

**APPENDIX E**  
**ENVIRONMENTAL COORDINATION REPORTS**

# **Task Force Guardian Borrow Team**

**March 23, 2006**

## **Interim Report on Mission, Progress, and Procedures Utilized For “Fast Track” Environmentally Compliant Borrow Acquisition**

### **INTRODUCTION**

On August 29, 2005, Hurricane Katrina caused major damage to the hurricane protection system in Orleans, St. Bernard, Plaquemines, and Jefferson Parishes, Louisiana. Since the storm, the U.S. Army Corps of Engineers (USACE) has been working to restore the hurricane protection system to the level of protection provided prior to the 2005 hurricane season. These efforts have been conducted mainly under the authority provided by Public Law 84-99, the Robert T. Stafford Disaster Relief and Emergency Assistance Act.

While significant progress is being made in restoring the hurricane protection system to its pre-storm conditions, the system remains vulnerable to tropical weather systems. It is imperative that all hurricane protection works are restored to their pre-storm conditions as soon as possible to protect life, health, property, and economic losses.

Based upon applicable regulations and guidance and a Presidential declaration proclaiming south Louisiana as a national disaster area, the New Orleans District Commander considers the New Orleans Metropolitan Area to be under an imminent threat from flooding due to the damaged hurricane protection system. The District Commander considers this threat to remain in effect until the hurricane protection system is restored to its pre-storm condition. The CEMVN will continue preparing an environmental assessment of the impacts associated with restoration of the hurricane protection system and release the document for public and agency review and comment as soon as possible after all features of restoration work are determined.

In order to accomplish the assigned task of rehabilitating the damaged hurricane protection system before the next hurricane season, the USACE leadership realized that an innovative, focused, goal-oriented, multidisciplinary team along with a technical support staff was needed to assess and rehabilitate the hurricane protection system. As a result of this need for fast track rehabilitation of the levee system, Task Force Guardian (TFG) was formed. The borrow team described below is one of the integral components of the TFG.

The following information provides insight about the mission of the team and the procedures used to document the borrow acquisition process including the consideration and protection of the natural and cultural resources of the area.

## **THE BORROW TEAM**

Hurricane protection levees constructed under Federal projects are typically constructed of clay materials provided by local sponsors as part of their responsibility for lands, easements, and rights-of-way. Investigating and acquiring borrow sources for projects in normal circumstances typically takes months to years to study, investigate, and integrate into construction contracts. Under TFG, that process is compressed into months, weeks, and occasionally days to facilitate advertisements for construction contracts.

Before TFG was formed, the USACE leadership recognized that an independent Project Delivery Team would be needed to initiate and manage the borrow acquisition process, and it established a borrow team for TFG, a four person team with integral ties to specialized supporting staff. The team consists of Danny Thurmond (Project Manager), Larry Hartzog (Biologist), Douglas Dillon (Geologist), and Amy Goodlett (Engineering Technician).

The borrow team also relied on supporting expertise from other disciplines concerned with Hazardous, Toxic and Radioactive Waste (HTRW) (Casey Rowe), wetland identification (John Bruza, Rob Heffner, and Furcy Zeringue), cultural resources (Paul Hughbanks), and real estate (Janet Cruppi).

## **MISSION OF BORROW TEAM**

The mission of the borrow team is to identify and provide high quality clay material sources for hurricane protection levee projects being constructed by TFG. Some 5,465,083 cubic yards of compacted clay material is needed for this effort, requiring cumulative borrow volumes that may be as much as 7,500,000 cubic yards.

The team must also accomplish this mission while guiding the procurement of the material in such a way as to be least damaging to both the natural and cultural resources in the construction area.

## **SITE IDENTIFICATION**

The team had a multi-faceted approach to identifying potential borrow sites. The team first identified the location where the material would be used. Next, the geologist studied the geological make-up of areas in the vicinity of the project that had a potential for containing clays. Then, the biologist would do an “in-office” survey of aerial photos of the area to see if the potential site appeared to be wetlands, if the site would experience critical CZM issues based on location, or if there were other obvious environmental issues that could be detected from photography. The USACE archeologist also did a preliminary “in-office” survey of mapped cultural resource sites to detect any obvious cultural resource problems. USACE botanists with the Regulatory Functions Branch researched their records of existing and upcoming permit activity in the area of a potential site. Prior to on-site field verification, a preliminary “in-office” vegetation analysis was made using the most recent available aerial photography (2004).

Potential sites were also identified by the real estate team members associated with TFG. The only options to obtain borrow areas for immediate use have been properties either owned by the local sponsor or commandeered by the parish or city. Normal methods and procedures would not provide the sources needed in time to start immediate construction. Normally, local sponsors, parishes, and cities do not have or maintain lands for borrow; however, Plaquemines Parish did have two sites, one near Belle Chasse and one near Fort Jackson. The initial evaluation of these sites is done in the same manner as noted previously excluding the contractor furnished borrow sites.

The contractor-furnished borrow sites were initially evaluated by reviewing the contractor provided information packet normally required for requesting alternative borrow. If the contractor furnished pit was previously permitted by the Corps, the pit was immediately usable; otherwise sites visit were made. Following these office assessments for potential sites, the borrow team initiated on site investigations noted in sections that follow.

## **ON SITE INVESTIGATIONS**

The borrow team and supporting experts would visit each potential site. The team members consisted of the engineer/borrow team leader who would evaluate the logistics needed to prepare the site; the biologist who would prepare and coordinate a environmental report with the appropriate Federal and state resource agencies; the team geologist who would take preliminary hand cores and provide logistics for mechanized soil borings and interpretation of the soil analysis; a botanist from the USACE Regulatory Functions Branch who would make the wetland and jurisdictional determinations to help determine the application of certain environmental regulations [404(b) (1), Section 10]; the USACE archeologist who would examine the site for signs of cultural resources, and the HTRW investigator who would assess the site and report the results about HTRW concerns.

A total of 63 borrow sites were visited or evaluated by the TFG borrow team. These sites included areas provided by the local government entities, areas identified by the borrow team protocol, sites with previous NEPA coverage, and contractor-furnished borrow sources. The team evaluated and coordinated a total of 29 sites with the appropriate resource agencies, 18 of which are being used. Another 6 sites evaluated were previously covered by NEPA documentation associated with EIS. The team performed wetlands determinations on another 17 potential sites identified in the St. Bernard Parish area by the team, but no coordination was initiated due to real estate procurement issues with the parish; therefore, none of these sites are in use. One additional site at Reggio was evaluated by the team, but further coordination on that site was not pursued due to environmental and possibly soil issues. Ten commercial contractor-furnished sites were investigated and evaluated for proper soils and environmental conditions, and the pits are presently or will currently be in use.

In addition to the sites noted above, an additional 14 sites have been identified. Thirteen of these sites have been field evaluated and have completed wetland determinations. However, none of these 14 sites have been coordinated with the resource agencies. Further coordination was postponed since there was a lack of willingness by the local governments to commandeer the properties.

## **SITE SELECTION**

The team made every effort to avoid environmentally and culturally sensitive areas when selecting borrow sites, and the group worked diligently to both avoid and minimize the environmental impact of the borrow acquisition. While the engineering properties of the borrow material were recognized as first priority, environmental sensitivity was also a part of the consideration for site selection. A protocol was developed to incorporate environmental sensitivity into the site selection process. The protocol established the following environmentally sensitive priority for land acquisition that was used in combination with the engineering factors to aid in site evaluation and selection.

- First utilize existing commercial pits where possible,
- Then identify feasible upland sources if available,
- Then identify disturbed or manipulated wetland sources,
- Then focus on low quality wetlands inside the levee system, and
- As last resort, utilize preferably low quality wetlands outside of the levee system.

Only 266 acres of the 1,712 acres identified in Orleans, Plaquemines and St. Bernard Parishes as potential borrow sites are wetlands, and only 56 acres of these wetland acres, which are primarily low quality wetland, are slated for use. Through the team's effort, only 10 percent of the entire borrow required for the hurricane protection rehabilitation will come from wetland sources.

The emergency need to facilitate restoring the levees requires the use of these wetlands. The team takes pride in the fact that primarily low quality wetlands were impacted, avoiding the higher quality swamps and marshes where productive wildlife and fishery habitat may eventually recover from the impact of the storm. This is considered a success in an area where wetlands dominate the landscape. The USACE will perform mitigation of the wetlands taken.

## **DOCUMENTATION AND COORDINATION**

As previously noted, the borrow team was required to locate, evaluate and obtain sufficient environmental and cultural resource information on potential borrow sites that was sufficient to initiate preliminary environmental coordination with the appropriate Federal and state agencies before utilizing the area. Due to the critical need for borrow material in an expedited manner, the team was required to evaluate, coordinate, and provide approval for use within a couple of days in most cases. This evaluation and approval process normally takes from 2 to 3 months.

Due to this need for fast track approval, the multi-disciplinary field team was designed to provide the expertise on site to quickly determine the environmental and cultural sensitivity of the area, identify mitigation needs if applicable, identify type of environmental coordination needed, and determine the type of regulatory evaluations (Section 404 and Section 10) required to be addressed in the “after the fact” environmental compliance document to be prepared when the TFG mission is completed.

### **Field Evaluation**

The team’s site evaluation involved walking the site to assess vegetative cover, drainage, surface hydrology, and hydrological connectivity. In addition, soil samples were taken by both the USACE botanist (to identify and verify wetland soil conditions) and the USACE geologist (to determine if the proper soil types required for levee construction were present in sufficient quantities). The archeologist, based on previous in-house map and aerial photography research, examined the site for the presence of significant cultural artifacts. If this preliminary investigation revealed a potential for cultural significance, a complete cultural survey of the area was initiated, and the results were analyzed prior to coordination with the Louisiana State Historic Preservation Officer (SHPO). The HTRW specialist examined the site for evidence of existing or potential sources of HTRW based on land use history and visual observations at the site. If evidence of significant HTRW was noted, the investigator coordinated with the Engineering Division of New Orleans District to initiate a Phase 2 analysis of the suspect area to determine if and to what extent the area may be contaminated.

In summary, the field investigation resulted in a wetland determination, information on soil suitability, the potential for encountering significant cultural resources, wildlife value of the site and subsequent mitigation needs, visual assessment of surface hydrology and drainage which will be used to assist in CZM compliance, potential for encountering HTRW, and information needed for accessibility (location of utility corridors and road access).

### **Coordination**

After the field evaluation was completed, an environmental coordination report was prepared and provided to the appropriate Federal and state resource agencies including the U.S. Fish and Wildlife Service; the National Marine Fisheries Service; the Louisiana Department of Natural Resources (LDNR), Coastal Management Division; and the SHPO. This report is designed to provide, document, and organize the field evaluation information along with any applicable in-house research so that the resource agencies have sufficient information to provide a response for either full compliance, or in the case of the LDNR, a predicated compliance based on preparation of a full Coastal Resource Program determination as part of the “after the fact” environmental document that will cover any impacts associated with the TFG work.

The environmental coordination report provides the location, size, and description of the proposed borrow area, as well as information on how the work would be performed

(bulldozer, back hoe, etc.), observations of drainage and surface hydrology, and notes on physical features such as levees, ditches, pumping stations, natural hammocks, etc. The report also provides a description of the vegetation, results of the wetland determination, observations on the wildlife value of the area, and information concerning the HTRW investigations. The ECR also notes the status of cultural resource investigations. Both aerial and standard photography of the site, along with coordinates for each site, were provided as part of the environmental coordination report, when available. The type and quantity of impacts was described, as was how impacts would be minimized, avoided, or mitigated if necessary.

The Louisiana Department of Environmental Quality has provided the USACE with a waiver of water quality certification (Enclosure 1) for the emergency work being constructed under the TFG. The LDNR Coastal Management Division has not provided a waiver from Coastal Resources Program compliance, but has agreed to provide an interim compliance allowing the work to proceed, with the stipulation that a complete consistency determination will be prepared for their review as part of the “after the fact” environmental document addressing the TFG work. The applicable CZM guidelines were reviewed for each site, and appropriate language addressing concerns such as impounding wetlands, increasing sedimentation, interruption of “sheet flow”, etc. was included in the ECR and coordinated with the LDNR Coastal Management Division for review and comment.

## **SUMMARY**

This document summarizes the fast track day-to-day operations of the borrow team. This document also demonstrates that an organized, consistent, systematic approach was developed by the team to ensure that a borrow site evaluation could be done expeditiously and that the borrow material could be obtained in an environmentally friendly manner.

In review, the evaluation procedure was as follows:

- In-office site identification and graphics preparation
- Preparation of aerial photography with project overlay
- Preparation of aerial photography with access routes and coordinates
- Preparation of overall borrow locations and vicinity map (enclosure 3)
- Preliminary “in-office” reconnaissance
- Review of cultural resource maps (archeologist)
- Review of soil maps (geologist)
- Review of aerial photography (biologist and botanist)
- Field evaluation
- Wetland determination
- Soils analysis
- Cultural resource evaluation
- Vegetation and wildlife evaluation
- HTRW evaluation

Surface hydrology observations and topography  
Preparation of environmental coordination report  
Coordination of environmental coordination report with appropriate Federal and state agencies  
Document responses from Federal and state agencies  
Project adjustments, to the maximum extent practicable, to incorporate resource agency suggestions where feasible and necessary  
Approval for borrow pit construction

**ENCLOSURE 1**  
**LDEQ WAIVER OF WATER QUALITY CERTIFICATION**



## DEPARTMENT OF ENVIRONMENTAL QUALITY

KATHLEEN BABINEAUX BLANCO  
GOVERNOR

MIKE D. McDANIEL, Ph.D.  
SECRETARY

September 7, 2005

Ms. Susan Hampton  
Chief, Regulatory CEMVD-PD-K  
U.S. Army Corps of Engineers  
P.O. Box 80  
Vicksburg, MS 39181-0080

RE: Emergency Response following Hurricane Katrina AI #130531

Dear Ms. Hampton:

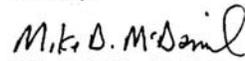
The Louisiana Department of Environmental Quality (LDEQ) recognizes that the state of Louisiana is in a state of emergency as a result of the widespread damage caused by Hurricane Katrina. Finding that the hurricane created conditions requiring immediate action to prevent serious threats to life or safety and irreparable damage to the environment, a Declaration of Emergency and Administrative Order was issued by the LDEQ on August 30, 2005.

Section 401 of the Clean Water Act, 33 U.S.C. 1251 *et. seq.* requires a water quality certification from the state to conduct any activity which may result in any discharge into navigable waters. Because of the immediate need to drain and pump out the flood waters in affected areas to protect public safety and the necessity to repair, replace, or restore public infrastructure damaged or destroyed by Hurricane Katrina, the LDEQ by this letter states that it has no objection to the U.S. Army Corps of Engineers or the U.S. Environmental Protection Agency waiving or otherwise dispensing with the requirement of a water quality certification from the state prior to authorizing or performing such work needed to abate the present emergency that will result in discharges into navigable waters.

To the extent practicable, the performance of the work referenced herein should be done in a manner which will minimize potential impacts on water quality.

If you have any questions regarding this letter, please contact Tom Griggs in the Office of Environmental Services, at (225) 219-3469.

Sincerely,

  
Mike D. McDaniel, Ph.D.  
Secretary

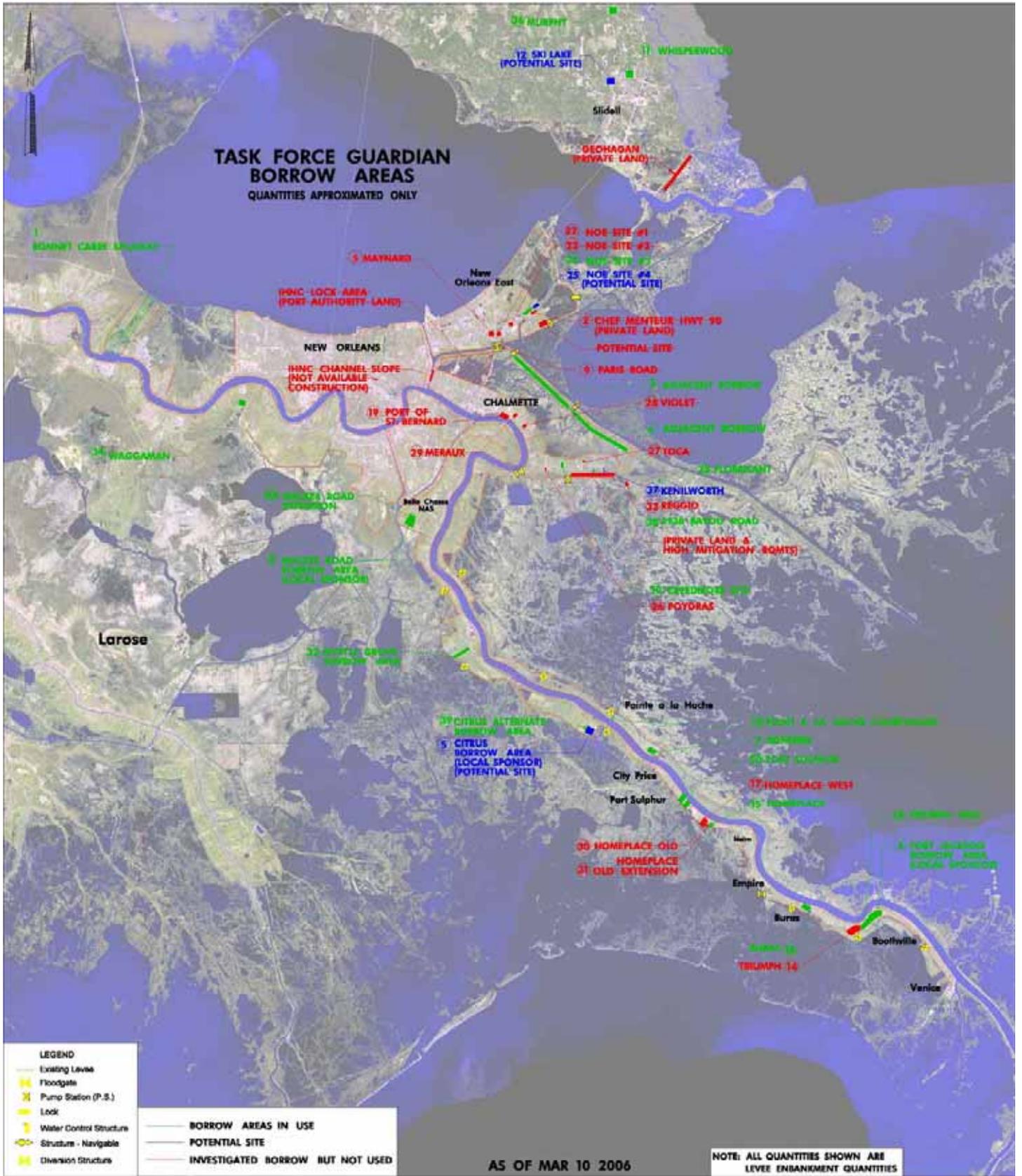
### OFFICE OF THE SECRETARY

: PO BOX 4301, BATON ROUGE, LA 70821-4301  
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**MAP OF  
TASK FORCE GUARDIAN BORROW AREAS**

# TASK FORCE GUARDIAN BORROW AREAS

QUANTITIES APPROXIMATED ONLY



**LEGEND**

- Existing Levee
- ⊘ Floodgate
- ⊘ Pump Station (P.S.)
- ⊘ Lock
- ⊘ Water Control Structure
- ⊘ Structure - Navigable
- ⊘ Diversion Structure

—	BORROW AREAS IN USE
—	POTENTIAL SITE
—	INVESTIGATED BORROW BUT NOT USED

AS OF MAR 10 2006

NOTE: ALL QUANTITIES SHOWN ARE  
LEVEE ENBANKMENT QUANTITIES

**ENVIRONMENTAL COORDINATION REPORTS  
INDIVIDUAL BORROW SITES**

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Bayou Dupre to Verret Proposed Borrow Site for St. Bernard Levee Restoration**

**October 5, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow to repair and restore the St. Bernard levee system.

**PROPOSED ACTION:** The work will consist of excavating a strip of scrub/shrub on the protected side and parallel to the St. Bernard back levee from the Bayou Dupre control structure south to the point where the hurricane protection follows an easterly route towards Verret, Louisiana.

