

5-2010

## **Corps decision on state's emergency permit request**

New Orleans District, U.S. Army Corps of Engineers

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# NEWS RELEASE

**U.S. ARMY CORPS OF ENGINEERS**

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For Immediate Release:  
May 27, 2010

Contact: Amanda Jones  
504-862-1914  
amanda.s.jones@usace.army.mil

## Corps decision on state's emergency permit request

NEW ORLEANS – Today, May 27, 2010, the U.S. Army Corps of Engineers, New Orleans District Commander Col. Al Lee offered an emergency permit to the state of Louisiana for portions of their barrier island plan.

“After careful consideration of the available information, and working closely with the state of Louisiana, the coastal parishes, and our federal partners, I have offered the permit under Emergency Permit NOD-20, with special conditions, authorizing the state to proceed with six reaches, E3 and E4 to the east of the Mississippi River, and W8, W9, W10, and W11 to the west,” said Col. Al Lee, commander of the New Orleans District, U.S. Army Corps of Engineers. “These areas have been identified as critical locations where greater immediate benefit is likely to be achieved with minimal adverse disruption of coastal circulation patterns.”

The Corps' regulatory permit compliance program will assure that the 33 conditions of the permit will effectively carry out the intent of the state's project. If necessary, modifications to the permit can be made as conditions evolve.

The request was processed under the emergency permit procedures of New Orleans District's NOD-20.

The New Orleans District received the emergency permit request from the Coastal Protection and Restoration Authority of Louisiana at 11 p.m. Tuesday, May 11 for work on the Chandeleur Islands and also on all barrier islands from East Grand Terre Island and eastward to Sandy Point. The permit was requested “to enhance the capability of the islands to reduce the inland movement of oil from the Deepwater Horizon oil spill,” as per the original permit request cover letter.

In accordance with the NEPA process, which must be followed even in emergency situations, we solicited interagency comments on the state's permit application. Those agency comments were provided to the state, which then submitted a revised plan on May 14. The revised plan extended the reach westward to Timbalier Island and removed the near shore borrow area along Chandeleur Islands. The Corps again solicited interagency comments on the state's revision. Following discussions between the state and the Corps regarding technical analyses, the state submitted additional information on May 21 and May 24.

Authorization under NOD-20 is temporary and does not replace the normal permit approvals. Within 30 days, a full Department of the Army permit request must be submitted.

(Editor's note: Please see attached document for additional information on the plan).

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**U.S. ARMY CORPS OF ENGINEERS, New Orleans District**

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Additional questions regarding the state's plan should be referred to Chris Macaluso, information director for the Governor's Office of Coastal Activities/CPRA, at 225-358-5361.

###

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# Executive Summary

## **Executive Summary**

### **Overview summary of proposed berm project**

The US Army Corps of Engineers, New Orleans District (USACE) coordinated a pre-application teleconference with state and federal agencies on morning of May 11, 2010. The State of Louisiana, Coastal Protection and Restoration Authority, submitted an application requesting Department of the Army (DA) emergency authorization at 11:00 p.m. May 11, 2010. The permit request was for a proposed restoration project which the applicant contended would also provide protection to barrier islands and landward wetlands from contamination caused by the Deepwater Horizon oil spill. Upon initial review of the application and comments received from the federal and state agencies, the USACE determined that the project, as proposed (coastal restoration) would not qualify for the USACE emergency authorization procedures. That determination was made clear to the applicant during the coordination teleconference meeting on May 12, 2010. The applicant submitted revised drawings specifically proposing construction of an oil spill protection berm, late Friday afternoon, May 14, 2010. Subsequently, the revised permit application was submitted to the federal and state agencies for their review and comment on May 15, 2010. The revised application was coordinated with federal and state agencies on Monday morning, May 17, 2010 in a teleconference meeting. During that teleconference, the USACE requested that all agencies in attendance submit their comments in writing by close of business that same afternoon. The USACE technical team (Engineer Research and Development Center (ERDC), the Mississippi Valley Division (MVD), and the New Orleans District (MVN) conducted engineering analysis and assessments throughout the permitting process. On Friday, May 21, 2010, USACE forwarded comments from an internal technical assessment to the applicant regarding the barrier plan. Following discussions between the state and the USACE regarding the technical analyses, the state submitted additional information on May 21st and May 24th, 2010.

### **Applicant's Proposal:**

The applicant proposes to construct a sand berm approximately 300-foot at the base, approximately 25-foot at the crown and approximately 6-foot above the mean high water line (MHWL). East of the Mississippi River, the berm would be constructed on the seaward side of the Chandeleur Island westward to Baptiste Collette Bayou; west of the Mississippi River it would be constructed from Timbalier Island eastward to Sandy Point. All fill placement for sand barrier construction would occur in the Gulf of Mexico of southeastern coastal Louisiana. Gaps are to be maintained in the berm for tidal exchange. Material to construct the berms would be dredged from Ship Shoal, South Pelto, the Mississippi River Offshore Disposal Site, Pass a Loutre, St Bernard Shoal, and Hewes Point, Gulf of Mexico. Total length of the berm structure is approximately 128 miles, requiring approximately 102 million cubic yards of dredged material to construct an estimated 9800 acres of sand barrier in waters of the US.

### **Alternatives Considered:**

Three project alternatives were considered: the applicant's revised permit, variations on the applicant's revised permit, and a "no action" alternative. The no action alternative

did not meet the permit application's purpose and need and was therefore eliminated. The applicant's revised permit was found to have potential significant environmental impacts. After an environmental and cultural resources evaluation and consultation and coordination with state and Federal agencies, a portion of the applicant's proposal was found to provide positive environmental impacts, be in the overall public interest, and was permitted.

**Partial Project Authorization:** Selection of this alternative entails issuing a permit authorizing reaches E3 and E4 to the east, and W8, W9, W10, and W11 to the west of the applicant's revised permit. These areas have been identified by USACE staff assessment as critical locations where greater immediate benefit is likely to be achieved with minimal adverse disruption of coastal circulation patterns. This provides a strategic approach wherein information on success can be obtained from site monitoring, and allows for more careful evaluation of the remaining, more difficult areas, in formulating a construction plan for the reaches not authorized in this permit, should the state maintain interest in addressing those specific areas.

**Emergency Permit Offered:**

The permit authorizes 6 reaches of the applicant's original proposal. Forty-five miles of barrier berms are authorized by the permit. In order for the applicant to proceed with the project, it must obtain a Coastal Use Permit, and coordinate its activities with the Breton National Wildlife Refuge and the Minerals Management Service. Further, the permit contains the following provisions and Special Conditions (summarized):

**Provisions:**

1. Limited to specific proposed segments: Only authorized reaches (E3-4, W8-11) in a manner to minimize adverse impacts.
2. Subject to emergency permit terms: Subject to emergency permit terms, with formal application in 30 days.

**Special Conditions:**

1. Property Rights: No property rights conveyed, or injury to property rights authorized.
2. No federal liabilities: Excepting federal actions taken under Oil Pollution Act (OPA) in Deep Water Horizon (DWH) response.
3. Water Quality Standards: Meet standards, laws, and Best Management Practices.
4. Permit may be revoked: For the public interest or if terms/conditions revoked.
5. Data accuracy: Federal government will rely on data, inaccurate data may result in permit being revoked.
6. Damages for permit change/revocation: Change or revocation of permit no basis for claim against federal government.
7. All other laws/regulations: Must be followed.
8. USACE inspection: Periodic inspection allowed.
9. Navigation: No interference; installation of lights, signals, signs for safety is responsibility of permittee.

10. Borrow site limitations: Currently, only a segment of the Pass a Loutre borrow site is approved and environmentally cleared.
11. Borrow site coordination: Coordinated with MMS, USGS, USACE (MVN Regulatory), EPA, USFWS, NMFS, and other concerned federal/state agencies.
12. Notice to Mariners: Coordinate with USCG for BNTM for vessel activities.
13. Pipelines and Submerged Objects: Permittee must identify and avoid.
14. Berm Removal/Relocation: May be required at permittee's expense if interferes with navigation.
15. Cannot substantially interfere with aquatic movement/migration: Of indigenous or migratory species.
16. Piping plover intertidal foraging habitat avoidance: 100 foot setback required from mean low-low water to foot of berm when practicable.
17. Equipment out of intertidal to dune/vegetation line as required by the Breton National Wildlife Refuge manager.
18. Best Management Practice to protect seagrass beds on landward side of island.
19. Minimize impacts: to natural sediment transport, fish migration, salinity regimes.
20. No blockage of tidal inlets to maximum extent practicable. Temporary oil booms or appropriate containment devices may be used in this area.
21. Bird rookery setbacks: Rookeries of specific species require 650-2000' setbacks from Sept – Mar/April (specified by species) with monitoring by USFWS observer.
22. Trustee/Service Consultations: Required before/during/after project with NMFS, USFWS, and USGS for Essential Fish Habitat and Endangered Species Act.
23. Cultural Resource Protection: Consultation required, and work must cease if new historic/prehistoric cultural resources discovered.
24. Historic Protection: Reporting of unknown historic or archeological items.
25. Tribal cultural materials: Area is aboriginal Chitimacha homelands, Tribe contact required if cultural materials are discovered.
26. No state boundary change: No new claims authorized, no boundary changes.
27. No statement on Oil Pollution Act applicability: Permit does not address applicability to oil spill response.
28. Construction schedule and timeline: Due prior to commencing work.
29. Weekly conference call: With interested parties to report progress.
30. Survey of berm alignment: Due prior to initiating work.
31. Monitoring plan: Specific requirements in consultation with USACE and other interested parties. The permittee is responsible for implementing this monitoring plan.
32. Aerial photography: Required every two weeks following project commencement.
33. Effective date of permit: Upon receipt by USACE of copy signed by permittee agreeing to and accepting conditions.

# Initial Permit Application





Coastal Protection and  
Restoration Authority of Louisiana

# State of Louisiana

BOBBY JINDAL  
GOVERNOR

May 11, 2010

Pete Serio  
Chief, Regulatory Branch  
Operations Division  
U.S. Army Corps of Engineers  
P.O. Box 60267  
New Orleans, Louisiana 70160-0267

*Initial*

Dear Mr. Serio:

I hereby request emergency authorization to perform restoration work on the Chandeleur Islands and also on all the barrier islands from East Grand Terre Island eastward to Sandy Point for purposes of enhancing the capability of the islands to reduce the inland movement of oil from the BP Deepwater Horizon Oil Spill. For the Chandeleur Islands the work entails removal of sediment via cutterhead pipeline dredge from adjacent water bottoms Gulf ward of those islands, and depositing the dredged material on those islands and in the associated channels that traverse them. However the Ship Shoal, the Mississippi River Offshore Disposal Site, and an area in Pass a Loute will be use as the borrow source for the islands to the west of the Mississippi River. The highly fragmented nature of the islands, especially following Hurricane Katrina, has greatly reduced their effectiveness in reducing inland movement of oil spills.

The proposed work area is shown on the attached drawings.

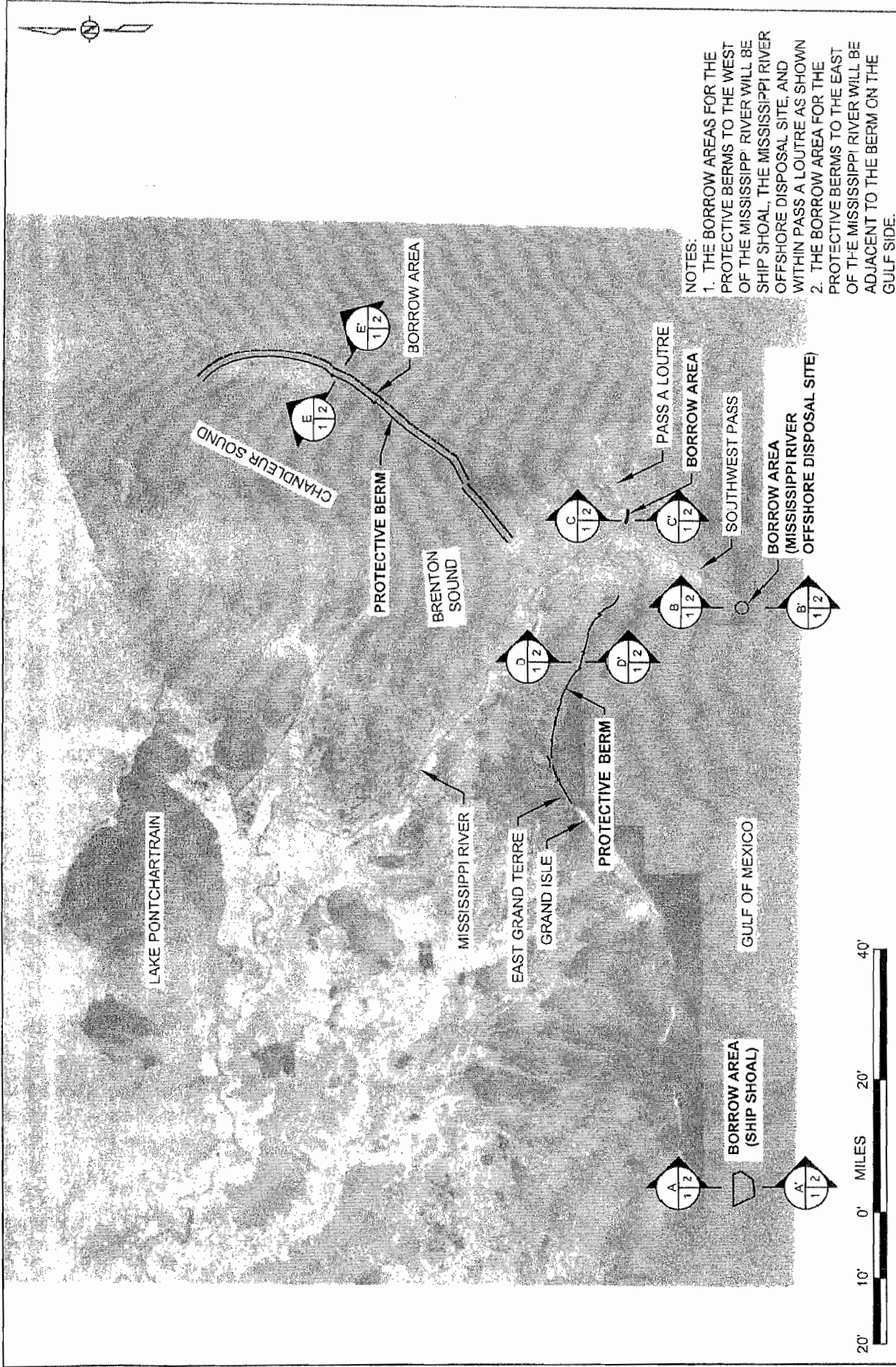
Please advise me as soon as possible of your action on this emergency authorization request. Should you have any questions regarding this request, please call me at 225-342-0242.

Sincerely yours,

*Kristi Cantu*

Kristi Cantu

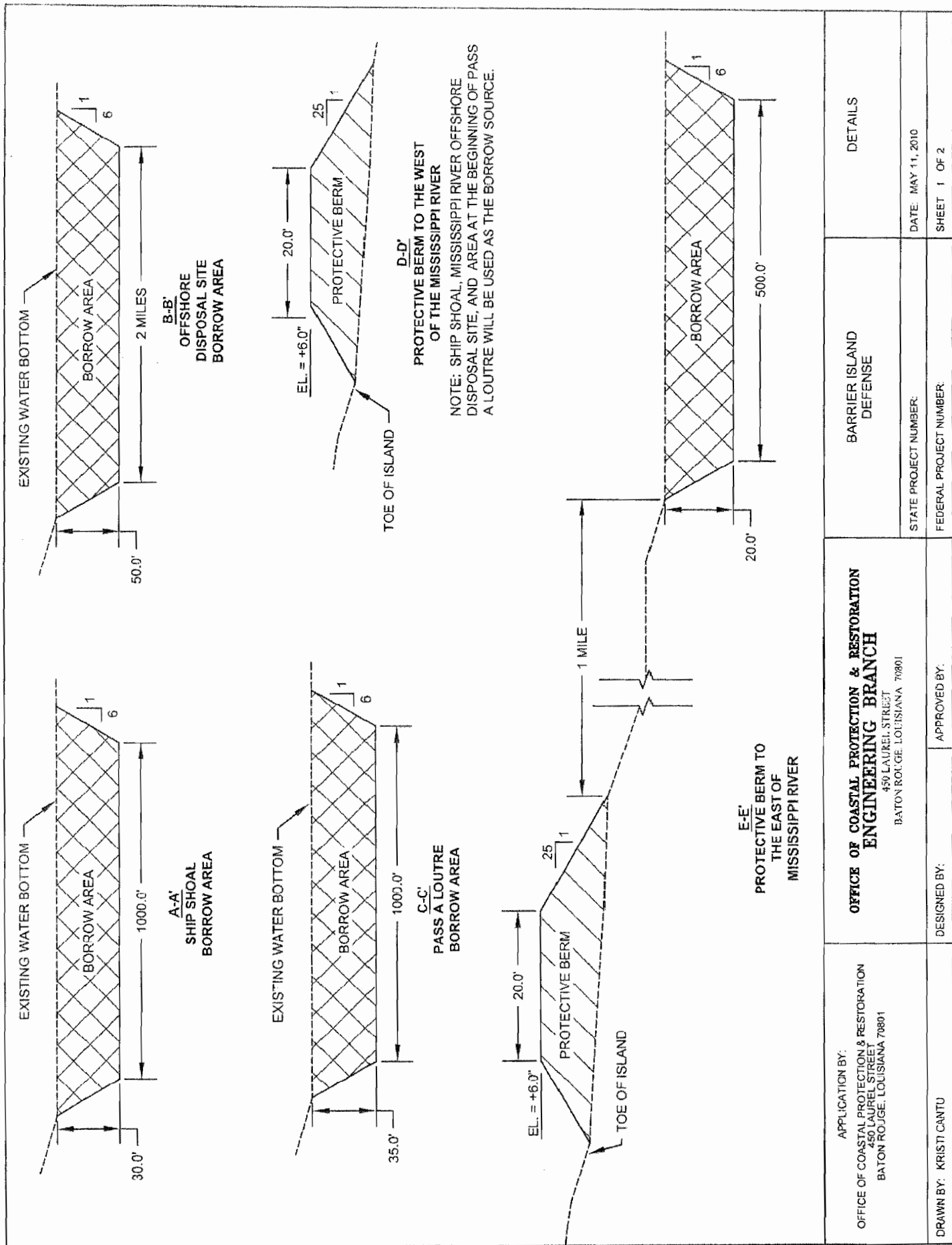
*MW - 2010 - 1066 - ETT*



NOTES:

1. THE BORROW AREAS FOR THE PROTECTIVE BERMS TO THE WEST OF THE MISSISSIPPI RIVER WILL BE SHIP SHOAL, THE MISSISSIPPI RIVER OFFSHORE DISPOSAL SITE, AND WITHIN PASS A LOUTRE AS SHOWN
2. THE BORROW AREA FOR THE PROTECTIVE BERMS TO THE EAST OF THE MISSISSIPPI RIVER WILL BE ADJACENT TO THE BERM ON THE GULF SIDE.

APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	OFFICE OF COASTAL PROTECTION & RESTORATION <b>ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BARRIER ISLAND DEFENSE	PLAN VIEW
DRAWN BY: KRISTI CANTU	DESIGNED BY:	APPROVED BY:	SHEET 1 OF 2
	STATE PROJECT NUMBER:	FEDERAL PROJECT NUMBER:	DATE MAY 11, 2010



APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	OFFICE OF COASTAL PROTECTION & RESTORATION ENGINEERING BRANCH 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BARRIER ISLAND DEFENSE	DETAILS
DESIGNED BY: KRISTI CANTU	APPROVED BY:	STATE PROJECT NUMBER: FEDERAL PROJECT NUMBER:	DATE: MAY 11, 2010 SHEET 1 OF 2

**NOAA CONSIDERATIONS ON LOUISIANA PROPOSAL FOR BARRIER ISLAND RESTORATION PLAN****SUMMARY:**

NOAA appreciates the opportunity to comment on the Louisiana Coastal Protection and Restoration Authority's proposal to construct an 86-mile berm as an oil spill response technique. Please find below our preliminary comments and initial recommendations. With more time and additional information, we hope to more fully discuss issues under our trust responsibilities.

NOAA has long been supportive of the restoration of Louisiana's coastal ecosystem, particularly barrier islands. NOAA actively participates in the Louisiana Mississippi Gulf Coast Ecosystem Restoration Working Group and has recently been involved in three barrier island restoration projects in Louisiana. NOAA believes that barrier island restoration is a critical component of a comprehensive long-term restoration strategy.

However, since this project is proposed as an oil spill response strategy, it should be evaluated by the Federal On-Scene Coordinator (FOSC) for its effectiveness in reducing the impact of oil should it make landfall. Should the FOSC decide that the project does achieve the response objectives, NOAA would urge consideration of the following issues and recommendations. Although the plan presently lacks sufficient detail to quantify potential impacts with certainty or precision, NOAA appreciates the opportunity to provide some general comments and observations on the qualitative impacts that could result from this project. It would be helpful if the issues highlighted below were sufficiently considered before the project moves forward. The following considerations and recommendations address ecological impacts, impacts to marine life, effectiveness, and the Natural Resource Damage Assessment process.

**ECOLOGICAL IMPACTS:**

**Borrow Impacts:** Borrow impacts of this project on barrier island shoreline habitats have not been determined and could be substantial. Accelerated erosion of the barrier island chain may result from creating borrow pits in close proximity to the islands.

**Dredging in Near-Shore Waters:** Dredging in near-shore waters could potentially impact essential fish habitat, water quality, and sediment transport.

**Water Quality:** Inadequate circulation, which may be caused by closing or reducing the cross-sectional area of passes leading into Chandeleur Sound and Barataria Bay, could lead to impaired water quality.

**Impacts on MS Sound:** The proposed project may have impacts on salinity in the Mississippi Sound. The State of Mississippi should be consulted prior to approval.

**Long-Term Restoration:** Depletion of finite Louisiana sand resources could affect future high-priority restoration projects, largely negating the planning efforts of the past two decades.

**IMPACTS TO MARINE LIFE:**

**Essential Fish Habitat:** Impacts would occur primarily to benthic habitat, including unvegetated water bottom and seagrasses. The relative amount of the type of habitats that would be affected are presently unknown. General estimates of the areal extent of habitats that would be affected by project

actions are:

	<u>Barataria Reach</u>	<u>Chandeleur Reach</u>
Dredge		2853 ac (adjacent nearshore borrow only)
Fill	1412 ac	1826 ac

**Sustainable Fishery Stocks:** There are potential impacts to sustainable fishery stocks that could result from losses or impacts to sensitive life stages of harvestable species. Phased construction options should be considered to minimize impact on shrimp, oysters, sheepshead, and red and black drum.

**Forage Species:** Forage species that support recreational and commercial fisheries could be adversely affected by impaired water quality and changes in hydrologic regimes caused by closing access between open waters and inshore waters.

**Protected Species:** Interruption of migrations to existing nesting beaches of sea turtles, as well as physical damage to turtles encountered in dredging operations, have not been evaluated. Dredging impacts on bottlenose dolphin populations have also not been studied.

#### **EFFECTIVENESS:**

**Transport of Contaminated Sediment:** The extent of the contamination of sediment to be mined is unknown. Further, once placed, oiled material could be returned to open water through regular erosion. Fate and disposition of contaminated sand eroded from protective berms, and likely causes of erosion, must be considered. Hurricanes or severe storms could also transport oiled sediment.

**Correspondence with Spill Modeling:** Plans to build natural barriers must be substantiated with spill modeling. Trapping of oil landward of the barriers that was introduced prior to or during construction is a risk.

**Constructability:** The proposed design section will be difficult to build in some reaches given the depths, currents, and sediment quality and availability.

**Timing:** Likelihood of completing construction in time prevent shoreward movement of oil is uncertain in general, and is particularly uncertain without use of borrow material from the shoreward side of the barrier islands.

#### **NATURAL RESOURCE DAMAGE ASSESSMENT (NRDA) PROCESS:**

**Natural Resource Damage Assessment:** It is unclear whether the proposed will qualify as an emergency restoration action. Instead, the proposal may lead to increased environmental injury for which the Responsible Party would be responsible for compensating the public.

**Oil Pollution Act:** The proposed action may not compensate for the injury as there is uncertainty about whether the project selection criteria in the Oil Pollution Act can be met.

If the decision of the U.S Army Corp of Engineers is to move forward with this project, we will have specific recommendation that we wish to make. NOAA is happy to work with the U.S. Army Corps of Engineers and the State of Louisiana to work through many of the issues and concerns highlighted above in order to facilitate an appropriate path forward.

**Comments on the Plaquemines Parish Berm Proposal**  
**Emergency Application**  
**U.S. Environmental Protection Agency**  
**May 13, 2010**

**Proposed Project**

On May 11, 2010, the State of Louisiana Office of Coastal Protection and Restoration, requested emergency authorization from the US Army Corps of Engineers New Orleans District to discharge dredged material into waters of the United States for the construction of 15 berms along the barrier islands from east Grand Terre Island eastward to Sandy Point and along the Chandeleur Islands. The stated purpose for this project is to enhance the capability of the barrier islands to reduce inland movement of oil from the Deepwater Horizon Oil Spill.

The berms will be constructed of dredged material to a height of 6 foot above sea level with a top width of 25 foot and a base width of approximately 320 feet. Side slopes for the berm will be 25 to 1. The source of dredged material for the berms along the Chandeleur Islands will be from the St Bernard shoal (approximately 20 miles eastward of the islands) and from water bottoms running parallel and gulfward of the island chain (approximately 1 mile eastward of the islands). The source of dredged material for the berms along the barrier islands from east Grand Terre Island eastward to Sandy Point would be the Ship Shoal (approximately 80 miles westward of the islands) and the Mississippi River Offshore Disposal site and within the Pass a Loue.

This is in response to your May 12, 2010, request for initial feedback from the Environmental Protection Agency (EPA) on this draft proposal. We fully share the state's urgency with respect to preventing oil from reaching Louisiana's valuable coastal wetlands and bays. We recognize the concept outlined in the state's application is under continuous development, and we do not have time to use a conventional planning and design process. The effectiveness and environmental sufficiency of this proposed project cannot be adequately assessed without additional information. Nevertheless, we would support moving forward quickly with aspects of it, while key information needs are being addressed.

EPA has long supported the long-term restoration of barrier islands in coastal Louisiana. We have worked closely with the state on six barrier island restoration projects as part of our ongoing efforts in the Coastal Wetlands Planning, Protection, and Restoration Act (CWPPRA) program. We commend the state and parishes for their tireless efforts to protect these coastal resources of national importance. We remain committed to doing everything in our power to help minimize the ecological and economic impacts of this oil spill.

## EPA Feedback

- The most basic question is whether the proposed project can be constructed in time to prevent oil from reaching interior waters and wetlands. The most optimistic timeframe for completion of the proposed work appears to be four to six months, which could be longer than it takes to contain the spill. Given the urgency of the situation, we must focus first on actions that have the greatest possibility of preventing further ecological and economic harm.
- There are concerns that depending upon the length of time to complete the entire berm, that the flow of water through unbermed portions could accelerate, potentially creating a funneling effect for the oil to more rapidly move to the wetlands/estuarine areas where the berm has yet to be completed. We need more analysis of how the berm construction will be staged and how this potential impact can be mitigated.
- There are concerns about other pipelines in the dredging areas and the inability to precisely define where all of these pipelines are located so that they can be avoided. There is a very significant possibility that new pipelines would be ruptured during the dredging, creating additional environmental challenges. Even with tools on the dredges to identify submerged metal, the presence of possible a dozen or more dredges in the area combined with the speed of activity and the shifting of these pipelines over time poses the risk of additional oil spills. We would need to have better information on the preventability of this type of incident.
- Would creation of the berm actually serve to trap the oil that moves inland while the construction is underway? We need better information on the timing and mechanisms that can be employed to prevent this.
- Would dredged material/sand be taken from behind the existing barrier islands? If so, what effect could that have on the life of the current barrier islands? We expect that this removal of sand from behind the barrier islands would shorten the life of these barrier islands and potentially seriously impact the sustainability of existing barrier islands).
- If this sand is used on an emergency basis from behind the barrier islands, and a hurricane or other large Gulf storm arrives---the sand will be washed away. This sand is an important resource for more permanently restoring ecological on these barrier islands.
- If this berm is successful and prevents the passage of oil and oil substances from migrating into the marsh but is, itself, contaminated, what is the plan for remediation? The sand will likely need to be removed. What is the plan for treatment and disposal of that sand?
- What effect would the removal of sand from behind these barrier islands have on any shellfish beds and other critical habitat that are lie the barrier islands?
- We need to understand the potential for contaminants in dredged material. Some dredged materials may already be contaminated by oil or other persistent bioaccumulative toxics/metals. We need to understand the extent to which we will be introducing these into the water column in the near term as an indirect impact of dredging and the effect that these may have on fish and wildlife species both near and longer term. A full and active testing protocol would be needed.
- There is critical habitat on the existing barrier islands for the piping plover. We need to better understand what impacts these activities will have on these species and other avian, wildlife and aquatic species which rely on the habitat of the existing barrier islands. The



creation of this berm can be expected to, in the near term, fundamentally change the habitat.

- The project could have implications on interior estuarine waters including exchange of fresh and salt water potentially increasing/decreasing salinities.
- There is the potential for significant changes in hydrology with the creation of this proposed structure. There is also the possibility of a tidal prism developing which could exacerbate the loss of internal marshes.
- The project could have effects on sediment transport, increasing velocities in tidal passes thereby facilitating transport of sediment. After construction, the new barrier islands may serve to unevenly transfer sediment—starving some areas while enriching others. We need to better understand and assess the potential consequences of this.
- Another potential avenue could be to consider closing gaps in existing barrier islands, as opposed to filling deeper waters in natural tidal passes. Such an initial approach could be done relatively quickly, would require less borrow material, and would likely be more sustainable and consistent with coastal restoration efforts. Similar work has been done in the CWPPRA program and could draw from the designs and templates already proven successful. The need, viability, and effectiveness of filling deeper waters could simultaneously be assessed, while efforts continue to staunch the flow of oil from its source.
- If this plan moves forward, the permit should be conditioned upon the applicant adjusting the “containment” aspect of the berm to a more environmentally beneficial project after the risk of oil contamination has passed. In other word, return the berm to a more studied and beneficial “barrier island” restoration project.
- It would also be imperative, if such a permit were issued, that this structure/island/berm that is created should remain public land (and not be privately developed or developed by the state or parish).



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**To:** MVN  
**Subject:** FW: Request for Agency Comments and Reconvene Re: Barrier Plan

From: Department of the Interior  
Sent: Thursday, May 13, 2010 8:54 PM  
To: MVN  
Subject: RE: Request for Agency Comments and Reconvene Re: Barrier Plan

Pete,

This is a very informal response to your request that has not been formally vetted through the Interior Department. We met today with the State of LA and the contractor who is developing the plan. It was very fruitful. We all agreed that the only feasible way to conduct this project and not harm the Chandeleur Islands is by using St Bernard Shoal and Hewes Point as borrow areas for the project east of the Mississippi instead of the proposed plan to dredge a mile offshore the Chandeleurs. We made it clear that we are still reviewing the proposal. But we also made it clear that without a change in the borrow areas the proposal would never be able to meet the Fish and Wildlife Service's compatibility determination test.

Our questions therefore right now are:

Where will the dredge material come from?

Will any of the fill be taken from the littoral system -- we hope & expect the answer to this is no.

What is the dredging process?

What process will be used for filling?

Where exactly will the berm be placed in respect to the shoreline?

What allowances will be made for tidal passages between the sound & the Gulf?

Will any motorized vehicles be used on the islands?

Where will the fill be placed?

Will fill be used in the deeper water areas?

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## United States Department of the Interior

FISH AND WILDLIFE SERVICE  
646 Cajundome Blvd.  
Suite 400  
Lafayette, Louisiana 70506



May 14, 2010

Colonel Alvin B. Lee  
District Engineer  
U.S. Army Corps of Engineers  
Post Office Box 60267  
New Orleans, Louisiana 70160-0267

Dear Colonel Lee:

Please reference the May 13, 2010, electronic mail from Mr. Martin Mayer, Chief of your Regulatory Branch's Central Evaluation Section, requesting our comments regarding the Louisiana Office of Coastal Protection proposed Barrier Island Defense project. The State of Louisiana proposes to construct and/or provide measures necessary to protect wetlands from the oil spill associated with the Deepwater Horizon (i.e., Mississippi Canyon 252) blowout. We understand that an earthen berm would be created along coastal barrier islands to prevent and/or reduce the amount of oil entering the Breton and Chandeleur sounds and the Barataria Basin. This letter is submitted in accordance with the technical assistance provisions of the Fish and Wildlife Coordination Act (FWCA; 48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), but it does not constitute the report of the Secretary of the Interior as required by Section 2(b) of that Act. In addition, this letter provides information regarding compliance with National Wildlife Refuge System Improvement Act of 1997 (16 U.S.C. 668dd-668ee, as amended by P.L. 105-57), the Wilderness Act (16 U.S.C. 1131 et seq.), the Migratory Bird Treaty Act (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), the Coastal Barrier Resources Act of 1982 (96 Stat. 1653, as amended; 16 U.S.C. 3501 et seq.) and provides informal consultation information under the authority of the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.) in anticipation of emergency consultation.

The Fish and Wildlife Service (Service) is committed to the protection of Louisiana's wetlands from ongoing landloss and the added impact of the oil spill. We also remain committed to working closely with all agencies involved in spill response efforts to further explore alternatives and alternative features in order to reduce the current degree of risk and uncertainty associated with any oil spill response activities.

The barrier islands in the proposed project area are the remains of abandoned Mississippi River Delta lobes. Barrier islands act as buffers to reduce the effects of ocean waves and currents on associated estuaries and wetlands. The future of barrier islands is dependent upon the replenishing sediments in the littoral system. Any activity that would adversely impact that ability of the littoral system to provide sediment could increase the loss rate of those barrier islands. The US Geological Survey has completed a study regarding the coastal processes, including littoral drift, affecting the Chandeleur Islands and possible sediment sources that could

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be utilized to replenish sediments without adverse impacts to those islands. That report can be found at: <http://pubs.usgs.gov/sir/2009/5252/> and the Service recommends that it be utilized to help develop project details in order to minimize any potential adverse impacts. The National Oceanic and Atmospheric Administration's Coastal Survey has recent hydrographic survey data from the proposed project area. For further information contact Tim Osbourn (Tim.Osborn@NOAA.GOV).

### **Borrow Sites**

The use of Ship Shoal as a borrow site for this project may preclude use of that area for the identified future coastal restoration projects. That consideration should be weighed into planning of this project. The possible borrow sources on the land side of the barrier islands could create deep areas where sediments would be trapped and would no longer be available for barrier island rebuilding; therefore use of such borrow sources should be discouraged. We recommend dredging compatible material from areas such as Hewes Point and St. Bernard Shoals for the section of berm proposed in proximity of the Chandeleur Islands. We also recommend that dredging not be done landward of the islands.

### **National Wildlife Refuge**

The Breton National Wildlife Refuge (NWR) is located within the proposed project area. The National Wildlife Refuge System Improvement Act of 1997 authorized that no new or expanded use of a refuge may be allowed unless it is first determined to be compatible. A compatible use is defined as a proposed or existing wildlife-dependent recreational use or any other use of a national wildlife refuge that, based on sound professional judgment, will not materially interfere with or detract from the fulfillment of the National Wildlife Refuge System mission or the purposes of the national wildlife refuge.

Federal agencies proposing a project that includes features on a national wildlife refuge are encouraged to contact the Refuge Manager in the planning process. The Refuge Manager will work with the project proponent to determine if the proposed project constitutes a "refuge use" subject to a compatibility determination. If the proposed project requires a compatibility determination, a concise description of the project (refuge use) including who, what, where, when, how and why will be needed to prepare the compatibility determination. In order to determine the anticipated impacts of use, the project proponent may be required to provide sufficient data and information sources to document any short-term, long-term, direct, indirect or cumulative impacts on refuge resources. Compatibility determinations will include a public review and comment before issuing a final determination.

All construction or maintenance activities (e.g., surveys, land clearing, etc.) on a NWR will require the Corps to obtain a Special Use Permit from the Refuge Manager; furthermore, all activities on that NWR must be coordinated with the Refuge Manager. Therefore, we recommend that the Corps request issuance of a Special Use Permit well in advance of conducting any work on the refuge. Please contact Kenneth Litzenberger, Project Leader for the Service's Southeast National Wildlife Refuges (985/882-2000) for further information on compatibility of restoration features, and for assistance in obtaining a Special Use Permit, as well

as prior to initiation of construction. The project should be conducted such that existing refuge resources and future restoration potential are not compromised.

### **Wilderness Act**

A portion of the Breton National Wildlife Refuge (i.e., Breton Island south of 29° 28') has been designated a Wilderness Area according to the Wilderness Act (16 U.S.C. 1131 et seq.). This Act establishes a National Wilderness Preservation System to be composed of Federally owned areas designated by Congress as "wilderness areas", which are to be managed in a manner that will leave them unimpaired for future use and provide for the protection and preservation of their wilderness character. With certain exceptions, the Act prohibits motorized equipment, structures, installations, roads, commercial enterprises, aircraft landings, and mechanical transport. Except as otherwise provided in this Act, each agency administering any area designated as wilderness shall be responsible for preserving the wilderness character of the area.

In planning a project, Federal agencies must determine whether or not the activity will affect a designated wilderness area. In making this determination, the Corps should consult with the appropriate administering agency (i.e. Service's Southeast National Wildlife Refuges) so we can assist the Corps in determining whether a proposed project falls among the activities prohibited in the wilderness area; how proposed activities may be mitigated; and whether exemptions to the prohibitions are necessary and can be obtained.

### **Migratory Birds**

The proposed project would be located in an area where colonial nesting waterbirds are present. Colonies may be present that are not currently listed in the database maintained by the Louisiana Department of Wildlife and Fisheries. That database is updated primarily by monitoring the colony sites that were previously surveyed during the 1980s. To minimize disturbance to colonies containing nesting gulls, terns, and/or black skimmers, all activity occurring within 650 feet of a rookery should be restricted to the non-nesting period (i.e., September 16 through April 1, exact dates may vary within this window depending on species present). In addition, we recommend that on-site contract personnel be informed of the need to identify colonial nesting birds and their nests, and should avoid affecting them during the breeding season.

Brown pelicans were delisted (due to recovery) on December 17, 2009, and are no longer protected under the ESA, but they are still protected by the Migratory Bird Treaty Act (MBTA). Brown pelicans are known to nest on barrier islands and other coastal islands in St. Bernard, Plaquemines, and Jefferson parishes. For colonies containing nesting brown pelicans, all activity occurring within 2,000 feet of a rookery should be restricted to the non-nesting period (i.e., September 15 through March 31). Nesting periods vary considerably among Louisiana's brown pelican colonies, however, so it is possible that this activity window could be altered based upon the dynamics of the individual colony. The Louisiana Department of Wildlife and Fisheries' Fur and Refuge Division should be contacted to obtain the most current information about the nesting chronology of individual brown pelican colonies.

## **Coastal Barrier Resources Act**

The Coastal Barrier Resources Act (CBRA) prohibits certain Federal expenditures and activities within the Coastal Barrier Resources System (CBRS), unless those activities qualify for an exception and are, therefore, considered to be consistent with CBRA. The Service, through the Secretary of the Interior, is responsible for administering CBRA, including consulting with Federal agencies that propose expenditures and actions within the CBRS. The Service has determined that the proposed Barrier Island Defense Project would affect lands within the CBRS. The area encompassing Sandy Point to Grand Terre Island is contained within CBRS Units SO1, SO1A, and SO2, and the Chandeleur Islands are within CBRS Unit LA-03P.

CBRS Unit LA-03P is classified as an "Otherwise Protected Area" under the CBRA. Otherwise Protected Areas (OPAs) are those areas that are established under Federal, State, or local law, or held by a qualified organization, primarily for wildlife refuge, sanctuary, recreational, or natural resource conservation purposes. The only restriction on Federal expenditures within OPAs pertains to the issuance of Federal flood insurance. Therefore, Federal funds could be used for all aspects of the proposed Barrier Island Protection Project in CBRS Unit LA-03P.

As mentioned above, there are certain activities that are considered to be exceptions under the CBRA and therefore consistent with the CBRA. Those exceptions include emergency actions essential to the saving of lives and the protection of property and public health and safety, and actions that are designed to protect fish and wildlife resources. Because the proposed project is designed to protect wildlife and humans from the adverse health risks associated with the oil spill, the Service has determined that the work needed to contain the oil spill is consistent with CBRA.

Additionally, the Service has determined that CBRA imposes no restrictions on Federal expenditures associated with the proposed project.

## **Endangered Species Act**

In addition to the minimization measures recommended in the Service's May 12, 2010 "Emergency Endangered Species Act Section 7 Consultation for Mississippi Canyon 252 Oil Spill" (see attachment) emergency consultation response letter, we recommend your consideration of the following additional minimization measures specifically for piping plovers.

- (1) To the maximum extent possible, design the berm slope steep enough to avoid creating habitat attractive to plovers, but that would be conducive for the easiest cleanup on the Gulf side;
- (2) Slope the bay/island side of the berm to provide resting loafing areas;
- (3) Avoid impacting the intertidal area to the maximum extent possible so that foraging habitat remains available. If possible allow for a 100-foot work zone from the toe of the berm to mean low, low water;
- (4) Keep all construction equipment out of the area from mean low low water to the dune/vegetation line;

(5) Place booms in front of the berms to further protect the beaches;

(6) If the present intertidal zone would be covered by the berm, then to the maximum extent practicable, maintain/protect existing intertidal foraging areas on the back side of the island (and berm) and work with LDWF and the Service to identify those areas; and

(7) If solid berms/dunes extend for greater than a 6-mile length, we recommend that the berm/dune be kept high until oil cleanup is complete and request that post cleanup "notching" be conducted if the Service and LDWF decides it would be beneficial. Notching involves lowering the berm/dune in places to increase the likelihood of washover events and sand flat creation on the backsides of the new islands.

### **Additional Recommendations**

The berm should be constructed strategically to intercept oil where it is coming ashore first.

Seagrass beds landward of islands should be identified and protected during construction.

Construction should not result in problematic changes in natural sediment transport, fish migration, or salinity regimes. Consideration should be given to monitoring for salinity changes landward of the berm.


Tidal inlets should not be blocked by the berm. These areas should be subject to temporary boom deployment.

That portion of the Chandeleur Islands north of Monkey Bayou should be prioritized for berm construction, if appropriate in terms of immediate needs to block oil movement, as there exists a better base shelf for construction than areas south of Monkey Bayou.

Consideration should be given to downsizing the berm initially, shortening construction time in order to provide protection from oil as quickly as possible.

We remain committed to working closely with all agencies and entities involved in the oil spill response and will continue to further explore alternatives to reduce the current degree of risk and uncertainty associated with any response activities while not jeopardizing the response. The Service recognizes the formidable challenge that the State of Louisiana and its Federal partners face and we look forward to continuing the planning and response efforts to protect and restore Louisiana's nationally significant coastal wetlands and resources.

Sincerely,



James F. Boggs  
Supervisor  
Louisiana Ecological Services Office

**Attachment**

**cc: SE Louisiana National Wildlife Refuges, Lacombe, Louisiana  
EPA, Dallas, TX  
National Marine Fisheries Service, Baton Rouge, LA  
LA Dept. of Wildlife and Fisheries, Baton Rouge, LA  
LA Dept. of Natural Resources (CMD), Baton Rouge, LA  
OCPR, Baton Rouge, LA**



## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

1875 Century Boulevard

Atlanta, Georgia 30345

In Reply Refer To:  
FWS/R4/ES

**MAY 12 2010**

To: Federal Agencies Affected By Mississippi Canyon 252 Oil Spill Response Actions

Subject: Emergency Endangered Species Act Section 7 Consultation for Mississippi Canyon 252 Oil Spill Response Actions

The Fish and Wildlife Service (Service) is offering our assistance in helping you to comply with section 7 of the Endangered Species Act (Act) of 1973, as amended (16 U.S.C. 1531 et seq.), during your oil spill response and cleanup activities in conjunction with the Mississippi Canyon 252 (Deepwater Horizon) oil spill in the Gulf of Mexico. At the present time, the Service has made the emergency consultation procedures available for Federal activities related to this emergency. Emergency procedures include all response activities that may be taken to prevent imminent loss of human life or property.

Section 7 regulations recognize that an emergency (natural disaster or other calamity) may require expedited consultation (50 CFR Part 402.05). During emergency events, the primary objective of the responding agency must be to protect human life and property and this objective takes precedence over normal consultation requirements under the Act. Emergency consultation procedures allow action agencies to incorporate endangered species avoidance provisions into their actions during their response to an emergency.

The primary objective of the Service during emergency consultation is to provide recommendations for minimizing adverse effects to listed species and designated critical habitat areas potentially adversely affected by emergency response activities. The Mississippi Canyon 252 oil spill response actions have the potential to affect listed species throughout the northern Gulf of Mexico as well as the coasts of peninsular Florida and the Florida Keys, encompassing the range of 38 federally listed endangered and threatened species as well as 11 species that are Federal Candidates for listing (see attachment 1). In order to expedite emergency consultation procedures and provide some measure of consistency across the geographic range of this emergency, we have identified a generic list of recommended actions that may be implemented to minimize the impacts to listed species, designated critical habitat, and candidate species (attachment 2).

The Service will continue to evaluate the emergency as it relates to the conservation of listed species. If this evaluation indicates that the emergency response procedures may result in jeopardy/adverse modification of designated critical habitat, and no means of reducing or avoiding this impact are available, the Service will advise the responding agency of this and document this conclusion. The Federal agency will not stop or delay their emergency response because of this notification. In such a situation, the Federal agency and the Service will discuss actions to remediate the effects following conclusion of the emergency.

**TAKE PRIDE  
IN AMERICA**



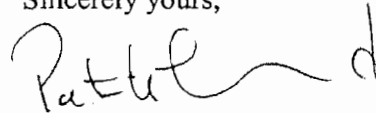


Once the emergency concludes, the action agency shall identify any incidental take of a species or an adverse effect to critical habitat that resulted from the emergency response action and initiate formal consultation. This formal consultation follows standard procedures, includes a description of what action the agency took to respond to the emergency, and identifies the final impacts to listed species.

The Service will prepare an after-the-fact biological opinion identifying any incidental take or adverse effect to critical habitat that occurred during the emergency response and document the final impacts resulting from the action. This biological opinion may contain recommendations for after-the-fact remediation in the form of reasonable and prudent alternatives, or reasonable and prudent measures when incidental take of listed species or adverse modification of critical habitat attributable to the emergency response occurred. With the finalization of the biological opinion, the action agency will have completed their compliance with the Act.

If you have general questions related to Endangered Species Act section 7 compliance or emergency consultation procedures, the point of contact for the Southeast Region will be Ken Graham at (404) 679-7358, or Janet Mizzi at (404) 679-7169. Specific Field Office section 7 contact information is included in Attachment 3. For other questions or concerns regarding the oil spill emergency response issues, please contact Patrick Leonard, Assistant Regional Director, Ecological Services, at (404) 679-7085.

Sincerely yours,

A handwritten signature in cursive script, appearing to read 'Cynthia K. Dohner', written in black ink.

for Cynthia K. Dohner  
Regional Director

Attachments



BOBBY JINDAL  
GOVERNOR

## State of Louisiana

DEPARTMENT OF WILDLIFE AND FISHERIES  
OFFICE OF WILDLIFE

ROBERT J. BARHAM  
SECRETARY

JIMMY L. ANTHONY  
ASSISTANT SECRETARY

May 13, 2010

Mr. Pete J. Serio, Chief  
Regulatory Branch  
United States Army Corps of Engineers  
P. O. Box 60267  
New Orleans, LA 70160-0267

**RE: Office of Coastal Protection and Restoration  
Barrier Island Defense (St. Bernard, Plaquemines, and Jefferson Parishes)**

Dear Mr. Serio:

The professional staff of the Louisiana Department of Wildlife and Fisheries (LDWF) has reviewed the proposal to perform restoration work on the Chandeleur Islands and also on all the barrier islands from East Grand Terre Island eastward to Sandy Point for purposes of enhancing the capability of the islands to reduce the inland movement of oil from the BP Deepwater Horizon Oil Spill. Based upon this review, LDWF staff has identified and enumerated the issues below which we believe require a thorough consideration:

The proposed protective berm would be approximately 320 feet wide at the base and 20 feet wide at the crown. It would be built to an elevation of +6 feet. Also, borrow areas are expected to be from 500 to 10,560 feet wide and from 30 to 50 feet deep. Can berm width and elevation be reduced to minimize impacts to shallow near-shore environments while still providing an acceptable level of protection from the inland movement of oil?

Pass-a-Loutre has experienced significant sedimentation and shoaling since the 1960s. LDWF recommends that the entire Pass-a-Loutre channel be dredged to some historic dimension and the material be used for creation of the protective berm. This material will likely be high-quality sediment and suitable for berm construction. Also, by dredging Pass-a-Loutre and increasing the channel's capacity, inland movement of oil may be abated and sediment delivery to Pass-a-Loutre Wildlife Management Area (WMA) will be enhanced.

The applicant shall determine whether or not borrow area excavation will increase wave energy and subsequent shoreline erosion, alter littoral currents, or otherwise impact depositional processes, in a way that undermines the sustainability of inland islands, marsh, and shorelines, most importantly the Chandeleur Islands.

Will the protective berm be monitored and maintained at the design elevations permanently or allowed to degrade and subside once the oil spill is no longer a threat to Louisiana's coast?

Because of the size of the oil spill, it is possible that the protective berm may be constructed with oil-contaminated sediments. Caution should be used to ensure that oil-contaminated sediments are not placed adjoining existing marsh, barrier islands or barrier shorelines.

May 13, 2010

The applicant shall identify existing infrastructure, such as pipelines, flowlines and well protection structures, which may potentially be affected by the proposed activity. Project feature design and future maintenance will need to consider: existing infrastructure.

The project should be modified to reduce the turbidity and sedimentation of seagrass beds in the Chandeleur Islands which can cause damage to the seagrasses and associated organisms.

The project should be modified to allow additional shallow tidal passes in the Chandeleur Island area to allow tidal flow into the seagrass beds. These tidal passes should be where existing passes are in order to save borrow material and not interrupt existing tidal flows to which the seagrass have adapted.

The workers and work boats used in this project should be instructed to not enter the seagrass beds and minimize work on the islands. This would help reduce possible damage and disruption of the seagrass beds, island habitat, nesting bird colonies and other species associated with those habitats.

All or a portion of the Pass-a-Loutre borrow site associated with the project is located within the Pass-a-Loutre WMA. LDWF has reviewed the project and a Natural Heritage Review has been performed on that portion of the project that lies within the WMA and no species of concern have been identified in the borrow site area. Therefore, LDWF will have no objection to that portion of the project located on the WMA provided that the following condition is met:

1. Prior to any activities on the WMA coordination of the project and equipment use will be conducted with the Department.
2. The Department recommends that the borrow area be extended the full length of Pass-a-Loutre which will provide additional borrow material for the project and will also enhance sediment delivery to the management area.

A review of the Louisiana Natural Heritage Database indicates that several federally listed or state rare species and natural communities are known to occur in the area. These species and communities include sea grass beds, coastal mangroves, brown pelicans, snowy plovers, piping plovers, manatees, diamondback terrapin, sea turtles, terns and wading birds.

Natural Resource Damage Assessment is a process dictated by federal and state law. Injury to natural resources must first be assessed. Restoration projects are suggested and then subjected to public scrutiny and comment before an assessment and restoration plan can be adopted. Some discussion of this project has implied that BP's funding of this project could serve as a prepayment for their natural resource damage assessment liabilities. We believe this would be inconsistent with the requirements of federal and state law.

The Louisiana Department of Wildlife and Fisheries appreciates the opportunity to review and provide recommendations to you regarding this proposed activity. Please do not hesitate to contact Habitat Section biologist Chris Davis at 225-765-2642 should you need further assistance.

Sincerely,



Jimmy L. Anthony  
Assistant Secretary

**From:** [Kristi Cantu](#)  
**To:** [Mayer, Martin S MVN](#); [Serio, Pete J MVN](#)  
**Cc:** [Karl Morgan](#); [Steve Mathies](#); [David Fruge](#); [Kirk Rhinehart](#); [Richard Raynie](#); [Syed Khalil](#); [Maury Chatellier](#); "Mike Flores"; [REDACTED]@cfbean.com  
**Subject:** Barrier Island Protective Berm - Response to Agency Comments  
**Date:** Friday, May 14, 2010 5:38:48 PM  
**Attachments:** [Barrier Berm Emergency Permit Agency Feedback Responses 5 14 10 - Final.docx](#)  
[Sand Berm Defense Revised Plats 5.14.10.pdf](#)  
[Barrier Berm Emergency Permit Agency Feedback Responses 5 14 10 - Final w USFWS response.docx](#)  
[Berm Side View.jpg](#)

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Gentleman,

Attached are the responses to the federal agency comment letters. We have been in contact with MMS regarding the lease for the Ship Shoal, South Pelto, and St. Bernard borrow sites and are working through that application process closely with them.

Also attached are revised permit plats. The borrow areas adjacent to the Chandeleur Islands have been removed. We have added Hewes Point and South Pelto as potential borrow areas. Also, the western protective berm reach has been revised to begin at Timbalier Island and continue eastward to Sandy Point.

We appreciate your time and effort.

Thank you,

Kristi Cantu

Office of Coastal Protection and Restoration (OCPR)

Engineering Branch

(225) [REDACTED]

(225) [REDACTED]



## MEMORANDUM

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**TO:** STEVE MATHIES; CHRISTY CANTU ET AL  
**FROM:** MIKE FLORES; BILLY GUSTE  
**SUBJECT:** PRELIMINARY RESPONSES TO AGENCY  
COMMENTS/FEEDBACK REGARDING EMERGENCY PERMIT  
APPLICATION FOR BARRIER BERM DREDGING OPERATIONS  
**DATE:** FRIDAY MAY 14TH, 2010

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Steve,

Please find below preliminary responses to agency comments/feedback from interested and participating agencies relative to the emergency permit application filed by OCPR. Please recognize that the majority of the responses are general in nature, given the time demands placed on the potential project due to the emergency. We stand ready to assist you and other agencies in insuring that any emergency actions taken will be accomplished in such a manner to minimize negative impacts to our coastal system that could potentially be caused by the project. All recognize the project being proposed, under normal circumstances, would require in- depth engineering, cultural resource, and habitat evaluations, but the unprecedented disaster for the Gulf Coast mandates that we attempt to address the current situation expeditiously.

This project is being expedited in an effort to respond to a current disaster and keep oil outside our marshes, wetlands, and estuaries. That said, we are prepared to respond in a manner that will address concerns all permitting agencies. We are convinced that the project, as proposed, (while being developed as an immediate disaster response) will have net long-term benefits. Most obvious of these benefits will be the reintroduction of sediments from a source outside the littoral system.

### **Preliminary Questions/ Permitting Agency Response**

**AGENCY:** U.S. Fish and Wildlife through, Jane Lyder, U.S. Department of the Interior, submitted on Thursday, May 13<sup>th</sup>.

**Question 1:** Will any of the fill be taken from the littoral system?

**Response:** No. it was originally envisioned that sediment would be dredged from the inland side of Chandeluer Islands and sources westward/seaward of the islands on the escarpment, ranging from 100 yards off the islands to ~1-2 miles away due to sediment sources, dredge capabilities of available dredges, and delivery times. Through meetings and discussions with DOI, USFWS, MMS, and USGS, it was agreed that every effort should be made to obtain





## MEMORANDUM

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material that is from outside the littoral system, i.e. from St. Bernard Shoals and Hewes Point, Ship Shoals, and the Mississippi River passes.

**Question 2:** What is the dredging process?

**RESPONSE:** Sand will be dredged from the borrow areas (Hewes Point, St. Bernard Shoal, Pass-a-Loutre, etc.) using cutterhead dredges and placed by a dredge loader into transport barges. The transport barges will move the sand to waiting spill barges that will place the material along the shoreline. The cutterhead dredges will have the capacity to dredge to a depth of 65 feet.

**Question 3:** What process will be used for filling?

**RESPONSE:** The transport barges will move the sand to waiting spill barges (floating in water as shallow as four (4) feet offshore) that will move the material via pipeline for deposit along the shoreline (Refer to Illustration No. 1). The material will be allowed to spread to the natural slope – based on the consistency of the sand being spread. Final shaping of the material will be accomplished by bulldozer and grader equipment working atop the berm.

**Question 4:** Where exactly will the berm be placed in respect to the shoreline?

**RESPONSE:** It is intended for the inside toe of the berm to be near (but ocean side) of the emergent island.

**Question 5:** What allowances will be made for tidal passages between the sound & the Gulf?

**RESPONSE:** Significant tidal passes will be allowed to remain as breaks in the berm. However, the final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 6:** Will any motorized vehicles be used on the islands?