**DESCRIPTION OF THE WORK AREA:** The area was heavily damaged by the storm from overtopping and surge, which resulted in the scrub/shrub habitat being victim of blow over and scour. In addition the area was covered with a silt and clay base that extended into the remnant marshes beyond the scrub/shrub interface. There was also additional evidence of scour in certain areas of the scrub shrub and beyond. Overall the area is currently considered a highly disturbed habitat. The areas to be utilized for borrow are higher than the marshes behind them and could possibly have been used as disposal areas at one time, but this has not been verified to date. The area is bounded by the Mississippi River levees on one side and the hurricane protection levees on the other. The only hydrological connections would be through either the control structure at either Bayous Dupre or Bienvenue.

**IMPACTS OF THE PROPOSED WORK:** The direct impacts of the construction would be the conversion of 103 acres of scrub/shrub habitat to open water or fringe marsh. Additional impacts may be encountered from obtaining construction access, but the amount and type of this type of secondary impact will depend on the ability to access the area by water and are not known at this time.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Efforts will be made to minimize runoff and create fringe marshes and other terrestrial and fishery habitat to minimize the overall impact of construction. The pits will be non-continuous if at all possible, and overburden material will be used beneficially to create both aquatic and terrestrial habitat where feasible.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with

the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of the review, the USACE has consulted the CZM surface alterations guidelines and has complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents addressing the impacts of the emergency actions associated with the emergency levee repairs. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana State Historic Preservation Officer (SHPO) was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of hazardous, toxic, and radioactive waste has been made, and an "after the fact" phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the "after the fact"

environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources. In fact, a connection between the pit and Bayou Dupre could actually provide additional fishery habitat. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as noted in their October 6, 2005 statement. The LDNR has no objection to the work as proposed as long as mitigation is assessed and initiated after the fact. The USACE agrees that mitigation needs will be determined after the fact and if compensatory mitigation needed, it will be initiated at that time. Since the habitat affected is scrub/shrub, it is not the USACE's intent to provide compensatory mitigation. The USACE has consulted with the USFWS, and both agree, due to the nature of the habitat and the periodic disturbance that would result to this already highly disturbed area, no mitigation would be required. The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project. The e-mail letter dated October 6, 2005 provided the determination of no affect.

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Bohemia Borrow site Plaquemines Parish Levee Restoration**

**October 7, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to the Plaquemine Parish Hurricane Protection Levee System.

**PROPOSED ACTION:** The action involves constructing 2 borrow pits in an area on the east side of the Mississippi River on the protected side near Bohemia, Louisiana. The area is bounded by State Highway 15 on the Mississippi River side and Highway 39 on the backside of the property. The property will be excavated by backhoe, and the excavated soils will be truck-hauled to the site.

**DESCRIPTION OF THE AREA:** The proposed area is currently open pasture with occasional tree cover. The sparse vegetation is made up of both planted and indigenous grasses mixed with scrub/shrub and occasional small oaks and myrtles. The area has been recently grazed. There seem to be no hydrological connections to the river or other water courses or wetlands under non-flood conditions.

**IMPACTS OF THE PROPOSED WORK:** The general areas of consideration for the two borrow pits have been sited, but not all of the area noted may be suitable. The acreages noted here would be the maximum acreage impacted by borrow excavation and would result in a 142-acre pit and an adjacent 64-acre pit if the whole acreage is utilized. The pits will be sloped and irregularly shaped to provide for aquatic habitat. Wetland fringe will be developed where possible, utilizing overburden material for wetland creation or possible marsh areas where practicable.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done and coordinated in a manner to avoid environmentally sensitive areas to the greatest extent practicable. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Turbidity control measures will be in place to minimize runoff.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of

Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of hazardous, toxic, and radioactive waste has been made, and an "after the fact" phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the "after the fact" environmental document addressing emergency operations.

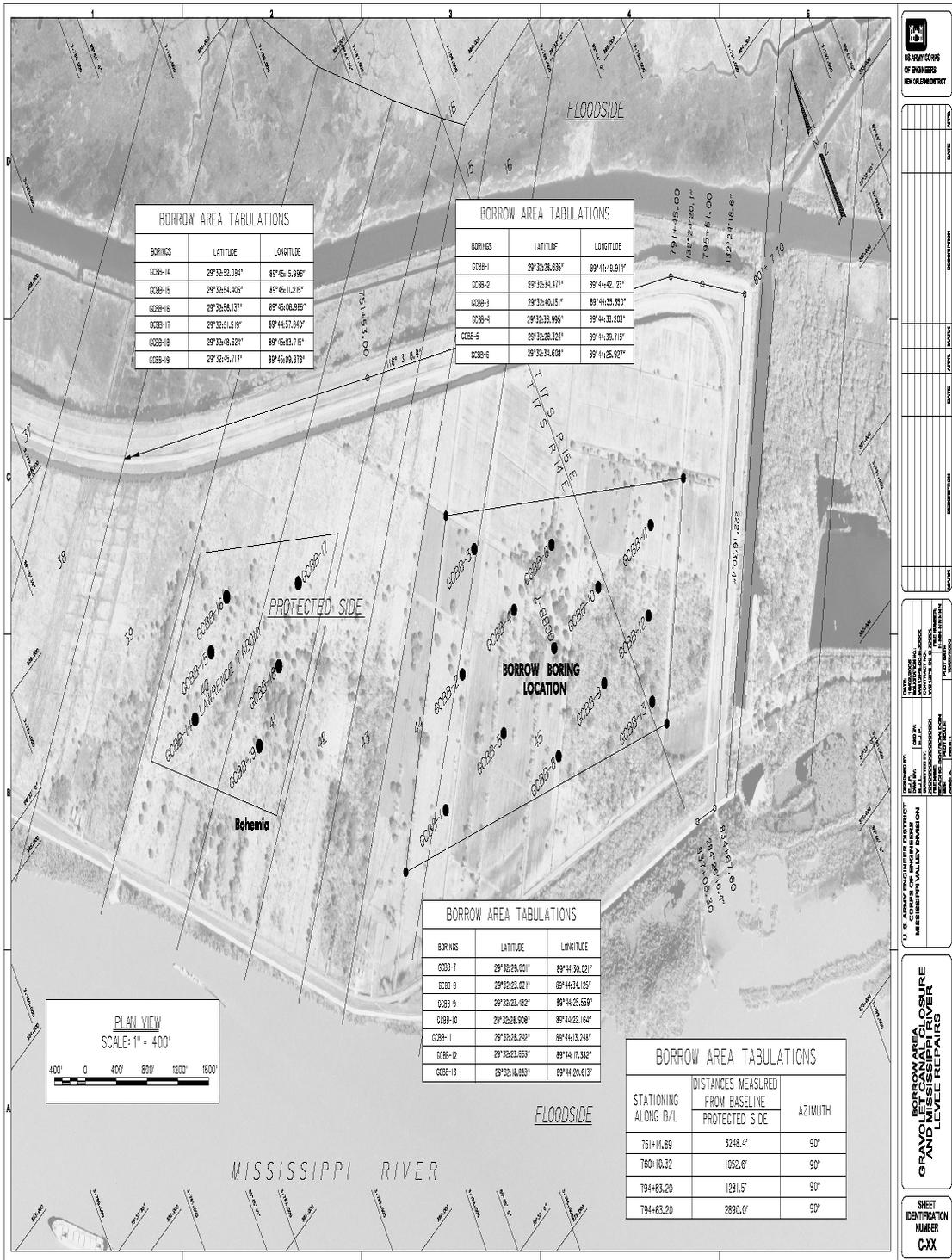
**AGENCY RESPONSES:** The NMFS noted that the area of the proposed work is not in an area identified as essential fish habitat or supportive of marine resources. Since the proposed work will actually create aquatic habitat and will be designed to enhance productivity, the NMFS supports the designation of the borrow area. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973, as stated in their October 11, 2005 statement. The USFWS notes that as proposed the borrow pits may include environmental features that would provide limited benefits to fisheries and some trust resources; therefore, there is no objection to the proposed work.

The LDNR has no objection to the project.

The State Historic Preservation Officer (SHPO) initially had concerns for a potential cemetery site in the Tabony borrow site. In order to provide data to the SHPO, a representative of the USACE Cultural Resources Section conducted a Phase 1

archeological survey of the area. The survey both identified the limits of the cemetery and identified if there were other areas of concern within the site. A no work buffer was established around the cemetery site. The USACE provided a letter report outlining the survey findings to the SHPO. After reviewing the report, the SHPO concurred with the USACE, by e-mail letter dated October 19, 2005, that no cultural resources would be affected by the project; therefore, the SHPO had no objections to the project.

## **DETAILED SITE MAP**



**BORROW AREA TABULATIONS**

BORINGS	LATITUDE	LONGITUDE
G02B-14	29°32'52.034"	89°45'15.396"
G02B-15	29°32'54.405"	89°45'11.215"
G02B-16	29°32'58.137"	89°45'06.395"
G02B-17	29°32'51.519"	89°44'57.849"
G02B-18	29°32'48.624"	89°45'03.715"
G02B-19	29°32'45.713"	89°45'09.379"

**BORROW AREA TABULATIONS**

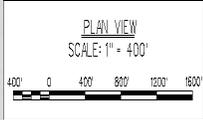
BORINGS	LATITUDE	LONGITUDE
G02B-1	29°32'28.635"	89°44'49.914"
G02B-2	29°32'34.477"	89°44'42.121"
G02B-3	29°32'40.151"	89°44'35.350"
G02B-4	29°32'33.996"	89°44'31.233"
G02B-5	29°32'28.324"	89°44'35.715"
G02B-6	29°32'34.618"	89°44'25.927"

**BORROW AREA TABULATIONS**

BORINGS	LATITUDE	LONGITUDE
G02B-7	29°32'29.001"	89°44'30.021"
G02B-8	29°32'23.432"	89°44'34.125"
G02B-9	29°32'28.908"	89°44'25.559"
G02B-10	29°32'28.242"	89°44'22.164"
G02B-11	29°32'28.242"	89°44'13.214"
G02B-12	29°32'23.653"	89°44'17.382"
G02B-13	29°32'18.883"	89°44'20.813"

**BORROW AREA TABULATIONS**

STATIONING ALONG B/L	DISTANCES MEASURED FROM BASELINE		AZIMUTH
	PROTECTED SIDE		
751+14.89	3248.4'	90°	
780+10.32	1052.6'	90°	
794+63.20	1281.5'	90°	
794+63.20	2890.0'	90°	



**U.S. ARMY CORPS OF ENGINEERS**  
NEW ORLEANS DISTRICT

**BOHEMIA AREA CLOSURE AND MISSISSIPPI RIVER LEVEE REPAIRS**

**SHEET IDENTIFICATION NUMBER CXX**

DATE: \_\_\_\_\_

DESIGNED BY: \_\_\_\_\_

DRAWN BY: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

APPROVED BY: \_\_\_\_\_

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# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Walker Road Borrow Pit Plaquemines Parish Levee Restoration**

**October 11, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to that portion of the hurricane levee protection system located in Plaquemines Parish, Louisiana.

**PROPOSED ACTION:** The action involves utilizing approximately 83.5 acres within the existing area designated for borrow in Environmental Impact Statement (EIS) for the West Bank and Vicinity of New Orleans Hurricane Protection Project (east of Harvey, Plate 13), which was prepared in August of 1994.

**DESCRIPTION OF THE AREA:** The proposed area is currently an active borrow site comprised of existing pits and highly disturbed areas or areas of open pasture with occasional tree cover.

**IMPACTS OF THE PROPOSED WORK:** The impacts of the proposed action have been previously covered by the EIS for the West Bank in the Vicinity of New Orleans Hurricane Protection Project (East of Harvey), prepared in August of 1994. No further environmental clearances are necessary unless areas are disturbed outside of the footprint covered by the West Bank EIS.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In this case, an area has been chosen that was previously disturbed, and existing pits will be utilized to the maximum extent possible.

If overburden is sufficient, sloped and fringe shallows may be created to provide shallows for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water movement within the coastal zone. Turbidity control measures will be in place to minimize runoff.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

In addition all sites are evaluated for the presence of hazardous or toxic materials.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** The current work has been addressed and previously coordinated with the appropriate resource agencies in conjunction with the EIS for the West Bank in the Vicinity of New Orleans Hurricane Protection Project (East of Harvey), prepared in August of 1994.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. This action was previously covered in the EIS referenced above.

**AGENCY RESPONSES:** The National Marine Fisheries Service (NMFS) has no objection since the proposed work would not affect the NMFS trust resources. The USFWS has reviewed the proposed project and noted in a statement dated October 28, 2005 that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies. However, due to the wetlands involved in the site, the USFWS noted an “after the fact” assessment of mitigation needs should be done and the habitat value mitigated. The Louisiana Department of Natural Resources had no objections or comments concerning the proposed action. The USACE has subsequently consulted with the USFWS and has agreed to mitigate for 2.5 acres wetland if the site is used and impacts the wetland portion of the site containing the wetlands. The Louisiana State Historic Preservation Officer’s (SHPO) review of the proposed work indicated, in a statement dated November 1, 2005, that no known archeological sites or historic properties will be affected by the project. The SHPO did indicate that this effect determination could change if new information is discovered. The SHPO has reviewed the proposed action and noted that there would be no adverse affects to resources under their jurisdiction.

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Pointe a La Hache Courthouse Borrow Site Plaquemines Parish, East Bank Levee Restoration**

**October 12, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to the Plaquemine Hurricane Protection Levee System.

**PROPOSED ACTION:** The action involves constructing a 5.3-acre borrow pit on a lot located directly behind the abandoned courthouse in Pointe a La Hache in Plaquemines Parish, Louisiana. The area is bounded by the Mississippi River and Louisiana State Highway 39. The material will be excavated with a backhoe and truck-hauled offsite. No additional damages are expected for access road construction.

**DESCRIPTION OF THE AREA:** The proposed area is currently a municipal block that has been fallow and cleared. The lot is located immediately behind the abandoned Pointe a La Hache courthouse and prison. The area in question has been cleared of vegetation and is in an urban setting in a rural locale. There seem to be no hydrological connections to the river or other watercourses or wetlands under non-flood conditions. The area has not been classified as a wetland, nor does it have any wetland functions.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow site has been highly disturbed both by preparation for development and by surges from Hurricane Katrina. A maximum of 5.3 acres of urban developed field would be impacted by the project. No vegetation presently exists onsite. The pit will be sloped and irregularly shaped to provide for aquatic habitat. Wetland fringe may be developed where possible by utilizing overburden material for wetland creation.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In addition, all sites are evaluated for the presence of hazardous or toxic materials that may be located in a proposed site. Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. Based on the above preventive measures taken, the USACE believes the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR will be notified of further changes if any occur, and further coordination will be initiated as needed. An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The site has been evaluated for presence of toxic waste, and the risk is minimal to none. Additionally, the area has been evaluated and is not regulated by the Section 404 processes.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an "after the fact" phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the "after the fact" environmental document addressing emergency operations. In this case, the borrow site was evaluated, and no wetlands exist; therefore, no 404(b)(1) will be required.

**AGENCY RESPONSES:** The NMFS has no resources under their jurisdiction in the affective area and, therefore, have no objections to borrow activity. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973, as noted in their October 19, 2005 statement. The LDNR did not have any objection to the project but are requesting that a formal consistency determination be prepared as part of the "after the fact" environmental documentation.

In an October 18, 2005 statement, the State Historic Preservation Officer concurred with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information is discovered.

**DETAILED SITE PHOTO**





# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Citrus Lands Plaquemines Parish Levee Restoration**

**October 12, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow to levee repairs to the Plaquemines Parish Hurricane Protection Levee System.

**PROPOSED ACTION:** The action involves utilizing approximately 23 acres within the existing area designated for borrow in Environmental Assessment (EA) #116, entitled New Orleans to Venice, Louisiana Hurricane Protection, prepared in March of 1990.

**DESCRIPTION OF THE AREA:** The proposed area is currently an active borrow site comprised of existing pits surrounded by fallow fields or pastureland. The proposed borrow site is open field used occasionally as pasture and is currently vegetated in grasses and fast-growing plants found in recently disturbed areas. The site was historically marsh, but has developed into uplands as a result of diking and pumping.

**IMPACTS OF THE PROPOSED WORK:** The impacts associated with removing borrow material from the area designated as a borrow site are addressed in EA #116 entitled New Orleans to Venice, Louisiana, Hurricane Protection; Alternative Borrow Site, Citrus Lands (prepared in March 1990), with a Finding of No Significant Impact (FONSI) signed on March 6, 1990. Basically, fallow field will be converted to open water. Depending on depth, poor water quality may develop as a result of seasonal stratification.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being coordinated to avoid environmentally sensitive areas to the greatest extent practicable. Planning involves utilizing existing pits and prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In this borrow pit, design will include slope sufficiently shallow for both near edge and submerged vegetative growth. Overburden material will be used to the maximum extent practicable to create fringe wetlands and resting areas for wildlife. Turbidity control measures will be in place to minimize runoff.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

A cultural resources survey was conducted, and no cultural resources were found to exist within the proposed borrow area. However, remains of a historic plantation site were recorded immediately outside of the northwest corner of the designated borrow area (near

Grand Bayou). Care should be taken that borrow material is only removed from the designated limits of the area and that heavy equipment use is minimized to the road and within the defined borrow area when working at the northwest corner. It is advised that that a 100-foot no work buffer zone be established off the northwest corner so that the plantation remains will not be disturbed.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** The work is covered under EA #116 for New Orleans to Venice, Louisiana, Hurricane Protection; Alternative Borrow Site, Citrus Lands (prepared in March 1990). A FONSI was signed on March 6, 1990.

The Louisiana State Historic Preservation Officer was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

**ENVIRONMENTAL DOCUMENTATION:** The environmental documentation and appropriate coordination with both state and Federal resource agencies has been accomplished through the EA process as noted above.

**AGENCY COORDINATION AND RESPONSE:** This site is an existing borrow area and was evaluated, coordinated, and received environmental clearance under The New Orleans to Venice Hurricane Protection Project, EA #116 prepared in 1990. A FONSI was signed on March 6, 1990.

**DETAILED SITE PHOTO**



# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Creedmoor Farm Site Chalmette Area Plan Plaquemines Parish, Lake Pontchartrain**

**October 18, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to the St. Bernard Hurricane Protection Levee System.

**PROPOSED ACTION:** The action involves constructing a 6.5-acre borrow pit in the area located off Louisiana State Highway 46 near Caernarvon in St. Bernard Parish, Louisiana. The area is already cleared, but will be excavated by backhoe and truck-hauled from the site. No additional access roads are anticipated due to direct access to State Highway 46.

**DESCRIPTION OF THE AREA:** The site inspection revealed the area to be primarily managed grassland used to produce hay. A wetland evaluation of the site was made, and it was determined that this portion of the property is not a wetland subject to USACE jurisdiction under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899. The land is located in a rural/residential setting with one house located at the back of the rectangular grassland. There seem to be no hydrological connections to the river or other watercourses or wetlands under non-flood conditions. The area has not been classified as a wetland, nor does it have any wetland functions.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow site has been continually maintained as a farmed grassland or grassed area. It may have been farmed or supported citrus at one time based on the few remaining citrus trees in the back of the acreage. Approximately 6.5 acres of non-wet rural agricultural lands would be converted to open water by the project. The pit will be sloped and irregularly shaped to provide for aquatic habitat. Wetland fringe may be developed where possible by utilizing overburden material for wetland creation. Cultural impacts are not expected, but the site will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In addition, all sites are evaluated for the presence of hazardous or toxic materials that may be located in a proposed site. Borrow pit design will include slope sufficiently shallow for both near

edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR will be notified of further changes if any occur, and further coordination will be initiated as needed.