**RESPONSE:** As stated in response to Question 3 above, equipment is not intended to be used on the existing island. However, all activities will be coordinated with USGS and motorized equipment will be utilized on the island if required and authorized by U.S. Geological Service and the Department of Interior.

**Question 7:** Where will the fill be placed?

**RESPONSE:** The berm material will be placed on the gulf side of the barrier islands.

**Question 8:** Will fill be used in the deeper water areas?

**RESPONSE:** No. The project is not intended to infill deeper passes at this time.



## MEMORANDUM

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**AGENCY:** Environmental Protection Agency, through John Ettinger, submitted on Thursday, May 13<sup>th</sup> ..

**Question 1:** Can the proposed project be constructed in time to prevent oil from reaching interior waters and wetlands? The most optimistic timeframe for completion of the proposed work appears to be four to six months.

**RESPONSE:** The time and scope of the current disaster is currently unknown. However, placement of material within the zone of impact as soon as possible will provide benefit.

**Question 2:** There are concerns that depending upon the length of time to complete the entire berm, that the flow of water through unbermed portions could accelerate, potentially creating a funneling effect for the oil to more rapidly move to the wetlands/estuarine areas where the berm has yet to be completed.

**RESPONSE:** The initial focus will be to add material and reduce the flow in shallow areas. While surface flow is extensive across these areas, the vast majority of water exchange occurs in the deeper passes. Shutting off the initial shallow passes will not accelerate the primary exchange of water in and around the islands.

**Question 3:** What mechanisms are in place to ensure dredging operations are being performed in manner consistent with applicable safety standards, given the existence of multiple pipelines in proposed dredge areas? There is concern that the need for speediness and efficiency might compromise the steps taken to ensure we don't rupture another pipeline.

**RESPONSE:** Calls will be placed to LA1 first to insure that all known pipelines and infrastructure is located. Additionally, magnetometer surveys will be accomplished in advance of any dredging operations.

**Question 4:** Would creation of the berm actually serve to trap the oil that moves inland while the construction is underway?

**RESPONSE:** There is no anticipation of oil "entrapment" behind the berm in that the oil (once in wetland areas) is not expected to then retreat back into the gulf. The berm will have the benefit of reducing the movement of the oil in shallows and reduce the number of locations required for the marshalling of personnel and clean-up resources.

**Question 5:** Would dredged material/sand be taken from behind the existing barrier islands? If so, what effect could that have on the life of the current barrier islands?

**RESPONSE:** No dredge material will be taken from behind the existing islands.



## MEMORANDUM

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**Question 6:** If this berm is successful and prevents the passage of oil and oil substances from migrating into the marsh but is, itself, contaminated, what is the plan for remediation? The sand will likely need to be removed. What is the plan for treatment and disposal of that sand?

**RESPONSE:** All contaminated sand, either existing or part of the berm, will be treated by the U.S. Coast Guard in the same fashion. It would be better if additional material were present to receive the oil versus having to displace the existing island material.

**Question 7:** What effect would the removal of sand from behind these barrier islands have on any shellfish beds and other critical habitat that are lie the barrier islands.

**RESPONSE:** As discussed previously, sediment would be dredged from areas outside the littoral systems, both East and West of the Mississippi River.

**Question 8:** Is there an understanding of the potential contamination of the dredged material from the spill or other persistent bioaccumulative toxics/metals. Is there a plan to address their effects if introduced into the water column?

**RESPONSE:** All material to be used in the development of the berm will be testing for contaminants in advance of the commencement of dredging operations.

**Question 9:** What will be the impacts on critical habitat, especially habitats that endangered species such as the piping plover? What impacts these activities will have on these species and other avian, wildlife and aquatic species which rely on the habitat of the existing barrier islands. The creation of this berm can be expected to, in the near term, fundamentally change the habitat.

**RESPONSE:** All activities associated with the development of the berm will be coordinated with the U.S. Fish & Wildlife Service and the National and National Marine Fisheries Service.

**Question 10:** What will be the impacts on interior estuarine waters, including exchange of fresh and salt water potentially increasing/decreasing salinities?

**RESPONSE:** The barrier islands have always been a component of the ecosystem and the salinity will remain within the historic levels for that area.

**Question 11:** There is the potential for significant changes in hydrology with the creation of this proposed structure, including a tidal prism. What are the envisioned effects?

**RESPONSE:** The barrier islands have always been a component of the ecosystem and the hydrology will remain within the historic levels for that area.

**Question 12:** The project could have implications on interior estuarine waters including exchange of fresh and salt water potentially increasing/decreasing salinities.





## MEMORANDUM

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**RESPONSE:** The barrier islands have always been a component of the ecosystem and the salinity will remain within the historic levels for that area.

**Question 13:** The project could have effects on sediment transport, increasing velocities in tidal passes thereby facilitating transport of sediment. After construction, the new barrier islands may serve to unevenly transfer sediment—starving some areas while enriching others. We need to better understand and assess the potential consequences of this.

**RESPONSE:** Significant tidal passes will be allowed to remain as breaks in the berm. However, the final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 14:** Another potential avenue could be to consider closing gaps in existing barrier islands, as opposed to filling deeper waters in natural tidal passes. Such an initial approach could be done relatively quickly, would require less borrow material, and would likely be more sustainable and consistent with coastal restoration efforts. Similar work has been done in the CWPPRA program and could draw from the designs and templates already proven successful. The need, viability, and effectiveness of filling deeper waters could simultaneously be assessed, while efforts continue to staunch the flow of oil from its source.

**RESPONSE:** The project as proposed will not close major passes and deepwater channels. However, the final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 15:** If this plan moves forward, the permit should be conditioned upon the applicant adjusting the “containment” aspect of the berm to a more environmentally beneficial project after the risk of oil contamination has passed. In other word, return the berm to a more studied and beneficial “barrier island” restoration project.

**RESPONSE:**

**Question 16:** It would also be imperative, if such a permit were issued, that this structure/island/berm that is created should remain public land (and not be privately developed or developed by the state or parish).

**RESPONSE:** It is intended that all land created by the berm will remain public land.



## MEMORANDUM

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**Agency-** Louisiana Department of Wildlife and Fisheries, Office of Wildlife, through letter dated May 13, 2010 from Jimmy Anthony, Assistant Secretary, to Pete Serio, Chief of Regulatory Branch, New Orleans District, USACE

**Question 1 :** Can berm width and elevation be reduced to minimize impacts to shallow near-shore environments while still providing an acceptable level of protection from the inland movement of oil?

**RESPONSE:** The width and height of the proposed berm are derivatives of two basic components of the berm construction and materials being placed. The material needs to be at least 3 feet out of the water to allow equipment to move atop the material and shape it during placement. The granular size of the material is expected to allow a maximum slope of 25:1. The combination of the minimal working height of the berm and the side slopes dictates the footprint of the berm. While a smaller footprint can be sought, the stacking capability of the dredge material will not allow it.

**Question 2:** LDWF recommends that the entire Pass-a-Loutre channel be dredged to some historic dimension and the material be used for creation of the protective berm. Can this be accomplished?

**RESPONSE:** Yes, the dredging of sediment from Pass-a-Loutre will be placed as the preferred and top priority source of material for the berm. Pass-a-Loutre is approximately 14 miles in length and contains sufficient material to construct a large percentage of western berm segment. The sediment in Pass-a-Loutre will be mined to its maximum depth and width to produce the required material for the berm. The quality of the material will be continually monitored to insure its usefulness for the berm construction.

**Question 3:** The applicant shall determine whether or not borrow area excavation will increase wave energy and subsequent shoreline erosion, alter littoral currents, or otherwise impact depositional processes, in a way that undermines the sustainability of inland islands, marsh, and shorelines, most importantly the Chandeleur Islands.

**RESPONSE:** It has been agreed that all borrow sources (Hewes Point, St. Bernard Shoal, Pass-a-Loutre, Southwest Pass Sediment Discharge Basin, and Ship Shoal) are all located well away from shorelines and will not negatively impact the existing shoreline or related wave action.

**Question 4:** Will the protective berm be monitored and maintained at the design elevation permanently or allowed to degrade and subside once the oil spill is no longer a threat to Louisiana's coast?

**RESPONSE:** After the emergency is over, the berm will be allowed to degrade and remain in the littoral zone.

**Question 5:** Because of the size of the oil spill, it is possible that the protective berm may be constructed with oil-contaminated sediments. Caution should be used to ensure that oil-contaminated sediments are not placed adjoining existing marsh, barrier islands or barrier shorelines.

**RESPONSE:** All berm material will be dredged from deepwater shoals (or Pass-a-Loutre) and the dredge source will be tested prior to commencement of dredging. The placement locations will be



## MEMORANDUM

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monitored to insure that oil is not present and covered by the berm. The U.S. Coast Guard will be contacted for removal of any oil contaminants prior to placement of the berm.

**Question 6:** The applicant shall identify existing infrastructure, such as pipelines, flowlines and well protection structures, which may potentially be affected by the proposed activity.

**RESPONSE:** Proper contact will be made with all appropriate public and private concerns to insure that all existing infrastructure is identified and will be properly flagged in the field prior to the commencement of work.

**Question 7:** The project should be modified to reduce the turbidity and sedimentation of seagrass beds in the Chandeleur Islands which can cause damage to the seagrasses and associated organisms.

**RESPONSE:** The final alignment of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 8:** The project should be modified to allow additional shallow tidal passes in the Chandeleur Island area to allow tidal flow into the seagrass beds. These tidal passes should be where existing passes are in order to save borrow material and not interrupt existing tidal flows to which the seagrass have adapted.

**RESPONSE:** The final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 9:** The workers and work boats used in this project should be instructed to not enter the seagrass beds and minimize work on the islands. This would help reduce possible damage and disruption of the seagrass beds, island habitat, nesting bird colonies and other species associated with those habitats.

**RESPONSE:** Minimal work in the placement of the berm is intended to be performed on the footprint of the existing islands. The final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.



## MEMORANDUM

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**TO:** STEVE MATHIES; CHRISTY CANTU ET AL  
**FROM:** MIKE FLORES; BILLY GUSTE  
**SUBJECT:** PRELIMINARY RESPONSES TO AGENCY  
COMMENTS/FEEDBACK REGARDING EMERGENCY PERMIT  
APPLICATION FOR BARRIER BERM DREDGING OPERATIONS  
**DATE:** FRIDAY MAY 14TH, 2010

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Steve,

Please find below preliminary responses to agency comments/feedback from interested and participating agencies relative to the emergency permit application filed by OCPR. Please recognize that the majority of the responses are general in nature, given the time demands placed on the potential project due to the emergency. We stand ready to assist you and other agencies in insuring that any emergency actions taken will be accomplished in such a manner to minimize negative impacts to our coastal system that could potentially be caused by the project. All recognize the project being proposed, under normal circumstances, would require in- depth engineering, cultural resource, and habitat evaluations, but the unprecedented disaster for the Gulf Coast mandates that we attempt to address the current situation expeditiously.

This project is being expedited in an effort to respond to a current disaster and keep oil outside our marshes, wetlands, and estuaries. That said, we are prepared to respond in a manner that will address concerns all permitting agencies. We are convinced that the project, as proposed, (while being developed as an immediate disaster response) will have net long-term benefits. Most obvious of these benefits will be the reintroduction of sediments from a source outside the littoral system.

### **Preliminary Questions/ Permitting Agency Response**

**AGENCY:** U.S. Fish and Wildlife through, Jane Lyder, U.S. Department of the Interior, submitted on Thursday, May 13<sup>th</sup>.

**Question 1:** Will any of the fill be taken from the littoral system?

**Response:** No. it was originally envisioned that sediment would be dredged from the inland side of Chandeluer Islands and sources westward/seaward of the islands on the escarpment, ranging from 100 yards off the islands to ~1-2 miles away due to sediment sources, dredge capabilities of available dredges, and delivery times. Through meetings and discussions with DOI, USFWS, MMS, and USGS, it was agreed that every effort should be made to obtain





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material that is from outside the littoral system, i.e. from St. Bernard Shoals and Hewes Point, Ship Shoals, and the Mississippi River passes.

**Question 2:** What is the dredging process?

**RESPONSE:** Sand will be dredged from the borrow areas (Hewes Point, St. Bernard Shoal, Pass-a-Loutre, etc.) using cutterhead dredges and placed by a dredge loader into transport barges. The transport barges will move the sand to waiting spill barges that will place the material along the shoreline. The cutterhead dredges will have the capacity to dredge to a depth of 65 feet.

**Question 3:** What process will be used for filling?

**RESPONSE:** The transport barges will move the sand to waiting spill barges (floating in water as shallow as four (4) feet offshore) that will move the material via pipeline for deposit along the shoreline (Refer to Illustration No. 1). The material will be allowed to spread to the natural slope – based on the consistency of the sand being spread. Final shaping of the material will be accomplished by bulldozer and grader equipment working atop the berm.

**Question 4:** Where exactly will the berm be placed in respect to the shoreline?

**RESPONSE:** It is intended for the inside toe of the berm to be near (but ocean side) of the emergent island.

**Question 5:** What allowances will be made for tidal passages between the sound & the Gulf?

**RESPONSE:** Significant tidal passes will be allowed to remain as breaks in the berm. However, the final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 6:** Will any motorized vehicles be used on the islands?

**RESPONSE:** As stated in response to Question 3 above, equipment is not intended to be used on the existing island. However, all activities will be coordinated with USGS and motorized equipment will be utilized on the island if required and authorized by U.S. Geological Service and the Department of Interior.

**Question 7:** Where will the fill be placed?

**RESPONSE:** The berm material will be placed on the gulf side of the barrier islands.

**Question 8:** Will fill be used in the deeper water areas?

**RESPONSE:** No. The project is not intended to infill deeper passes at this time.



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**AGENCY:** Environmental Protection Agency, through John Ettinger, submitted on Thursday, May 13<sup>th</sup> ..

**Question 1:** Can the proposed project be constructed in time to prevent oil from reaching interior waters and wetlands? The most optimistic timeframe for completion of the proposed work appears to be four to six months.

**RESPONSE:** The time and scope of the current disaster is currently unknown. However, placement of material within the zone of impact as soon as possible will provide benefit.

**Question 2:** There are concerns that depending upon the length of time to complete the entire berm, that the flow of water through unbermed portions could accelerate, potentially creating a funneling effect for the oil to more rapidly move to the wetlands/estuarine areas where the berm has yet to be completed.

**RESPONSE:** The initial focus will be to add material and reduce the flow in shallow areas. While surface flow is extensive across these areas, the vast majority of water exchange occurs in the deeper passes. Shutting off the initial shallow passes will not accelerate the primary exchange of water in and around the islands.

**Question 3:** What mechanisms are in place to ensure dredging operations are being performed in manner consistent with applicable safety standards, given the existence of multiple pipelines in proposed dredge areas? There is concern that the need for speediness and efficiency might compromise the steps taken to ensure we don't rupture another pipeline.

**RESPONSE:** Calls will be placed to LA1 first to insure that all known pipelines and infrastructure is located. Additionally, magnetometer surveys will be accomplished in advance of any dredging operations.

**Question 4:** Would creation of the berm actually serve to trap the oil that moves inland while the construction is underway?

**RESPONSE:** There is no anticipation of oil "entrapment" behind the berm in that the oil (once in wetland areas) is not expected to then retreat back into the gulf. The berm will have the benefit of reducing the movement of the oil in shallows and reduce the number of locations required for the marshalling of personnel and clean-up resources.

**Question 5:** Would dredged material/sand be taken from behind the existing barrier islands? If so, what effect could that have on the life of the current barrier islands?

**RESPONSE:** No dredge material will be taken from behind the existing islands.



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**Question 6:** If this berm is successful and prevents the passage of oil and oil substances from migrating into the marsh but is, itself, contaminated, what is the plan for remediation? The sand will likely need to be removed. What is the plan for treatment and disposal of that sand?

**RESPONSE:** All contaminated sand, either existing or part of the berm, will be treated by the U.S. Coast Guard in the same fashion. It would be better if additional material were present to receive the oil versus having to displace the existing island material.

**Question 7:** What effect would the removal of sand from behind these barrier islands have on any shellfish beds and other critical habitat that are lie the barrier islands.

**RESPONSE:** As discussed previously, sediment would be dredged from areas outside the littoral systems, both East and West of the Mississippi River.

**Question 8:** Is there an understanding of the potential contamination of the dredged material from the spill or other persistent bioaccumulative toxics/metals. Is there a plan to address their effects if introduced into the water column?

**RESPONSE:** All material to be used in the development of the berm will be testing for contaminants in advance of the commencement of dredging operations.

**Question 9:** What will be the impacts on critical habitat, especially habitats that endangered species such as the piping plover? What impacts these activities will have on these species and other avian, wildlife and aquatic species which rely on the habitat of the existing barrier islands. The creation of this berm can be expected to, in the near term, fundamentally change the habitat.

**RESPONSE:** All activities associated with the development of the berm will be coordinated with the U.S. Fish & Wildlife Service and the National and National Marine Fisheries Service.

**Question 10:** What will be the impacts on interior estuarine waters, including exchange of fresh and salt water potentially increasing/decreasing salinities?

**RESPONSE:** The barrier islands have always been a component of the ecosystem and the salinity will remain within the historic levels for that area.

**Question 11:** There is the potential for significant changes in hydrology with the creation of this proposed structure, including a tidal prism. What are the envisioned effects?

**RESPONSE:** The barrier islands have always been a component of the ecosystem and the hydrology will remain within the historic levels for that area.

**Question 12:** The project could have implications on interior estuarine waters including exchange of fresh and salt water potentially increasing/decreasing salinities.



## MEMORANDUM

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**RESPONSE:** The barrier islands have always been a component of the ecosystem and the salinity will remain within the historic levels for that area.

**Question 13:** The project could have effects on sediment transport, increasing velocities in tidal passes thereby facilitating transport of sediment. After construction, the new barrier islands may serve to unevenly transfer sediment—starving some areas while enriching others. We need to better understand and assess the potential consequences of this.

**RESPONSE:** Significant tidal passes will be allowed to remain as breaks in the berm. However, the final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 14:** Another potential avenue could be to consider closing gaps in existing barrier islands, as opposed to filling deeper waters in natural tidal passes. Such an initial approach could be done relatively quickly, would require less borrow material, and would likely be more sustainable and consistent with coastal restoration efforts. Similar work has been done in the CWPPRA program and could draw from the designs and templates already proven successful. The need, viability, and effectiveness of filling deeper waters could simultaneously be assessed, while efforts continue to staunch the flow of oil from its source.

**RESPONSE:** The project as proposed will not close major passes and deepwater channels. However, the final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 15:** If this plan moves forward, the permit should be conditioned upon the applicant adjusting the “containment” aspect of the berm to a more environmentally beneficial project after the risk of oil contamination has passed. In other word, return the berm to a more studied and beneficial “barrier island” restoration project.

**RESPONSE:**

**Question 16:** It would also be imperative, if such a permit were issued, that this structure/island/berm that is created should remain public land (and not be privately developed or developed by the state or parish).

**RESPONSE:** It is intended that all land created by the berm will remain public land.





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**Agency- Louisiana Department of Wildlife and Fisheries, Office of Wildlife, through letter dated May 13, 2010 from Jimmy Anthony, Assistant Secretary, to Pete Serio, Chief of Regulatory Branch, New Orleans District, USACE**

**Question 1 :** Can berm width and elevation be reduced to minimize impacts to shallow near-shore environments while still providing an acceptable level of protection from the inland movement of oil?

**RESPONSE:** The width and height of the proposed berm are derivatives of two basic components of the berm construction and materials being placed. The material needs to be at least 3 feet out of the water to allow equipment to move atop the material and shape it during placement. The granular size of the material is expected to allow a maximum slope of 25:1. The combination of the minimal working height of the berm and the side slopes dictates the footprint of the berm. While a smaller footprint can be sought, the stacking capability of the dredge material will not allow it.

**Question 2:** LDWF recommends that the entire Pass-a-Loutre channel be dredged to some historic dimension and the material be used for creation of the protective berm. Can this be accomplished?

**RESPONSE:** Yes, the dredging of sediment from Pass-a-Loutre will be placed as the preferred and top priority source of material for the berm. Pass-a-Loutre is approximately 14 miles in length and contains sufficient material to construct a large percentage of western berm segment. The sediment in Pass-a-Loutre will be mined to its maximum depth and width to produce the required material for the berm. The quality of the material will be continually monitored to insure its usefulness for the berm construction.

**Question 3:** The applicant shall determine whether or not borrow area excavation will increase wave energy and subsequent shoreline erosion, alter littoral currents, or otherwise impact depositional processes, in a way that undermines the sustainability of inland islands, marsh, and shorelines, most importantly the Chandeleur Islands.

**RESPONSE:** It has been agreed that all borrow sources (Hewes Point, St. Bernard Shoal, Pass-a-Loutre, Southwest Pass Sediment Discharge Basin, and Ship Shoal) are all located well away from shorelines and will not negatively impact the existing shoreline or related wave action.

**Question 4:** Will the protective berm be monitored and maintained at the design elevation permanently or allowed to degrade and subside once the oil spill is no longer a threat to Louisiana's coast?

**RESPONSE:** After the emergency is over, the berm will be allowed to degrade and remain in the littoral zone.

**Question 5:** Because of the size of the oil spill, it is possible that the protective berm may be constructed with oil-contaminated sediments. Caution should be used to ensure that oil-contaminated sediments are not placed adjoining existing marsh, barrier islands or barrier shorelines.

**RESPONSE:** All berm material will be dredged from deepwater shoals (or Pass-a-Loutre) and the dredge source will be tested prior to commencement of dredging. The placement locations will be



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monitored to insure that oil is not present and covered by the berm. The U.S. Coast Guard will be contacted for removal of any oil contaminants prior to placement of the berm.

**Question 6:** The applicant shall identify existing infrastructure, such as pipelines, flowlines and well protection structures, which may potentially be affected by the proposed activity.

**RESPONSE:** Proper contact will be made with all appropriate public and private concerns to insure that all existing infrastructure is identified and will be properly flagged in the field prior to the commencement of work.

**Question 7:** The project should be modified to reduce the turbidity and sedimentation of seagrass beds in the Chandeleur Islands which can cause damage to the seagrasses and associated organisms.

**RESPONSE:** The final alignment of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 8:** The project should be modified to allow additional shallow tidal passes in the Chandeleur Island area to allow tidal flow into the seagrass beds. These tidal passes should be where existing passes are in order to save borrow material and not interrupt existing tidal flows to which the seagrass have adapted.

**RESPONSE:** The final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Question 9:** The workers and work boats used in this project should be instructed to not enter the seagrass beds and minimize work on the islands. This would help reduce possible damage and disruption of the seagrass beds, island habitat, nesting bird colonies and other species associated with those habitats.

**RESPONSE:** Minimal work in the placement of the berm is intended to be performed on the footprint of the existing islands. The final alignment and configuration of the berm will be coordinated with local representatives of U.S. Geological Service and the Department of Interior.

**Agency- U.S. Department of the Interior, Fish and Wildlife Service, through letter dated May 14, 2010 from James F. Boggs, Supervisor, Louisiana Ecological Services Office**

**Comment 1:** We recommend dredging compatible material from areas such as Hewes Point and St. Bernard Shoals for the section of berm proposed in proximity of the Chandeleur Islands. We also recommend that dredging not be done landward of the islands.

**RESPONSE:** All material to be used for the development of the berm will be dredged from shoals deemed acceptable by USGS and the Department of Interior in proximity of the Chandeleur Islands. Dredging will not be done landward of the islands.



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**Comment 2:** Federal agencies proposing a project that include features on a national wildlife refuge are encouraged to contact the Refuge Manager in the planning process.

**RESPONSE:** Mr. Kenneth Litzenberger, Project Leader for the Service's Southeast National Wildlife Refuges will be kept abreast of all activities associated with the planning and construction of the berm and his determination sought in the development of each component of the project.

**Comment 3:** In making this determination, the Corps should consult with the appropriate administering agency (i.e. Service's Southeast National Wildlife Refuges) so we can assist the Corps in determining whether a proposed project falls among the activities prohibited in the wilderness area.

**RESPONSE:** As stated in the response to Comment 2 above, Mr. Litzenberger will be kept informed of all proposed actions.

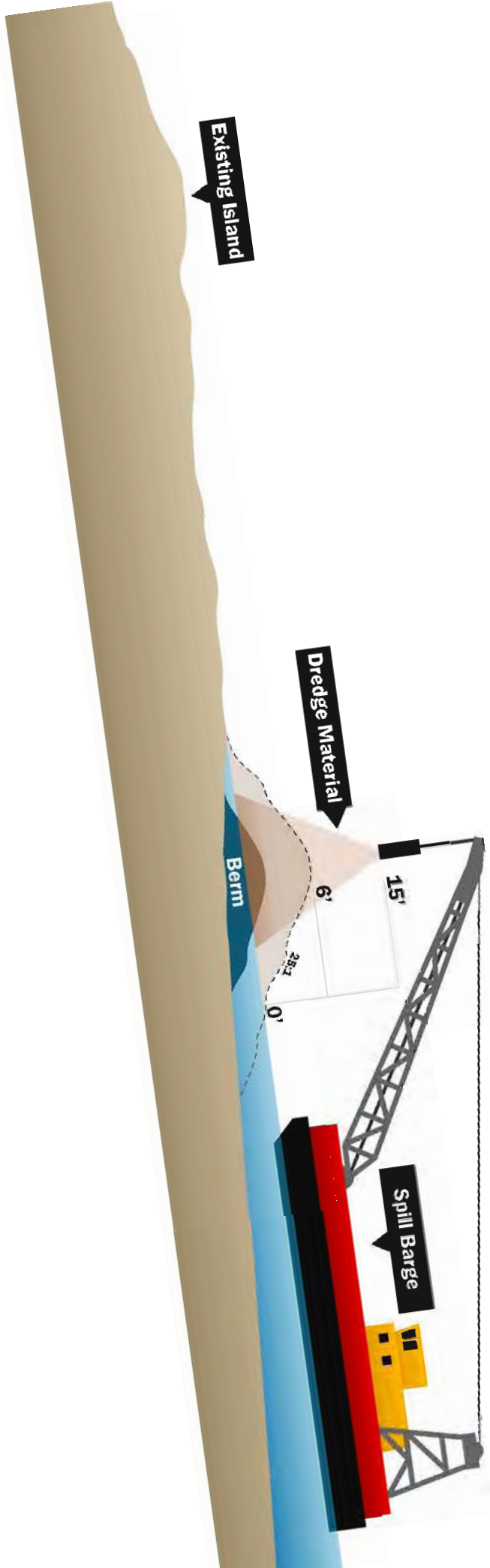
**Comment 4:** We recommend that on-site contract personnel be informed of the need to identify colonial nesting birds and their nests, and should avoid affecting them during the breeding season.

**RESPONSE:** Unless requested/authorized by USGS no construction activities are proposed on the existing islands. All work is proposed to occur within the footprint of the proposed berm – to be constructed seaward of the existing islands. However, all contract personnel will be kept advised of the necessity to refrain from affecting the activities of nesting birds and their nests.

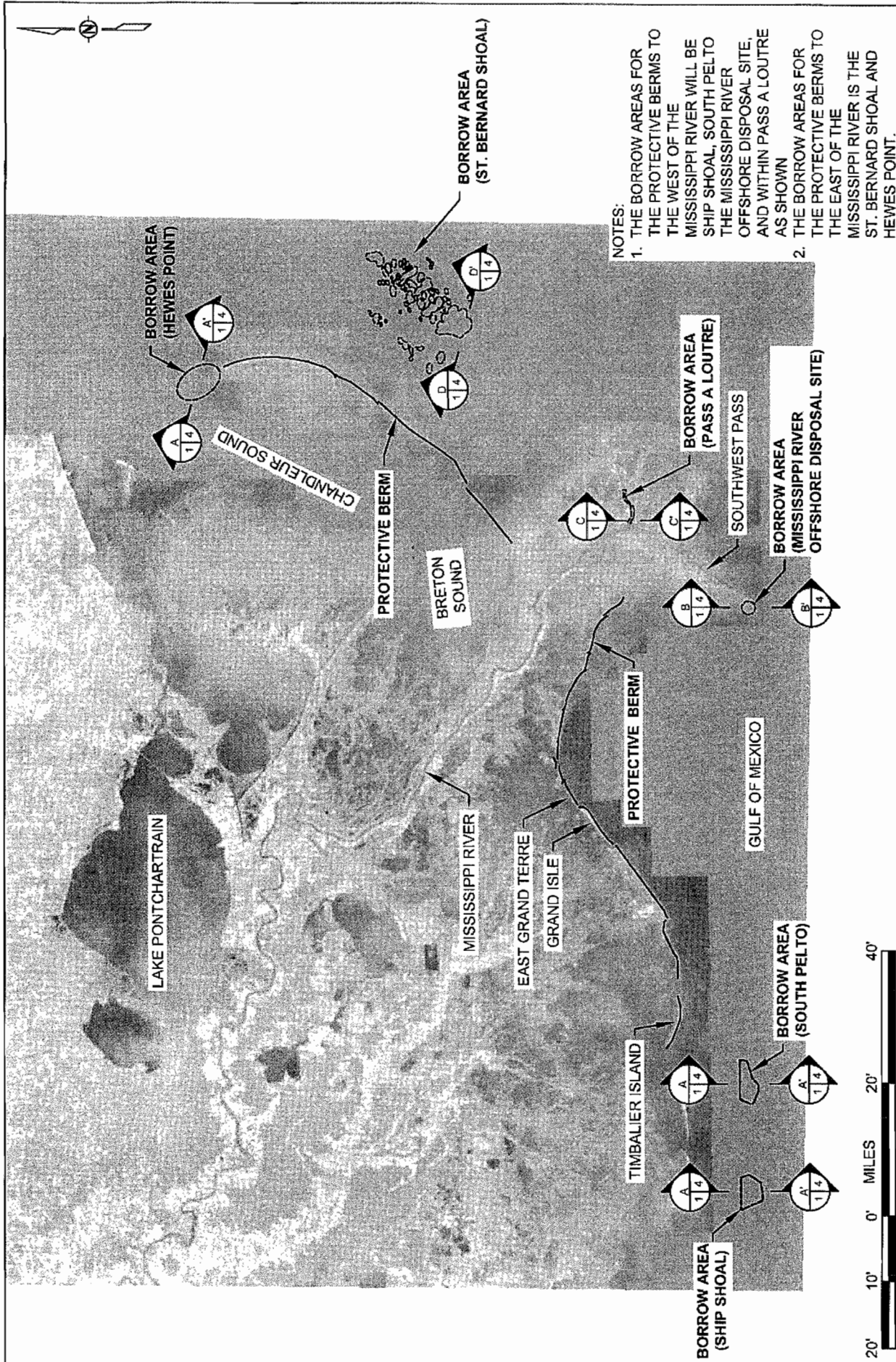
**Comment 5:** The Louisiana Department of Wildlife and Fisheries' Fur and Refuge Division should be contacted to obtain the most current information about the nesting chronology of individual brown pelican colonies.

**RESPONSE:** The project management team will have a agency liaison officer that will maintain contact with the Louisiana Department of Wildlife and Fisheries' Fur and Refuge Division to maintain current information about the nesting chronology of the brown pelican colonies.

**Concluding comments from USFWS:** Under the "Endangered Species Act" and "Additional Recommendations" sections (on Pages 4 and 5 of the USFWS letter) there are several recommendations offered regarding the location, construction methods, and placement of the berm. All of the recommendations are acceptable to the applicant and have been addressed by specific reference to another agency within the body of this response.



# Revised Permit Application

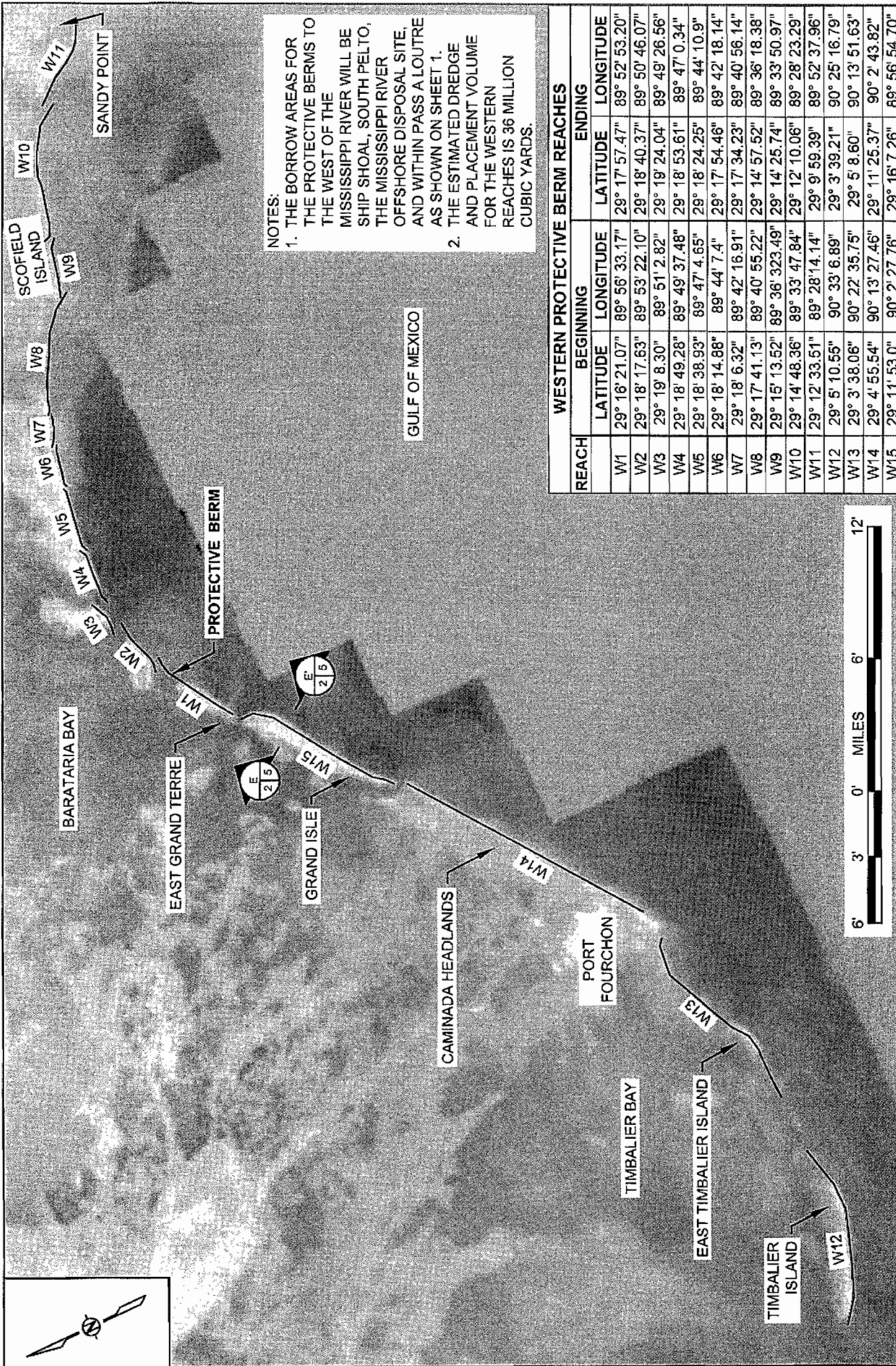


**NOTES:**

1. THE BORROW AREAS FOR THE PROTECTIVE BERMS TO THE WEST OF THE MISSISSIPPI RIVER WILL BE SHIP SHOAL, SOUTH PELTO THE MISSISSIPPI RIVER OFFSHORE DISPOSAL SITE, AND WITHIN PASS A LOUTRE AS SHOWN
2. THE BORROW AREAS FOR THE PROTECTIVE BERMS TO THE EAST OF THE MISSISSIPPI RIVER IS THE ST. BERNARD SHOAL AND HEWES POINT.

<p>APPLICATION BY: OFFICE OF COASTAL PROTECTION &amp; RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801</p>	<p><b>OFFICE OF COASTAL PROTECTION &amp; RESTORATION ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801</p>	<p>BARRIER ISLAND DEFENSE</p>	<p>PLAN VIEW</p>
<p>DRAWN BY: KRISTI CANTU</p>	<p>DESIGNED BY:</p>	<p>STATE PROJECT NUMBER:</p>	<p>DATE: MAY 11, 2010 (REVISED 5/14/10)</p>
	<p>APPROVED BY:</p>	<p>FEDERAL PROJECT NUMBER:</p>	<p>SHEET 1 OF 5</p>

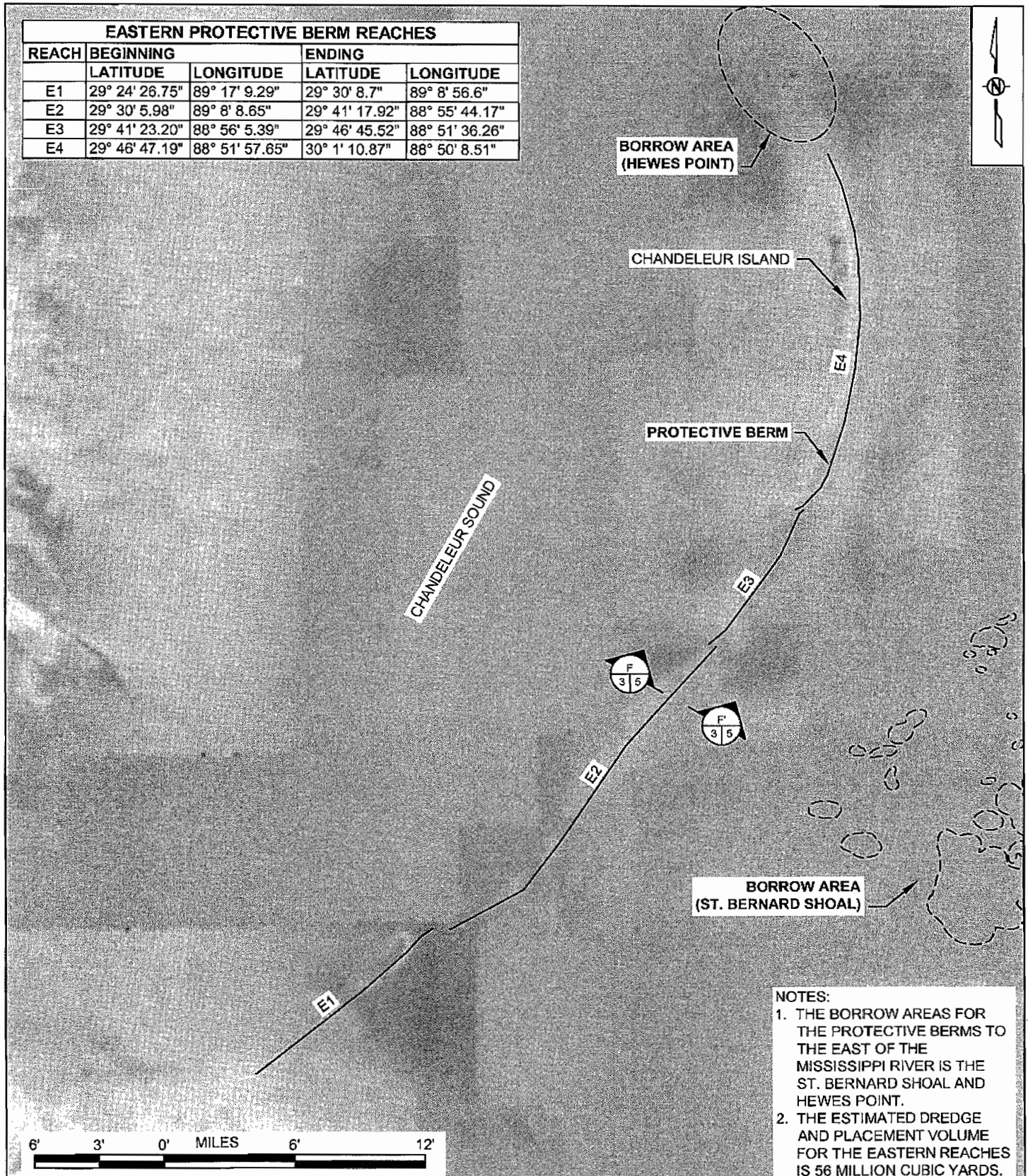




WESTERN PROTECTIVE BERM REACHES			
REACH	BEGINNING	ENDING	
	LATITUDE	LONGITUDE	LONGITUDE
W1	29° 16' 21.07"	89° 56' 33.17"	29° 17' 57.47"
W2	29° 18' 17.63"	89° 53' 22.10"	29° 18' 40.37"
W3	29° 19' 8.30"	89° 51' 2.82"	29° 19' 24.04"
W4	29° 18' 49.28"	89° 49' 37.48"	29° 18' 53.61"
W5	29° 18' 38.93"	89° 47' 4.65"	29° 18' 24.25"
W6	29° 18' 14.88"	89° 44' 7.4"	29° 17' 54.46"
W7	29° 18' 6.32"	89° 42' 16.91"	29° 17' 34.23"
W8	29° 17' 41.13"	89° 40' 55.22"	29° 14' 57.52"
W9	29° 15' 13.52"	89° 36' 323.49"	29° 14' 26.74"
W10	29° 14' 48.36"	89° 33' 47.84"	29° 12' 10.06"
W11	29° 12' 33.51"	89° 28' 14.14"	29° 9' 59.39"
W12	29° 5' 10.55"	90° 33' 6.89"	29° 3' 39.21"
W13	29° 3' 38.08"	90° 22' 35.75"	29° 5' 8.60"
W14	29° 4' 55.54"	90° 13' 27.46"	29° 11' 25.37"
W15	29° 11' 53.0"	90° 2' 27.76"	29° 16' 7.26"

<b>OFFICE OF COASTAL PROTECTION &amp; RESTORATION</b> <b>ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		<b>OFFICE OF COASTAL PROTECTION &amp; RESTORATION</b> <b>ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		<b>WESTERN REACHES</b>	
APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		DESIGNED BY: KRISTI CANTU		STATE PROJECT NUMBER:	
DRAWN BY: KRISTI CANTU		APPROVED BY:		FEDERAL PROJECT NUMBER:	
DATE: MAY 11, 2010 (REVISED 5/14/10)		SHEET 2 OF 5		WESTERN REACHES	

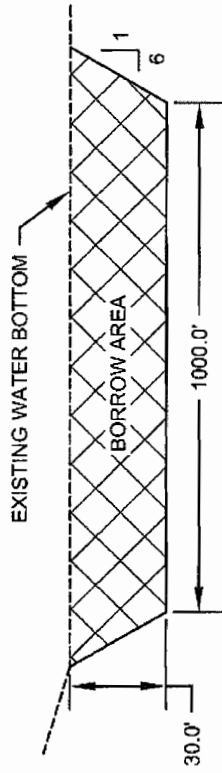
EASTERN PROTECTIVE BERM REACHES				
REACH	BEGINNING		ENDING	
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE
E1	29° 24' 26.75"	89° 17' 9.29"	29° 30' 8.7"	89° 8' 56.6"
E2	29° 30' 5.98"	89° 8' 8.65"	29° 41' 17.92"	88° 55' 44.17"
E3	29° 41' 23.20"	88° 56' 5.39"	29° 46' 45.52"	88° 51' 36.26"
E4	29° 46' 47.19"	88° 51' 57.65"	30° 1' 10.87"	88° 50' 8.51"



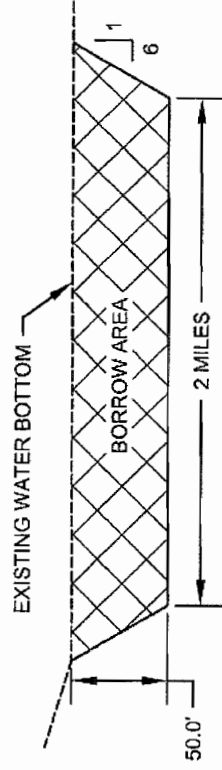
- NOTES:**
1. THE BORROW AREAS FOR THE PROTECTIVE BERMS TO THE EAST OF THE MISSISSIPPI RIVER IS THE ST. BERNARD SHOAL AND HEWES POINT.
  2. THE ESTIMATED DREDGE AND PLACEMENT VOLUME FOR THE EASTERN REACHES IS 56 MILLION CUBIC YARDS.

APPLICATION BY: OCPR 450 LAUREL STREET BATON ROUGE, LA	OFFICE OF COASTAL PROTECTION & RESTORATION ENGINEERING BRANCH 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BARRIER ISLAND DEFENCE	EASTERN REACHES
			STATE PROJECT NUMBER:	DATE: MAY 11, 2010 (5/14/10)
DRAWN BY: KRISTI CANTU	DESIGNED BY:	APPROVED BY:	FEDERAL PROJECT NUMBER:	SHEET 3 OF 5

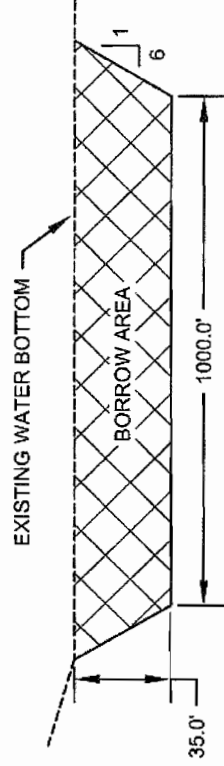




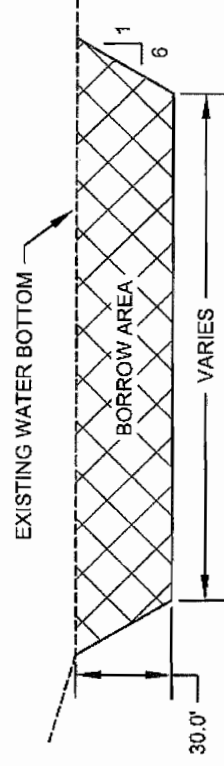
**A-A'**  
SHIP SHOAL, SOUTH  
PELTO, & HEWES POINT  
BORROW AREAS



**B-B'**  
OFFSHORE  
DISPOSAL SITE  
BORROW AREA



**C-C'**  
PASS A LOUTRE  
BORROW AREA



**D-D'**  
ST. BERNARD  
SHOAL

APPLICATION BY:  
OFFICE OF COASTAL PROTECTION & RESTORATION  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

**OFFICE OF COASTAL PROTECTION & RESTORATION  
ENGINEERING BRANCH**  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

**BARRIER ISLAND  
DEFENSE**

**BORROW DETAILS**

DRAWN BY: KRISTI CANTU

DESIGNED BY:

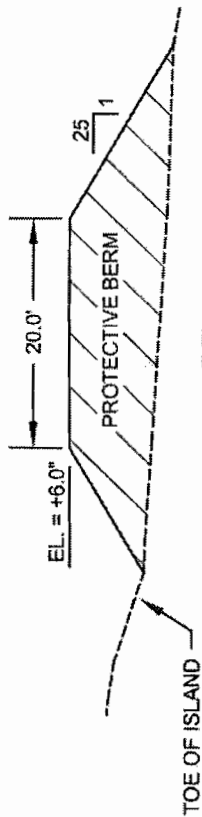
APPROVED BY:

STATE PROJECT NUMBER:

FEDERAL PROJECT NUMBER:

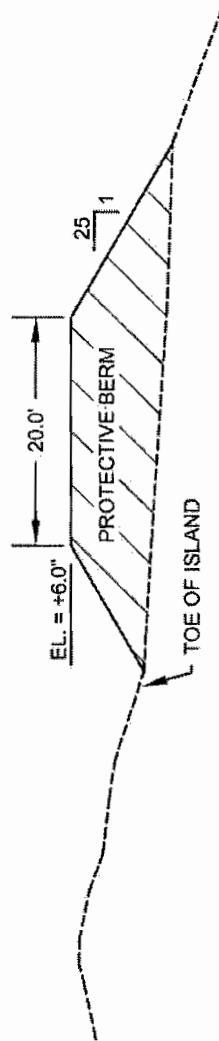
DATE: MAY 11, 2010 (REVISED 5/14/10)

SHEET 4 OF 5



**PROTECTIVE BERM TO THE WEST  
OF THE MISSISSIPPI RIVER**

NOTE: SHIP SHOAL, SOUTH PELTO, MISSISSIPPI  
RIVER OFFSHORE DISPOSAL SITE, AND AREA  
AT THE BEGINNING OF PASS A LOU TRE WILL BE  
USED AS THE BORROW SOURCE.



**PROTECTIVE BERM TO  
THE EAST OF  
MISSISSIPPI RIVER**

NOTE: HEWES POINT AND ST. BERNARD  
SHOAL WILL BE USE AS THE BORROW AREAS.

APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	<b>OFFICE OF COASTAL PROTECTION &amp; RESTORATION ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BARRIER ISLAND DEFENSE	PROTECTIVE BERM DETAILS
DRAWN BY: KRISTI CANTU	DESIGNED BY:	STATE PROJECT NUMBER:  FEDERAL PROJECT NUMBER:	DATE: MAY 11, 2010 (REVISED 5/14/10)  SHEET 5 OF 5

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**Subject:**

FW: LA Barrier Island Protective Berm - digested comments

From: U.S. Fish and Wildlife Service

Sent: Monday, May 17, 2010 3:48 PM

Subject: LA Barrier Island Protective Berm - digested comments

As you requested on our conference call this morning, here are succinct comments for use in the construction of a draft permit:

- \* Verify with USGS that borrow material from Hewes Point will not negatively affect the ability of that shoal to provide wave attenuation benefits.
- \* Monitor post-construction and conduct necessary work (i.e., gap installation, localized levee degradation) to minimize any adverse impacts of oil removal work and short-term sediment redistribution.
- \* Avoid impacting the intertidal area to the maximum extent possible so that piping plover foraging habitat remains available. If possible, allow for a 100-foot buffer from the toe of the berm to mean low, low water.
- \* Keep all construction equipment out of the area from mean low low water to the island dune/vegetation line;
- \* If solid berm extends for greater than a 6-mile length, post-cleanup gapping should be considered to increase the likelihood of washover events, sand flat creation and restoration of tidal interchange.
- \* The berm should be constructed strategically to intercept oil where it is coming ashore first.
- \* Seagrass beds landward of islands should be identified and protected during construction.
- \* Construction should not result in problematic changes in natural sediment transport, fish migration, or salinity regimes. Information on area sediment transport can be found at <http://pubs.usgs.gov/sir/2009/5252> (Sand Resources, Regional Geology, and Coastal Processes of the Chandeleur Islands Coastal System: an Evaluation of the Breton National Wildlife Refuge) which we recommend be utilized in project planning and implementation.
- \* Tidal inlets should not be blocked by the berm. Temporary booms should span tidal inlets to intercept oil.
- \* That portion of the Chandeleur Islands north of Monkey Bayou should be prioritized for berm construction, if appropriate in terms of immediate needs to block oil movement.
- \* Minimize the use of the proposed Ship Shoal borrow site, as this portion of Ship Shoal has been identified as the borrow site for future coastal restoration projects (LCA and CWPPRA).
- \* We recommend dredging compatible material from areas such as Hewes Point and St. Bernard Shoals for the section of berm proposed in proximity of the Chandeleur Islands. We also recommend that dredging not be done landward of the islands.
- \* All construction or maintenance activities on Breton NWR will require the a Special Use Permit,

Compatibility Determination, and Wilderness Act effect determination from the Refuge Manager; furthermore, all activities on that NWR must be coordinated with the Refuge Manager. Please contact Kenneth Litzenberger, Project Leader for the Service's Southeast National Wildlife Refuges (985/882-2000) for further information. The project should be conducted such that existing refuge resources and future restoration potential are not compromised.

\* To minimize disturbance to colonies containing nesting gulls, terns, and/or black skimmers, the Service typically recommends that all activity occurring within 650 feet of a rookery be restricted to the non-nesting period (i.e., September 16 through April 1). For colonies containing nesting brown pelicans, the Service typically recommends that all activity occurring within 2,000 feet of a rookery be restricted to the non-nesting period (i.e., September 15 through March 31). If rookeries are identified, and these buffer restrictions to these rookeries are not feasible, berm construction should occur at the maximum distance practicable from these rookeries. If feasible, the alternative of gapping and boom deployment should be investigated in these areas. The Service should be notified when rookeries are identified. An observer should monitor each rookery to determine the minimum distance at which construction can occur without disturbing nesting birds (this should be done on an individual rookery basis). That distance could be utilized as the construction zone buffer for that rookery and a boom(s) could be placed in lieu of the berm within that buffer distance until nesting season is complete at which time the berm can be completed. The Louisiana Department of Wildlife and Fisheries' Fur and Refuge Division (Tom Hess: 337-538-2276) may be contacted to obtain the most current information about the nesting chronology of individual brown pelican colonies.

\* In general, in order to minimize adverse impacts to piping plover, nesting colonial birds, and seagrass beds, the applicant should work in collaboration with the Service, NOAA, and USGS to identify beneficial gaps in passes and along the shoreline to strategically install booms, if they can provide the barrier necessary to stop oil migration.

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National Oceanic and Atmospheric Administration  
National Marine Fisheries Service  
Southeast Region

Comments on Louisiana Barrier Island Berm  
Provided under authority of the Essential Fish Habitat provisions of the Magnuson-  
Stevens Fishery Conservation and Management Act  
And  
Fish and Wildlife Coordination Act

1. This authorization only includes placement of sand in front of existing islands and to reduce the cross-sectional area of passes. Complete closure of passes is not authorized.
2. The permittee shall evaluate potential impacts of the activity on issues of concern. The permittee also shall evaluate proposed efforts to reduce the cross-sectional openings of tidal passes on passage of fishery resources, bay/sound water quality, oyster producing areas and long shore transport of sediment.
3. The permittee shall test sediments to be dredged for oil contamination prior to excavation; no contaminated sediments shall be used construct the barrier berm.
4. The NOD should require coordination throughout and after project implementation between the permittee and the regulatory and natural resource agencies. The permittee shall submit, prior to dredging, a summary plan of the order of intended work and anticipated schedule and duration for each project reach depicted on the permit plats. This information shall be submitted to the National Marine Fisheries Service and other interested agencies. The permittee shall provide written status and weekly updates during project construction.
5. The permittee shall coordinate directly with National Marine Fisheries Service, Southeast Region, Baton Rouge Field Office, in advance of berm construction in the vicinity of reach W4, W5, W6, W7, W9, W10, and W13 due to the presence of active Coastal Wetlands Planning, Protection and Restoration Act projects in these areas.
6. The permittee shall conduct numerical analyses of potential wave climate changes that may result from excavation of the proposed borrow areas. These analyses shall be conducted using current coastal engineering standard methods (i.e., wave refraction/diffraction simulations) and shall assess changes in wave height and direction under various conditions including storm events. Additionally, the applicant shall assess, using current engineering methods, potential changes to adjacent shorelines that may result from predicted wave climate changes. The permittee shall submit both wave climate and shoreline response analyses to National Marine Fisheries Service and other interested agencies.

7. No dredging for fill material or equipment access is authorized outside of areas depicted on the May 11, 2010, plats, as revised on May 14, 2010. Use of borrow sites not expressly depicted in the plats is not allowed unless separate authorization is obtained through consultation with the agencies.
8. The permittee shall avoid, to the extent practicable, direct impacts to vegetated wetlands and seagrass beds from dredged material discharge/placement or from prop washing.
9. No tracked construction equipment is allowed on existing islands, shorelines, vegetated wetlands and seagrasses unless approved by the NOD through coordination with the natural resource agencies. No construction access corridors or pipeline discharge alignments should be across marsh or seagrasses unless approved by the NOD through coordination with the resource agencies.
10. Sediment in the berm that may become contaminated must be removed and disposed of in a manner consistent with State and Federal law through coordination with those agencies with oversight authority.
11. The permittee shall develop a monitoring plan, in coordination with the natural resource agencies, to assess the adverse impacts of berm construction. Monitoring should include, but not be limited to, evaluation of oil contamination that may develop in borrow sites after excavation, surveying the dispersal of any berm sediment that becomes contaminated, assessment of the effects of construction activities and berm erosion on infilling tidal passes, marsh, and seagrasses. As part of the monitoring plan, the permittee shall provide to the resource agencies copies of pre-construction and as-built plans
12. The permittee shall develop a post-emergency plan to ensure that any remaining berm features will not interfere with present and future coastal restoration projects. Such a plan may include removal, degrading, or gapping of remaining berm features.

**5/22/10 Department of the Interior Response to Information received from the Applicant for the Permit to dredge sediment to replenish Barrier Islands in response to the Deepwater Horizon Spill**

## **BACKGROUND**

The Department of the Interior (DOI) has two main agencies involved in review of this application: the U.S. Fish and Wildlife Service (FWS) and the Minerals Management Service (MMS). In addition the National Park Service has an interest because of the close proximity of Gulf Islands National Seashore. DOI has been active in the review of this application since the day it was filed by the State of Louisiana. We are well aware of the urgencies involved in protecting the marsh and wetland areas of the Louisiana Delta from this spill. DOI has been actively involved in working with other agencies within the Administration on a strategy for Gulf Coast restoration. President Obama has made this a very high priority within the Administration.