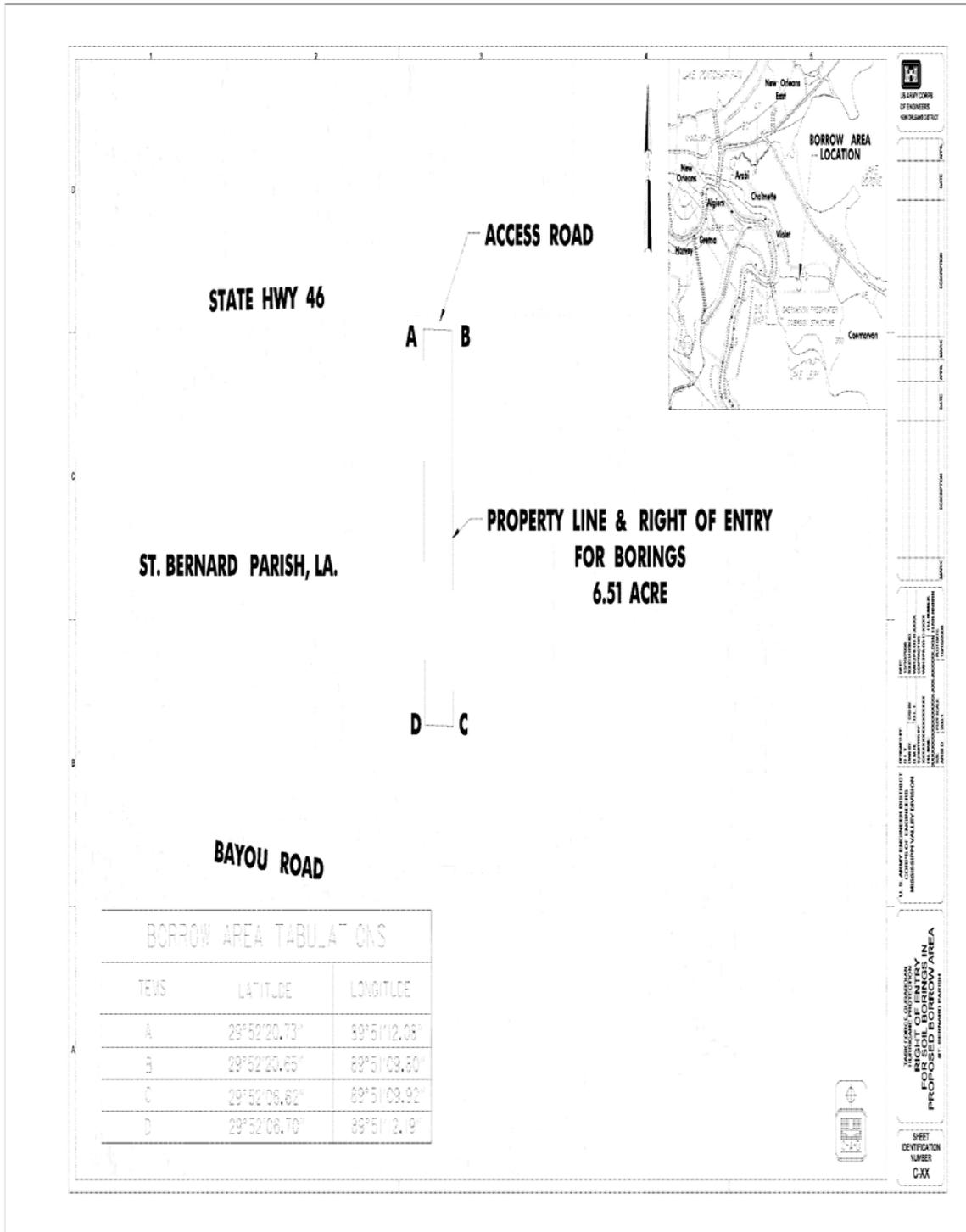
An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The site has been evaluated for presence of toxic waste, and the risk is minimal to none.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an "after the fact" phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the "after the fact" environmental document addressing emergency operations. In this case, the borrow site was evaluated, and no wetlands exist; therefore, no 404(b)(1) will be required.

**AGENCY RESPONSES:** The NMFS had no objection to using the proposed site for borrow since it is in an impounded area and has no essential fish habitat implications. The USFWS has reviewed the proposed project and noted, in a statement dated October

19, 2005, that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies. The LDNR had no objections to the project based on their initial evaluation. In a statement dated October 19, 2005, the Louisiana SHPO's review of the proposed work indicated that no known archeological sites or historic properties will be affected by the project. The SHPO did indicate that this effect determination could change if new information is discovered. Additional language was added to the Environmental Coordination Report as requested by the SHPO to incorporate additional statements concerning the consideration of the National Historic Preservation Act in the Environmental Coordination Process.

## **DETAILED SITE MAP**



# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Whisper Wood Borrow Site St. Bernard Parish, Chalmette**

**October 19, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to Chalmette Loop in the Lake Pontchartrain Hurricane Protection System.

**PROPOSED ACTION:** The action involves excavating further within the footprint of an existing 20-acre borrow pit in the area located east of U.S. Highway 11 and north of Interstate Highway 12 in the City of Slidell, St. Tammany Parish, Louisiana. The proposed action is to deepen the existing pit from 10 feet to a depth of 20 feet. The material will be excavated by backhoe and truck-hauled to the levee location. No additional access roads are anticipated due to direct access to U.S. Highway 11.

**DESCRIPTION OF THE AREA:** The site is located in a previously active, permitted, commercial borrow pit located in an urbanized residential area. The area has no direct hydrological connections to the coastal or inland waters. Water source for the existing pit is primarily rainfall and some runoff from adjacent land. The area has no wetland habitats on the site.

**IMPACTS OF THE PROPOSED WORK:** Since the area of impact has no wetlands, has been previously cleared of vegetation, and doesn't require additional haul access, impacts will be minor. Approximately 20 acres of open water will remain as open water. The deepened water depth could cause some summertime stratification that may lead to temporary reductions in water quality. Since the area is located in a residential/commercial area, construction noise and dust associated with truck hauling and excavation could be a concern.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In this case, an existing borrow pit is being utilized to maximize existing borrow sources, thereby reducing the need where possible for impacting more sensitive habitats.

Based on the existing vegetated buffer around the pit, there may not be a need for noise abatement other than limiting hauling and excavation to daylight hours. A dust abatement program will be implemented if necessary. In addition, all sites are evaluated for the presence of hazardous or toxic materials.

If overburden is sufficient, sloped and fringe shallows may be created to provide shallows for both near edge and submergent vegetative growth. Overburden material will be used to the maximum extent practicable to create fringe wetlands and resting areas for wildlife. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action.

Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The proposed borrow location is not located in the coastal zone, but the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. Additionally, the borrow activity has been previously permitted under a Section 404(b)(1) permit (#19-970-0144). In the "after the fact" environmental document, the permit will be modified or amended as necessary to reflect the impact of the current activity and any mitigation needed.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of hazardous, toxic, and radioactive waste has been made, and an "after the fact" phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the "after the fact" environmental document addressing emergency operations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources and the area is not tidally influenced. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird

colonies, as noted in the statement dated October 20, 2005. The LDNR has no objections to the proposed activity and it is outside the coastal zone.

The State Historic Preservation Officer concurs with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information is discovered. The determination of no affect was dated October 25, 2005.

**SITE PHOTO**





# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation The Maynard Borrow Site Orleans Parish**

**October 20, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to hurricane protection levees in Orleans Parish, Louisiana.

**PROPOSED ACTION:** The action involves clearing and grubbing 102 acres in preparation for the borrow excavation. The pit will be excavated to a depth of 25 feet by backhoe, dragline, and possibly bulldozer. The overburden will be stockpiled at the perimeter of the pit or just within the pit footprint. It is possible that access and haul roads will be needed to allow the material to be truck hauled from the site. The haul roads are not expected to impact wetlands.

**DESCRIPTION OF THE AREA:** The 102-acre site is located in the northwest corner of the intersection of Gentilly and Almonaster Boulevard in Eastern New Orleans. A site assessment of the area was made, and approximately 20% of the site was delineated as wetlands. These wetlands are very low diversity, with no mast bearing trees and sparse to open understory. The vegetative community is representative of previously cleared, cut over lands that have been leveed and placed under pump. The wetland portion of the site has an overstory dominated by Chinese tallow, some green ash, swamp maple, scattered black willow, and box elder. The understory in these wet areas is comprised of smartweed, buttonbush, and lizard tail. The non-wet areas are dominated by blackberry and elderberry in the understory.

The area is in an industrial park setting in an urban area slated for development known as the Almonaster Industrial Development Corridor. The site is completely isolated from tidal interchange and is under pump.

**IMPACTS OF THE PROPOSED WORK:** The proposed action will convert 24 acres of low quality wetlands and 78 acres of cut over scrub/shrub to open water habitat. Because the already minimal terrestrial habitat quality found in this area was further deteriorated by the storm surge of Hurricane Katrina, the proposed action does not represent a loss of high quality habitat important to terrestrial wildlife. However, there will be a shift in wildlife usage in the area to favor more aquatic species and possibly wading and water birds. Due to the depth of the borrow area, there may be some seasonal water quality problems associated with oxygen depletion caused by stratification during the warm summer months.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental,

engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In this case, an area of poor quality wetlands located in an area slated for development, isolated from tidal interchange, and under pumps is being utilized to maximize existing borrow sources, therefore reducing the need where possible for impacting more sensitive habitats.

If overburden is sufficient, sloped and fringe shallows may be created to provide shallows for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water movement within the coastal zone.

If haul roads are needed, placement will be limited to the non-wetland routes to the greatest extent practicable. Where possible, brush piles should be placed around the ponded area to provide cover for wildlife.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

In addition, all sites are evaluated for the presence of hazardous or toxic materials.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action.

Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

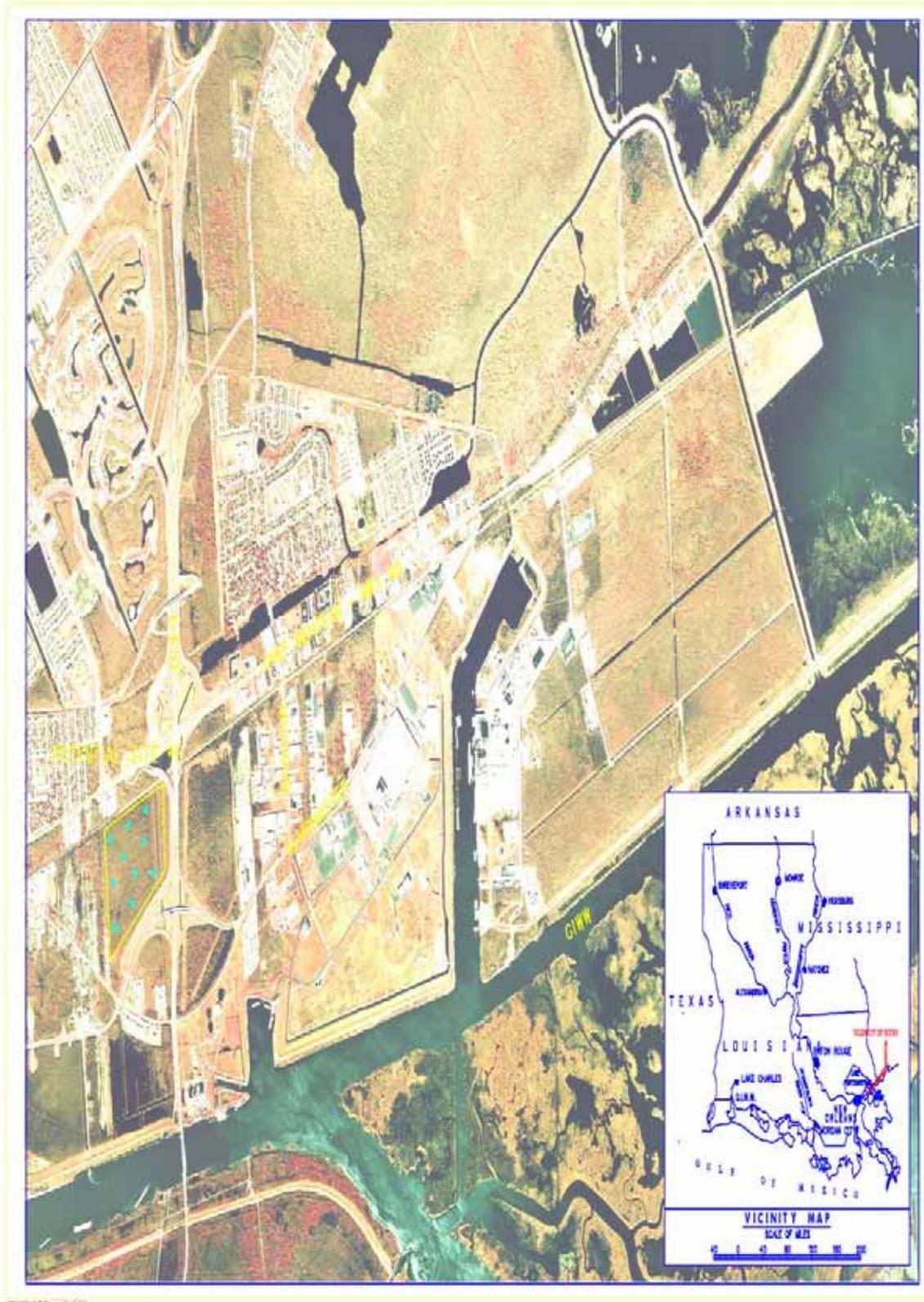
The Louisiana State Historic Preservation Officer (SHPO) was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource. An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas

where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. Since use of this site could involve impact to low quality wetlands, an evaluation of mitigatable impacts will be prepared “after the fact” and included in the “after the fact” environmental documentation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations.

**AGENCY RESPONSES:** The NMFS has no objection since the proposed work would not adversely impact essential fish habitat or associated marine resources. The USFWS has reviewed the proposed project and noted in a statement dated October 24, 2005 that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies. The LDNR provided no reason to object to the proposed project. The SHPO reviewed the proposed activity, and no sites exist in the proposed area and potential for unidentified sites is seen as low due to current land use. All sites recorded in the vicinity are described as either destroyed or as spoil piles. In a statement dated October 25, 2005, the SHPO gives approval for the work since no known archeological sites or historic properties will be affected by the project. This determination could change if new information is discovered.

**DETAILED SITE PHOTO**



The Maynard Borrow Tract

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Paris Road Borrow Orleans Parish (South of Gulf Intracoastal Waterway, East of Paris Road Bridge) October 21, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to that portion of the hurricane levee protection system located in Orleans Parish, Louisiana.

**PROPOSED ACTION:** The action involves clearing and grubbing 20 acres in preparation for the borrow excavation. The pit will be excavated to a depth of 20 feet by using land-based equipment including backhoe, dragline, and bulldozer. The overburden will be stockpiled at the perimeter of the pit or just within the pit footprint. Initial excavation will be executed just landward of the water's edge, with actual excavation encompassing the shallow water immediately adjacent to the site. The excavation will then proceed landward from the water's edge to the limits of the pit acreage. There are existing haul roads in the area, but some improvements may be needed. Any improvements to the haul roads are not expected to impact wetlands.

**DESCRIPTION OF THE AREA:** The 20-acre site is located on the south side of the Gulf Intracoastal Waterway (GIWW), approximately 600 feet east of the Paris Road Bridge (I-510) near the intersection of the Mississippi River Gulf Outlet (MRGO) and the GIWW. The area is located on the flood side of the levee and has been previously utilized as a disposal area for channel maintenance. While the soils are not indicative of wetland soils, for the most part the area does support a low quality wetland due to the flooding frequency in the area. The habitat is a disturbed, low quality, wooded wetland with little understory due to the storm surge in the area. The soil in the area is sandy, and the overstory is dominated by sugarberry, box elder, and yaupon. Some mid story canopy is occupied by wax myrtle and black willow interspersed with some vestiges of Hercules Club and seaside goldenrod. Storm damage was evident in the high canopy and the mostly non-existent under story. The wildlife value of the area is limited since there are no mast bearing trees and little cover. The area is periodically flooded and, therefore, subject to hydrologic interchange with the waters of the GIWW and the MRGO.

**IMPACTS OF THE PROPOSED WORK:** The proposed action will convert 20 acres of low quality wetlands to open water habitat. The minimal terrestrial habitat quality found in this area was further deteriorated by the storm surge of Hurricane Katrina. Therefore, the proposed action does not represent a loss of high quality habitat important to terrestrial wildlife. However, there will be a shift in wildlife usage in the area to favor more aquatic species and possibly wading and water birds. Due to the depth of the borrow area, there may be some seasonal degradation in water quality. Since the borrow

pit will remain open to the GIWW, circulation may be established that may alleviate at least some of the water quality problem. The initial excavation at the water's edge could result in navigation concerns. The pit excavation as proposed would be an action addressed under an evaluation per Section 404(b)(1) of the Clean Water Act, which will be prepared "after the fact" as described in the environmental documentation section below.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In this case, an area has been chosen that was previously disturbed with disposal deposition and is dominated by poor quality wetland habitat. The area is subject to periodic flooding that establishes interchange with the GIWW and its links to other coastal wetlands. After the removal of borrow, the pit can be notched on the flood side to provide access for aquatic organisms seeking deep-water refugia or food. The notching can also improve circulation within the pit to improve water quality conditions during the warmer months.

If overburden is sufficient, sloped and fringe shallows may be created to provide shallows for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water movement within the coastal zone.

If haul roads are needed, placement will be limited to the non-wetland routes to the greatest extent practicable. Where possible, brush piles should be placed around the ponded area to provide cover for wildlife.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

In addition, all sites are evaluated for the presence of hazardous or toxic materials.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to

the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana State Historic Preservation Officer (SHPO) was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. Since use of this site could involve impact to low quality wetlands an evaluation of mitigatable impacts will be prepared and included in the "after the fact" environmental documentation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of hazardous, toxic, and radioactive waste has been made, and an "after the fact" phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the "after the fact" environmental document addressing emergency operations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources. The USFWS has reviewed and evaluated the proposed work and noted that the work will have no affect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973. The USFWS did advise the construction of environmental features into the borrow pit design and, in this case, would like to see the borrow pit connected to the GIWW after completion. In addition, the USFWS agrees that the low quality wetlands would be assessed and mitigated after the fact. The LDNR has no objection, but like USFWS wants the low quality wetlands assessed by Wetlands Valuation Assessment (WVA) or a similar procedure to determine compensatory mitigation. The LDNR also noted that while they do not object to the borrow activity, they cannot provide an official consistency determination until they receive a complete "after the fact" Consistency Determination. The SHPO determined that there was potential for archeological sites within the work boundaries. Sites were already noted,

but they may have been destroyed by previous work. The SHPO agreed that the work could be initiated as long as there was an archeologist observer onsite.

**DETAILED SITE PHOTO**



# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation New Orleans East Borrow Sites Orleans Parish (Almonaster Industrial Corridor & N. of Chef Menteur Highway) October 22, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to that portion of the hurricane levee protection system located in Orleans Parish, Louisiana.

**PROPOSED ACTION:** The action involves clearing and grubbing four sites (Sites 1-4, see figure attached) totaling 181 acres in preparation for the borrow excavation. The pits will be excavated to a depth of 20 feet by using land-based equipment including backhoe, dragline, and bulldozer. The overburden will be stockpiled at the perimeter of the pit or within a designated portion the pit footprint. There is existing road access to the pit areas; however, some improvements may be needed.