## **PROPOSAL HISTORY**

The original proposal, submitted on May 11, called for, among other things, dredging about a mile offshore the Chandeleur Islands and using the dredged material to build a berm along those islands. The Chandeleur Islands are within Breton National Wildlife Refuge and are designated as wilderness. The Chandeleurs are barrier islands that are extremely eroded, suffering a significant loss of sediment as a result of Hurricane Katrina. While they once served to protect marsh areas east of the Mississippi, they no longer can do that effectively. In meetings on May 12 and 13, DOI expressed its concerns that the State's proposal would lead to the further erosion of the Chandeleurs because of the location of the borrow area. These views are based a comprehensive report prepared by the U.S. Geological Survey (USGS) at the request of FWS entitled: *Sand Resources, Regional Geology, and Coastal Processes of the Chandeleur Islands Coastal System: an Evaluation of the Breton National Wildlife Refuge*.

In response to these meetings, the State amended its original permit application and identified different borrow areas for the Chandeleurs – Hewes Pt, north of the Islands, and St. Bernard Shoals, east of the Islands. Both of these areas were identified by USGS as having sediment appropriate for inclusion in the littoral system in which the Islands sit. This amendment however resulted in a need for a sand and gravel lease from the Minerals Management Service (MMS) because these borrow areas are in the Outer Continental Shelf. The MMS has comprehensive requirements for dredging on the OCS related to pipeline location, shipping needs, current impacts etc.

Finally, the State submitted a second application to the Corps for berm construction along Racoon, Trinity, and Whiskey Islands. The State has asked the Corps not to begin the processing of that application until the first permit application is resolved.

## **DOI CONCERNS AND VIEWS**

DOI recognizes the urgency of the State's application. We have made ourselves available often and quickly to discuss this proposal with the State and the Corps. If this project could be completed within a week or two, we would be more willing to consider the risks inherent in the project as appropriate ones. However, the State itself has said this very large and comprehensive project will take six to nine months to complete. We are seeing oiling in the areas proposed for protection right now.

Given the size of this project and the fact that the project cannot be completed within a timeframe needed for it to provide protection to the Delta, we do not think the risks inherent in proceeding without more environmental study and knowledge are acceptable. We are however open to reviewing any projects proposed by the State that could be executed in time to prove helpful in minimizing the devastating impacts of this spill.

### **Safety**

MMS has a primary concern about safety when dredging the borrow area, particularly with regard to pipelines and impacts on cultural resources. When issuing a sand and gravel lease, MMS normally requires an advanced geophysical survey, particularly for an area like St Bernard Shoals because we have little information on this area. This would include 30 m line spacing with side scan sonar, magnetometer, and sub-bottom profile for pipeline and cultural resource identification. This is expected to take about 30 days unless the State uses multiple boats to complete the survey.

### **Natural and Cultural Impacts**

Unfortunately, this spill is occurring during the prime nesting period for a number of species. FWS staff is willing to work with the State and its contractor to minimize impacts on nesting birds but a project of this magnitude will most likely cause some impacts that cannot be minimized. A number of royal tern nests numbering in the several hundreds on the Chandeleur Islands will be directly impacted if the construction is initiated within the next two months. Air quality for example will be affected by the dredging and construction activities proposed.

From a cultural perspective, historic ship access to New Orleans came through the Rigolets into Lake Pontchartrain and down Bayou St. John. Egress was downriver to "The Balize" near modern-day Pilottown and out Pass a Loutre. Prior to late in the 19<sup>th</sup> century, ship traffic passed in and out of the Mississippi River through passes on the east side of the birdfoot delta. This should be considered in any cultural analysis.

**Sediment Concerns and Impact on Future Restoration** Dredging requires the intake of water, which, if contaminated, will mix with the sediment/sand during the dredging/placement process. We are unclear as to how the State can control for this in the construction of the berm. If there is no way to filter the water intake and the water is oiled, they will be placing contaminated sediment into the berm.



DOI is also concerned about oiling of the borrow areas after they are dredged. FWS asked for the USGS report because ideally it would like to use sediment to replenish the Chandeleur Islands so as to provide long-term restoration of these islands. Everyone is in agreement that the proposed project is a short-time protective berm, not a coastal restoration measure. During dredging operations, sediment becomes suspended in the water column. Fine-grained clay particles, once resuspended, do not rapidly settle out of the water column, resulting in a plume of suspended sediment in the proximity of the dredging operations (Anchor Environmental, 2003). Over time, the borrow area may layer with a mixture of the oil-contaminated sediment and non-contaminated sediment so that not only is the top seafloor layer compromised, but the entire depth of the borrow area.

For the most part, oil is less dense than water, so it “floats” on the sea surface. However, incorporation of suspended sediment particles in floating oil results in increased density of the oil, formation of aggregates, and ultimately deposition of oil-contaminated sediment on the seafloor (Bassin and Ichiye, 1977; Castle et al., 1997). This phenomenon would result in contamination of valuable, Louisiana beach-quality sand reserves that would be needed for future use.

### **Cost Estimates**

The \$350 million project cost estimate (which does not include the areas in the second permit application) seems to be at odds with what has been estimated per cubic yard for each of the borrow areas in recent feasibility studies. For example, a recent feasibility study completed in May 2010 for USACE MRGO Ecosystem Restoration Study, concluded that dredge mobilization cost would be \$750k, booster \$275k, pipeline per mile \$500k, quarters barge \$100k. Sand for Chandeleurs from Hewes Point would be \$9.50 per cu yd and from St. Bernard Shoals would be \$12.50 per cu yd. Assuming the 92 million cu yds requested for Timbalier to Northern Chandeleur by the State for the \$350 million, that would only be \$3.80 per yd and not include any mobilization costs. Nor would it include the recent Isles Derniere add-on. Using the numbers above, the actual cost of placing 92 million cu yd at \$10/cu yd with 9 dredges would be something like \$950 million.

### **Tidal Inlet Processes**

Tidal inlets are channels that separate barrier islands and are the conduits for daily tidal exchange between the Gulf and estuaries. Tidal currents maintain these channels by shore-perpendicular flushing of sand that is transported to the channel by longshore processes (waves). Tidal inlet channel geometry (width and depth) is controlled by the tidal prism (the volume of water that flows through the inlet during half of each tidal cycle) (Jarrett, 1976). Tidal prism is controlled by spring tidal range and bay area. In Louisiana, tidal inlets are undergoing widening and deepening, and additional, stable inlets form along the shoreline, as tidal prism increases due to interior wetland loss (increasing bay area) (FitzGerald et al., 2007; Miner et al., 2009; Louisiana CPRA, 2010).

There is an equilibrium relationship between tidal inlet cross-sectional area and bay area (Jarrett, 1976). In Louisiana, this relationship can be described as one of dynamic equilibrium because as interior land is lost, the inlets respond by widening and deepening. Attempts to artificially constrict tidal inlets are most often futile and result in that cross-sectional area being compensated for elsewhere along the barrier system by breaching of existing barrier islands (Miner et al., 2007). More importantly, the strong tidal currents that flow through the inlets during each daily tidal cycle will flush sand as it is placed resulting in significant offshore losses during construction. The only way to effectively decrease inlet cross sectional area along the barrier shoreline is to mitigate for tidal prism by reversing trends of interior land loss (FitzGerald, 1988).

While the State has offered to work with FWS on where the breaches should be to protect tidal inlets, FWS alone does not have the expertise or the scientific knowledge available to make those determinations. A project that impacts tidal currents needs careful consideration.

### **Regional Circulation Patterns**

This is a large project. We do not know what impact it will have on regional circulation patterns affecting sediment and water quality. The NPS is concerned that currents and circulation patterns south of Cat Island (part of Gulf Islands National Seashore) and north of the Chandeleur Islands could be altered by the construction of this project. We would like more study or information on whether any such impacts would occur

**Subject:** FW: BP Oil Spill protection berm

From: Chitimacha Tribe of Louisiana  
Sent: Tuesday, May 18, 2010 8:46 PM  
Subject: RE: BP Oil Spill protection berm

Thanks for the opportunity to comment on this important emergency project. After a review of the records that I have in my office, I find no cultural sites in the project area that contain human remains. However, these areas do have the remnants of pre-historic camp sites, shell middens, historic plantations, forts and most importantly a historic cemetery (which will be near W15). It should be noted that within these areas there are 2 sites listed on the National Register of Historic Place (W1 and W15), 6 National Register eligible sites (3-W1 and 3-W14), and 2 potentially eligible sites (W14). It seems that most of these areas mentioned have already been damaged by erosion and subsidence.

I have not had time, as of yet, to check the records on the borrow areas.

Thank you for taking the time to consult with the Chitimacha Tribe of Louisiana during this difficult time.

Cultural Director

Chitimacha Tribe of Louisiana

## **EPA Review of Revised Berm Proposal**

**May 26, 2010**

11:10 am

The Corps of Engineers New Orleans District (Corps) has requested comments on a draft emergency permit NOD-20, MVN-2010-1066-ETT, transmitted by Col. Lee New Orleans District via email on May 24, 2010. According to that transmission, the Corps has identified two potential berm projects for an area east of the lower Mississippi River in the vicinity of the Chandeleur Islands and four potential berm projects for an area in the Barataria Bay west of the lower Mississippi River.

### **East of the lower Mississippi River:**

1- Berm E4 (Northern segment of the Chandeleur Barrier Islands)

2- Berm E3 (Next lower Northern segment of the Chandeleur Barrier Islands).

It is the objective of these berms in front of the islands at E3 and E4 to provide a means to reduce the volume of oil reaching the Chandeleur Islands and marshes providing protection to the island. According to this proposal, these berms are likely to create a more sheltered regime on the western side of the Chandeleur Islands to better allow for skimming of oil. These two sections are located in the lowest tidal energy areas of the Chandeleur islands.

### **West of the lower Mississippi River:**

1- Berms W8, W9, W10, W11

These four berm areas are located in the Barataria Bay where according to the Corps' transmission, the tidal prism are expected to be much smaller as well as lower tidal velocities than areas farther west and east in the Barataria Bay.

## **SUMMARY OF EPA CONCERNS**

In these comments, EPA is only addressing the 40 miles of berms described above (E3, E4, W8, W9, W10, W11). EPA continues to have significant additional concerns about the original proposals to build 80-120 miles of berms. Clearly a project of the 80-120 mile scope is so significant that under normal permitting procedures it would likely require full NEPA review—and NEPA review of this project under normal permitting procedures would likely be required as well.

As described more fully below, although the proposed permit transmitted by the Corps in their email dated May 24 for the permitting of E3, E4, W8, W9, W10 and W11 has additional information to support the reduced size project proposal reviewed by EPA on May 23, EPA remains concerned about: (1) the effectiveness of this project at actually stopping the oil from moving into estuarine waters and marshes; (2) whether the proposed project realistically can be constructed in time to have a measurable effect on controlling movement of oil into interior estuarine waters and wetlands (and whether the

berms could sustain the impacts of hurricanes or other Gulf storms or be washed away); (3) whether the constructed berms themselves, dredging activity, barge and other boat equipment traffic, and floating pipe for sediment transport could exacerbate the emergency situation in the Gulf; (4) the impacts of construction of these berms and longer term impacts on aquatic species and wildlife and on sensitive environmental resources such as those that exist in the Chandeleur Islands (in particular the west side of the islands that have extensive seagrass beds), (5) the potential estuarine sediment transport, salinity, and hydrologic impacts over the longer term; and, finally, (6) the lack of sufficient testing of borrow areas for potentially contaminated sediments prior to dredging and the potential longer term impacts of contaminated sediments being used for the berm as well as the ultimate disposition of berm materials that would become contaminated with oil if the berms are effective in stopping the oil from moving.

## **MORE IN-DEPTH DISCUSSION OF EPA CONCERNS**

**Effectiveness at stopping oil:** In the May 24 proposal, the primary focus is on placing material adjacent to existing barrier islands and not to fill in deep water passes near the Chandeleur Islands (previously proposed Berm reaches E1 and E2) and all open water reaches west of the Mississippi River. Currently, proposing to leave these openings is a promising approach to minimize potential estuarine sediment transport, salinity, and hydrologic impacts. However, placing sand berms only in front of existing islands, while leaving numerous and significant tidal passes open, raises questions of the proposal's ability to arrest movement of oil into estuarine waters and marshes. It is expected that the majority of oil will migrate through the "big passes," not through the small minor openings. Although the more limited sand berm may arrest some oil migration, it is unlikely to stop the majority of the oil from migrating inland. Furthermore, EPA has concerns that once berm construction is underway, the constructed berms themselves, dredging activity, barge and other boat equipment traffic, and floating pipe for sediment transport could exacerbate the emergency situation in the Gulf. This could stem from either trapping oil that has already made its way into interior waters behind the berms, exacerbating movement of oil in the Gulf water column, re-suspending bottom sediments that have adsorbed oil and dispersants, impeding movement of other emergency boat traffic/equipment, or impeding deployment of other emergency actions.

**Construction timing:** We are concerned about the element of time. Can the proposed project realistically be constructed in time to have a measurable effect on controlling movement of oil into interior estuarine waters and wetlands? However, the threat to Louisiana's coastal marshes is already present. Given the urgency of the situation, we must focus first on actions that have the greatest possibility of preventing further ecological and economic harm. We recommend placing increased focus on deployment of state-of-the-science boom technology in tidal passes, in front of existing barrier shorelines and coastal wetlands. Such technology is highly mobile, rapidly deployable, can be implemented in multiple layers, and would intercept oil without long-term environmental consequences risked by construction of the proposed sand berm structures. As indicated in the draft permit, booms and other appropriate containment devices MAY be used in tidal inlets to block migration of oil. We strongly encourage utilization of

such approaches, in concert with proposed berm structure, given our concerns about continued migration of oil inland through the passes.

**Sensitive environmental resources:** The Chandeleur Islands (in particular the west side of the islands) have extensive seagrass beds including manatee grass, shoal grass, turtle grass, and widgeon grass. The draft permit indicates, “shall implement and monitor BMPs to protect sea grass beds on the landward side of the islands.” It is unclear what specific protective measures this project would implement to avoid and minimize impacts to these aquatic resources from dredged sediments and potentially oil that is pooled in the more sheltered regime created by the berms. Should measures be planned and implemented to avoid and minimize impacts to these special aquatic sites, they should be fully coordinated with EPA Region 6, the U.S. Fish & Wildlife Service and the National Marine Fisheries Service.

**Long term impacts on salinity, hydrology, and sediment transport.** In the May 24 proposal, the primary focus is on placing material adjacent to existing barrier islands and not to fill in deep water passes near the Chandeleur Islands (previously proposed Berm reaches E1 and E2) and all open water reaches west of the Mississippi River. Currently, proposing to leave these openings is a promising approach to minimize but not eliminate the long term potential to impact estuarine sediment transport, salinity, and hydrology. We need to better understand and assess the potential longer term consequences of this. If this plan moves forward, the permit should be conditioned upon the applicant adjusting the “containment” aspect of the berm to a more environmentally beneficial project after the risk of oil contamination has passed. In other words, return the berm to a more studied and beneficial “barrier island” restoration project. Clearly, if the more extensive 80-120 mile proposal were to be advanced, EPA’s concerns about these longer term impacts on salinity, hydrology and sediment transport would greatly increase.

**Ensure safe dredged sediments:** In this most recent proposal, it appears all previously-identified sediment borrow areas are still under consideration for use. In addition, draft permit conditions require the applicant to “identify and avoid all submerged structures, objects and pipelines.” However, there is no specific provision for testing borrow areas for potentially contaminated sediments prior to dredging. Identification of appropriate constituents to testing for in sediments, detection levels, the potential need for organism toxicity testing, and design/layout of sampling scheme are all important components of testing these sediments for potential contamination. However, none of this needed information has been discussed or shared with EPA or the other Federal agencies. EPA has previously indicated the need for the Agency, as well as our other Federal partners, to engage in the planning, design, implementation and review of results from this crucial additional testing. We also recognize the challenge of collecting, analyzing, and informing project dredging decisions with this yet-to-be collected data, in a manner that can address the immediate need of arresting shoreward-moving oil.

**Planning to address contaminated berm sediments:** EPA continues to have concerns that the draft permit gives no consideration to either short or longer-term planning, responsibility or costs for removal/remediation of berm sediments that become

contaminated from intercepting waterborne oil. The Corps' draft permit states, "This permit does not address the applicability of the proposed project to the spill response effort, which is a decision to be made by the NIC in consultation with Federal OSC." Designing and constructing a structure to arrest contaminants without discussing and deciding how contaminated materials will be properly managed and removed from the environment is of great concern in this highly dynamic and vulnerable coastal environment. Safe and rapid removal of contaminated sediments would be critical for ensuring a hurricane or tropical storm does not subsequently disperse these materials into bays and wetlands. It is also critical to ensure that potential upland disposal of sediments that have been contaminated with oil does not create Environmental Justice or other environmental problems by potentially harming the coastal communities we seek to protect.

In addition, there is significant potential that sediments used for berm construction may become contaminated even during project construction due to the extended period of time over which these berms will be built. These sediments would have to be removed or remediated concurrent with construction. If not, these contaminated sediments will be re-introduced to the aquatic environment as the berm erodes naturally. EPA and our other Federal emergency response framework partners would need to participate in developing and implementing appropriate contaminated sediment identification, remediation, removal, and/or containment plans.

**5/21/10 OCPR Responses Barrier Plan Issues Communicated to the State by the Corps**

A. Overall, the proposed plan offers opportunity, at least in part, to directly mitigate the effects of the oil spill by reducing the migration of oil into coastal marshes. We believe there are portions of the plan that can be successfully constructed, but there are components that may prove to be problematic due to the ability of the material to stack and remain in place. There is more confidence that segments immediately adjacent to existing barrier islands and those remnants of barrier islands can be constructed, and less confidence in the constructability of segments where tidal exchanges may create velocities not conducive to the stacking of fill material necessary to construct the berms. Reach E1, that part of the E2 reach in open water, and all of the reaches west of the Mississippi River in open water, will likely be difficult to construct. For all open water reaches, the permittee should provide more analysis on the construction techniques that will be utilized.

**RESPONSE:** It has always been the intention in the permitting process to maximize the development of the protective berm by primarily focusing on placing material adjacent to existing and remnant barrier islands. The permittee is receptive to delaying decisions regarding deep water material placement in Reach E-1, parts of E-2, and open water for all reaches west of the Mississippi River until such plan of action is further investigated and agreed by parties. We have always acknowledged that tidal passes are critical hydrologic features and we are not proposing these be adversely altered with this proposed feature.

The following list identifies the passes and other deep water areas that are anticipated to remain open until such time as a more in-depth hydrodynamic analysis can be conducted. The scope of the analysis can be developed in coordination with all permitting agencies:

West of the Mississippi River:	Latitude	Longitude
	29-03-35N	90-24-00W
	29-04-30N	90-15-25W
	29-04-44N	90-35-51W
	29-16-16N	89-56-57W
	29-18-03N	89-53-48W
	29-18-51N	89-50-24W
	29-17-49N	89-47-00W
	29-18-21N	89-44-07W
	29-18-04N	89-42-24W
	29-17-40N	89-40-56W
	29-15-17N	89-36-32W
	29-14-46N	89-33-53W
	29-12-39N	89-28-29W
East of the Mississippi River	29-30-18N	89-09-33W
	29-34-06N	89-02-57W
	29-41-25N	88-56-36W



The width of the openings at each of these passes and other deep water area (and any others recommended by permitting agencies) will be coordinated with these same agencies.

B. As stated above, constructing berms in what appears to be the wave zone of existing barrier islands raises questions regarding retention of berm material and its ability to retain the proposed configuration. The character of borrow material with regard to coarseness of the sand and percentage of fines will correlate directly with the retention of material in the berm, quantity of borrow required and the time required for construction. The permittee should provide information that enables an assessment of this factor.

**RESPONSE:** The permittee is currently evaluating all historic data sets for the proposed borrow areas. Information gathered will be evaluated to develop the geophysical survey plan. Following initial grab sampling for contaminant analysis, geophysical surveying consisting of seismic reflection profiling, sidescan sonar, magnetometer and bathymetry will be performed. Vibracores will be collected as needed to further characterize the borrow material. Equipment is currently in route to the project area.

C. Based on the information in the permit application, we cannot evaluate production rates to determine if the schedule submitted by the permittee is feasible. We know that the permittee intends to use hopper dredges, cutterhead dredges and scowls to transport material to build the berm. We need to understand how identified dredges and construction reaches are sequenced including estimated duration for each reach.

**RESPONSE:** The concept, as laid out, includes the use of every viable dredge responding to this initiative. In reality, we believe the level of response will be dependent upon the level of commitment by BP to fast-track the operation, how many dredges currently under obligation that may be released by the USACE and / or other entities currently utilizing these resources. It will also depend upon where the allocated resources will actually be focused due to the projected oil slick movements. With that understanding, the current plan encompasses the use of 3 placement spreads on the east side of the river and 3 placement spreads on the west side of the river. EAST SIDE: 1 cutter dredge will be positioned on Hewe's Point and will directly pump sand south along the proposed berm alignment. Pipeline lengths may approach 30 – 40,000 feet. In addition, 4 – 6 hopper dredges will mine material from Hewe's Point and/or St. Bernard Shoals and deliver it to pre-determined strategic areas for rehandling and placement by cutter dredges positioned in front of the berm alignment in water depths of approximate 30 feet. The direct pump cutter dredge will be focusing on the northern 1/3 of the Chandeleur. The lower re-handling area will be focused near the southern tip of Chandeleur. The middle placement area will be focused near the lower 1/3 to lower 1/2 of the Chandeleur.

*See Response to Comment G regarding activities West of the Mississippi River.*

D. If successful, the berms will capture oil and there also may be second order benefits that enable more effective skimming and recovery of oil due to the project. However,

this permit application does not address clean-up efforts after the oil has been intercepted by the berms or has entered the area. We realize other agencies may be requested to provide clean-up efforts, but ultimately, clean-up will be the responsibility of the permittee.

**RESPONSE:** Clean up of this oil spill is a BP/Coast Guard responsibility. The permittee is pursuing a preventative method to protect our natural resources and reduce impacts of the BP spill in federal waters. The Federal government permitted the activity and receives royalties from the oil produced from the permitted activity. The sand berm is being suggested and permitted by the State as a protective measure to aid in controlling the impacts of this spill. MMS models of a spill of this size in this location showed no oiling of our coast would be possible from a spill of this size in this location; we are currently experiencing significant oiling with no end in sight. We are hopeful the question was not properly edited and the federal government is not suggesting the State of Louisiana is responsible for cleaning up this spill.

E. Construction of the berms could change the hydrology in these areas. The permittee will need to establish a monitoring plan to evaluate what is happening during construction.

**RESPONSE:** It is agreed that the permittee will establish a monitoring plan to evaluate hydrological effects of berm construction. As mentioned previously, it is not our intent to alter the hydrology of tidal passes and other significant water exchange points.

**Below are additional specific engineering observations and requests for clarification.**

**F. East of the Mississippi River**

The protection berms in front of the islands, specifically E4, E3, and the northern portion of E2, can provide a means to reduce the volume of oil reaching the Chandeleur Islands and marshes providing protection to the island and some of the smaller passes. They are likely to create a more sheltered regime on the western side of the Chandeleur Islands to better allow for the skimming of oil.

Placing sand from outside the system is a positive effect but recognize that sand placed may move elsewhere through the system over time. Tidal actions and waves driven by wind events will likely move sand out of from the protective berm.

The northern portion of E1 and the southern portion of E2 are located in the area of greatest tidal exchange. Given the material being proposed for the berm, address what measures are envisioned for retaining sufficient dredged material to close off the subject area.

Should construction of E1 and lower portion of E2 be accomplished, tidal energy in the passes between the Chandeleur Islands and Ship Island, and those leading to Mississippi Sound may be increased. Tidal exchange concerns are critical. Successful construction of E1 and lower portion of E2 could possibly drive oil deeper into Lake Borgne, Mississippi

Sound, and Biloxi Marshes compared to a non-closure situation. Please provide any existing supporting data or analysis that would address this concern. Also advise on contingency plans should that situation develop.

**RESPONSE:** As stated previously, the deep water reaches, which include E-1 and a portion of E-2, will not be included in the initial work. The hydrological effects of the proposed construction will be evaluated more in-depth to determine potential impacts of that deep water berm placement and whether the proposed action for those reaches is necessary and justifiable given the conditions at the time that reach is to be constructed.

The protective berm will be reshaped with dozers as needed and potential for further dredging depending upon the continued need.

#### **G. West of the Mississippi River**

While the permit application does not go into great detail on the western barrier, similar detail should be provided for this area. Concerns and request for clarification, analysis or insight would be similar to above. In general, protective berms can reduce the volume of oil reaching the islands, has similar positive effects but it's expected the protected berm will deteriorate over time due to wind and tidal actions.

Provide additional information on plans to close or leave open passes and existing open areas within existing islands. There are similar concerns regarding constructability, sustainability and deterioration should velocities change as a result of changed conditions.

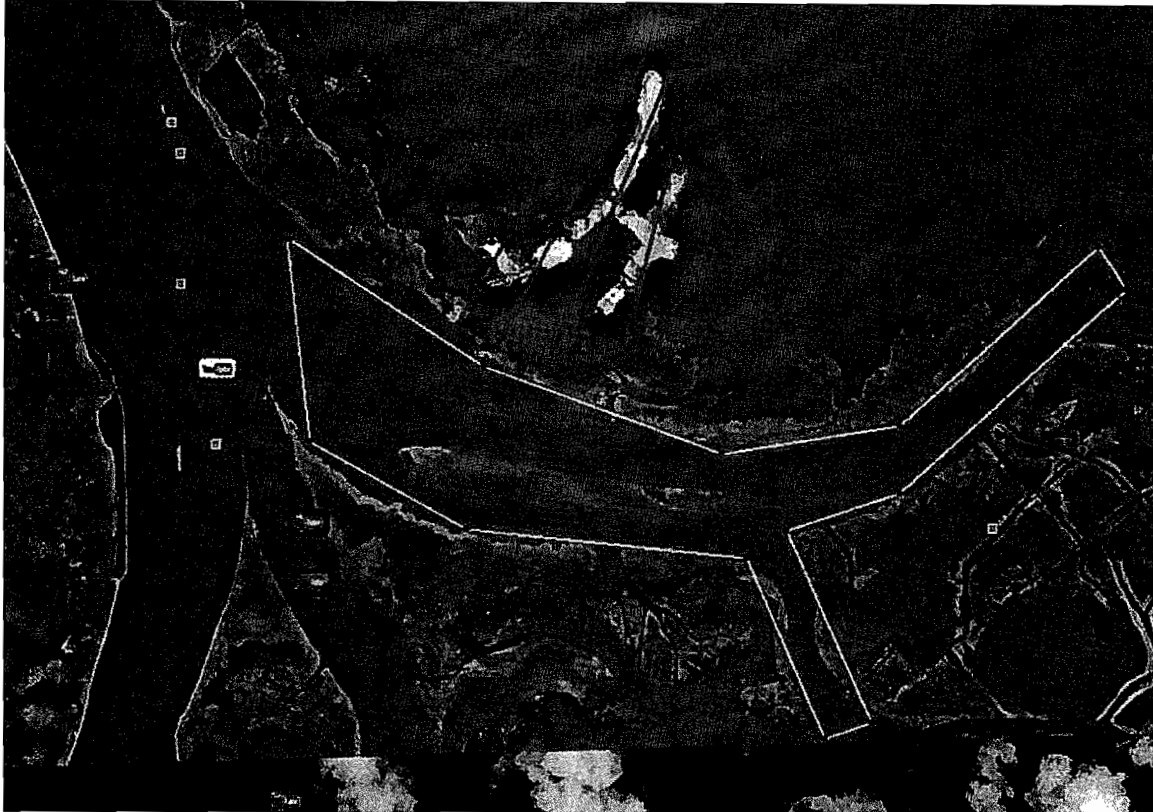
Marshes located west of the Mississippi River may be more at risk based upon collective engineering judgments at this time. Beach nourishment (protective berm) is believed to be a good thing but may not prevent oil from entering the marshes north of the proposed barrier since oil will enter through the passes. Additional analysis is needed for these areas to look for strategies to retard spill movement into wetlands within these tidal basins, particularly those with high level of tidal action.

Additional analysis west of the Mississippi River is necessary to create a confidence level similar to that achieved for the east side analysis.

The permit letter states that cutterhead pipeline dredging will be used for the Chandeleur Island work, but does not provide dredging methodology for the western barrier islands. The proposed method of dredging, transport, and placement of materials for this work requires additional information.

**RESPONSE:** The overall purpose of the proposed action is to create a linear line of defense in appropriate areas which will impede the flow of oil into our fragile marshes, estuaries, and inland waters. The creation of this berm will allow for the strategic reallocation and concentration of boom and other oil spill reaction mechanisms in the passes.