**DESCRIPTION OF THE AREA:** The sites are all located in a heavily developed area of New Orleans East, Orleans Parish, Louisiana (see attached figure). There are a total of four potential sites to the east of Interstate 510 and both north (Sites 3 and 4) and south (Sites 1 and 2) of Chef Menteur Highway (U.S. Highway 90). All sites are located in industrialized, leveed, and drained areas that are under pump and zoned for commercial development. Sites 1 and 2 are located in the Almonaster Industrial Development Corridor (AMID) and have been zoned for light industry. In general, all of these areas contain varying degrees of marginal, low quality wetlands with little mast bearing vegetation and sparse wildlife cover. All sites were severely impacted by Hurricane Katrina with heavily damaged and denuded overstory and a remaining sparse understory. Many of the areas lost much of their canopy and their entire understory as a result of “blow over” or scouring at the site. Some of the areas had evidence of light dumping from household debris.

All of the sites can be characterized as having low plant diversity, which results in poor quality wildlife habitat. This low diversity is representative of a previously cleared, cut over lands that have been leveed and put under pump. The specifics of the various sites follow.

**Site 1 (43 acres):** This is a marginal site with both wetlands and non-wetlands areas. The overstory was heavily damaged by the storm and is now mostly open. Chinese tallow is the dominant overstory species with green ash, swamp red maple, black willow, and box elder sparsely interspersed within the canopy. The understory in this area is comprised of smartweed, buttonbush, and lizard tail. The non-wet portions of the site are dominated

by blackberry and elderberry. This site is located in the AMID area and is surrounded by commercial development.

**Site 2 (30 acres):** This site was also heavily damaged by the storm, leaving the remaining overstory canopy almost completely defoliated. The remaining overstory is dominated by black willow and maple with scattered box elder. There is also a very minimal secondary overstory comprised of defoliated cypress. The remaining mid-story and understory is comprised of lizard tale, elderberry, swamp maple, and black willow.

This area also contains wetlands, but the habitat was a previously disturbed area prior to the storm and continues to be a low quality area for the support of wildlife.

**Site 3 (72 acres):** This area is also enclosed by levees and was heavily pumped and previously disturbed through land clearing. It appears that prior to the storm the area had scattered patches of live oak in the middle of the property, but that canopy has been almost completely removed. The area is considered wetlands due to poor drainage and is considered low in quality due to the lack of both diversity and hydrological connections. Currently, the dominant species are sugarberry, ash, box elder, and some of the defoliated live oak that remained standing after the storm. This area would provide marginal wildlife habitat except possibly for songbirds, who may use it more extensively. Currently, the canopy has been removed by the storm, and the remaining vegetation is dominated by sugarberry, ash, elm, and box elder with occasional occurrences of mostly defoliated live oaks. The understory in this area is currently denuded and was a victim of both blow over and scour, leaving little vegetation.

**Site 4 (36 acres):** This site has also been previously disturbed, leeved, and heavily pumped. Again, most of the area is wetland due to poor drainage. The higher ridges to the center of the site have some of the few remaining live oaks. The remaining understory and overstory are similar to the low quality habitat described in Site 3 above. Due to the urban nature of the site and the wildlife quality of adjacent lands, the borrow site provides no benefit as a wildlife corridor.

**IMPACTS OF THE PROPOSED WORK:** The proposed action will convert 181 acres of low quality wetlands to open water habitat. The minimal terrestrial habitat quality found in this area was further deteriorated by the storm surge of Hurricane Katrina. Therefore, the proposed action does not represent a loss of high quality habitat important to terrestrial wildlife. However, there will be a shift in wildlife usage in the area to favor more aquatic species and possibly wading and water birds. Due to the depth of the borrow area, there may be some seasonal degradation in water quality. The pit excavation as proposed would be an action addressed under an evaluation per Section 404(b)(1) of the Clean Water Act, which will be prepared “after the fact” as described in the environmental documentation section below.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub

habitat, pasturelands, and low value marsh fringes where possible. In this case, an area has been chosen that was previously disturbed, “protected side” borrow, hydrologically isolated containing wetlands with marginal habitat value. Brush or debris piles will be left in the vicinity of the borrow area to provide wildlife cover. After the construction is complete, all bare ground will be seeded and fertilized so that grasses will provide both erosion control and forage for wildlife.

If overburden is sufficient, sloped and fringe shallows may be created to provide shallows for both near edge and submergent vegetative growth. Overburden material will be used to the maximum extent practicable to create fringe wetlands and resting areas for wildlife. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water movement within the coastal zone.

If haul roads are needed, placement will be limited to the non-wetland routes to the greatest extent practicable. Where possible, brush piles should be placed around the ponded area to provide cover for wildlife.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

In addition, all sites are evaluated for the presence of hazardous or toxic materials.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana’s approved Coastal Resources Program. . The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana State Historic Preservation Officer (SHPO) was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An “after the fact” environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted

either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. Since use of this site could involve impact to low quality wetlands, an evaluation of mitigatable impacts will be prepared and included in the “after the fact” environmental documentation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of hazardous, toxic, and radioactive waste has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources and the area is not tidally influenced. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as noted in the statement dated October 25, 2005. The USFWS also supports construction of the proposed environmental features of the pits including creation of wetland fringe and wildlife use of brush piles. While the USFWS agrees that the wetland habitat is low quality, an assessment of any potential mitigation can be done during the “after the fact” environmental documentation. The LDNR has no objection to the proposed activity. New Orleans East Site 3 lost a great deal of wildlife value due to storm damage. The site experienced defoliation, sedimentation, blow over, and high salinity flooding, greatly reducing the habitat quality of the area. However, field visits with the USFWS did reveal that some pockets of hardwoods and cypress remained intact and would have a chance of at least a moderate to good recovery. For these reasons, it was agreed that approximately 72 acres of the site would be mitigated for bottomland hardwood and Cypress Tupelo mixed.

The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information is discovered. The determination of no affect was dated October 25, 2005.

**DETAILED SITE MAPS**





# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Walker Road Borrow Pit Extension Plaquemines Parish Levee Restoration**

**October 25, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to that portion of the hurricane levee protection system located in Plaquemines Parish, Louisiana.

**PROPOSED ACTION:** The action will involve excavating borrow material from two sites (25.8 acres and 9 acres) located off Walker Road near Belle Chase, Louisiana.

The area will be cleared where necessary and grubbed by bulldozer and tractor-mounted mowing equipment. The borrow site will then be excavated by backhoe, and excavated soils will be off-loaded to trucks for transport to the construction site.

**DESCRIPTION OF THE AREA:** The sites are located in a disturbed area immediately adjacent to an existing active borrow site previously designated for the West Bank and Vicinity of New Orleans Hurricane Protection Project.

The proposed borrow will come from two sites within a disturbed, leveed area adjacent to the existing designated borrow area as noted above. The 9-acre site is primarily non-wetland and has been cleared, manipulated, mowed, and maintained. The area is currently native pasture with no improved species. The dominant vegetation is pepper vine. The adjacent 25 acres proposed as the second borrow source has been previously cleared, but it has not been continuously manipulated, although it is within a leveed area. However, since the area has not been maintained in several years and was utilized as a pasture in the past, saplings of black willow, Drummond red maple, and green ash are populating the non-wet portion of the site. Both sites contain a small amount of wetland totaling 2.5 acres. The wetland vegetation at both sites is similar and comprised of soft rush, maiden cane, and smartweed. Both areas are isolated from tidal exchange and have no hydrological connections to tidal waters.

**IMPACTS OF THE PROPOSED WORK:** The impacts of the proposed action will result in the conversion of approximately 32.5 acres of manipulated pasturelands and abandoned, maintained field and 2.5 acres of wetlands to open water.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In this case, an area has been chosen that was previously disturbed and has low habitat value and minimal

wetlands. The area adjacent to the completed borrow pit and the haul roads should be seeded and fertilized to reestablish ground cover and reduce erosion and runoff from the completed site.

If overburden is sufficient, sloped and fringe shallows may be created to provide shallows for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water movement within the coastal zone. Turbidity control measures will be in place to minimize runoff. Brush or trees removed during clearing operations should be placed in piles to provide wildlife habitat and serve as runoff control from the site until the native vegetation is reestablished.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

In addition, all sites are evaluated for the presence of hazardous or toxic materials. Initial site evaluation noted no visual evidence of past or present hazardous, toxic, and radioactive waste (HTRW) issues.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact as. The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. The area has also been evaluated for the presence of jurisdictional wetlands regulated under Section 404, and a total of approximately 2.5 acres of wetlands were identified.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations.

**AGENCY RESPONSES:** The NMFS has no objection since the proposed work would not affect the NMFS trust resources. The USFWS has reviewed the proposed project and noted in a statement dated October 28, 2005 that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies. However, due to the wetlands involved in the site ,the USFWS noted an “after the fact” assessment of mitigation needs should be done and the habitat value mitigated. The LDNR had no objections or comments concerning the proposed action. The Louisiana State Historic Preservation Officer’s review of the proposed work indicated, in a statement dated November 1, 2005, that no known archeological sites or historic properties will be affected by the project. The SHPO did indicate that this effect determination could change if new information is discovered.

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Buras and Homeplace Borrow Sites Plaquemines Parish Hurricane Protection**

**October 27, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency levee repair to the New Orleans to Venice Hurricane Protection Levees.

**PROPOSED ACTION:** The action involves constructing three borrow pits: two in the vicinity of Buras, Louisiana (one 5 acres and one 12) and a third in Homeplace, Louisiana (approximately 55 acres in size). The total acreage to be excavated within the three pits will be 70 acres. Activities will include clearing, grubbing, debris removal, and excavation. There is road access, but if additional haul roads are needed, they will be sited to avoid or minimize impacts to wetlands. Clearing will be done by bulldozer, and excavation to a depth of approximately 20 feet will be done by backhoe. The material will be stockpiled if necessary or loaded directly and truck-hauled to the construction site.

**DESCRIPTION OF THE AREA:** Site visits were made to both the Buras and Homeplace locations to examine the suitability of the areas as borrow sites and determine environmental conditions in the areas.

The first site (Homeplace borrow site) is located 3 miles south of Port Sulfur near Homeplace, Louisiana and will affect 55 acres. This area is cleared, drained, leveed, and maintained under pump. The area is classified as a non-wetland due to the lack of hydrological conditions required for wetlands defined in the USACE January 1987 Wetlands Delineation Manual. The site is presently dry, improved pasture and is characterized by mostly dead vegetation due to the effects of the hurricane floodwaters that previously inundated the area. Based on the remaining vegetation, the area was probably dominated by bahia Grass, various panic grasses, and other improved species. The area is located between Louisiana State Highway 23 and the New Orleans to Venice Hurricane Protection Levee and, therefore, is not subject to tidal exchange. Hydrological connections are limited to pumping or forced drainage.

The second borrow location contains two sites in Buras, Louisiana on the east bank of the Mississippi River. The sites are bounded by the Mississippi River Levee to the north and Louisiana State Highways 11 and 23 and the New Orleans to Venice Hurricane Protection Levee to the south. Both sites are in a disturbed, rural, suburban setting in the town of Buras. The first site is 12 acres in size and is bounded by Highway 11 to the south and the Mississippi River Levee to the North. This narrow, linear tract runs perpendicular to the highway, is non-wetland, and shows signs of past disturbance and hydrological manipulation. The vegetation in this area has a sparse overstory, with sugarberry as the dominant tree species. Dense thickets of blackberry overgrown with

trumpet creeper invaded the more open areas. Sump weed was scattered throughout. This site is bordered and crossed by several deep drainage ditches. It appears that a portion of the property had been cleared in the past and was being prepared for residential development. There was evidence of some debris onsite both in the trees and on the ground.

The second Buras site measures 5 acres in size and is located south of and between Highway 11 and the Mississippi River Levee. This site has also been manipulated through ditching and other drainage improvements along the perimeter of the parcel. This area is considered to be a non-wetland area due to the lack of the hydrological characteristics. Again, the area is not subject to tidal exchange, and the hydrological connections, if any, are limited to pumps or drainage. The area has a better developed overstory than the 12-acre site due the reduced level of site preparation completed. The overstory in this area is dominated by sugarberry and tallow tree with an understory of small tallow tree, sump weed, and trumpet creeper.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow sites will result in converting a total of 17 acres of non-wetlands and the associated low quality wildlife habitat to open water. Direct access to the site is available from Highway 11 or Highway 23. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the non-wet area. There will be a possibility of increased levels of ambient dust and runoff. This possibility is expected to be minimal, and since the area presently has little to no population in the vicinity of the construction site, minimal affects are expected on the suburban area. No cultural impacts are expected, but the site will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In this case, some of the site proposed is a non-wetland area with low quality wildlife habitat, and some is pasture. In addition, all sites are evaluated for the presence of hazardous or toxic materials. Dust abatement will be implemented if necessary by altering truck speed in the work k area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. During clearing operations, brush piles will be established for wildlife cover. These brush piles should be

placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The area itself has been evaluated and is not regulated by the 404 processes.

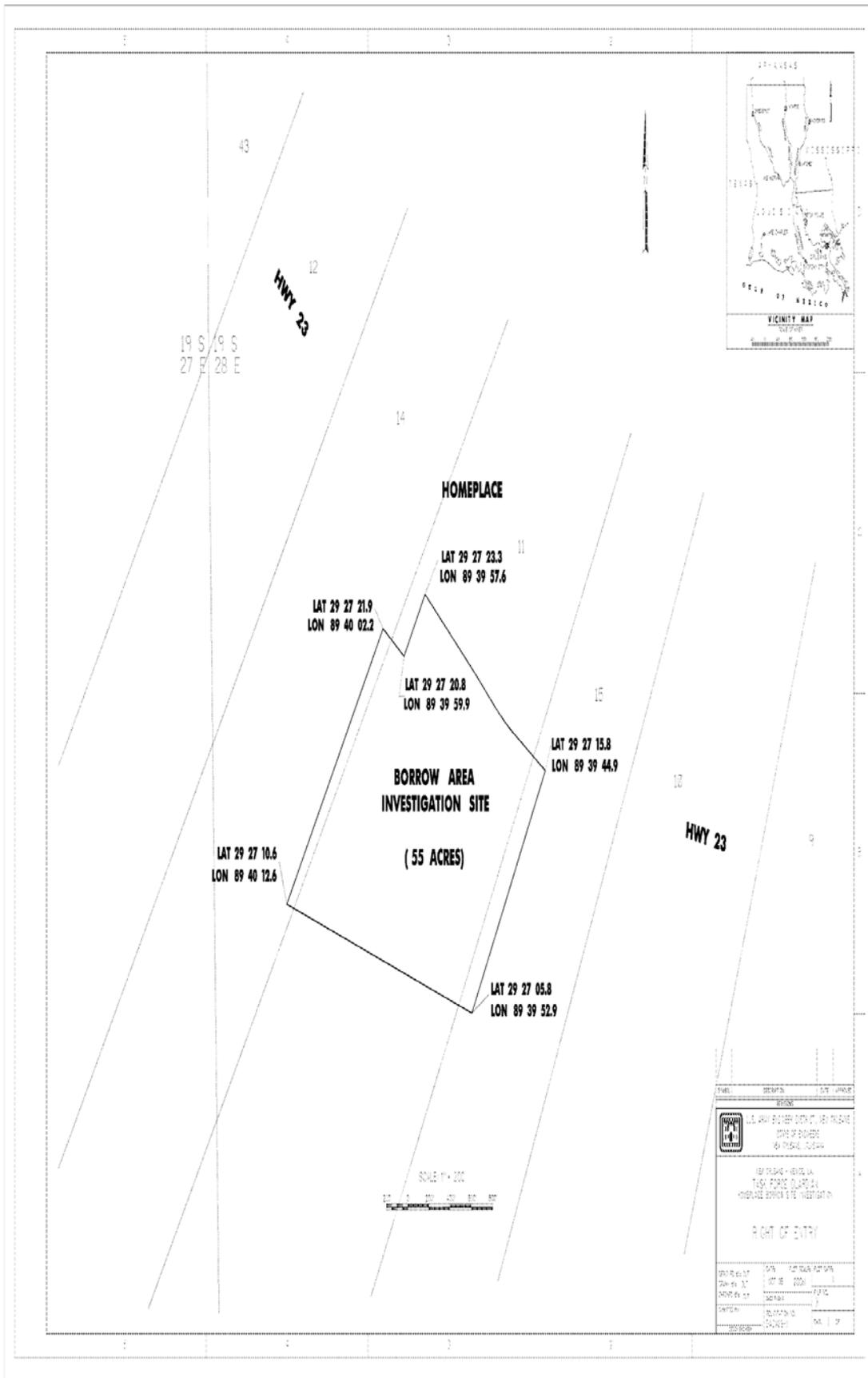
The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. The hazardous, toxic, and radioactive waste (HTRW) evaluation did note debris comprised of house trailer parts and household items, and one container (#4977427) that appeared empty was on the site and would require removal. No hazardous material or appliances containing HTRW components were noted on the site.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an "after the fact" phase I

assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. In this case, the borrow site was evaluated, and no wetlands exist; therefore, no 404 (b)(1) will be required. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources and the area is not tidally influenced. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973, as noted in their statement dated October 28, 2005. The USFWS notes that, as proposed, the borrow pits may include environmental features that would provide limited benefits to fisheries and some trust resources; therefore, there is no objection to the proposed work. The LDNR has no objection to the work as proposed. The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information is discovered. The determination of no affect was dated November 1, 2005.

## **DETAILED SITE MAP**



# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Homeplace West Plaquemines Parish, Louisiana New Orleans To Venice Hurricane Protection Project November 6, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency levee repair to the New Orleans to Venice Hurricane Protection Levees.

**PROPOSED ACTION:** The action involves constructing a 49-acre borrow pit approximately 5 miles south of Port Sulfur, Louisiana. Site preparation will require tree removal either by bulldozer or by a combination of hand cutting and bulldozer. The area will then be cleared and grubbed with bulldozers and backhoe prior to excavation. The cleared material will be pushed into piles and then burned, chipped, or stacked onsite. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The excavated depth is estimated to be 20 feet. There is currently access to the site via Louisiana State Highway 23. If additional haul roads are needed, they will be sited on existing unimproved roads or old access routes within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The site is located between Port Sulfur and Buras, Louisiana, approximately 5 miles south of Port Sulfur on the west bank of the Mississippi River. The site is south of Louisiana Highway 23 located between the Mississippi River Levee and the New Orleans to Venice Hurricane Protection Levee. The property has been drained and ditched on both sides and also cross-ditched. This 49-acre tract is a well-drained and maintained pasture that appears to have been grazed immediately prior to the recent hurricanes. During and following the storms, the property was inundated (ponded) by several feet of water for a sufficient period to kill and rot most of the herbaceous vegetation. The few scattered shade trees within the pasture (sugarberry) were blown down or severely damaged by winds.

Vegetation consisted of bermuda and at least two species of paspaum. Dominant weeds include Carolina nightshade and curly dock. Most other herbaceous vegetation was unrecognizable due to severe decomposition.

Several relatively shallow drainage ditches running perpendicular to Louisiana Highway 23 dissect the property. It is under forced drainage. With the exception of the flooding/ponding that occurred during the storms, no evidence of hydrology indicative of a wetland was observed.

Under normal conditions, there is no tidal exchange or hydrological connections to existing water bodies. Under forced pump, there may be indirect connections to other

drainages, but this would flow through controlled structures with no chance of biological transport.

The overall site is low habitat quality for most wildlife except possibly rabbits, an occasional deer, and possibly field mice due to sparse cover and lack of mast bearing trees and plant diversity.