Regarding the dredging methodology for placement in areas west of the Mississippi, the material to be utilized for the sand boom alignment on the west side of the river is anticipated to come from the head of passes in the Mississippi River and the Pass-a-Loutre area, see map attached for Pass a Loutre. The material will be loaded into scows (barges) by a cutterhead in the borrow location. These scows will be transported by boat to the prescribed re-handling area where the scow will be bottom dumped. The material will be dredged and rehandled by a cutterhead dredge at the dump zone onto the sand boom alignment. This process is similar to the procedures utilized on the east coast of Florida for coastal restoration.



#### **H. Constructability and Sustainability**

Barrier Island improvements seem beneficial provided oil has not reached the beach prior to construction and provided oil free borrow is placed within the protective berm.

Please advise on your analysis of borrow material properties, engineering analysis or judgments in achieving the desired cross section. The method of placement may improve chances for construction of the submitted cross section but based upon our experience the unconfined section having a slope of 1 to 50 would be more achievable. Dredged quantities, construction duration and cost are directly related to the achieved cross section. Describe intent or plans for dealing with erosion, loss of elevation and breaches that may occur during or after the construction process to include effect on construction duration, quantities and proposed costs.

Provide intent or plans should oil accumulate prior to or during construction in the areas intended for protective berms, within the designated borrow source areas or on the protective berms themselves.

**RESPONSE:** We expect to utilize mechanical equipment to shape the berm during and after construction to maintain its effectiveness as a “sand boom”. 50:1 slopes would not be unnatural for the silty sand encountered in many of our borrow areas to date, especially without “containment”. Utilizing Hewe’s Point, St Bernard Shoals, and Pass-a-loutre allows us to target the coarsest material we have practically available in these regions. The action of washing silts through the hopper or scow during the loading process at the borrow area will further increase the average grainsize of material to be transported to the berm alignment. It is expected that by combining these actions, we have a greater chance of achieving the average 25:1 slope depicted in the typical template.

We understand that the actual slope achieved is dependent on the quality and makeup of dredge material being placed. However, we believe that the current design scenario is acceptable given the initial reports on sand availability from USGS analysis detailed in USGS’ Sand Resources, Regional Geology, and Coastal Processes of the Chandeleur Islands Coastal System: An Evaluation of the Breton National Wildlife Refuge (Scientific Investigations Report 2009-5252 (author Dawn Lavoie) and that this endeavor is not intended to be a permanent barrier berm. Section evaluation will be reviewed as material quality becomes more readily available.

#### **I. Preconstruction Data Collection**

Strongly recommend that a magnetometer survey be conducted prior to any dredging activities throughout the proposed borrow sites to locate any unknown pipelines.

Recommend investigation and grain size analysis of material at the borrow site as it is used. Sampling of borrow today will not be indicative of conditions when dredging begins.

Strongly recommend that a magnetometer survey be conducted prior to any dredging activities throughout the proposed borrow sites to locate any unknown pipelines.

**RESPONSE:** Magnetometer and geophysical surveys have been initiated by OCPR to determine availability and quality of sediment and potential hazards in extraction.

#### **J. Monitoring**

Please provide intent for development and execution of a monitoring plan, and how that plan may be utilized in arriving at adaptive implementation of work contained in the permit. General monitoring considerations are below but are not all inclusive.

Monitoring will reduce the uncertainty of the actions and allow for changes as the project is constructed

Monitoring will provide baseline and with project information to better assess environmental effects

Long term effects for a very long hydraulic barrier with far fewer passes are largely unknown but are of concern. Monitoring will help to address the unknown long term effects of the barrier.

Monitor the protection berms for the presence of oil – frequency of monitoring and actions to remove oil are of concern.

Monitor circulation patterns on the western side of the Chandeleur Islands and protection berm. (this monitoring will provide information on where to deploy booms as well as document changed circulation patterns). Similar general concerns exists for the islands west of the Mississippi River. Elaborate on plans to close current opening in the islands and passes, evaluation of changes in circulation patterns and potential effect as a result of changes.

Monitor water levels to the east and west of the Chandeleur Islands in areas without gages. Advise on similar plans west for areas west of the Mississippi River.

Monitoring should be extended into Lake Borgne, Mississippi Sound, and Biloxi Marshes if E1 and lower portion of E2 are constructed. Monitor tides and salinity in Lake Borgne and entrances to Lake Pontchartrain, and currents in the passes between Ship Island and Chandeleur Island, passes leading into western Mississippi Sound, and passes leading to Lake Borgne and into Biloxi Marsh.

**RESPONSE:** We agree that monitoring should be done in coordination with all agencies. The intent of the issuance of the permit is to allow for initiation of the mobilization of dredges and to begin construction on critical reaches mutually agreed by all parties to be of low risk in terms of potential adverse effects. A monitoring plan will be developed that includes the suggestions listed above.

### **Barrier Plan Issues to be communicated to the state**

A. Overall, the proposed plan offers opportunity, at least in part, to directly mitigate the effects of the oil spill by reducing the migration of oil into coastal marshes. We believe there are portions of the plan that can be successfully constructed, but there are components that may prove to be problematic due to the ability of the material to stack and remain in place. There is more confidence that segments immediately adjacent to existing barrier islands and those remnants of barrier islands can be constructed, and less confidence in the constructability of segments where tidal exchanges may create velocities not conducive to the stacking of fill material necessary to construct the berms. Reach E1, that part of the E2 reach in open water, and all of the reaches west of the Mississippi River in open water, will likely be difficult to construct. For all open water reaches, the permittee should provide more analysis on the construction techniques that will be utilized.

B. As stated above, constructing berms in what appears to be the wave zone of existing barrier islands raises questions regarding retention of berm material and its ability to retain the proposed configuration. The character of borrow material with regard to coarseness of the sand and percentage of fines will correlate directly with the retention of material in the berm, quantity of borrow required and the time required for construction. The permittee should provide information that enables an assessment of this factor.

C. Based on the information in the permit application, we cannot evaluate production rates to determine if the schedule submitted by the permittee is feasible. We know that the permittee intends to use hopper dredges, cutterhead dredges and scowls to transport material to build the berm. We need to understand how identified dredges and construction reaches are sequenced including estimated duration for each reach.

D. If successful, the berms will capture oil and there also may be second order benefits that enable more effective skimming and recovery of oil due to the project. However, this permit application does not address clean-up efforts after the oil has been intercepted by the berms or has entered the area. We realize other agencies may be requested to provide clean-up efforts, but ultimately, clean-up will be the responsibility of the permittee.

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## **5/24/10 OCPR Responses Barrier Plan Issues Communicated to the State by the Corps**

From observation of current oil clean-up and protective booming operations being conducted along the Louisiana coast, it is the opinion of the State of Louisiana (based on ongoing operations) that keeping the oil on the outer edges of the barrier islands and removing the oil from newly placed berms is the most effective way of keeping the oil from reaching and negatively impacting the ecosystems of both the barrier islands and the inland wetlands.

The attached drawings provide more specific dimensioning of the placement of dredge material along reaches E3 and E4 of the barrier island sand berm proposed by the State to protect the islands and inland wetlands from encroaching oil from the Deepwater Horizon disaster. Reaches E3 and E4 (which form the easternmost segments of the barrier island chain) will provide a protective barrier for the Chandeleur Islands, the Breton National Wildlife Refuge, and the interior wetlands.

As stated in previous communication in support of the placement of the sand berm, the barrier islands (while providing a first line of defense to oil moving from the open water of the gulf to inland wetlands) are themselves a fragile and complex ecosystem. The Breton National Wildlife Refuge was established in 1904 by an executive order of Theodore Roosevelt and is the second oldest refuge of over 540 currently in the National Wildlife Refuge System.

The plan is intended to move dredge equipment to the project as quickly as it becomes available, with the initial work to begin establishing the protective barrier along reaches E3 and E4. Work in reaches E3 and E4 will be coordinated with Mr. Kenneth Litzenberger, Project Leader for the Southeast Louisiana Refuges and Dawn Lavoie, co-author of the 2009 report completed by the USGS entitled: *"Sand Resources, Regional Geology, and Coastal Processes of the Chandeleur Islands Coastal System: an Evaluation of the Breton National Wildlife Refuge."* Discussions with Mr. Litzenberger and Ms. Lavoie have confirmed their willingness to work with the permittee in the proper placement of material in the open waters on the gulf side (from sources located at Hewes Point and St. Bernard Shoal) to provide benefits to the existing island. While not impeding the current island conditions (and potentially providing direct benefit) the filling of the shallows and closing of open water sections of the island will help keep oil clean-up operations off of the existing islands and reduce, if not eliminate, the movement of oil further inland.

As Breton Wildlife Refuge is owned by the U.S. Government through the Department of Interior (U.S. Fish and Wildlife Service) it is essential that the permittee coordinate all activities with that agency. Mr. Litzenberger will represent the owner in this initiative. Similar action will be taken with each existing barrier island reach within the project limits.

The exclusion of deep-water passes from the proposed action (requiring that work in these passes will require further investigation) will restrict all actions by this permit request to open gulf waters immediately adjacent to and not extending upon, existing emergent land masses. Any negative impacts of placing material in these open are viewed by the State of Louisiana to be offset by the protection the sand berm will provide to the existing barrier island and inland wetland ecosystems.

Because of the absence of definitive emergent land masses in current aerial photography, reaches W8 – W11 (west of the Mississippi River) will require additional survey work to confirm the subsurface ridges that best define the shallows in these reaches. The current action is submitted by the permittee in support of the Corps issuance of NOD-20 General Permit to authorize commencement of the work under Emergency Actions in response to the current oil being released by the collapse of the Deepwater Horizon rig.

It is understood that approval to perform work under the NOD-20 general permit does not replace normal permitting approval required by the Corps of Engineers and that standard permitting is required to maintain the work initially authorized under the general permit. Better definition and location of the W8 - W11 reaches and the number and location of the deepwater passes will be included in the permit application within the 30 day window for submittal of the permit.



CAPRIEN BAY

W7

W8

W9

SCOFIELD  
ISLAND

W10

PROTECTIVE BERM

W11

SANDY POINT

GULF OF MEXICO



NOTE:  
BACKGROUND IMAGERY  
WAS TAKEN IN 2008.

APPLICATION BY:  
OFFICE OF COASTAL PROTECTION & RESTORATION  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

OFFICE OF COASTAL PROTECTION & RESTORATION  
ENGINEERING BRANCH  
450 LAUREL STREET  
BATON ROUGE, LOUISIANA 70801

BARRIER ISLAND  
DEFENSE

WESTERN REACHES

STATE PROJECT NUMBER:

DATE: MAY 24, 2010

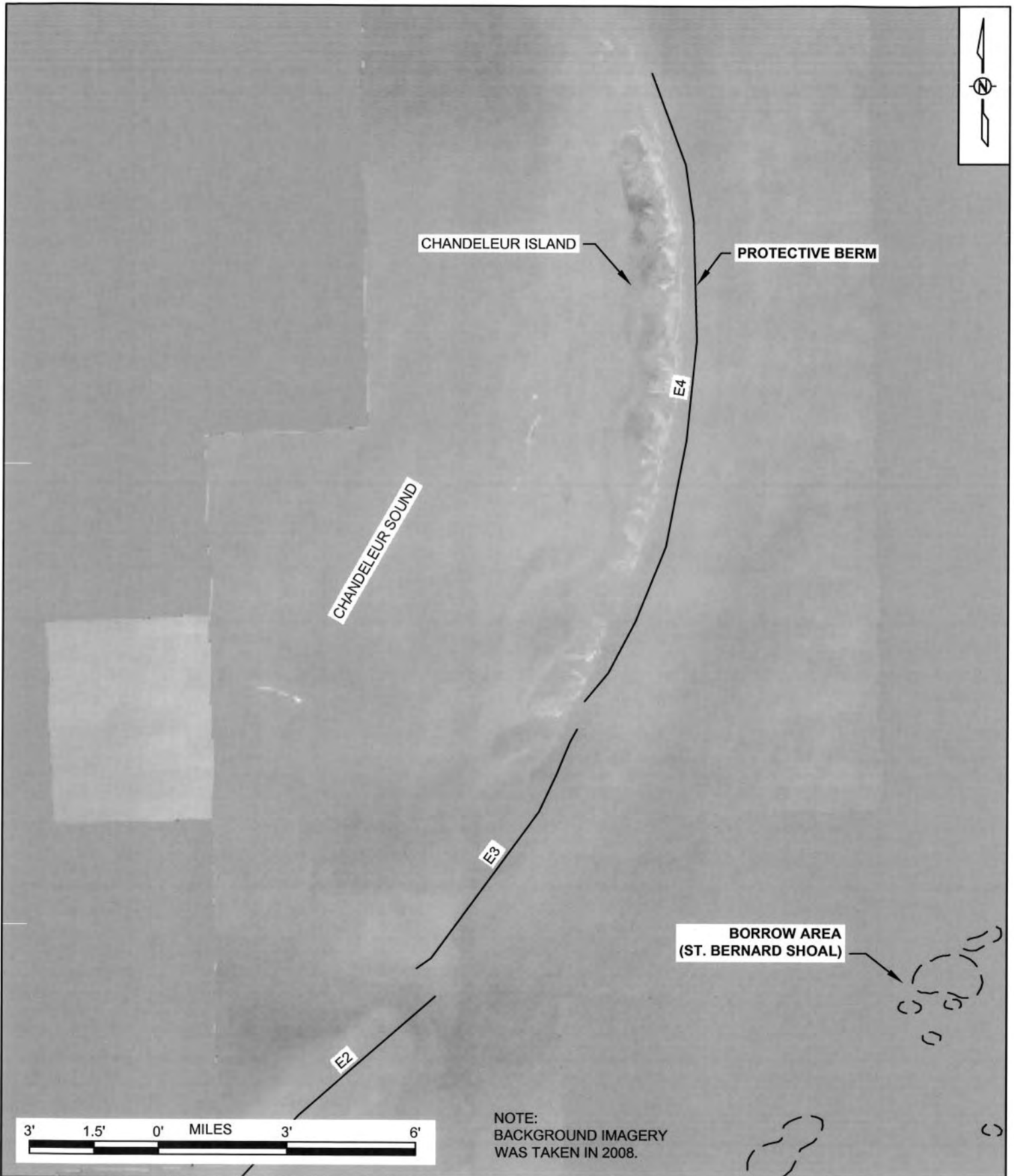
DRAWN BY: KRISTI CANTU

DESIGNED BY:

APPROVED BY:

FEDERAL PROJECT NUMBER:

SHEET 1 OF 2



APPLICATION BY: OCPR 450 LAUREL STREET BATON ROUGE, LA	<b>OFFICE OF COASTAL PROTECTION &amp; RESTORATION ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BARRIER ISLAND DEFENCE	EASTERN REACHES
		STATE PROJECT NUMBER:	DATE: MAY 24, 2010
DRAWN BY: KRISTI CANTU	DESIGNED BY:	APPROVED BY:	FEDERAL PROJECT NUMBER:
			SHEET 2 OF 2

# Non-Governmental Organizations Comments



## UNITED FOR A HEALTHY GULF

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338 Baronne St., Suite 200, New Orleans, LA 70112  
Mailing Address: P.O. Box 2245, New Orleans, LA 70176  
Phone: (504) 525-1528 Fax: (504) 525-0833  
[www.healthygulf.org](http://www.healthygulf.org)

May 14, 2010

Col. Alvin Lee  
United States Army  
Corps of Engineers  
New Orleans District  
7400 Leake Avenue  
New Orleans, LA 70118

RE: State of Louisiana proposal for Emergency Barrier Island Creation and Restoration for the Chandeleur Islands and also on all the barrier islands from East Grand Terre Island eastward to Sandy Point

Dear Col. Lee,

I am writing on behalf of the Gulf Restoration Network (GRN), a diverse coalition of individual citizens and local, regional, and national organizations committed to uniting and empowering people to protect and restore the resources of the Gulf of Mexico. We, like many of our colleagues who have been following the BP oil drilling disaster response closely, have recently heard about a proposal submitted to the U.S. Corps of Engineers (Corps) to "request emergency authorization to perform restoration work on the Chandeleur Island and also on all the barrier islands from East Grand Terre Island eastward to Sandy Point for purposes of enhancing the capability of the islands to reduce the inland movement of oil from the sediment via cutterhead pipeline dredge from adjacent water bottoms Gulf ward of those islands, and depositing the dredged material in protective berms along those islands." While we share the State's desire to protect our coast from the harmful effects of the ever-growing threat of oil fouling our wetlands, based on conversations with scientists, conservationists, as well as federal resource agencies, we do have some concerns and suggestions regarding this proposal:

I. Concerns

1. The timeline of this proposal

Given the small amount of information in the drawings associated with Louisiana's request, as well as the complexity and diversity of existing barrier islands, it seems ill advised to move forward with such a massive project on such a short time frame.



Additionally, it seems that it would take quite a long time to build the sand barriers. Since oil is already being seen within the barrier islands, would these barriers effectively keep the oil out?

2. Limited amounts of sand and sediment

When it comes to coastal restoration, it has become exceedingly clear that one of the limiting factors is the amount of sediment available for restoration purposes. This must be taken into account when considering this sand barrier plan. Sand used for this project will not be available for other restoration projects, especially if it is fouled with oil. We are not saying a balance cannot be struck here, but limited sediment resources must be taken into consideration.

3. Impacts of oil on new barriers

We would like to see more information as to the efficacy of building and enhancing barrier islands if the intention is that they might become polluted with oil. How will these barriers be cleaned? Will the sand need to be removed and disposed of, thus reducing the amount of sediment we have for restoration?

4. Impacts to hydrology

Given the information in the drawings submitted to the Corps for their review, there does not appear to be any analysis of the effects the sand barriers might have on the hydrology inside the barrier islands. Some questions that need to be answered are: Will these barriers restrict the hydrology so water within the barriers will rise? Will the constricted passes between the barrier islands increase velocities such that flow will increase, potentially pulling oil towards the coast during certain tidal periods?

5. Impacts to fish and marine life

The State's proposal does not include any analysis as how the proposed barriers would impact fish, other marine life, water fowl, and other wildlife. An obvious goal of these barriers should be to protect wildlife. Given this, we feel that there must be a thorough analysis on what impacts these barriers might have on wildlife in our oceans, estuaries, and existing barrier islands.

6. Coverage under general permit

We understand that the BP oil drilling disaster is a disaster of unprecedented proportions. However, we are concerned that Louisiana is proposing to have such a large project covered under a general permit (NOD 20). General permits are intended to have negligible impacts individually and cumulatively, however this project will certainly have impacts that would normally require a full Environmental Impact

Statement (EIS) under the National Environmental Policy Act (NEPA). While we acknowledge that this disaster requires regulatory flexibility, general permits were never intended to address massive projects with potentially significant environmental impacts. We find the precedent set by this action disturbing.

## II. Suggestions

As we have stated throughout this letter, we acknowledge the extraordinary circumstances under which the sand barrier proposal has been offered. Because we share Louisiana's desire to protect our coast from the, as of yet, uncontrolled oil leak, we offer the following suggestions if the Corps moves forward with a sand barrier plan.

### 1. Do a pilot study

We recently attended a meeting with EPA Administrator Lisa Jackson, where she stated that the EPA, NOAA, and other agencies were conducting a pilot study of direct injection of dispersants into the oil plume. Similarly, we suggest that instead of moving forward with the entire sand barrier plan, a strategic pilot study be done. This study could be placed in an area where oil coming ashore is eminent. This way the pilots could be studied for effectiveness, longevity, and feasibility before dozens of miles of sand are dredged and deposited along our coast and barrier islands. This pilot study could be studied and monitored over a short period of time to inform a decision whether or not move forward with the entire project.

### 2. Focus on repairing gaps in and restoring existing barrier islands

We understand that there are past and developing plans to repair Louisiana's existing barrier islands. Perhaps it would make more sense to, instead of moving forward with the whole sand barrier project, focus efforts on bolstering existing barrier islands with the tools we have acquired through CWPPRA and other projects.

We would like to be clear that we are very concerned about the impacts of the BP oil drilling disaster and understand that the State needs to be doing what we can to reduce the impacts. However, moving forward with such a massive and expensive effort that may, in the end, prove ineffective and possibly inflict harm on existing natural resources may not be the best approach. If this project does proceed, the State must first ensure that BP will bear both the full cost of construction and responsibility for any detrimental impacts these barriers might have on our fisheries, coast, and wetlands. Additionally, it must be acknowledged by both the State and BP that these sand barriers are a short term response to the oil *response* not remediation/restoration for the impacts the oil will have on the Gulf Coast.

Thank you for reviewing our concerns and suggestion. I would be happy to explore these ideas further if you have any questions.

For a healthy Gulf,

Matt Rota  
Water Resources Program Director

CC: President Barack Obama  
Thad Allen, U.S. Coast Guard  
Mike Boots, CEQ  
Garret Graves, State of Louisiana  
Lisa Jackson, EPA  
Al Armendariz, EPA  
Lawrence Starfield, EPA Region 6  
Jane Lubchenco, NOAA  
Pete Serio, USACE New Orleans District

**LAKE PONTCHARTRAIN BASIN FOUNDATION**  
**SAVE OUR COAST SAVE OUR LAKE**

Lake Pontchartrain Basin Foundation  
3838 North Causeway Blvd., Metairie, LA. 70009 [saveourlake.org](http://saveourlake.org)

May 24, 2010

RE: Emergency permit for the barrier berm dredging operations – East of the river

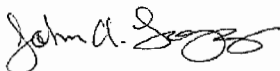
State and Federal Agency Representatives:

Due to the extraordinary circumstances thrust upon on all of us by the ongoing BP oil spill, LPBF wishes to inform State and Federal officials of its recommendation regarding the Emergency permit for the barrier berm dredging operations. The initial proposed plans had some significant concerns, but many of these issues may have been resolved. At this time LPBF recommendations is only in regard the Pontchartrain Basin (east of the river). LPBF supports issuing of the emergency permit for the east of the river project with the following stipulations:

- Use of all natural sand material , i.e. no rock, gabions, geotubes, Hesco baskets etc (except temporary containment placed offshore during dredging)
- Sand must be taken from Hewes Point area identified by the USGS report as suitable sand. The St. Bernard shoals are too small and should be preserved for future restoration purposes.
- The total cut dredge volume should not exceed the permit of 54 MCY (maximum). (The USGS estimates that Hewes Point has 500 MCY of sand)
- No use of heavy equipment on the islands (minimize disturbance)
- Continuously monitoring of dredge material and oil in the water to ensure that no contaminated sediment or entrainment of oil occurs in dredge material. (Operations must cease if oil is contaminating sediment during placement.)
- Sand placement should begin on the main Chandeleur Island chain (to protect sensitive habitats) & placed in the gulf-side littoral area
- All operations must be coordinated continuously with National Wildlife Refuge representatives to minimize any impact to the refuge

Please call or email if you have questions or if I can be of any assistance.

Regards,



John A. Lopez, Ph.D.  
Director-Coastal Sustainability Program  
Lake Pontchartrain Basin Foundation - [SaveOurLake.org](http://SaveOurLake.org)  
985 643-4589 - land line 504-421-7348 – cell [johnlopez@pobox.com](mailto:johnlopez@pobox.com)

**Congress of the United States**  
**Washington, DC 20515**

Received by  
GEMVN-IM-SM  
US Army Corps of Engineers  
New Orleans District

May 20, 2010

MAY 24 2010

Col. Al Lee, New Orleans District Commander  
Army Corps of Engineers  
7400 Leake Ave.  
New Orleans, LA 70118

Adm. Thad Allen, Commandant  
United States Coast Guard  
2100 Second St. SW Stop 7101  
Washington, DC 20593

Dear Col. Lee and Adm. Allen,

We write today to urge you to quickly approve the emergency authorization request submitted by Governor Bobby Jindal on May 11, 2010, and to incorporate these plans into the Incident Action Plan.

Approving the authorization and including this work as part of the Incident Action Plan will allow the State to immediately begin constructing a sand barrier along our barrier islands. This work will provide a critical barrier against the oil that continues to leak in the Gulf of Mexico.

As heavy oil is now coating our marshes, it is imperative that the Corps of Engineers and the U.S. Coast Guard work with the State of Louisiana to ensure we are pursuing every avenue possible to protect our marshlands. Our coastal wetlands not only provide critical hurricane protection to South Louisiana but also serve as home to over 400 species that live in the spill area and 26 percent of the fisheries catch in the lower 48 states.

We implore you to immediately approve the emergency authorization request submitted by Governor Jindal. If the Louisiana Congressional delegation can be of any assistance as we work together to protect these vital resources, do not hesitate to let us know.

Sincerely,

  
Mary Landrieu

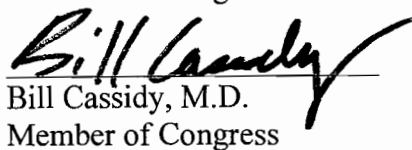
United States Senator

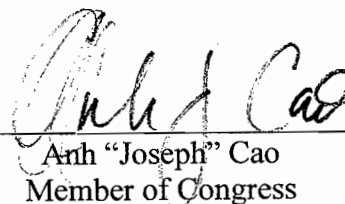
  
Rodney Alexander

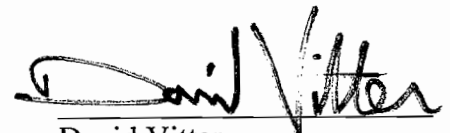
Member of Congress

  
Charlie Melancon

Member of Congress

  
Bill Cassidy, M.D.  
Member of Congress

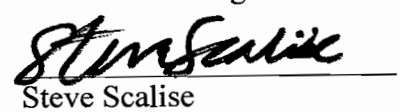
  
Arth "Joseph" Cao  
Member of Congress

  
David Vitter

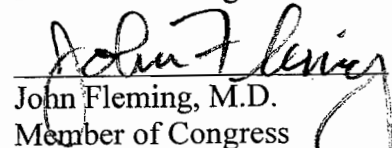
United States Senator

  
Charles Boustany, M.D.

Member of Congress

  
Steve Scalise

Member of Congress

  
John Fleming, M.D.  
Member of Congress

# Environmental Assessment

Department of the Army Permit Evaluation  
And Decision Document

Applicant: State of Louisiana, Coastal Protection and Restoration Authority

Application No: MVN-2010-1066

Emergency Authorization Request under NOD-20

This document constitutes the Environmental Assessment, Statement of Findings, review and compliance determination according to Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344), Section 10 of the Rivers and Harbors Act of 1899 (30 Stat. 1151; 33 U.S.C. 403), and their implementing regulations.

**Application Chronology:** The State of Louisiana, Coastal Protection and Restoration Authority, submitted an application requesting Department of the Army (DA) emergency authorization on May 11, 2010 for a proposed restoration project which the applicant contended would also provide protection to barrier islands and landward wetlands from contamination caused by the Deepwater Horizon oil spill. The US Army Corps of Engineers, New Orleans District (Corps) coordinated the applicant's request with the concerned state and federal agencies on May 11, 2010. Upon initial review of the application and comments received from the concerned agencies, the Corps determined that the project, as proposed (coastal restoration) would not qualify for the Corps emergency authorization procedures. That determination was made clear to the applicant during the coordination teleconference meeting on May 12, 2010. The applicant submitted revised drawings specifically proposing construction of an oil spill protection berm, late Friday afternoon, May 14, 2010. The revised application was coordinated with all concerned agencies on Monday morning, May 17, 2010 in a teleconference meeting. During that teleconference, the Corps requested that all agencies in attendance submit their comments, concerns, and recommendations by close of business that same afternoon. On Friday, May 21, 2010, the Corps forwarded comments from an internal technical project review to the applicant regarding the barrier plan. By e-mail response on the same day, the applicant provided some additional information relative to the proposed action.

**Purpose and Need for the Project:** The purpose of the proposed berm is to act as a barrier to reduce oil penetration and impact to the coastal barrier islands and mainland coastal wetlands resulting from the Deepwater Horizon oil spill. The need for the project is to protect sensitive barrier islands and coastal wetlands from oil pollution.

**Existing Conditions:** Existing conditions in the project area are open waters adjacent to barrier islands and coastal wetlands. Some of the project area contains oil from the Deepwater Horizon Oil spill.

**Proposed Project (Applicant's Preferred Alternative):** The applicant proposes to construct a sand berm approximately 300 foot at the base, approximately 25-foot at the crown and approximately 6 foot above the mean high water line (MHWL). East of the Mississippi River, the berm would be constructed on the seaward side of the Chandeleur Island westward to Baptiste Collette Bayou; west of the Mississippi River it would be constructed from Timbalier Island eastward to Sandy Point. All fill placement for sand barrier construction would occur in the Gulf of Mexico of southeastern coastal Louisiana. Gaps are to be maintained in the berm for tidal exchange. Material to construct the berms would be dredged from Ship Shoal, South Pelto, the Mississippi River Offshore Disposal Site, Pass a Loutre, St Bernard Shoal, and Hewes Point, Gulf of Mexico. Total length of the berm structure is approximately 128 miles, requiring approximately 102 million cubic yards of dredged material to construct an estimated 9800 acres of sand barrier in waters of the US.