Homeplace West is not a wetland subject to USACE jurisdiction.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow sites will result in the conversion of 49 acres of improved pasture and a few scattered willow and sugarberry to open water. Direct access to the site is available from Highway 23. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. There will be a possibility of increased levels of ambient dust and runoff. Because this possibility is expected to be minimal and the area currently has little to no population in the vicinity of the construction site, minimal affects are expected. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. In this case, the site proposed is non-wet. In addition, all sites are evaluated for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. The site has been chosen

to both avoid impacts to wildlife refuges and other sensitive wildlife areas. During clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or receiving waters within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for hazardous, toxic, and radioactive waste

(HTRW) was completed. The risk of encountering HTRW for the proposed action is low, based on the ISA.

The 49-acre site evaluated is not a wetland and would not be regulated under the Section 404 processes. Further coordination with the appropriate agencies will be completed through review of this report, and an “after the fact” Section 404(b)(1) evaluation will be prepared only if concurrence with the resource agencies is not reached.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as noted in their e-mailed statement dated November 7, 2005. The LDNR does not object to the proposed activity and finds it consistent with the Coastal Zone Management Act of 1972 (C20050611). The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information is discovered. The determination of no affect was dated November 7, 2005.

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Triumph Borrow Site Plaquemines Parish Hurricane Protection**

**November 6, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the New Orleans to Venice Hurricane Protection Levees.

**PROPOSED ACTION:** The action will involve constructing an 84.7-acre borrow pit near Bootheville, Louisiana. Site preparation will require tree removal either by bulldozer or by a combination of hand cutting and bulldozer. The area will then be cleared and grubbed with bulldozers and backhoe prior to excavation. The cleared material will be pushed into piles and then burned, chipped, or stacked onsite. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The excavated depth is estimated to be 20 feet. There is currently access to the site via Louisiana State Highway 23. If additional haul roads are needed, they will be sited on existing unimproved roads or old access routes within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The site is located near Bootheville, Louisiana on the east side of the Mississippi River located between the Mississippi River Levee and the New Orleans to Venice Hurricane Protection Levee and to the south of Louisiana State Highway 23. Site visits were made, and the area was determined to be approximately 20% (17 acres) wetland. These wetlands are concentrated in the southern half of the property, west of a large drainage canal that is approximately 460 feet west of the east boundary. The area east of this canal was non-wetland.

This is the largest forested tract within the leveed area for several miles. To the northwest, there are scattered forest remnants interspersed with residential development and pasture land. Pastureland, interspersed with very few wooded parcels, occurs for a mile to the northeast. Beyond this area is a tract of several hundred acres of scrub/shrub surrounding several large borrows pits.

The overstory trees are currently defoliated, damaged, and in some cases uprooted, with the understory basically bare as a result of the storm surge from Katrina. Based on spacing between trees, it appears that the pre-Katrina conditions would have resulted in a closed canopy dominated by sugarberry and green ash. Drummond red maple, bald cypress, nuttall oak, water oak, and live oak are also scattered throughout the site.

The overstory developed prior to draining the site by a series of internal drainage ditches and several large canals. Moderate amounts of subsidence (12-18 inches) resulting from the site being drained were evident on portions of the property. Some of the internal

drainages appear to be of limited function due to lack of maintenance, allowing portions of the property to retain its wetland function.

The Triumph site, known by the birding community as Morel's Woods, is noted in the Orleans Chapter of the National Audubon Society's Southeastern Louisiana Birding Guide as a recognized birding site. Neotropical migrant bird activity was noted during the site visit, particularly in the southern half of the property. Signs of recent and past use of the overstory trees by yellow-bellied sapsucker were also noted on the property.

While the area is drained, there appears to be no hydrological connection between the area and viable water bodies inside or outside the leveed system. As noted above, the drainage has not been continuously maintained, and a portion of the property (16 acres) still exhibits wetland signatures in the vegetation observed onsite.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow sites will result in converting a total of 17 acres of wetland forest and approximately 68 acres of non-wetland forest and scrub/shrub to open water. The overall site is low to moderate habitat quality for most wildlife due to sparse cover and lack of mast bearing trees. At least a portion of the site is noted as a prime birding area. Further coordination with the appropriate resource agencies will result in a determination of the significance of this area to protected species or species of concern. If mitigation by avoidance of the sensitive area cannot be negotiated, then appropriate mitigation will be developed for this habitat along with the 17 acres of wetlands.

Direct access to the site is available from Highway 23. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. There will be a possibility of increased levels of ambient dust and runoff. Because this possibility is expected to be minimal and the area currently has little to no population in the vicinity of the construction site, minimal affects are expected. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. In this case, 17 acres of the 84.7-acre proposed site are wetland.

All sites are evaluated for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt

screens if necessary. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Overburden material will be used to the maximum extent practicable to create fringe wetlands and resting areas for wildlife. Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. During clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

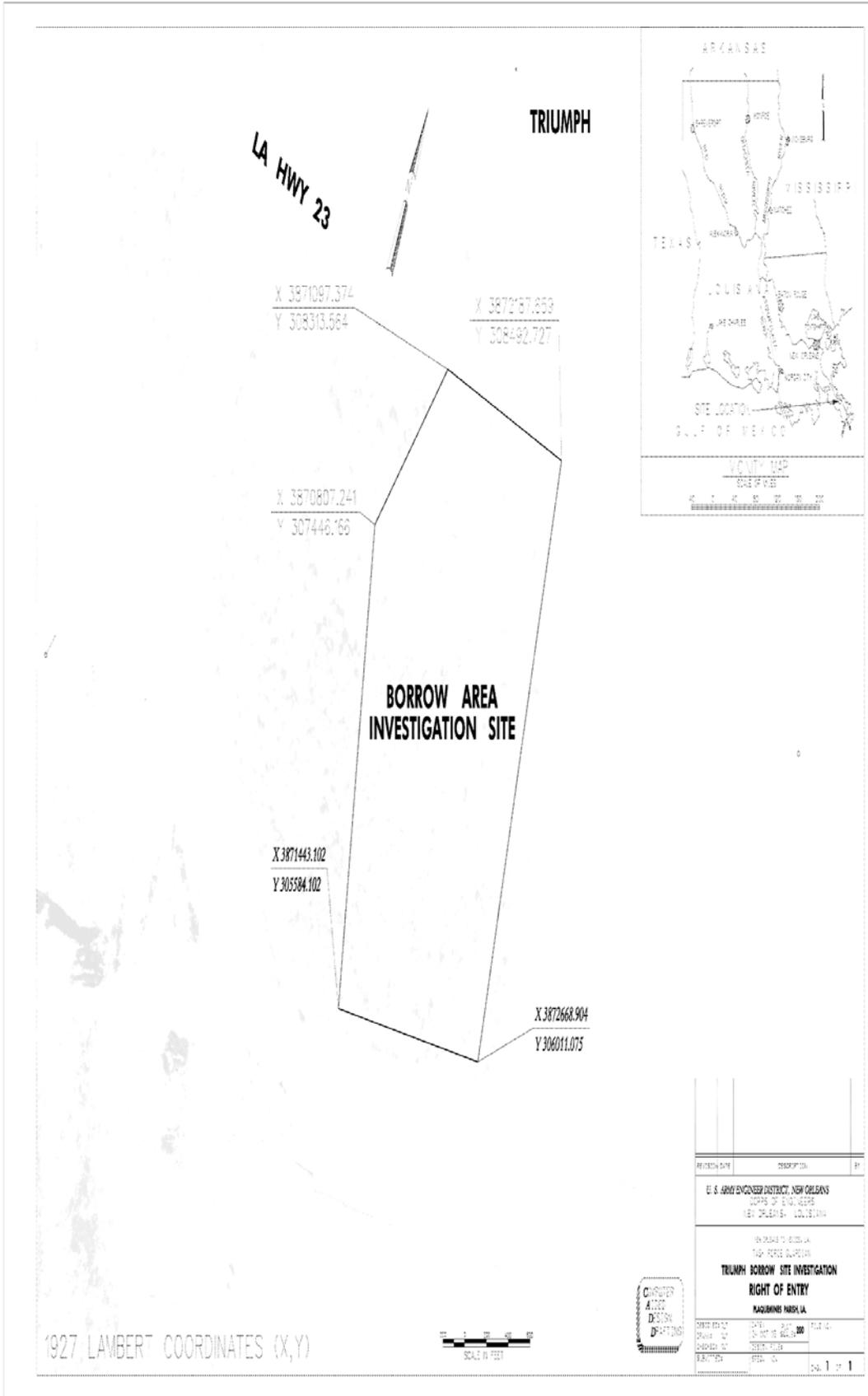
An “after the fact” environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The site has been evaluated for presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for hazardous, toxic, and radioactive waste (HTRW) was completed. The risk of encountering HTRW for the proposed action is low to none based on the ISA.

The area has been evaluated, and only 17 acres would be regulated under the 404 processes. Further coordination with the appropriate agencies will be completed through coordination of this report, and an “after the fact” 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be done as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources. The USFWS has reviewed the proposed project and noted in their November 14, 2005 e-mailed statement that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies. In addition, the USFWS does support incorporation of proposed environmental features into the borrow pit construction to the greatest extent feasible. Determination of need for bottomland hardwood and or wetland should be addressed in “after the fact” environmental document. The endangered species concurrence was received by e-mail dated November 14, 2005. The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information is discovered. The determination of no affect was dated November 7, 2005.

**DETAILED SITE PHOTO**



# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Port Of St. Bernard Borrow Site St. Bernard Parish Hurricane Protection**

**November 7, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the St. Bernard Hurricane Protection System.

**PROPOSED ACTION:** The action involves constructing a 21.9-acre borrow pit near Chalmette, Louisiana. Site preparation will require tree removal either by bulldozer or by a combination of hand cutting and bulldozer. The area will then be cleared and grubbed with bulldozers and backhoe prior to excavation. The cleared material will be pushed into piles; then used as wildlife cover; oriented to assist in runoff control; or burned, chipped, or stacked onsite. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The woody debris removed from the site should be placed so the wetlands are not impounded and the hydrological connections are not affected. The construction will be land-based, initiating from the flood side of the levee and terminating approximately 350 feet from the river. The excavated depth is estimated to be 20 feet. There is currently access to the site via Louisiana State Highway 46 (St. Bernard Highway). If additional haul roads are needed, they will be sited on existing unimproved roads or old access routes within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The site is located near Meraux, Louisiana on the east bank of the Mississippi River. The location is south and on the flood side of the east bank (left descending bank) of the Mississippi River Flood Control Levee immediately south of Louisiana State Highway 46.

The area has some evidence of previous manmade disturbance as a result of providing landside access to the river batture area. The area is characterized by a series of swales and ridges that seem to be natural formations resulting from the seasonal invasion of the river into the area. Another feature that dissects the area is the remnant of an access ramp that appears to have originally connected the leveed area to the river batture. The wooded overstory at the site is dominated by black willow (damaged during storms) with a component of sycamore and cottonwood. The understory is comprised of dense vines and herbaceous species. The dominant vine is ladies - eardrops (redvine) that forms dense tangles at higher elevations. Herbaceous species include Pennsylvania smartweed, swamp smartweed, and creeping spotflower.

While there is plenty of cover for wildlife, there is little diversity in forage or browse. There was little evidence of wildlife in the area except rabbit and possibly raccoon. If the area recovers from the scour and defoliation it experienced during the storm, it may be

suitable for songbirds and small mammals. The area could provide temporary cover for deer depending on the season and the condition of the browse available on the nearby levee.

There is at least a seasonal hydrological connection to the Mississippi River. The riparian nature of the property is expected to provide seasonal backwater areas that may serve as viable feeding and spawning areas for certain fish species. The quality of spawning habitat is dependent on the time and duration of flooding as well as the water temperature. As the water recedes, the pools that form between the swales, along with the beach-like areas, may provide temporary habitat for wading birds and possibly waterfowl depending on the size and depth of the flooded swales.

The property is a wetland and is subject to USACE jurisdiction under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow sites will result in converting a total of 21.9 acres of wetland forest and scrub/shrub to open water. The overall site is low to moderate habitat quality for most wildlife due to sparse cover and lack of mast bearing trees. The seasonal, more diverse aquatic habitats created by the flooded batture during rising river stages and the swale pools present during the falling river stage will be replaced by the more permanent large areas of deep water habitat.

Approximately 21.9 acres of seasonally flooded wooded habitat will be replaced by seasonally flooded deepwater habitat. The present aquatic habitat would be converted from a seasonal fishery habitat with waterfowl use to a more year-round fishery habitat with potential for expanded waterfowl use depending on rate of shallowing. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. There will be a possibility of increased levels of ambient dust and runoff. This possibility is expected to be minimal, and the area currently has little to no population in the vicinity of the construction site. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. Due to the large volumes of borrow material required to repair damaged levees in St. Bernard Parish, availability of “protected side” borrow is now minimal. To avoid viable marsh and highly graded wetland areas, the batture site is being assessed because it is a renewable habitat. The USACE continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas. In this case, a 300-foot buffer of batture forest is being left between the river and the borrow site. The borrow pit itself will undergo a naturally shallowing process as sediment is brought into the area during high

river stages. This shallowing and hydrologic exchange can be encouraged by notching the pit to a certain height to ensure connection with the river. As the pit shallows, the batture forest is predicted to be reestablished based on observations of other flood side pits.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues is noted at this time. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action.

Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding,

or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the “after the fact” environmental document that will address the impacts of the emergency operations. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana’s approved Coastal Resources Program. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An “after the fact” environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The proposed borrow site has been evaluated, and only 17 acres would be regulated under the 404 processes. Further coordination with the appropriate agencies will be completed through coordination of this report, and an “after the fact” 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed.

Any excavation that occurs in navigable waters in non-tidal areas to the ordinary high water mark or in tidal areas to the high tide line is regulated by Section 10 of the Clean Water Act. Section 10 applies to the proposed site and will be addressed in an “after the fact” evaluation.

The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

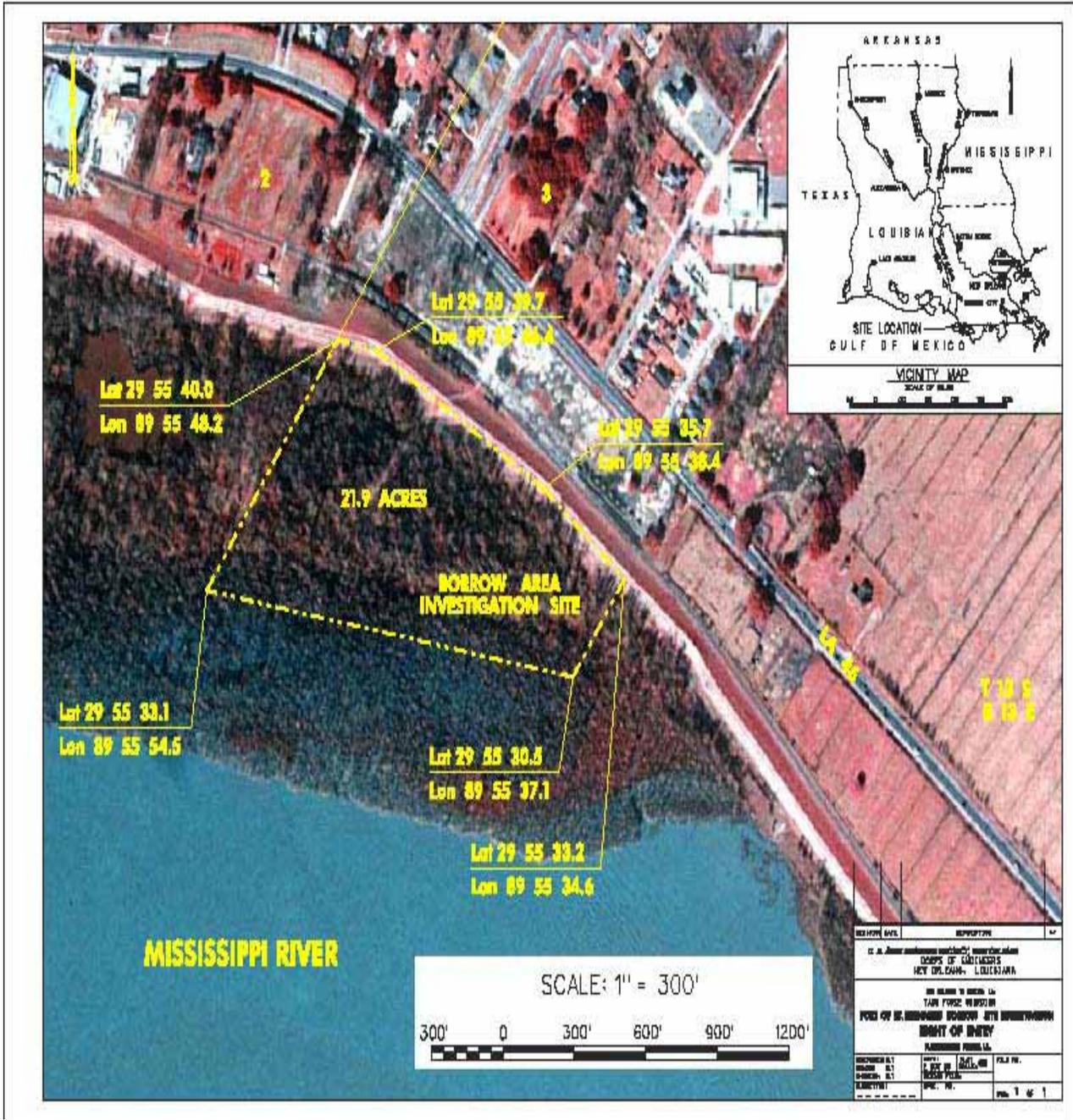
**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency

operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no resources under their jurisdiction in the affective area and, therefore, has no objections to borrow activity. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973, as stated in the November 10, 2005 email. Determination of need for bottomland hardwood and or wetland should be addressed in “after the fact” environmental document. The LDNR had no objection to the proposed work.

The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project, as noted in the November 22, 2005 statement. This effect determination could change if new information is discovered.

**DETAILED SITE MAP**



# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Port Sulphur Pits Plaquemines Parish, Louisiana New Orleans to Venice Hurricane Protection Project November 8, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the New Orleans to Venice Hurricane Protection Levees.

**PROPOSED ACTION:** The action will involve constructing 5 borrow pits (45, 23, 9, 12, and 7 acres in size) near Port Sulphur, Louisiana. Site preparation will require tree removal either by bulldozer or by a combination of hand cutting and bulldozer. The area will then be cleared and grubbed with bulldozers and backhoe prior to excavation. The 45-, 7-, and 9-acre sites will need to be cleared of varying amounts of house debris. The cleared material will be pushed into piles; then used as wildlife cover; oriented to assist in runoff control; or burned, chipped, or stacked onsite. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The woody debris removed from the site should be placed so the wetlands are not impounded and the hydrological connections are not affected. House debris will be disposed of at Federal Emergency Management Authority (FEMA)/U.S. Environmental Protection Agency (EPA) designated disposal sites. The excavated depth is estimated to be 20 feet. There is currently access to the site via Louisiana State Highway 23. If additional haul roads are needed, they will be sited on existing unimproved roads or old access routes within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The sites are located on the west bank of the Mississippi River in Port Sulphur, Louisiana at approximately River Mile 40. All of the sites are located between the Mississippi River Levee and the New Orleans to Venice Hurricane Protection Levee. The 45-, 12-, and 13-acre sites are located south of Louisiana Highway 23 between the highway and the New Orleans to Venice Hurricane Protection Levee. All of these sites have been ditched and drained and possibly have been or are under pump. The 45-acre site has large amounts of house debris on the portion of the property nearest the highway. The property has been evaluated for wetland characteristics and was determined to be non-wet. This site appears to have been previously cleared and disturbed ten to fifteen years ago based on age of trees and vegetation. The dominant tree species are presently tallow and sugarberry, with a few pecan scattered within the overstory. Where present, the scrub understory is dominated by elderberry.