**Alternatives considered:** The original project proposed on May 11, 2010, entailed construction of a sand barrier east and west of the Mississippi River delta. East of the delta, four reaches were proposed along the Chandeleur/Breton Island complex (E1, E2, E3 and E4); west of the delta, 11 reaches were proposed from East Grand Terre Island to Sandy Point (W1 – W11). Material to construct these reaches was to be obtained from: a borrow area one mile offshore and parallel to the Chandeleur/Breton Island complex; St. Bernard Shoal; a small segment of Pass A Loutre; Mississippi River Offshore Disposal Site, and; Ship Shoal.

Based on concerns expressed by State and Federal agencies, the applicant submitted revised plans on May 14, 2010, consisting of the following modifications: the Hewes Point Borrow Area at the northern end of the Chandeleur Islands was added; the borrow area one mile offshore and parallel to the Chandeleur/Breton Island complex was deleted; the Pass A Loutre borrow area was expanded; the South Pelto Borrow Area was added, and; the number of sand barrier reaches proposed for construction was expanded westward to Timbalier Island (added W12-W15). The revised plans dated May 14, 2010, constitute the applicant's preferred alternative.

**No Action:** Selection of the "No Action" alternative would result in the proposed sand barrier not being constructed and the avoidance of short- and long-term beneficial and adverse impacts associated with the project. It is reasonable that protective measures taken thus far, such as strategic boom placement, skimming and burning, would continue, but considering the extremely limited success of these spill control techniques in the high energy marine environment, such actions alone would not be effective in achieving the project purpose. In addition, it has become apparent that tremendous volumes of oil occur in a subsurface plume, which renders traditional containment methods ineffective. Therefore, selection of the "No Action" alternative was found to be not practical in preventing oil contamination of the barrier islands and coastal wetlands.

**Applicant's Preferred Alternative:** Selection of this alternative would result in the establishment of approximately 128 miles of sand barrier berm at the locations (15 reaches west of the delta, and four reaches east of the delta) shown in the revised drawings. If the project functions as proposed, the berm would physically impede the movement of a limited amount of



oil into the coastal marshes and onto the barrier islands themselves. Such benefit would be local in scope, considering the volume that has been discharged into the Gulf of Mexico and the area over which the oil has spread. Moreover, open areas such as the “birdfoot” delta and open passes between the constructed barriers would remain pathways for oil penetration to the mainland marshes.

Selection of this alternative is not without potential adverse impact. Beyond the issues raised by the agencies and entities listed below, project assessment by the Corps identified that project implementation has the potential to alter coastal circulation patterns in such manner that oil introduction is accelerated, and beneficial flushing is reduced, in portions of Breton and Chandeleur Sounds and Barataria Basin. The time required to build the berms and actual longevity of the structures also raised concern. Therefore, a third alternative was evaluated by the Corps as described below.

**Partial Project Authorization:** Selection of this alternative entails issuing a permit authorizing only reaches E3 and E4 to the east, and W8, W9, W10, and W11 to the west. These areas have been identified by Corps staff assessment as critical locations where greater immediate benefit is likely to be achieved with minimal adverse disruption of coastal circulation patterns. This provides a strategic approach wherein information on success can be obtained from site monitoring, and allows for more careful evaluation of the remaining, more difficult areas, in formulating a construction plan for the reaches not authorized in this permit, should the State maintain interest in addressing those specific areas.

**Consultation with Concerned Federal and State Agencies/Entities:** On May 13, 2010, May 17, 2010, and May 22, 2010, the Corps coordinated the proposed project with concerned agencies including: the Environmental Protection Agency (EPA), US Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS), United States Coast Guard (USCG), Minerals Management Service (MMS), Federal On-Scene Commander (FOSC), National Incident Commander (NIC), Department of Interior (DOI), the Louisiana Office of the Governor, and the Office of Coastal Protection and Restoration (applicant).

In addition the Corps has separately coordinated with the Chitimacha Tribe of Louisiana, State of Louisiana, Office Cultural Development, Division of Archaeology (SHPO), and State of Mississippi, Department of Marine Resources (DMR).

**Endangered Species Act (ESA):** On May 13, 2010, and May 17, 2010, the Corps coordinated the proposed project with the FWS and the NMFS for consultation on federally listed threatened and endangered species. The FWS and the NMFS, by emails dated May 13, 2010, May 14, 2010, and May 17, 2010, provided the Corps with comments & recommendations for ESA issues anticipated to be encountered during construction of the berm. Federally listed species that may be encountered during dredging and construction activities include the West Indian Manatee (*Trichechus manatus*), Piping Plover (*Charadrius melodus*), Kemps Ridley Sea Turtle (*Lepidochelys kempii*), Leatherback Sea Turtle (*Dermochelys coriacea*), and the Gulf Sturgeon

(*Acipenser oxyrinchus desotoi*). FWS and NMFS recommendations have been incorporated into the permit instrument, as special conditions and are to be adhered to by the applicant during all phases of the proposed project. Further coordination for ESA issues are pending the review of an after-the-fact Standard Permit Application (ATF) to be submitted by the applicant within 30 days from the date of this authorization.

**National Wildlife Refuge System Improvement Act, Wilderness Act, Migratory Bird Treaty Act, Coastal Barrier Resources Act:** On May 13, 2010, and May 17, 2010 the Corps coordinated the proposed project with the FWS regarding activities on the Breton National Wildlife Refuge (BNWR) and impacts to colonial seabirds utilizing the barrier islands. The FWS, by emails dated May 14, 2010, May 17, 2010, and May 22, 2010, provided the Corps with comments & recommendations regarding impacts to BNWR and colonial seabirds from berm construction. A Corps permits does not obviate the need for the applicant to obtain a Special Use Permit from the FWS. FWS recommendations have been incorporated into the permit instrument as special conditions and are to be adhered to by the applicant during all phases of the proposed project. Further coordination for ESA issues are pending the review of an ATF permit application to be submitted by the applicant within 30 days from the date of this authorization.

**Magnuson-Stevens Act [Essential Fish Habitat (EFH)]:** On May 13, 2010, and May 17, 2010, the Corps coordinated the proposed project with NMFS for consultation on EFH relative to this proposal. The NMFS, by emails dated May 13, 2010, and May 17, 2010, provided the Corps with comments and recommendations for EFH issues anticipated to be encountered during construction of the berm. NMFS recommendations have been incorporated into the permit instrument, as Special Conditions, and are to be adhered to by the applicant during all phases of the proposed project. Further coordination for ESA issues are pending the review of an ATF permit application to be submitted by the applicant within 30 days from the date of this authorization.

**Marine Mammal Protection Act (MMPA):** On May 13, 2010, and May 17, 2010, the Corps coordinated the proposed project with the FWS and the NMFS regarding potential impacts to marine mammals within the project area waters. The FWS and the NMFS by emails dated May 13, 2010, May 14, and May 17, 2010, provided the Corps with comments and recommendations relative to anticipated issues to be encountered during construction of the berm. FWS and NMFS recommendations have been incorporated into the permit instrument as Special Conditions, and are to be adhered to by the applicant during all phases of the proposed project. Further coordination for MMPA issues are pending the review of an ATF permit application to be submitted by the applicant within 30 days from the date of this authorization.

**Section 106 National Historic Preservation Act:** By email dated May 19, 2010 the SHPO provided the Corps with contact information which will be incorporated into the permit instrument as a Special Condition requiring the permittee to coordinate all dredge and fill activities with the SHPO. Further consultation for SHPO issues will commence during review of

the ATF application, required to be submitted by the applicant, within 30 days from the date of this authorization.

**Tribal Consultation:** By email dated May 18, 2010 the Corps coordinated the proposed project with the Chitimacha Tribe of Louisiana. By email also dated May 18, 2010 the Chitimacha Tribe, Cultural Director, Kim Walden stated "I find no cultural sites within the project area that contain human remains". The Cultural Director further states that pre-historic camp sites, shell middens, historic plantations, forts and most importantly a historic cemetery are within or in the vicinity of the proposed activity. The Director also noted that there are 2 sites listed in the National Register of Historic Places, 6 other sites eligible for listing and 2 other sites that are potentially eligible. The Director further stated that it appears as if most of these areas mentioned have already been damaged by erosion and subsidence. They also provided contact information which will be incorporated into the permit instrument as a special condition requiring the permittee to coordinate all dredge and fill activities with the SHPO and Cultural Director of the Chitimacha Tribe.

**Section 401 Water Quality Certification (WQC):** The State of Louisiana, Department of Environmental Quality (DEQ) has issued a WQC for the NOD-20 emergency permit during previous consultations. Further consultation for WQC issues with the DEQ will commence during review of the ATF application, required to be submitted by the applicant within 30 days from the date of this authorization.

**Coastal Zone Management Act (CZM):** The State of Louisiana, Office of Coastal Management (OCM), is processing an emergency authorization (#EUA10-037) for the proposed project. Further consultation for CZM issues with the OCM will commence during review of the ATF application, required to be submitted by the applicant to OCM, within 30 days from the date of this authorization.

The DOI, EPA, NIC, FOSSC and MMS have all submitted concerns verbally or in writing; however, none of those agencies have submitted a formal objection to the Corps requesting that the NOD-20 emergency permit not be issued for this proposal. The Mississippi DMR did not respond. Further coordination with all the agencies will commence during review of the ATF permit application, required to be submitted by the applicant within 30 days from the date of this authorization.

**Environmental Impacts of the Proposed Project:** A detailed assessment of environmental impacts that would result from the proposed project has not been conducted at this time due to expedited procedures enacted under emergency provisions outlined in 33 CFR 325.2 (e) (4). As described above, however, authorization of the Reaches E3, E4, W8, W9, W10 and W11 is expected to result in the minimum adverse hydrologic impact, has increased probability of successful implementation, and supports development of an adaptive management approach for project construction. The applicant is required to obtain approval from MMS for the proposed offshore borrow sites. A detailed assessment of the direct, secondary and cumulative impacts

resulting from borrow area excavation and fill deposition to construct the sand barriers will be conducted during the formal ATF permit application review procedure.

The proposed project has been analyzed for conformity applicability pursuant to regulations implementing Section 176 (c) of the Clean Air Act. It has been determined that the activities proposed under this project will not exceed *de minimis* levels of direct emissions of a criteria pollutant or its precursors and are exempted by 40 CFR Part 93.153. Any later indirect emissions are generally not within the Corps continuing program responsibility and generally cannot be practicably controlled by the Corps. For these reasons a conformity determination is not required.

Having reviewed the information provided by the applicant, the permit file and the assessment of environmental impacts, I find this permit action is allowed as outlined in 33 CFR 325.2 (e) (4) and thereby qualifies as "an emergency" as defined by those regulations as an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures to provide protection to barrier islands and coastal wetlands from the Deepwater Horizon Oil Spill. The issuance of NOD-20 authorization provides the mechanism to allow the applicant to proceed with the proposed work and to prepare a Standard Permit application to be submitted within 30 days from the date of this authorization. Therefore, an Environmental Impact Statement (EIS) will not be required at this time. The Corps will decide whether or not an EIS will be required during the review process of the required Standard Permit.

I find that emergency Department of the Army authorization as prescribed by regulations published in 33 CFR 320 to 330 and 40 CFR 230, is not contrary to the overall public interest.

26 May 2010  
Date

Robert J. Feris  
Preparer

26 May 2010  
Date

Rob Lee  
Reviewer

27 MAY 2010  
Date

Alvin B. Lee  
Approving Officer

Offered Permit



## DEPARTMENT OF THE ARMY

NEW ORLEANS DISTRICT, CORPS OF ENGINEERS

P. O. BOX 60267

NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO  
ATTENTION OF:

Operations Division  
Eastern Evaluation Section

SUBJECT: (Emergency Permit) NOD-20  
BASE FILE: MVN 2010-1066-ETT

Ms. Kristi Cantu  
State of Louisiana  
Coastal Protection and Restoration Authority  
Post Office Box 44027  
Baton Rouge, Louisiana 70804-4027

Dear Ms. Cantu:

This responds to your letter dated May 11, 2010, requesting emergency authorization to dredge and fill to construct a berm for protection from the Deepwater Horizon Oil Spill along the seaward shoreline of the Chandeleur Islands/Breton National Wildlife Refuge westward to Baptiste Collette Bayou and along the seaward shoreline of Timbalier Island eastward to Sandy Point. Material to construct the berm would be dredged from Ship Shoal, South Pelto, to the Mississippi River Offshore Disposal Site, Pass a Loutre, St. Bernard Shoal and Hewes Point.

We have reviewed your letter and are authorizing a portion of the work under (Emergency Permit) NOD-20, as long as all conditions included with this permit are met. This authorization allows the construction of the berms only in reaches E3, E4, W8, W9, W10 and W11, as shown on the enclosed drawings. No work may be performed on the remaining reaches without prior approval from the US Army Corps of Engineers (CEMVN). This authorization does not eliminate the need to obtain a Louisiana Coastal Use Permit or any other federal, state, or local approval that may be required by law. All proposed activities within the Breton National Wildlife Refuge (BNWR) will require a Special Use Permit, Compatibility Determination and Wilderness Act effect determination from the Refuge Manager. For more information, please contact Mr. Kenneth Litzenberger, BNWR Manager at 985-882-2000. Additionally, prior to dredging from the offshore borrow sites, the permittee shall obtain the required approval from the Minerals Management Service (MMS). For further information on the MMS requirements, please contact Mr. Jack Irion, Office of Leasing and Environment at (504) 736-1742.

The following two (2) provisions are hereby made a part of this emergency authorization:

1. The authorized activities shall be done in accordance with the plans specific to the authorized reaches E3, E4, W8, W9, W10 and W11 and performed in a manner that will avoid adverse impacts to the environment and aquatic resources, to the maximum extent practicable.
2. This approval is subject to the terms and conditions of (Emergency Permit) NOD-20, dated September 13, 2007, a copy of which is enclosed with this authorization. Please note that a formal permit application and drawings must be submitted within the time limits stated in the attached emergency permit (30 days from the date of this authorization). Your project is located within the Louisiana Coastal Zone, as such your formal permit application submittal must be sent through the Louisiana Department of Natural Resources. Should you require information on submitting your application through their office, please contact Mr. Karl Morgan at (225) 342-6470.

The following Special Conditions are hereby made a requirement of this emergency authorization:

1. This emergency permit does not convey any property rights, either in real estate or material, or any exclusive privileges; and it does not authorize any injury to property or invasion of rights or any infringement of federal, state, or local laws or regulations nor does it obviate the requirements to obtain state or local assent required by law for the activity authorized herein.
2. In issuing this permit, the Federal Government does not assume any liability for damages to persons, property or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit unless such damages are caused by the Federal Government in the exercise of their responsibilities under the Oil Pollution Act and the Deepwater Horizon oil spill.
3. All activities authorized herein shall, if they involve, during their construction or operation, any discharge of pollutants into waters of the United States, be at all times consistent with applicable water quality standards, effluent limitations and standards of performance, prohibitions, pretreatment standards and management practices established pursuant to the Clean Water Act (PL 92-500: 86 Stat 816), and applicable state and local laws.

4. Any individual authorization granted under this permit may be modified, suspended, or revoked in whole or in part if the Secretary of the Army or his authorized representative determines that there has been a violation of any of the terms or conditions of this permit or that such action would otherwise be in the public interest.
5. In issuing authorizations under this permit, the federal government will rely upon information and data supplied by the permittee. If, subsequent to the issuance of an authorization, such information and data prove to be false, incomplete, or inaccurate, the authorization may be modified, suspended, or revoked, in whole or in part.
6. Any modification, suspension, or revocation of this permit or any individual authorization granted under this permit will not be the basis for any claim for damages against the United States
7. Activities proposed for authorization under the NOD-20 must comply with all other necessary federal, state, and/or local permits, licenses, approvals, laws and regulations.
8. The permittee shall permit the District Commander or his authorized representative(s) or designee(s) to make periodic inspections of the project site(s) and disposal site(s) if different from the project site(s) at any time deemed necessary in order to assure that the activity being performed under authority of this permit is in accordance with the terms and conditions prescribed herein. This may include a government inspector on site to report construction activities and progress.
9. There shall be no unreasonable interference with navigation (to include maritime activities associated with the oil spill cleanup) by the existence or use of the activity authorized herein. The permittee will, at their expense, install and maintain any safety lights, signals, and signs prescribed by the United States Coast Guard, through regulations or otherwise, on authorized facilities or on equipment used in performing work under the authorization.
10. The Pass a Loutre borrow site shall be limited to the Hopper Disposal Area located in the western most segment of the Pass in close proximity to the Mississippi River. Excavation is limited to a depth of -40 NGVD. All other segments will require approval from US Army Corps of Engineers, New Orleans District (CEMVN), Regulatory Branch and other appropriate state and federal agencies. A more detailed description of this borrow site is shown on the attached drawing.
11. The permittee shall coordinate the use of borrow sites with the Minerals



Management Service (MMS), US Geological Service (USGS), MVN Regulatory Branch, the US Environmental Protection Agency (EPA), US Fish and Wildlife Service (FWS), National Marine Fisheries Service (NMFS) and other concerned state and federal resource agencies.

12. If the proposed project involves the use of floating construction equipment (barge mounted cranes, barge mounted pile driving equipment, floating dredge equipment, dredge discharge pipelines, etc.), you are advised to notify the Eighth Coast Guard District so that a Notice to Mariners, if required, may be prepared. Notification with a copy of your permit approval and drawings should be mailed to the US Coast Guard, Sector New Orleans Command Center, 201 Hammond Highway, Metairie, Louisiana 70005 before you plan to start work. Telephone inquiries can be directed to (504) 846-5923.

13. The permittee is responsible for the identification and avoidance of all submerged structures, objects and pipelines.

14. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the United States on account of any such removal or alteration.

15. No activity may substantially disrupt the movement of those species of aquatic life indigenous to the water body, including those species which normally migrate through the area.

16. The permittee shall avoid impacting piping plover intertidal foraging habitats. When practicable, the permittee shall allow for a 100-foot buffer from the toe of the berm to the mean low, low water, as defined by the Breton National Wildlife Refuge Manager.

17. The permittee shall keep all construction equipment out of the area from the mean low, low water line to the island dune/vegetation line, as defined by the Breton National Wildlife Refuge Manager.

18. The permittee shall implement and monitor best management practices (BMPs) to protect the seagrass beds on the landward side of the islands.

19. The permittee shall minimize, to the maximum extent practicable, impacts to: natural sediment transport, fish migration, and salinity regimes. Information on area sediment transport can be found at <http://pubs.usgs.gov/sir/2009/5252> (Sand

Resources, Regional Geology, and Coastal Process of the Chandeleur Island Coastal System: an Evaluation of the Breton National Wildlife Refuge).

20. Tidal inlets shall not be blocked to the maximum extent practicable. Temporary oil spill booms or other appropriate containment devices may be used in these areas.

21. To minimize disturbance to colonies of nesting gulls, terns, and black skimmers, all activity occurring within 650 feet of a rookery shall be restricted to non-nesting months September 16<sup>th</sup> through April 1<sup>st</sup> of any given year. For colonies containing nesting brown pelicans, activity occurring within 2000 feet of a rookery should be restricted to the non-nesting period of September 15<sup>th</sup> through March 31<sup>st</sup> of any given year. If these buffer distances are not practicable, berm construction should occur at the maximum distance practicable from identified rookeries. The CEMVN Regulatory Branch and FWS should be notified of the existence and location of the rookeries and an observer should monitor each rookery to determine the minimum distance at which construction can occur without disturbing nesting birds on an individual rookery basis. The Louisiana Department of Wildlife and Fisheries' Fur and Refuge Division (Tom Hess: 337-538-2276) should be contacted to obtain the most current information about the nesting chronology of individual brown pelican colonies.

22. The permittee is advised that project implementation may adversely affect Essential Fish Habitat (EFH), federally listed threatened and endangered species protected by the Endangered Species Act (ESA). The permittee should consult with the NMFS, FWS and the USGS prior to commencing the project, during the project and upon completion of the project for further information on properly addressing EFH and ESA issues.

23. No activity is authorized under this emergency permit which may adversely affect significant cultural resources listed or eligible for listing in the National Register of Historic Places until the requirements for Section 106 of the National Historic Preservation Act are met. Upon discovery of the presence of previously unknown historic and/or prehistoric cultural resources, all work must cease and the permittee must notify the State Historic Preservation Office and the CEMVN, Regulatory Branch. The authorization shall be suspended until it is determined whether or not the activity will have an adverse effect on cultural resources. CEMVN will initiate the required Federal, State, and Tribal coordination to determine the significance of the cultural materials and the need, if applicable, for additional cultural resource investigations.

24. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

25. The Chitimacha Tribe of Louisiana has stated that the project area is part of the aboriginal Chitimacha homelands. If during the course of work at the site, prehistoric and/or historic aboriginal cultural materials are discovered, the permittee shall contact the Chitimacha Tribe of Louisiana at Post Office Box 661, Charenton, Louisiana 70523, and CEMVN Regulatory Branch. CEMVN, Regulatory Branch will initiate the required federal, state, and tribal coordination to determine the significance of the cultural materials and the need, if applicable, for additional cultural resource investigations.

26. This permit does not extend the State of Louisiana's coastal boundaries seaward or change the existing federal-state offshore boundary, and the State of Louisiana explicitly renounces and affirmatively waives any such claim by accepting and proceeding under this permit. If the State of Louisiana subsequently submits an ATF Standard Permit Application to maintain the temporary structures permitted by this permit, the State of Louisiana must waive any newly created claims or rights to the newly created extension of its offshore boundary to the satisfaction of the US Department of Interior, Minerals Management Service, and the US Department of Justice.

27. This permit does not address the applicability of this proposed project to the spill response effort, which is a decision to be made by the National Incident Commander in consultation with Federal On-Scene Coordinator.

28. Prior to the initiation of work, the permittee must provide a construction schedule that details a timeline for the proposed work.

29. After construction has begun, the permittee will host a weekly conference call with CEMVN Regulatory Branch and other interested parties to report progress and provide project status updates. Questions from CEMVN Regulatory Branch and other interested parties will be addressed by the permittee. Revisions to construction could result based on these discussions.

30. Prior to the initiation of work, the permittee must provide the alignment of the proposed berm and a survey profile of the alignment, inclusive of Global

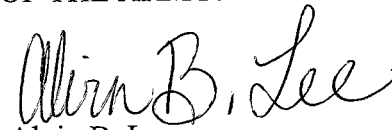
Positioning System (GPS) coordinates. The survey will form the baseline for a pre-project site condition.

31. Prior to construction, the permittee must develop a monitoring plan in consultation with CEMVN Regulatory Branch and other interested parties for each project site. At a minimum, the monitoring plan shall include a detailed description of the work accomplished to date, any observations of oil, dredge production rates, an assessment on the ability of the material to stack and stay where placed, any observation of increases in erosion, any observation of adverse environmental impacts and a general description on the accomplishment of project purpose. The permittee is responsible for implementing this monitoring plan.

32. Aerial photographic documentation of the project area at a scale of 1-inch=300 feet shall be provided to CEMVN Regulatory Branch documenting pre-project (baseline) conditions and subsequently every two weeks following project commencement.

33. This permit becomes effective upon receipt by the CEMVN of a signed acceptance of the enclosed copy executed by a duly appointed representative of the State of Louisiana with authority to bind the state.

BY AUTHORITY OF THE SECRETARY OF THE ARMY:



Alvin B. Lee  
Colonel, US Army  
District Commander

Enclosures:

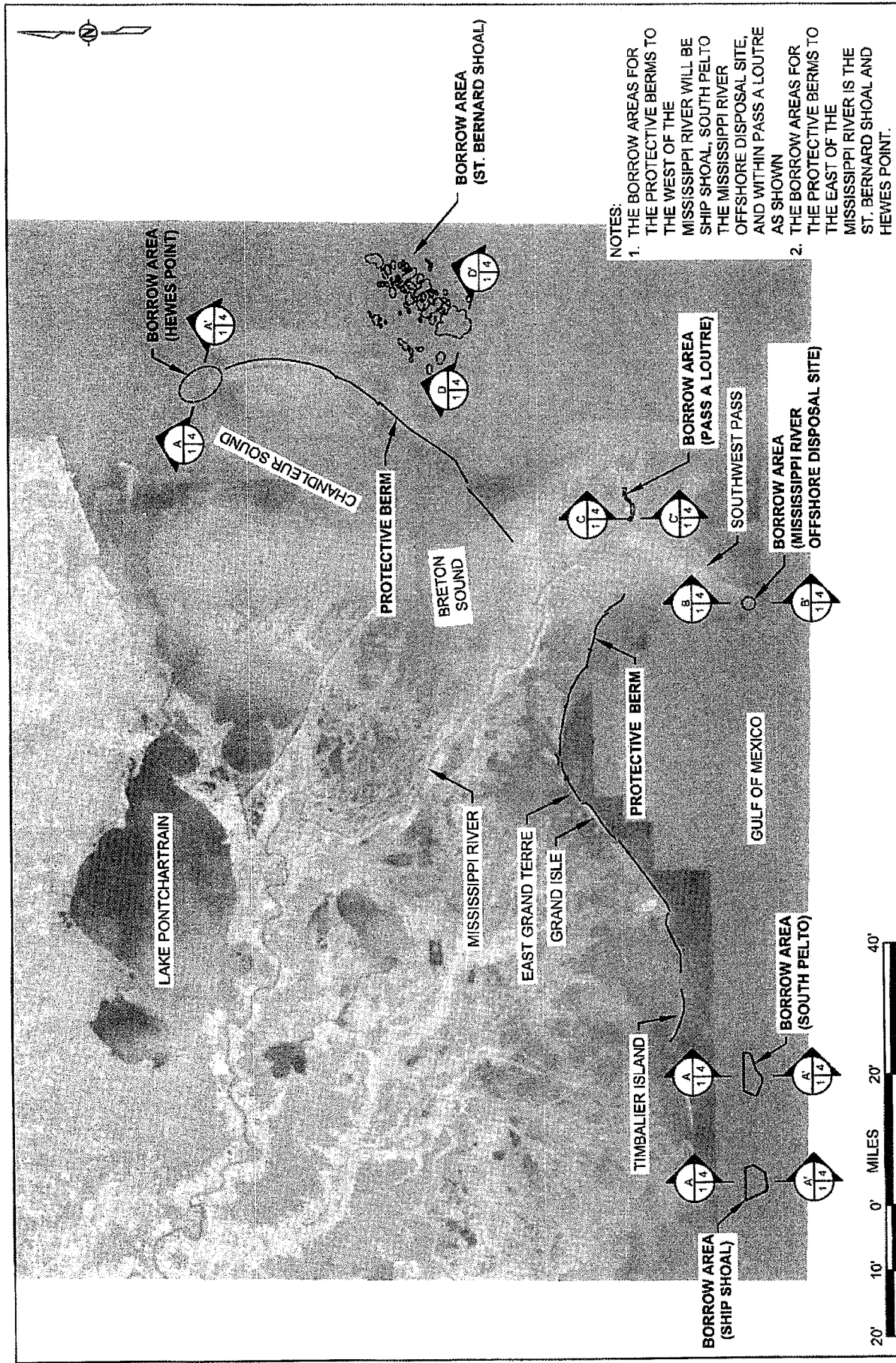
1. Project Drawings
2. NOD-20 Conditions
3. Acceptance Letter

The above terms and conditions are satisfactory and are accepted.

By: \_\_\_\_\_

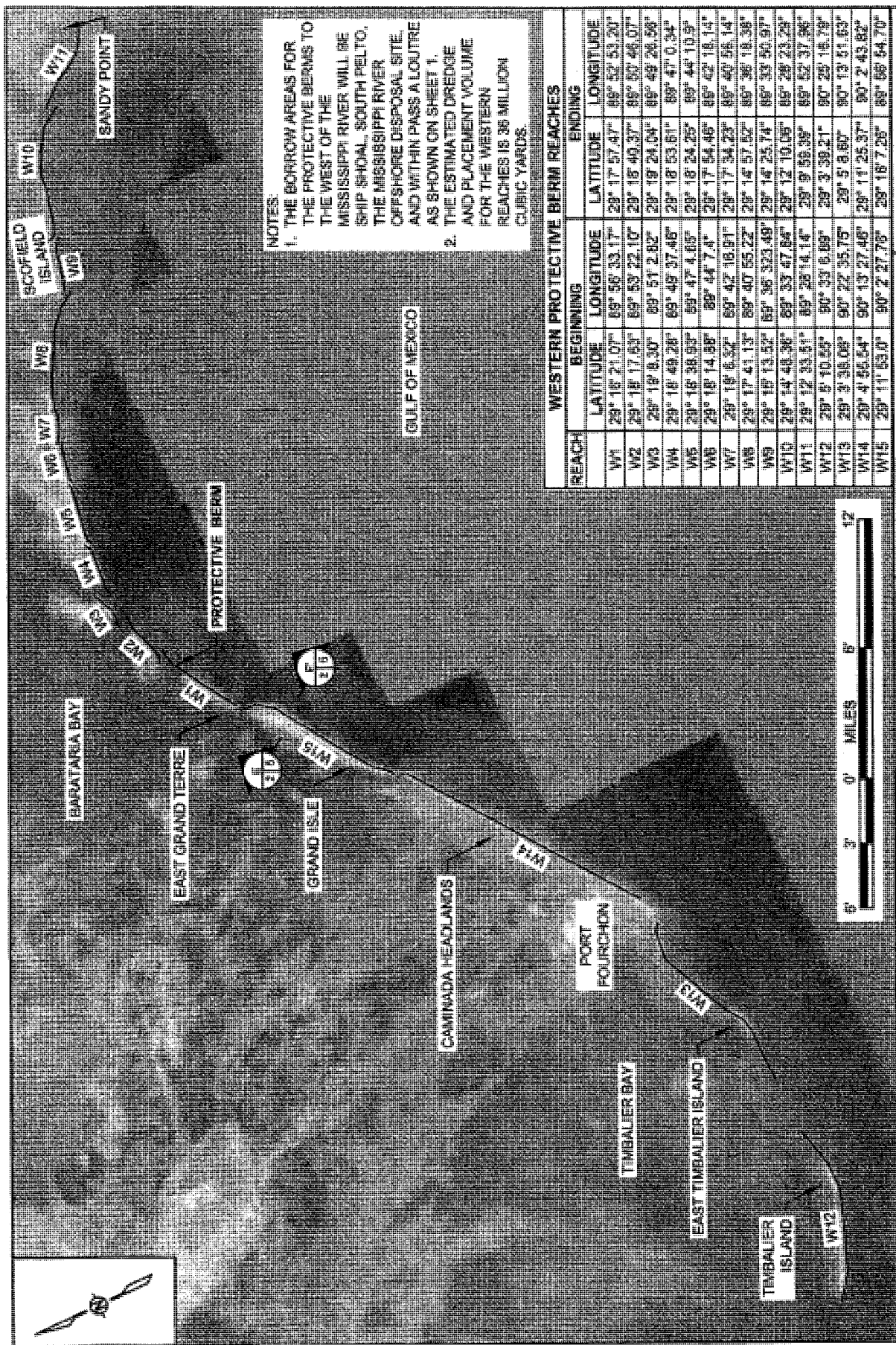
Title \_\_\_\_\_

Date \_\_\_\_\_



APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	OFFICE OF COASTAL PROTECTION & RESTORATION <b>ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BARRIER ISLAND DEFENSE	PLAN VIEW
DESIGNED BY: KRISTI CANTU	APPROVED BY:	STATE PROJECT NUMBER:	DATE: MAY 11, 2010 (REVISED 5/14/10)
DRAWN BY: KRISTI CANTU	FEDERAL PROJECT NUMBER:	10F066-ETT	Page 1 of 8





NOTES:

1. THE BORROW AREAS FOR THE PROTECTIVE BERMS TO THE WEST OF THE MISSISSIPPI RIVER WILL BE SHIP SHOAL, SOUTH PELTO, THE MISSISSIPPI RIVER OFFSHORE DISPOSAL SITE, AND WITHIN PASS A LOUIRE AS SHOWN ON SHEET 1.
2. THE ESTIMATED DREDGE AND PLACEMENT VOLUME FOR THE WESTERN REACHES IS 35 MILLION CUBIC YARDS.

WESTERN PROTECTIVE BERM REACHES			
REACH	BEGINNING	ENDING	
	LATITUDE	LONGITUDE	LATITUDE
W1	29° 18' 21.07"	89° 55' 33.17"	29° 17' 57.47"
W2	29° 18' 17.63"	89° 53' 22.10"	29° 15' 40.37"
W3	29° 18' 8.30"	89° 51' 2.82"	29° 18' 24.04"
W4	29° 18' 49.28"	89° 49' 37.46"	29° 18' 53.61"
W5	29° 18' 38.93"	89° 47' 4.65"	29° 18' 24.25"
W6	29° 18' 14.58"	89° 44' 7.41"	29° 17' 54.45"
W7	29° 18' 6.32"	89° 42' 16.91"	29° 17' 34.23"
W8	29° 17' 41.13"	89° 40' 55.22"	29° 14' 57.52"
W9	29° 18' 13.52"	89° 36' 323.49"	29° 14' 25.74"
W10	29° 14' 48.36"	89° 33' 47.84"	29° 12' 10.06"
W11	29° 12' 33.51"	89° 28' 14.14"	29° 9' 58.35"
W12	29° 9' 10.55"	90° 23' 6.69"	29° 3' 39.21"
W13	29° 9' 36.06"	90° 22' 35.75"	29° 5' 8.60"
W14	29° 4' 55.54"	90° 13' 27.46"	29° 1' 25.37"
W15	29° 11' 53.0"	90° 2' 27.76"	29° 18' 7.26"

APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 850 LAUREL STREET BATON ROUGE, LOUISIANA 70801		OFFICE OF COASTAL PROTECTION & RESTORATION ENGINEERING BRANCH 408 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BARRIER ISLAND DEFENSE		WESTERN REACHES	
DRAWN BY: KRISTY CANTU		DESIGNED BY:		STATE PROJECT NUMBER:		DATE: MAY 14, 2010 (REVISED 6/16/00)	
		APPROVED BY:		FEDERAL PROJECT NUMBER:		MVN-2010-1066-ETT	



CARPIEN BAY

SANDY POINT  
W11

SCOPEFIELD ISLAND  
W10  
W9  
PROTECTIVE BERM

W8

W7

GULF OF MEXICO

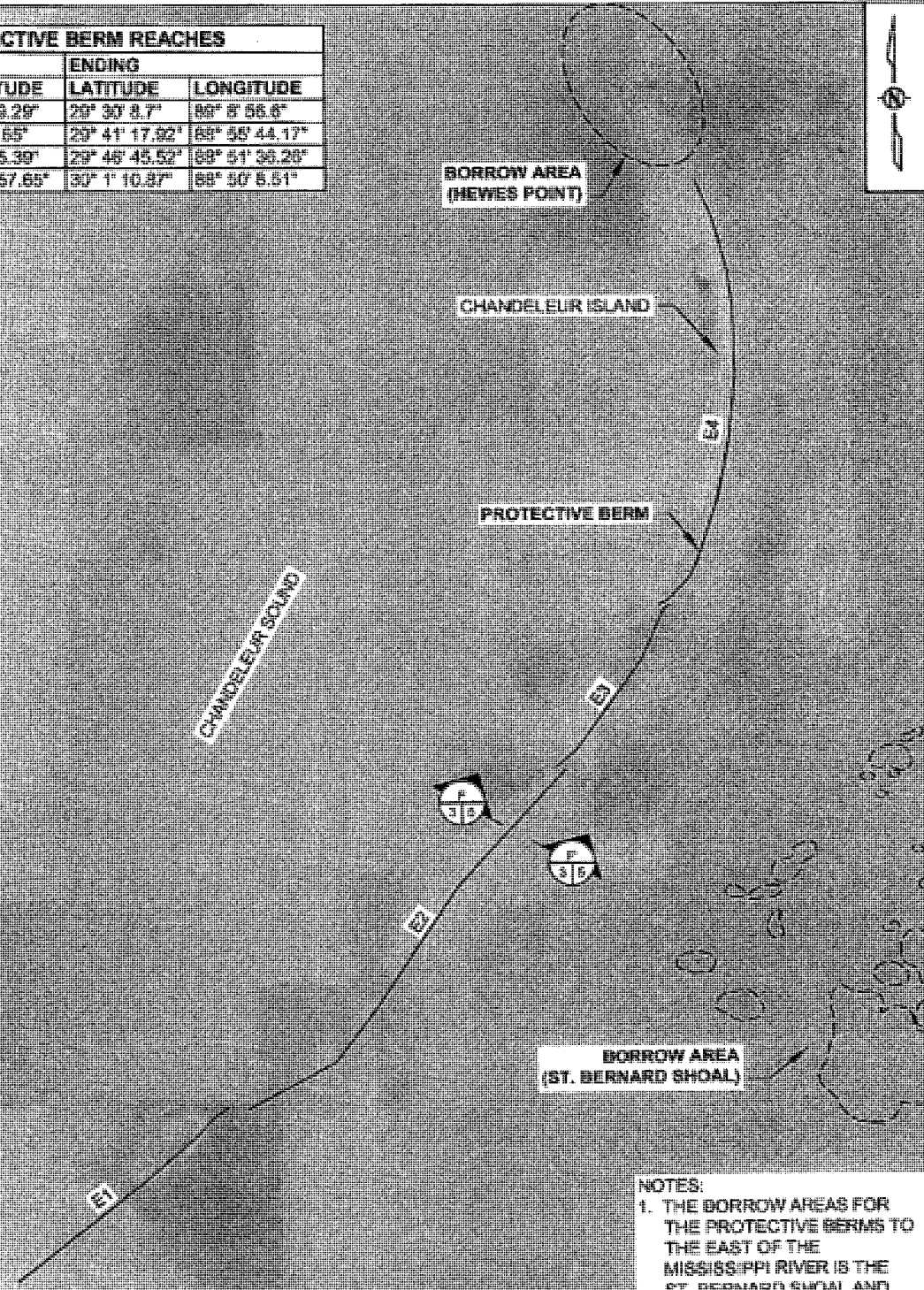
NOTE:  
BACKGROUND PHOTOGRAPHY  
WAS TAKEN IN 2002



APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		OFFICE OF COASTAL PROTECTION & RESTORATION ENGINEERING BRANCH 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BARRIER ISLAND DEFENSE	WESTERN REACHES
DRAWN BY: KRISTI CANTU	DESIGNED BY:	APPROVED BY:	STATE PROJECT NUMBER:	FEDERAL PROJECT NUMBER:	
			DATE: MAY 24, 2010	MVN-2010-1066-ETT	



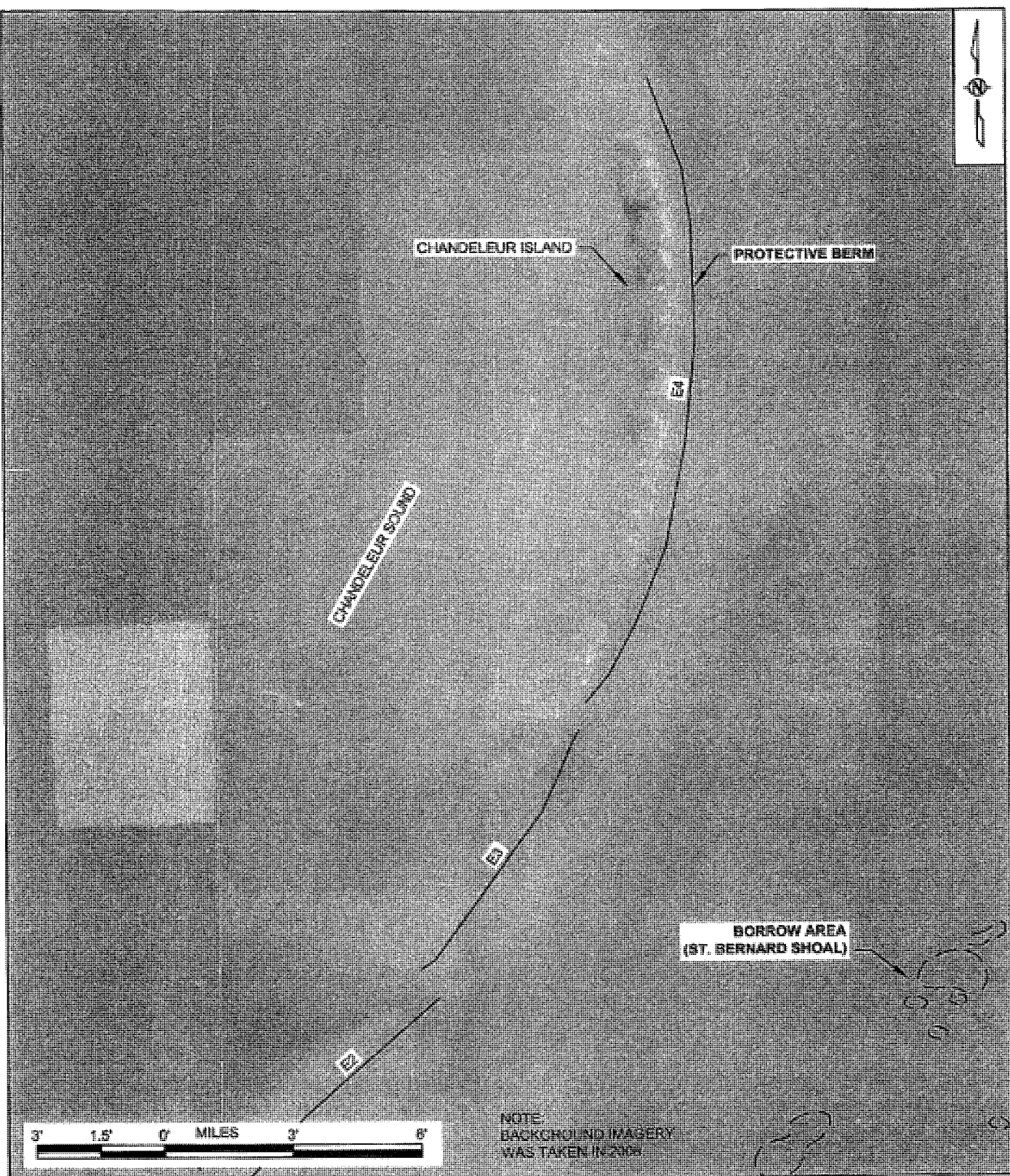
EASTERN PROTECTIVE BERM REACHES				
REACH	BEGINNING		ENDING	
	LATITUDE	LONGITUDE	LATITUDE	LONGITUDE
E1	29° 24' 26.75"	89° 17' 9.29"	29° 30' 8.7"	88° 8' 58.8"
E2	29° 30' 5.98"	88° 5' 8.65"	29° 41' 17.92"	88° 55' 44.17"
E3	29° 41' 23.20"	88° 56' 5.39"	29° 46' 45.52"	88° 51' 36.28"
E4	29° 46' 47.18"	88° 51' 57.65"	30° 1' 10.87"	88° 50' 5.51"



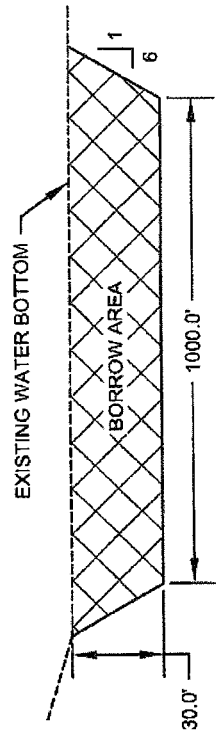
- NOTES:
1. THE BORROW AREAS FOR THE PROTECTIVE BERMS TO THE EAST OF THE MISSISSIPPI RIVER IS THE ST. BERNARD SHOAL AND HEWES POINT.
  2. THE ESTIMATED DREDGE AND PLACEMENT VOLUME FOR THE EASTERN REACHES IS 58 MILLION CUBIC YARDS.

APPLICATION BY: OCPR 450 LAUREL STREET BATON ROUGE, LA	OFFICE OF COASTAL PROTECTION & RESTORATION ENGINEERING BRANCH 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BARRIER ISLAND DEFENCE	EASTERN REACHES
			DATE: MAY 11, 2010 (5/14/10)
DRAWN BY: KRISTI CAMTU	DESIGNED BY:	APPROVED BY:	FEDERAL PROJECT NUMBER: MVN-2010-1066-ETT

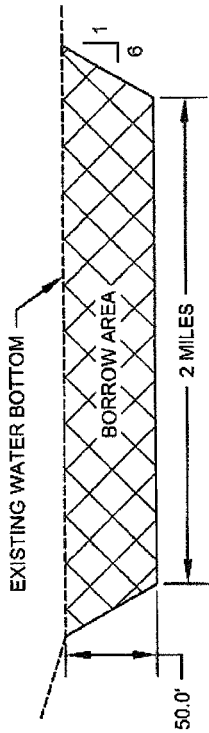




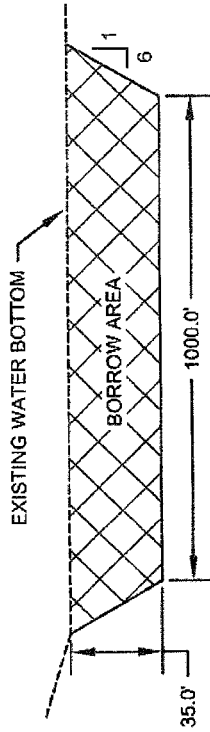
APPLICATION BY: CCPR 430 LAUREL STREET BATON ROUGE, LA	<b>OFFICE OF COASTAL PROTECTION &amp; RESTORATION ENGINEERING BRANCH</b> 430 LAUREL STREET BATON ROUGE, LOUISIANA 70801		BARRIER ISLAND DEFENCE	EASTERN REACHES
DRAWN BY: KRISTI CANTU	DESIGNED BY:	APPROVED BY:	STATE PROJECT NUMBER:	DATE: MAY 24, 2010
			FEDERAL PROJECT NUMBER:	MVN-2010-1066-ETT



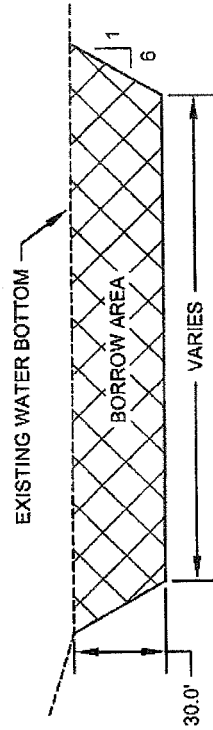
**A-A'**  
SHIP SHOAL, SOUTH  
PELTO, & HEWES POINT  
BORROW AREAS



**B-B'**  
OFFSHORE  
DISPOSAL SITE  
BORROW AREA

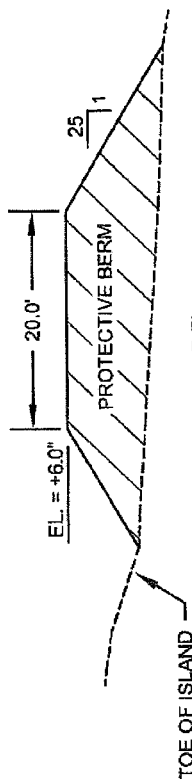


**G-C'**  
PASS A LOUTRE  
BORROW AREA



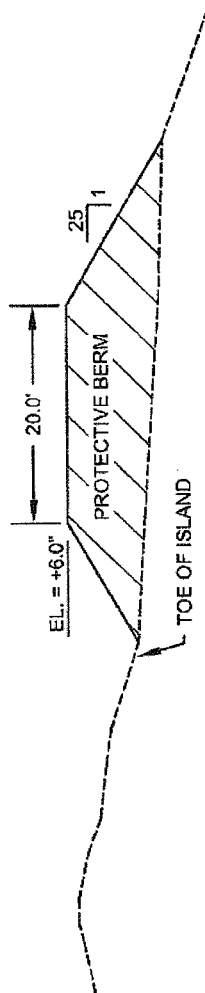
**D-D'**  
ST. BERNARD  
SHOAL

APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	<b>OFFICE OF COASTAL PROTECTION &amp; RESTORATION ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BARRIER ISLAND DEFENSE	BORROW DETAILS
DRAWN BY: KRISTI CANTU	DESIGNED BY:	STATE PROJECT NUMBER:  FEDERAL PROJECT NUMBER:	DATE: MAY 11, 2010 (REVISED 5/14/10)  MVN-2010-1066-ETT



**E-E'**  
**PROTECTIVE BERM TO THE WEST**  
**OF THE MISSISSIPPI RIVER**

NOTE: SHIP SHOAL, SOUTH PELTO, MISSISSIPPI RIVER OFFSHORE DISPOSAL SITE, AND AREA AT THE BEGINNING OF PASS A LOU TRE WILL BE USED AS THE BORROW SOURCE.



**F-F'**  
**PROTECTIVE BERM TO**  
**THE EAST OF**  
**MISSISSIPPI RIVER**

NOTE: HEWES POINT AND ST. BERNARD SHOAL WILL BE USE AS THE BORROW AREAS.

APPLICATION BY: OFFICE OF COASTAL PROTECTION & RESTORATION 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	<b>OFFICE OF COASTAL PROTECTION &amp; RESTORATION</b> <b>ENGINEERING BRANCH</b> 450 LAUREL STREET BATON ROUGE, LOUISIANA 70801	BARRIER ISLAND DEFENSE	PROTECTIVE BERM DETAILS
DRAWN BY: KRISTI CANTU	DESIGNED BY:	STATE PROJECT NUMBER:  FEDERAL PROJECT NUMBER:	DATE: MAY 11, 2010 (REVISED 5/14/10)  MVN-2010-1066-EIT





DEPARTMENT OF THE ARMY  
NEW ORLEANS DISTRICT, CORPS OF ENGINEERS  
P.O. BOX 60267  
NEW ORLEANS, LOUISIANA 70160-0267

REPLY TO  
ATTENTION OF:

Operations Division  
Regulatory Branch

SEP 13 2007

SUBJECT: MVN-1997-4840-CX  
(General Permit)NOD-20

SPECIAL PUBLIC NOTICE

ANNOUNCEMENT OF GENERAL PERMIT TIME EXTENSION  
FOR EMERGENCY OPERATIONS  
WITHIN THE NEW ORLEANS DISTRICT

On March 9, 2007, this district issued a public notice announcing consideration of a time extension to the general permit for emergency operations. All available information and comments were considered in determining that the overall public interest would be best served by issuing the time extension. A copy of the extended general permit for emergency operations is attached.

We have reserved the right to modify, suspend, or revoke this general permit any time we determine it is in the public's interest to do so. Interested parties are invited to submit written comments or suggestions for modifications or improvement of this general permit to the Regulatory Branch of this district at any time.

BY THE AUTHORITY OF THE SECRETARY OF THE ARMY:

A handwritten signature in cursive script, reading "Pete Serio".

Pete J. Serio  
Chief, Regulatory Branch

Attachment



**DEPARTMENT OF THE ARMY**  
**NEW ORLEANS DISTRICT, CORPS OF ENGINEERS**  
**P.O. BOX 60267**  
**NEW ORLEANS, LOUISIANA 70160-0267**

REPLY TO  
ATTENTION OF:

Operations Division  
Regulatory Branch

**SEP 13 2007**

SUBJECT: MVN-1997-4840-CX  
(General Permit)NOD-20

**GENERAL PERMIT**  
**EMERGENCY OPERATIONS**  
**WITHIN THE NEW ORLEANS DISTRICT**

Authorization No.: (General Permit)NOD-20  
Initial Effective Date: November 1, 1982  
Expiration Date: October 31, 2012

Under authorization granted by Part 325.8(b) of Title 33, Code of Federal Regulations, the District Commander at New Orleans has granted this general permit for certain emergency operations as described. This permit authorizes work and structures under the following legislation:

- a. Section 10 of the Rivers and Harbors Act of March 3, 1899 (33 USC 403).
- b. Section 404 of the Clean Water Act (33 USC 1344).

This permit does not authorize any work under Section 9 of the Rivers and Harbors Act of March 3, 1899 (33 USC 404) or Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 USC 1413).

This permit is applicable only within the boundaries of the New Orleans District of the U.S. Army Corps of Engineers.

Work authorized by this general permit is the minimum amount necessary to respond to such emergencies as oil or gas well blowouts, pipeline explosions or ruptures, explosions, fires, oil or hazardous materials spills, and shipwrecks or sinkings of vessels in navigation channels or similar situations which would result in an imminent safety and/or environmental hazard, loss of property, or immediate economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process an application.

Approval to perform work under this general permit does not replace normal permitting approval required under our regulations. Authorization under the general permit is a temporary approval to allow the applicant to perform work under emergency situations. After the emergency situation has been addressed, the applicant must either restore the site to as near pre-project conditions as practical, or must apply for a permit to maintain the work initially authorized under the general permit. Permit applications to maintain work initially authorized under this general permit would be processed in the normal manner to include a public notice, water quality certification from the Louisiana Department of Environmental Quality, and coastal use permit or other approval from the Louisiana Department of Natural Resources, Coastal Management Division, where applicable.

The activities authorized by this general permit include, but are not limited to:

- a. Emergency placement of a drilling rig in open waters to drill a shutoff well.
- b. Emergency dredging and disposal of dredged material for movement of equipment to evacuate personnel, fight fires, shutoff blow-out wells, install and service pollution control equipment, and repair ruptured pipelines.
- c. Emergency dredging and placement of fills to collect and confine oil or hazardous materials.
- d. Emergency dredging and deposition of dredged material to remove or re-float grounded, wrecked, burned out or sunken vessels blocking major navigation channels.
- e. Emergency placement of fills to provide access to a location for placement of drilling rigs to drill shutoff wells.

In addition to the applicable conditions of our standard permit form (copy enclosed), the following conditions apply to this general permit:

- a. Dredging and other activities will be the minimum necessary to meet the emergency.
- b. Restoration is required in accordance with the following:
  - (1) Restoration plans must be submitted to the Regulatory Branch of this district within 30 days of the date when the approval was granted by the New Orleans District for the emergency work under the general permit.
  - (2) The District Commander will consult with appropriate federal, state, and local agencies prior to approval of restoration plans.
  - (3) The restoration work must begin within 30 days of approval of plans or lesser time when so specified by the District Commander or his representative, unless a specific time extension is granted by the New Orleans District.
  - (4) Once begun, restoration work will be diligently prosecuted until completed.

(5) Disturbed wetland areas shall be restored to as near preproject conditions as practicable.

c. In appropriate cases when it may be in the public interest to allow maintenance of structures, fills, or dredged areas installed under this general permit authorization, permittees must apply for and receive a Department of the Army permit. If the permit application is denied, restoration will proceed in accordance with condition b., immediately above.

d. Applications to maintain facilities authorized by this general permit must be submitted within 30 days of the date when the approval was granted by the New Orleans District for the emergency work under the general permit, unless a specific time extension is granted by the New Orleans District. Permit applications will be processed using regular procedures, including a public notice where applicable.

e. Requests to maintain facilities authorized under this general permit must include a completed application form, letter-sized drawings illustrating the location and scope of the work, and be mailed to the Regulatory Branch at the letterhead address above. Applications for work in the Louisiana Coastal Zone must also be sent to the Louisiana Department of Natural Resources, Coastal Management Division.

f. This general permit may be modified, suspended, or revoked by the District Commander any time it is found to be in the public interest to do so.

g. Approval under this general permit does not relieve permittees from obtaining emergency permits or other approvals from any required state or local agency, or the consent of the landowner. For emergency work within the Louisiana Coastal Zone, applicant's must also contact Louisiana Department of Natural Resources, Coastal Management Division (CMD) at (225) 342-7591 for specific approval before performing the emergency work. CMD has a similar emergency general permit, CUP-GP-29.

h. Other conditions may be added in individual approvals for work under this general permit to address site specific conditions or situations.

Procedures to be followed in administering this general permit are as follows:

a. The initial contact may be made in person or by telephone to one of the following numbers.

(1) Regulatory Branch  
(504) 862-2255

(2) Eastern Evaluation Section  
(504) 862-2044

(3) Central evaluation Section  
(504) 862-2276



(4) Western Evaluation Section  
(504) 862-2261

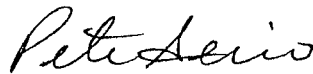
For work within the Louisiana Coastal Zone also contact the Louisiana Department of Natural Resources, Coastal Management Division at (225) 342-7591.

b. Authorization under this general permit may be granted upon initial contact provided the requester can present sufficient information on the location, nature, and extent of the work to establish that the emergency situation exists. Depending on the extent of the emergency, immediate verbal authorization may be granted to perform the work, however, in other cases a written request explaining the emergency, with sketches and maps, may be needed to establish that the project qualifies for approval under the provisions of the emergency general permit.

c. If authorization to proceed is granted at the initial contact, the permittee must supply written documentation of the work to be done within 1 working day of the approval being granted, including necessary maps, drawings, and sketches.

d. Permittees will supply all other information necessary to establish a complete file.

e. Written approval will be granted after all necessary information has been provided.



Pete J. Serio  
Chief, Regulatory Branch

Enclosures