The 12- and 13-acre tracts have habitats characteristic of drained and ditched areas similar to those found in the 45-acre tract. The areas are non-wet and are dominated by sugarberry, tallow, and a few live oaks in the overstory. Elderberry and pepper vine are the dominant understory species.

Like the other tracts, the 7- and 9-acre tracts are ditched and drained and are located north of State Highway 23 between the highway and the Mississippi River Levee. These sites have the same habitat as the previously mentioned sites, but have less live oak in the mix.

All of the sites have been drained, ditched, and leveed and have characteristics of cleared disturbed sites with a shrub type understory, overstory trees, and little to no wildlife value. Rabbits, small furbearers such as raccoon, and occasional deer or squirrel may occasionally utilize the area along with small mammals. Lack of plant diversity, forage species, and poor cover make this a low quality wildlife area even when vegetation is healthy. Due to the storm damage experienced by both the understory and the overstory, the marginal wildlife value of the area has been further degraded.

These Port Sulphur sites are not wetlands subject to the USACE jurisdiction; therefore, no evaluations under Section 404 (of the Clean Water Act) are necessary.

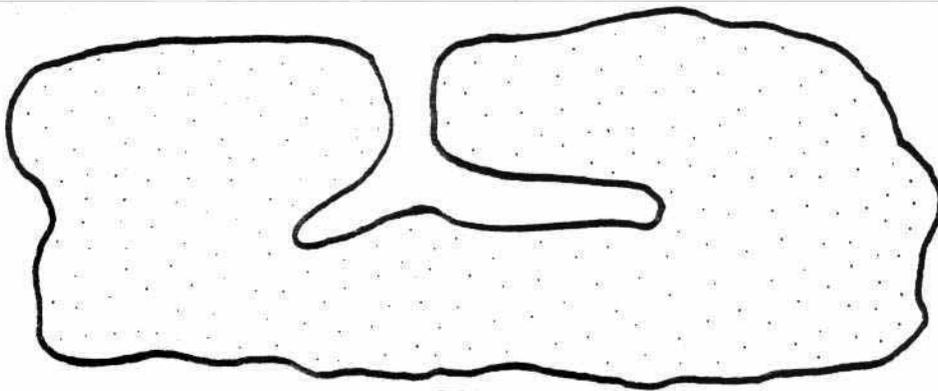
**IMPACTS OF THE PROPOSED WORK:** The proposed borrow sites will result in converting a total of 96 acres of naturally reforested cleared area to open water. The overall site is low to moderate habitat quality for most wildlife due to lack of plant diversity, landforms, and mast bearing trees. There could be a temporary increase in runoff due to the clearing and grubbing prior to reseeding. If additional internal haul roads are needed, new roads may be constructed in the non-wet area. There will be a possibility of increased levels of ambient dust. This possibility is expected to be minimal, and the area currently has little to no population in the vicinity of the construction site. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. In this case, a non-wetland cut over site was chosen with low to moderate habitat value.

Due to the size of this pit, some detailed information on pit construction is included below. Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Where possible, irregular edge will be created to create additional “near shore” fishery habitat. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid the blocking or destruction of hydrological connections,

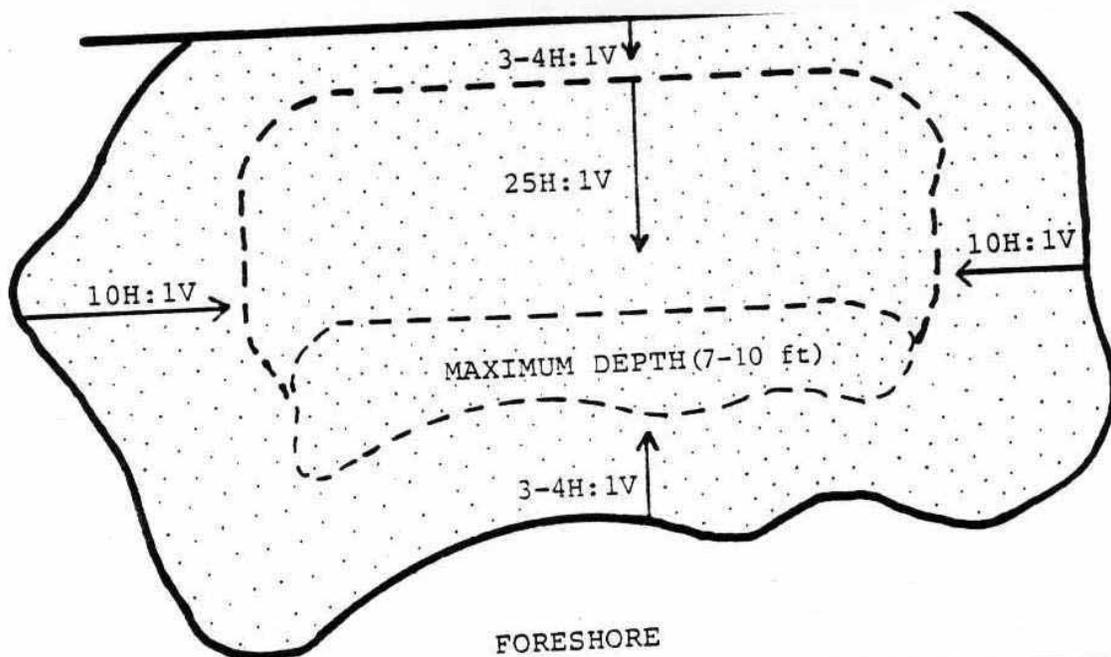
migratory routes, and large sediment releases into nearby streams, marshes, or water bodies.

Clearing at the site shall be limited to areas being used for access and the borrow area. All tree and brush material shall be retained onsite. Irregular shorelines will be created to the maximum extent practicable during pit excavation. Peninsulas should be created at 400-foot intervals around the perimeter of the pits. Peninsulas should be a minimum of eight feet wide and extend a minimum of 20 feet into the pit. Peninsular construction can be accomplished using overburden or degraded retention dike material. Peninsulas will be graded to an elevation 1.5 before consolidation. Borrow pit slope excavations should be varied to include shallow water. Slopes of 10h:1v, 4h:1v and 3h:1v from elevation 0.0 to minus 3.0 are acceptable. Steeper slopes can be incorporated as needed below elevation minus 3.0. See Figures 1 and 2 below.



**Figure 1**

**Illustration of a borrow pit with irregular shoreline and peninsula.**



**Figure 2**  
**Typical illustration of a borrow pit side slopes.**

The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes will be degraded to elevation 0. The material removed, along with any remaining overburden or excavated material on the site, should be used to create irregular shorelines and peninsulas. All degraded material shall be placed into the borrow site to create additional irregular shoreline features and peninsulas.

An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues is noted at this time.

Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

These measures, along with silt screens, utilization of brush piles, and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied with these guidelines, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in an "after the fact" environmental document that will address the impacts of the emergency operations. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National

Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The proposed borrow site is not located on lands regulated by Section 404(b)(1) of the Clean Water Act. No further coordination concerning this subject is necessary.

In addition any excavation that occurs in navigable waters in non-tidal areas to the ordinary high water mark or in tidal areas to the high tide line is regulated by Section 10 of the Clean Water Act. Section 10 also does not apply to the proposed site, so no further coordination is necessary.

The site has been evaluated for presence of toxic waste and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none, based on preliminary results of the field investigation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection since the proposed work would not adversely impact essential fish habitat or associated marine resources. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as stated in the November 10, 2005 e-mail. The LDNR had no objection to the proposed work.

The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project, as noted in the November 16, 2005 statement. This effect determination could be change if new information is discovered.

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Triumph East Borrow Pits Plaquemines Parish, Louisiana New Orleans to Venice Hurricane Protection Project November 9, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the New Orleans to Venice Hurricane Protection Levees.

**PROPOSED ACTION:** The action will involve constructing borrow pits on two sites that are 47 and 185 acres in size near Triumph, Louisiana. Site preparation will require tree removal either by bulldozer or by a combination of hand cutting and bulldozer. The site will then be cleared and grubbed with bulldozers and backhoe prior to excavation. There are some abandoned pipe racks, drilling pipes, and remnants of storage sheds that will need to be removed. The cleared material will be pushed into piles, then used as wildlife cover, and oriented to assist in runoff control, with remaining woody debris stacked as brush piles in the deepest part of the pit. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The woody debris removed from the site should be placed so the wetlands are not impounded and the hydrological connections are not affected. The minimal metal and construction debris will be disposed of at Federal Emergency Management Authority (FEMA)/U.S. Environmental Protection Agency (EPA) designated disposal sites. The excavated depth is estimated to be 20 feet. There is currently access to the site via Louisiana State Highway 23. If additional haul roads are needed, they will be sited on existing unimproved roads or old access routes within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The sites are located on the west bank of the Mississippi River at Triumph, Louisiana, north of Bootheville, Louisiana. All of the sites are located between the Mississippi River Levee and the New Orleans to Venice Hurricane Protection Levee south of Louisiana Highway 23 (LA 23). The entire area is dissected by several relatively shallow drainage ditches running perpendicular to LA 23 and is under forced drainage. With the exception of the flooding/ponding that occurred during the recent storms, no evidence of hydrology indicative of a wetland was observed.

The majority of the 185-acre site is well-maintained pasture that was grazed prior to the storm. The dominant vegetation is Bermuda grass. Two narrow strips within the pasture were forested. Dominant vegetation within these wooded strips includes sugarberry and tallow. A few live oaks were scattered throughout. Although the understory was unrecognizable due to prolonged inundation, it is expected to have been dominated by elderberry. A narrow citrus grove is located perpendicular to LA 23 along the “up river”

boundary of the property. All of the trees were dead from prolonged inundation during the storms.

The 47-acre site is comprised of several different vegetation types. Approximately half of the tract was a citrus grove that is now destroyed from prolonged inundation during the storms. The remainder of the site is either pasture dominated by Bermuda grass or overgrown field that had been bush hogged prior to the storms. The dominant vegetation in this abandoned field was common reed, Bermuda grass, Big Leaf sump weed, eastern false willow, and golden rod.

All of the sites have been drained, ditched, and leveed and have characteristics of cleared disturbed sites with no hydrological connections to water bodies, streams, or surrounding wetlands. The wildlife habitat value for these areas is low for most terrestrial species except possibly songbirds. The area has a low value since it is regularly maintained and lacks plant diversity, mast production, quality and quantity of browse, escape cover, and sustainable source of water. Due to the isolated nature of the site, the wooded area is not big enough to provide a wildlife corridor to areas of better wildlife quality. Rabbits, small furbearers such as raccoon, and occasional deer or squirrel may occasionally utilize the area, along with small mammals. Occasional usage by quail and dove is possible. The marginal wildlife value of the area has been further degraded as a result of the storm.

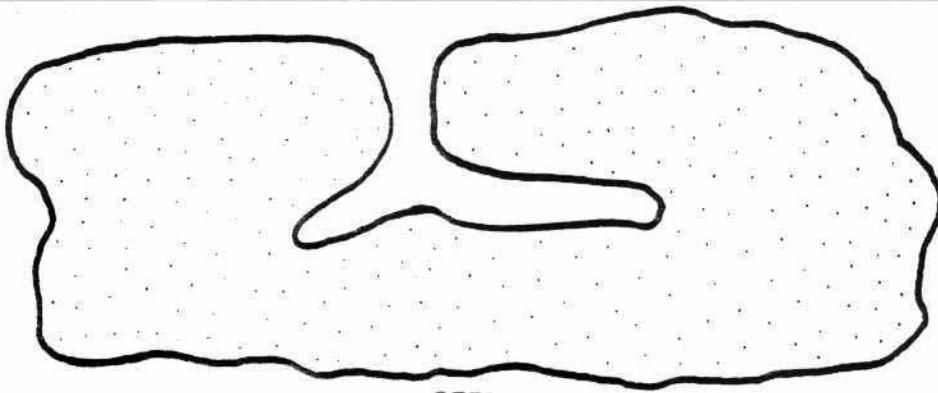
These Triumph East sites are not wetlands subject to USACE jurisdiction; therefore, no Section 404(b)(1) evaluations are necessary.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow sites will result in converting a total of 232 acres of improved pasture and damaged citrus groves to open water. The overall site is low to moderate habitat quality for most wildlife due to lack of plant diversity, landforms, and mast bearing trees. There could be a temporary increase in runoff due to the clearing and grubbing prior to reseeding. If additional internal haul roads are needed, new roads may be constructed in the non-wet area. Temporary interference in localized hydrology could result from haul road placement retention dikes. Both the haul roads and detention dikes will be degraded or gapped after construction is completed. There will be a possibility of increased levels of ambient dust. This possibility is expected to be minimal, and the area currently has little to no population in the vicinity of the construction site. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

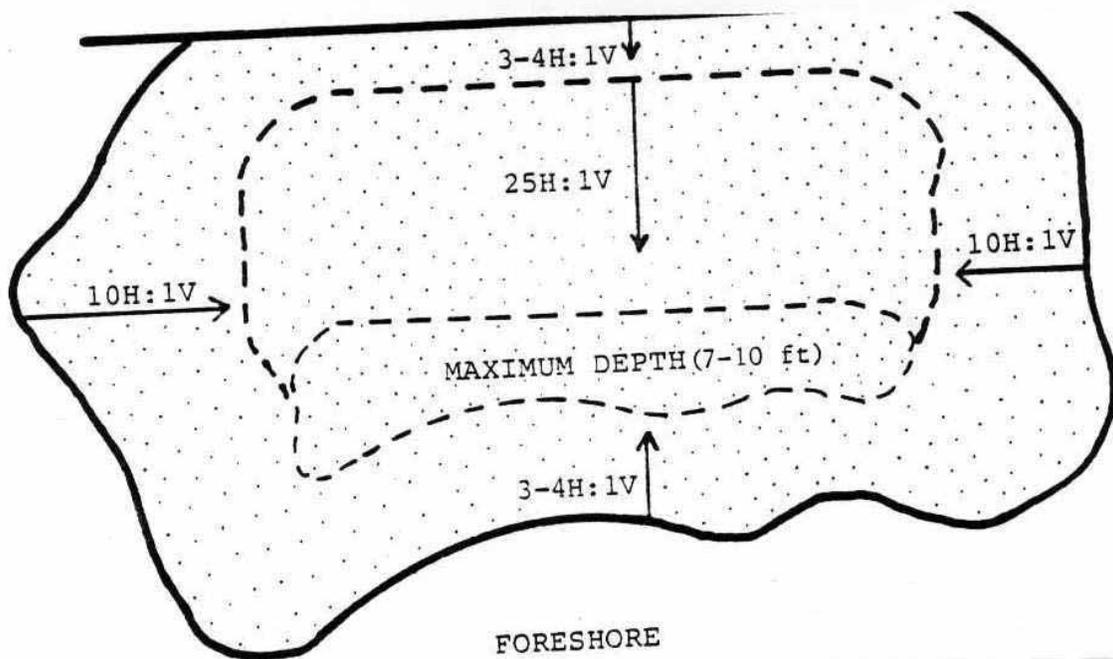
**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. In this case, a non-wetland comprised of primarily improved or cleared lands is being utilized instead of more sensitive wetlands. Due to the size of this pit, some detailed

information on pit construction is included below. It is understood that both the 185-acre tract and the 47-acre tract may be subdivided into several smaller pits; therefore, the following design will be incorporated to the greatest extent practicable. Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Where possible, irregular edge will be created to provide more “near shore” fishery habitat. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife extent. Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid the blocking or destruction of hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies.

Clearing at the site shall be limited to the areas being used for access and the borrow area. All tree and brush material shall be retained onsite. Irregular shorelines will be created, to the maximum extent practicable, during pit excavation. Peninsulas should be created at 400-foot intervals around the perimeter of the pits. Peninsulas should be a minimum of eight feet wide and extend a minimum of 20 feet into the pit. Peninsular construction can be accomplished using overburden or degraded retention dike material. Peninsulas will be graded to an elevation 1.5 before consolidation. Borrow pit slope excavations should be varied to include shallow water. Slopes of 10h:1v, 4h:1v and 3h:1v from elevation 0.0 to minus 3.0 are acceptable. Steeper slopes can be incorporated as needed below elevation minus 3.0. See Figures 1 and 2 below.



**Figure 1**  
**Illustration of a borrow pit with irregular shoreline and peninsula.**



**Figure 2**  
**Typical illustration of a borrow pit side slopes.**

The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes will be degraded to elevation 0. The material removed, along with any remaining overburden or excavated material on the site, should be used to create irregular shorelines and peninsulas. All degraded material shall be placed into the borrow site to create additional irregular shoreline features and peninsulas.

An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues is noted at this time.

Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

These measures, along with silt screens, utilization of brush piles, and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied with these guidelines, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands, peninsulas, and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. Based on the above preventive measures taken, the USACE believes that the proposed action is consistent, to the maximum extent practicable, with the State of Louisiana's approved Coastal Resources Program. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National

Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The proposed borrow site is not located on lands regulated by either Section 404(b)(1) of the Clean Water Act. Further coordination with the appropriate agencies will be completed through coordination of this report, and an “after the fact” 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed. The subject work does not constitute a 404 action; therefore, no further coordination concerning this subject is necessary.

In addition, any excavation that occurs in navigable waters in non-tidal areas to the ordinary high water mark or in tidal areas to the high tide line is regulated by Section 10 of the Clean Water Act. Section 10 also does not apply to the proposed site, so no further coordination is necessary.

The site has been evaluated for presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none, based on preliminary results of the field investigation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be done as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources and the area is not tidally influenced. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as noted in the e-mailed statement dated November 10, 2005. The USFWS also agrees that the need for mitigation needs to be determined “after the fact” and compensatory mitigation initiated if needed. The USACE has consulted with the USFWS and has agreed that impacts to approximately 10 acres of bottomland hardwood habitat would be mitigated to account for the impacts of the borrow action. The LDNR has no objection to the work as proposed.

Initial coordination with SHPO indicated a concern for encroachment on the “view shed” for the Fort Jackson Historic site. An archeologist with the USACE Cultural Resources section provided additional engineering and site location information to the SHPO. Based on the additional information, the SHPO concurred with the USACE assessment that the excavations at the Triumph East Borrow Site would have no adverse effect on Fort Jackson. The e-mail letter dated November 29, 2005 provided the determination of no affect.

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Old Homeplace Borrow Pit Extension Plaquemines Parish Hurricane Protection**

**November 17, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency levee repair to the New Orleans to Venice Hurricane Protection Levees.

**PROPOSED ACTION:** The action involves constructing a borrow pit 10.5 acres in size in the vicinity of Homeplace, Louisiana. Activities will include clearing, grubbing, debris removal, and excavation. There is road access, but if additional haul roads are needed, they will be sited to avoid or minimize impacts to wetlands. Clearing will be done by bulldozer, and excavation to a depth of approximately 20 feet will be done by backhoe. The material will be stockpiled if necessary or loaded directly and truck-hauled to the construction site.

**DESCRIPTION OF THE AREA:** Site visits were made to the Homeplace location to examine the suitability of the area as a borrow site and determine environmental conditions in the area. The Homeplace borrow site is located 3 miles south of Port Sulfur near Homeplace, Louisiana and is 10.5 acres in size. The area is located south of Louisiana State Highway 23 between the Mississippi River Levee and the New Orleans to Venice Hurricane Protection Levee; therefore, it is not subject to tidal exchange, and hydrological connections, if any, are limited to pumping or forced drainage.

The portion of the site closest to the road (northernmost portion of the site) immediately behind the orange grove had some mixed debris consisting of old house parts, old automobile parts, drill pipe, abandoned appliances, bicycles, and other household debris. Debris quantity was small and was concentrated on the portion of the tract nearest the highway on the western side.

The proposed borrow area is bounded by the existing Homeplace borrow pit on the west side; open, improved pasture on the east side; and a storm damaged orange grove and wooded area on the north side of the property. The field investigation was conducted on November 16, 2005.

This 10.5-acre tract is well drained. A portion had been in citrus production prior to the recent hurricanes. A live oak ridge dominates the remainder of the site. During and following the storms, the property was inundated (ponded) by several feet of water for a sufficient period to kill and rot most of the herbaceous vegetation.

Vegetation consisted of live oak, water oak, and sugarberry in the overstory. Scattered Chinese tallow tree and pecan are in the sub canopy. Elderberry is the dominant

shrub/sapling. Dominant weeds include ladies'-eardrops and nut grass. Most other herbaceous vegetation was unrecognizable due to severe decomposition. Several drainage ditches running perpendicular to Louisiana State Highway 23 dissect the property. It is under forced drainage. With the exception of the flooding/ponding that occurred during the storms, no evidence of hydrology indicative of a wetland was observed. The Homeplace extension borrow site is not a wetland subject to USACE jurisdiction.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow sites will result in converting a total of 10.5 acres of non-wetlands and the associated low quality wildlife habitat to open water. Direct access to the site is available from Louisiana Highway 23. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the non-wet area. There will be a possibility of increased levels of ambient dust and runoff. This possibility is expected to be minimal, and since the area presently has little to no population in the vicinity of the construction site, minimal affects are expected on the suburban area. No cultural impacts are expected, but the archeologist has visited the site, and an in- house evaluation is currently in progress. The results of that evaluation will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. In this case, the site proposed is in a non-wetland area with potential for providing moderate quality wildlife habitat for small game such as squirrel and rabbit and when the area recovers. The only current evidence of wildlife is raccoon and a few passerine birds.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies.

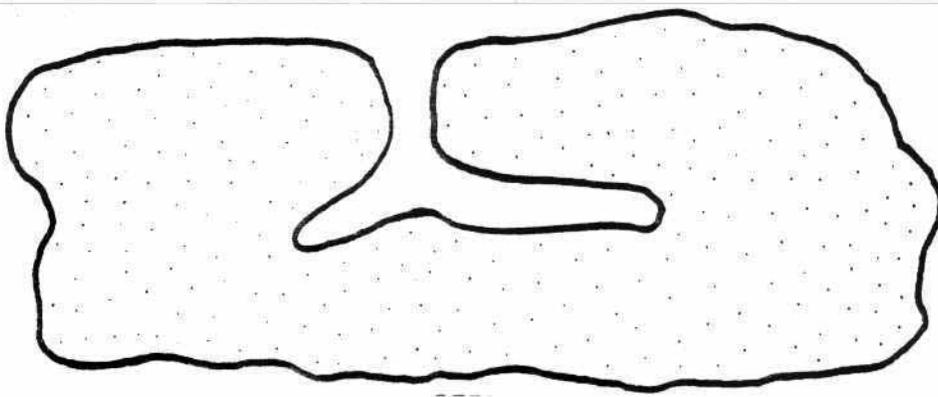
In addition, the site is currently being evaluated for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided. The results of these investigations will be documented, and further testing will initiated if appropriate.

Dust abatement will be implemented if necessary by altering truck speed in the work k area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

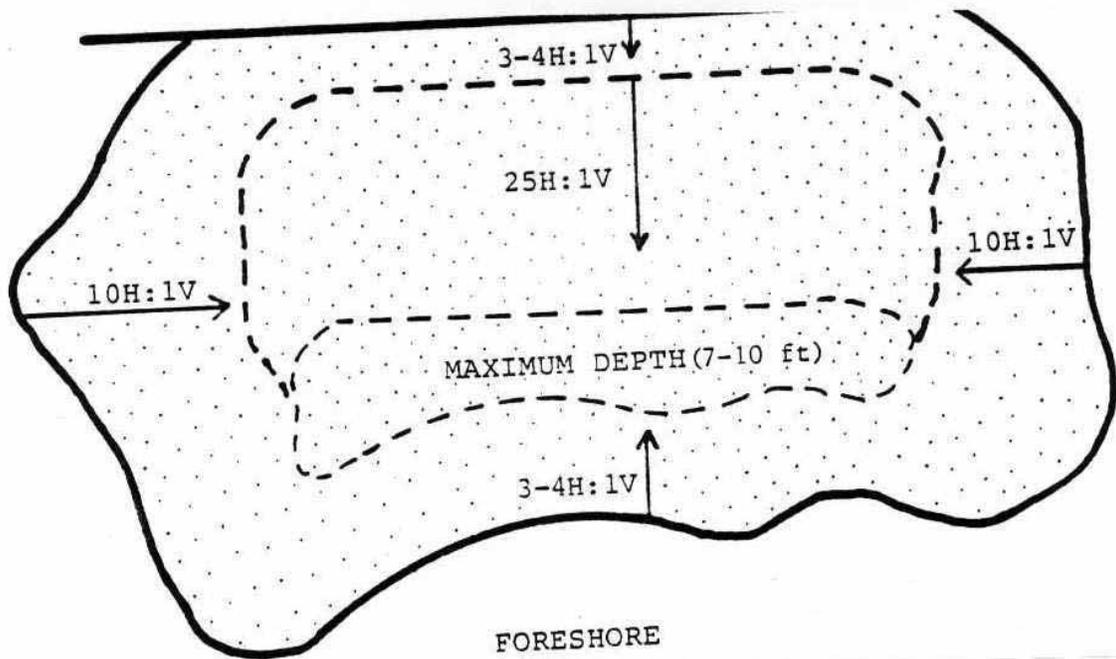
Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. During clearing operations, brush pile will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

Clearing at the site shall be limited to the areas being used for access and the borrow area. All tree and brush material shall be retained onsite. Irregular shorelines will be created, to the maximum extent practicable, during pit excavation. Peninsulas should be created at 400-foot intervals around the perimeter of the pits. Peninsulas should be a minimum of eight feet wide and extend a minimum of 20 feet into the pit. Peninsular construction can be accomplished using overburden or degraded retention dike material. Peninsulas will be graded to an elevation 1.5 before consolidation. Borrow pit slope excavations should be varied to include shallow water. Slopes of 10h:1v, 4h:1v and 3h:1v from elevation 0.0 to minus 3.0 are acceptable. Steeper slopes can be incorporated as needed below elevation minus 3.0. See Figures 1 and 2 below.



**Figure 1**  
**Illustration of a borrow pit with irregular shoreline and peninsula.**



**Figure 2**  
**Typical illustration of a borrow pit side slopes.**

The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes are to be degraded to elevation 0. The material removed, along with any remaining overburden or excavated material on the site, should be used to create irregular shorelines and peninsulas. All degraded material shall be placed into borrow site to create additional irregular shoreline features and peninsulas.

An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

These measures, along with silt screens, utilization of brush piles, and others, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action

to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted both the general and surface alterations CZM guidelines and has complied with these guidelines, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands, peninsulas, and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents addressing the impacts of the emergency actions associated with the emergency levee repairs. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact. The proposed borrow site is not located on lands regulated by either 404(b)(1) or the Clean Water Act. Further Coordination with the appropriate agencies will be completed through coordination of this report and an "after the fact" 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed. However the subject work does not constitute a 404 action therefore no further coordination concerning this subject is necessary.

In addition any excavation that occurs in navigable waters in non-tidal areas to the ordinary high water mark or in tidal areas to the high tide line is regulated by Section 10 of the Clean Water Act. Section 10 also does not apply to the proposed site thus further coordination is necessary.

The site has been evaluated for presence of toxic waste and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for hazardous, toxic, and radioactive

waste (HTRW) is ongoing. The risk of encountering HTRW for the proposed action is low to none, based on preliminary results of the field investigation

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources and the area is not tidally influenced. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as noted in their e-mailed statement dated November 18, 2005. In addition, the USFWS does support construction of the proposed environmental features noted for the pit to the greatest extent feasible. Determination of need for bottomland hardwood and or wetland should be addressed in “after the fact” environmental document. The endangered species concurrence was received by e-mail dated November 18, 2005. The LDNR has no objection to the work as proposed as long as mitigation is assessed and initiated “after the fact,” but their full authorization will follow the filing of a formal Consistency Determination as part of the “after the fact” environmental documentation. The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information is discovered. The determination of no affect was dated December 12, 2005.

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Meraux Borrow Site St. Bernard Parish Hurricane Protection (Back Levee)**

**November 26, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the St. Bernard Hurricane Protection Back Levee System.

**PROPOSED ACTION:** The action involves constructing a borrow pit up to 30 acres in size near Chalmette, Louisiana. The pit will be restricted to 30 acres, but it may be sited anywhere within the 200-acre site depending on soil conditions, identification of cultural resources, or environmental sensitivity of a particular location. Site preparation could require removal of some small trees depending on site selection. The majority of the site is mostly open pasture that can be cleared with small bulldozers. The cleared area will be cleaned, scraped, and grubbed with bulldozers and backhoe prior to excavation. The cleared material will be pushed into piles, then used as wildlife cover, oriented to assist in runoff control, and placed in the pit to decrease the pit depth and create structure for fish habitat. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The woody debris removed from the site should be placed in such a way that wetlands are not impounded and the hydrological connections are not affected. The excavated depth is estimated to be 20 feet. There is currently access to the site via Louisiana State Highway 46 (St. Bernard Highway). If additional haul roads are needed, they will be sited on existing unimproved roads or old access routes within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The site is located near Meraux, Louisiana on the east bank of the Mississippi River. The location is south and on the protected side of the east bank (left descending bank) of the Mississippi River Flood Control Levee and immediately south of Louisiana State Highway 46. The proposed borrow site is located on the east bank of the Mississippi River between the Mississippi River Levee and the St. Bernard Back Levee south of Louisiana Highway 46.

The 200-acre tract is a well-drained, maintained pasture that appears to have been grazed immediately prior to the recent hurricanes. During and following the storms, the property was inundated (ponded) by several feet of water for a sufficient period to kill and rot most of the herbaceous vegetation. The site is dominated by Bermuda grass with a few scattered live oaks, at least two species of paspalum, scattered dwarf palmetto, and several patches of soft rush. Most other herbaceous vegetation was unrecognizable due to severe decomposition.

Many relatively shallow drainage ditches running between Louisiana Highways 39 and 46 dissect the property. The area is under forced drainage, and with the exception of the flooding and or ponding that occurred during the storms, no evidence of hydrology indicative of a wetland was observed. The site exhibits the characteristics of cleared disturbed sites with no hydrological connections to water bodies, streams, or surrounding wetlands in addition. A wetland evaluation of the site was made, and it was determined that property is not a wetland subject to USACE jurisdiction under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899.

There is only moderate cover for wildlife and little diversity in forage or browse. There was little evidence of wildlife in the area except rabbit and possibly raccoon. A few passerine birds and terrestrial meadowland species such as rodents may utilize the area, and occasional squirrels may use the areas where trees remain. The area could provide temporary cover for deer depending on the season and the condition of the browse available on the nearby levee.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow site will result in converting a total of 30 acres of improved pasture to open water. The overall site is low habitat quality for most wildlife due to sparse cover and lack of mast bearing trees.

During construction, there will be a possibility of increased levels of ambient dust and localized turbid runoff. Turbidity control measures will be used to retain the runoff onsite within the pit to the maximum extent practicable. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. The need for additional roads is expected to be minimal, and the area currently has little to no population in the vicinity of the construction site. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. The USACE continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas.

Borrow pit design will include irregular shorelines, peninsulas, and slope sufficiently shallow for both near edge and submergent vegetative growth to the greatest extent practicable. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas (peninsulas or beach) for wildlife. During clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will

help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

Clearing at the site shall be limited to the areas being used for access and the borrow area. The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes are to be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues are noted at this time. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action

to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and has complied with these guidelines, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Agency (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

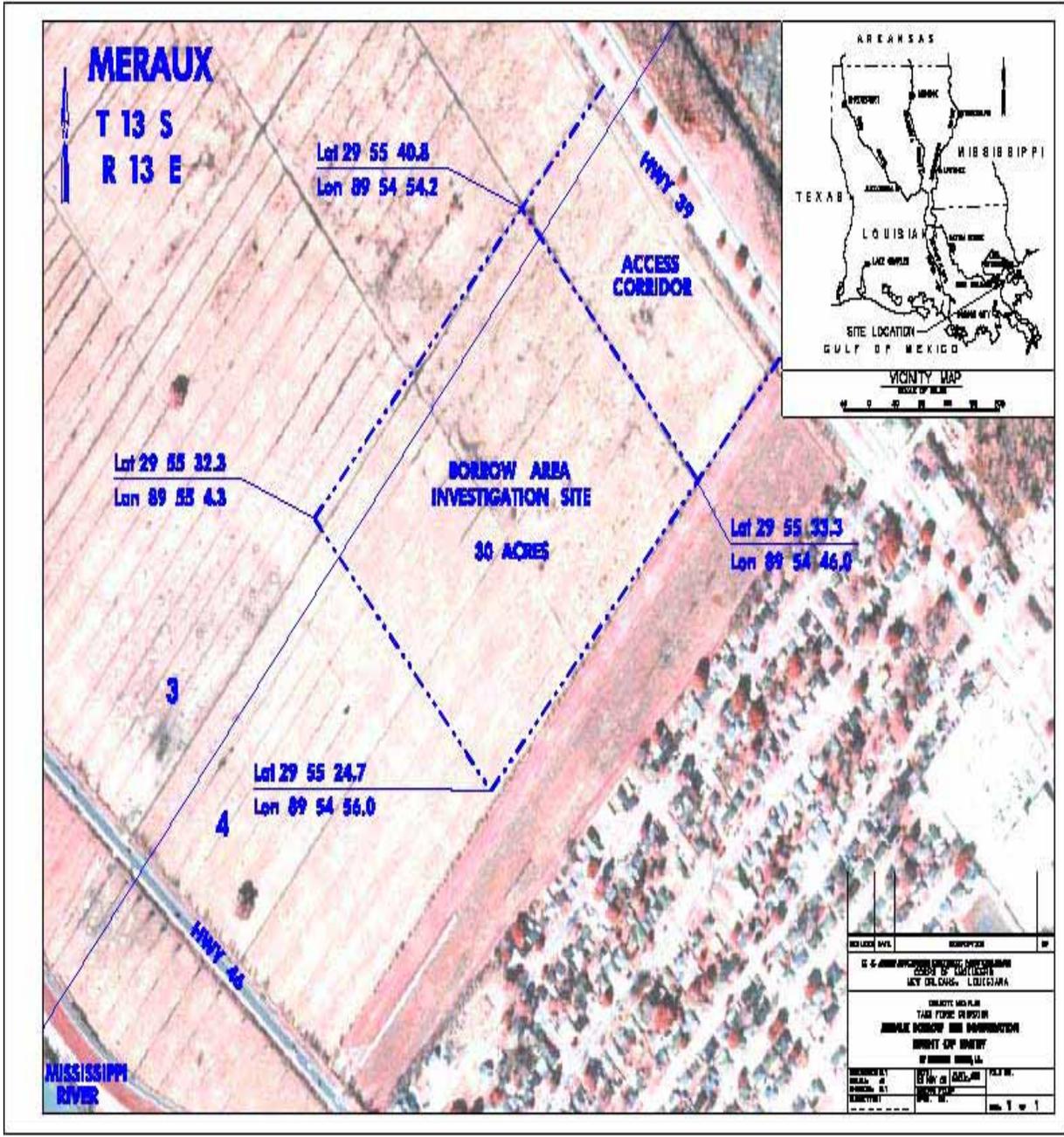
A jurisdictional wetlands determination has been prepared, and it was determined that the Meraux site is non-wet and, therefore, not regulated by the 404 regulations or Section 10 of the Clean Water Act. Further coordination with the appropriate agencies will be completed through coordination of this report, and an "after the fact" 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed.

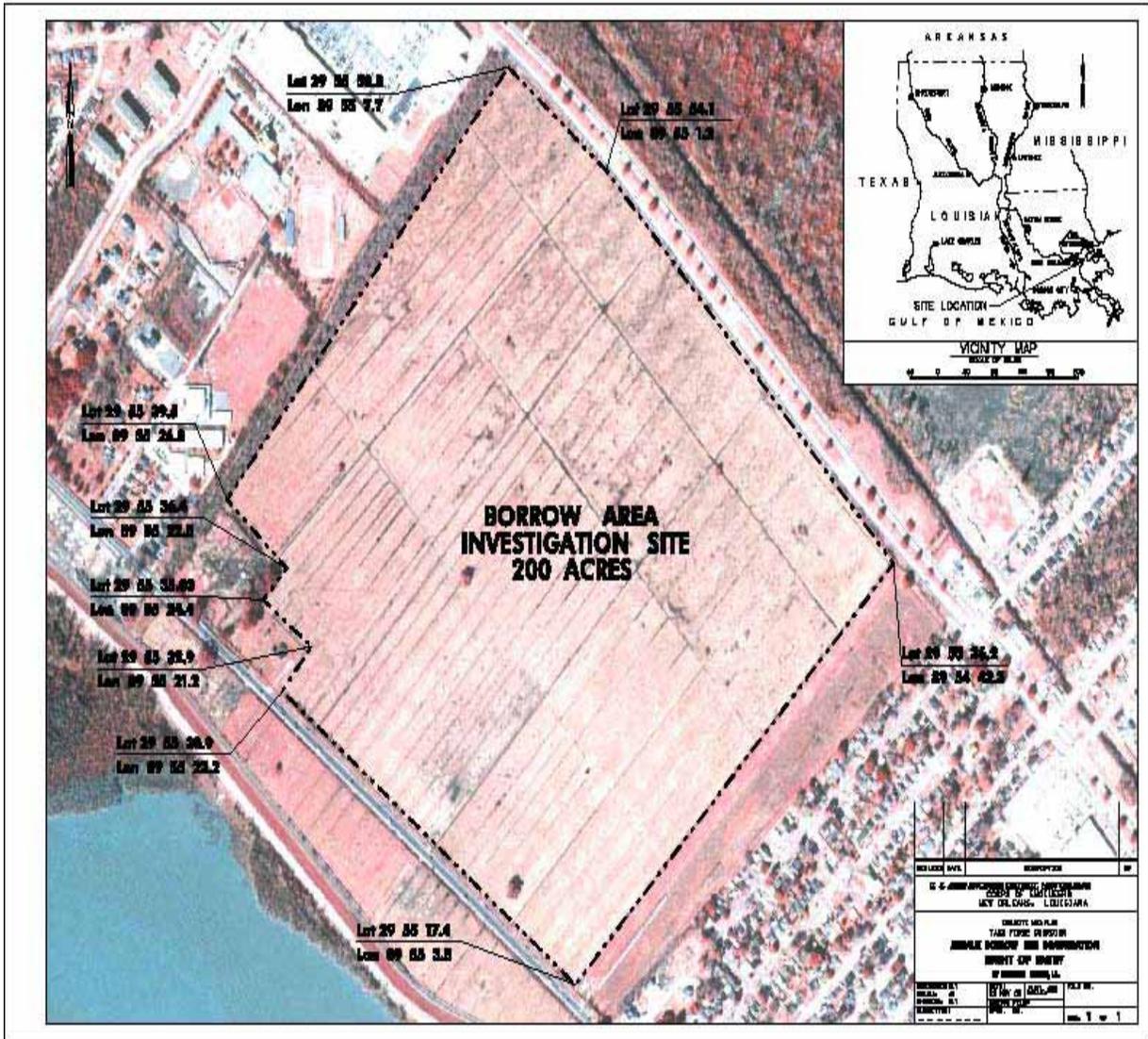
The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as noted in the e-mailed statement dated November 28, 2005. The endangered species concurrence was received by e-mail dated November 28, 2005. The USFWS endorses the construction of the environmental features of the borrow pits. The LDNR has no objection to the proposed activity, but their full authorization will follow the filing of a formal Consistency Determination as part of the “after the fact” environmental documentation. The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information is discovered. The determination of no affect was dated December 6, 2005.

**DETAILED SITE MAP  
AND SITE PHOTOS**







Meraux Tract  
(Picture distorted; landscape is actually flat)



Maynard Site  
(Picture distorted; landscape is actually flat)

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Poydras Borrow Site St. Bernard Parish Hurricane Protection (Back Levee)**

**November 27, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the St. Bernard Hurricane Protection Back Levee System.

**PROPOSED ACTION:** The action involves constructing a borrow pit 16-acres in size located in Poydras, Louisiana, in St. Bernard Parish. Site preparation would be minimal due to scarcity of trees. The entire site is open pasture except for a small tree fringe on the western side of the property. The site can be cleared with small bulldozers and possibly some hand cutting of trees. The cleared area will be cleaned, scraped, and grubbed with bulldozers and back hoe prior to excavation. The cleared material will be pushed into piles, then used as wildlife cover, oriented to assist in runoff control, and placed in the pit to decrease the pit depth and create structure for fish habitat. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The woody debris removed from the site should be placed so the wetlands are not impounded and the hydrological connections are not affected. The excavated depth is estimated to be 20 feet. There is currently access to the site via Bayou Road to Louisiana State Highway 39/46. If additional haul roads are needed, they will be sited on existing unimproved roads within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The site is located in Poydras, Louisiana on the east bank of the Mississippi River. The location is south and on the protected side of the east bank (left descending bank) of the Mississippi River Flood Control Levee and the St. Bernard Back Levee. The proposed borrow site is located south of Louisiana Highway 39/46 between Poydras and Sebastapol, Louisiana. The site is directly across the highway from the St. Bernard High School.

The property is dissected by relatively shallow drainage ditches and is under gravity or forced drainage. With the exception of the flooding and/or ponding that occurred during the storms, no evidence of hydrology indicative of a wetland was observed. The 16 acre tract was used as a golf driving range prior to Katrina. The site consists of open field maintained in turf and improved grasses. A few live oaks border the drainage on the western side of the property line. The area is bounded by a railroad embankment to the rear of the property and the roadway on the northern end of the property.

The area exhibits the characteristics of cleared disturbed sites with no hydrological connections to water bodies, streams, or surrounding wetlands. A wetland evaluation of the site was made, and it was determined that the property is not a wetland subject to

USACE jurisdiction under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899.

There is little cover for wildlife and little diversity in forage or browse. There was little to no evidence of wildlife in the area. The area has very low habitat value for wildlife except possibly an occasional transient rabbit or squirrel that may be passing through the area to reach more viable habitat. A few passerine birds and terrestrial meadowland species such as rodents may utilize the area, and occasional squirrels may use the areas where trees remain.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow site will result in converting a total of 16 acres of improved turf grasses utilized as a golf driving range to open water. The overall site is marginal to very low habitat quality for most wildlife due to sparse cover and lack of mast bearing trees.

During construction, there will be a possibility of increased levels of ambient dust and localized turbid runoff. Turbidity control measures will be used to retain the runoff onsite within the pit to the maximum extent practicable. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. The need for additional roads is expected to be minimal, and the area currently has little to no population in the vicinity of the construction site. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. The current site is non-wet, maintained commercial turf and improved grasses that can be accessed through a non-wetland area, thereby greatly reducing overall wetland impacts. The USACE continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas.

Borrow pit design will include irregular shorelines, peninsulas, and slope sufficiently shallow for both near edge and submergent vegetative growth to the greatest extent practicable. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. During clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

Clearing at the site shall be limited to the areas being used for access and the borrow area. The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes will be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues is noted at this time. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed

the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied with the guidelines, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

A jurisdictional wetlands determination has been prepared, and it was determined that the Poydras site is non-wet and, therefore, not regulated by the 404 regulations or Section 10 of the Clean Water Act. Further coordination with the appropriate agencies will be completed through coordination of this report, and an "after the fact" 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed.

The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

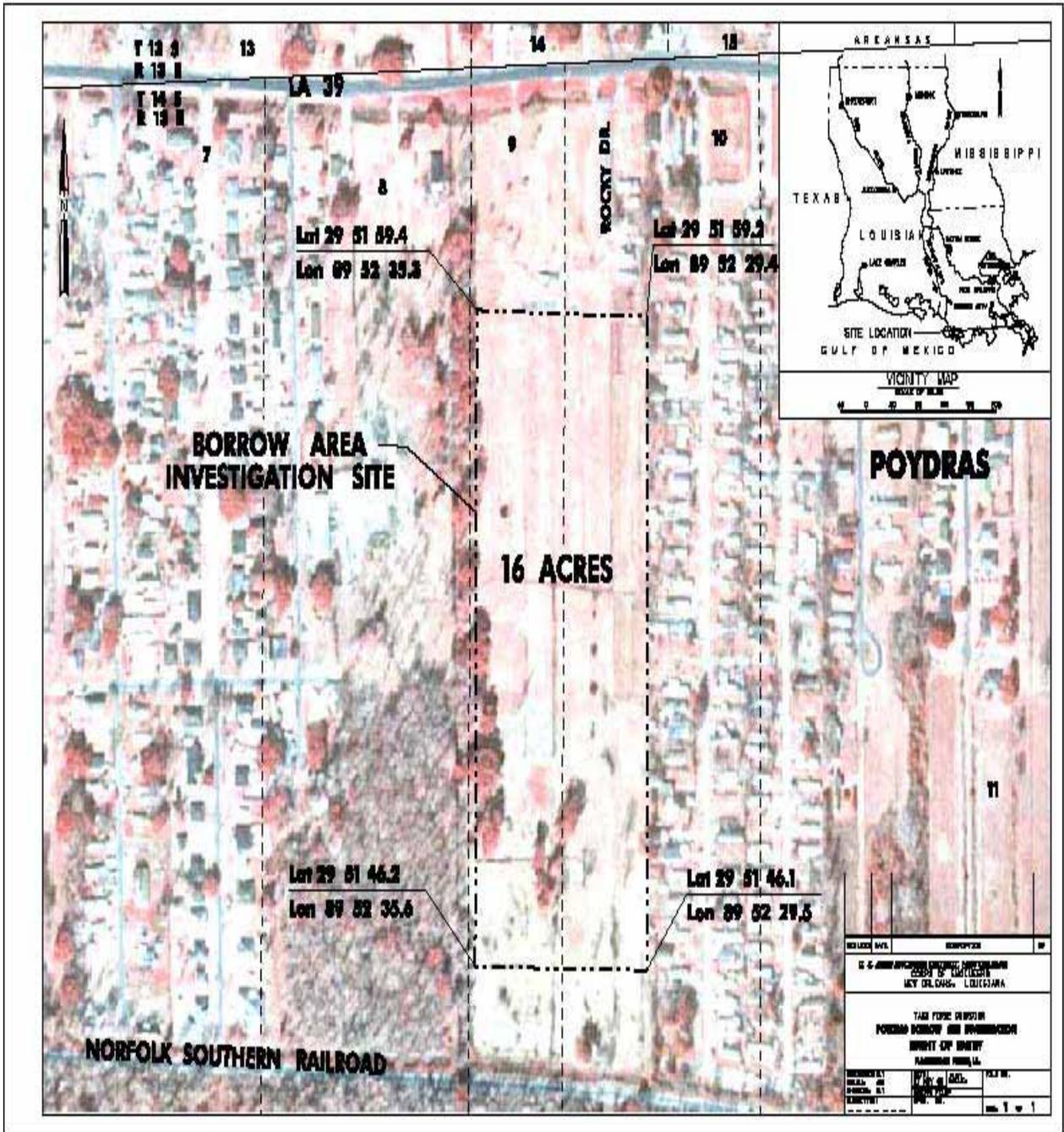
**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency

work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as stated in their November 28, 2005 e-mailed statement. In addition, the USFWS does support incorporation of proposed environmental features into the borrow pit construction to the greatest extent feasible. The LDNR has no objection for the emergency activity. Complete authorization from the LDNR will follow the submission of a formal Consistency Determination as part of the after the fact environmental documentation.

The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project, as noted in their December 6, 2005 statement. This effect determination could change if new information is discovered.

**DETAILED SITE MAP  
AND SITE PHOTO**





Overview of Poydras Site

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Toca Borrow Site St. Bernard Parish Hurricane Protection (Back Levee)**

**November 27, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the St. Bernard Hurricane Protection Back Levee System.

**PROPOSED ACTION:** The action involves constructing a borrow pit 15 acres in size at Toca, Louisiana, east of Poydras, Louisiana, in St. Bernard Parish. The pit will be restricted to 15 acres in size, but it may be sited anywhere within the 80-acre site depending on soil conditions, identification of cultural resources, or environmental sensitivity of a particular location. Site preparation would be minimal due to scarcity of trees. Almost the entire site is open pasture that can be cleared with small bulldozers. The cleared area will be cleaned, scraped, and grubbed with bulldozers and backhoe prior to excavation. The cleared material will be pushed into piles, then used as wildlife cover, oriented to assist in runoff control, and placed in the pit to decrease the pit depth and create structure for fish habitat. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The woody debris removed from the site should be placed so the wetlands are not impounded and the hydrological connections are not affected. The excavated depth is estimated to be 20 feet. There is currently access to the site via Bayou Road to Louisiana State Highways 46 or 39. If additional haul roads are needed, they will be sited on existing unimproved roads or old access routes within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The site is located near Toca, Louisiana on the east bank of the Mississippi River (see attachments). The location is south and on the protected side of the east bank (left descending bank) of the Mississippi River Flood Control Levee and the St. Bernard Back Levee. The proposed borrow location is south of and between Louisiana State Highway 46 and Bayou Road.

The 80-acre tract is well-drained and was maintained pasture prior to the storm. The site was dominated by Bermuda grass and other improved pasture grasses. The site is drained by both north/south and east/west drains. During and following the storms, the property was inundated (ponded) by several feet of water for a sufficient period to kill and rot most of the pasture grasses. Although trees are sparse and scattered, there are some pecans and live oaks scattered throughout the property, with tallow and sugarberry dominant along the drains.

The area is under forced drainage, and with the exception of the flooding and or ponding that occurred during the storms, no evidence of hydrology indicative of a wetland was

observed. The area exhibits the characteristics of cleared disturbed sites with no hydrological connections to water bodies, streams or surrounding wetlands. A wetland evaluation of the site was made, and it was determined that property is not a wetland subject to USACE jurisdiction under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899.

There is little cover for wildlife and little diversity in forage or browse. There was little to no evidence of wildlife in the area except rabbit. A few passerine birds and terrestrial meadowland species such as rodents may utilize the area, and occasional squirrels may use the areas where trees remain.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow site will result in converting a total of 15 acres of improved pasture to open water. The overall site is low habitat quality for most wildlife due to sparse cover and lack of mast bearing trees.

During construction, there will be a possibility of increased levels of ambient dust and localized turbid runoff. Turbidity control measures will be used to retain the runoff on site within the pit to the maximum extent practicable. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. The need for additional roads is expected to be minimal, and the area currently has little to no population in the vicinity of the construction site. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. The site is non-wet pastureland that can be accessed through a non-wetland area, thereby greatly reducing overall wetland impacts. The USACE continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas.

Borrow pit design will include irregular shorelines, peninsulas, and slope sufficiently shallow for both near edge and submergent vegetative growth to the greatest extent practicable. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. During clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

Clearing at the site shall be limited to the areas being used for access and the borrow area. The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the

perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes will be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid the blocking or destruction of hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues is noted at this time. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that

may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied with the guidelines, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoiding critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

A jurisdictional wetlands determination has been prepared, and it was determined that the Toca site is non-wet and, therefore, not regulated by the 404 regulations or Section 10 of the Clean Water Act. Further coordination with the appropriate agencies will be completed through coordination of this report, and an "after the fact" 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed.

The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

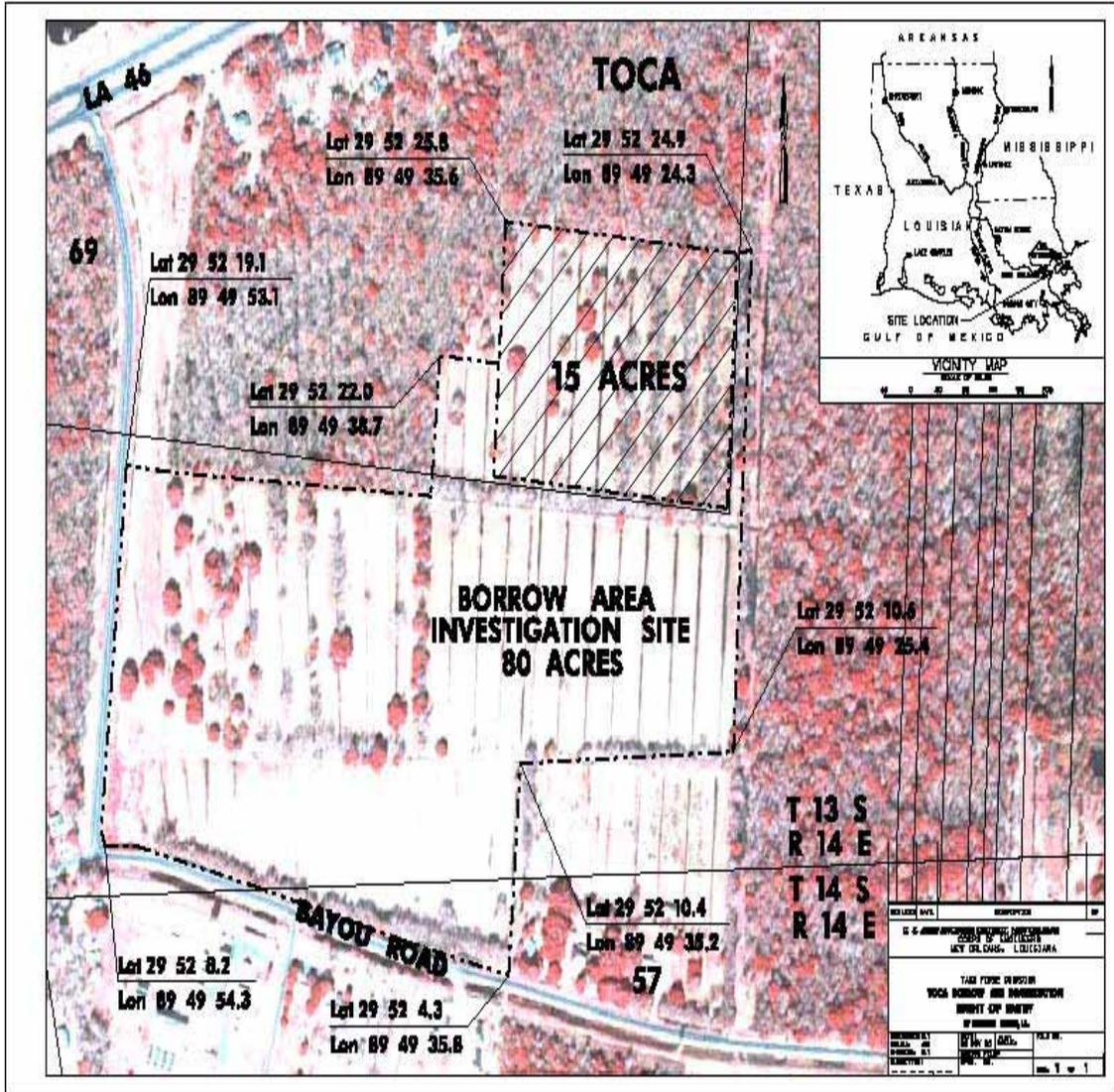
**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an "after the fact" environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has

provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana State SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as noted in the e-mailed statement dated November 28, 2005. The LDNR has no objection for the emergency activity, but complete authorization from the LDNR will follow the submission of a formal Consistency Determination as part of the after the fact environmental documentation.

Coordination with Louisiana SHPO is incomplete at this time. It was determined that a cultural survey was needed in order for SHPO to render an opinion. Denial of real estate access by the parish resulted in abandonment of the site; therefore, no further action was taken with coordination with the SHPO.

**VICINITY MAP AND  
DERAILED SITE PHOTO**





**Panoramic view of Toca Site  
(land is flat, photo distorted to fit page)**

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Creedmore Borrow Site Expansion St. Bernard Hurricane Protection (Back Levee)**

**November 29, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to the St. Bernard Hurricane Protection Levee System.

**PROPOSED ACTION:** The action involves constructing a 2.85-acre borrow pit in the area located off State Highway 46 near the community of Kenilworth in St. Bernard Parish, Louisiana. The site is open pasture that can be cleared with small bulldozers. The cleared area will be cleaned, scraped, and grubbed with bulldozers and backhoe prior to excavation. The cleared material will be pushed into piles, then used as wildlife cover, oriented to assist in runoff control, and placed in the pit to decrease the pit depth and create structure for fish habitat. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. The woody debris removed from the site should be placed so the wetlands are not impounded and the hydrological connections are not affected. The excavated depth is estimated to be 20 feet. No additional access roads are anticipated due to direct access to State Highway 46.

**DESCRIPTION OF THE AREA:** The site is located south of Louisiana State Highway 46 between the Lake Pontchartrain Hurricane Protection Levee (Chalmette Area Plan) and the St. Bernard Hurricane Protection Back Levee near Kenilworth, Louisiana in St. Bernard Parish. The property is immediately adjacent to the active Creedmore Farm borrow site and has been ditched, drained, and pumped. There is no evidence that hydrologic connections to the river or other watercourses or wetlands exist under non-flood conditions. The current wetland evaluation for the property indicates that the area is classified as a non-wetland and is not within the jurisdictional wetlands of the USACE or subject to Section 404 of the Clean Water Act.

The proposed borrow site has been continually maintained as farmed grassland or improved pasture. The site provides little cover for wildlife and little diversity in forage or browse. There was little to no evidence of wildlife in the area except rabbit. A few passerine birds and terrestrial meadowland species such as rodents may utilize the area, and occasional squirrels may use the areas where trees remain.

The vegetation on the site is characteristic of manipulated land and is comprised of cleared pasture presently dominated by bahia grass, vasseey grass, Bermuda, and other improved pasture grasses. The vegetation was mostly dead due to the prolonged flooding of the area. The land is located in a rural setting with sparse residential on the side of the existing pit.

**IMPACTS OF THE PROPOSED WORK:** Approximately 2.85 acres of improved pasture lands would be converted to open water by the project. During construction, there will be a possibility of increased levels of ambient dust and localized turbid runoff. Turbidity control measures will be used to retain the runoff onsite within the pit to the maximum extent practicable. If additional internal haul roads are needed, the new roads can be constructed on the non-wet areas of the project site. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value marsh fringes where possible. The current site is non-wet pastureland that can be accessed through a non-wetland area, greatly reducing overall wetland impacts. The USACE continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas. In addition, all sites are evaluated for the presence of hazardous or toxic materials. Borrow pit design will include slope sufficiently shallow for both near edge and submergent vegetative growth. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

Borrow pit design will also include irregular shorelines, peninsulas, and slope sufficiently shallow for both near edge and submergent vegetative growth to the greatest extent practicable. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas for wildlife. During clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of stockpile areas, where practicable, to minimize site runoff and provide additional turbidity control. These measures, along with silt screens, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or waters within the coastal zone.

Clearing at the site shall be limited to the areas being used for access and the borrow area. The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes will be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues is noted at this time. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area are consulted to gauge the potential of impact to known or unknown cultural resources.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and has complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency

repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the “after the fact” environmental compliance documents addressing the impacts of the emergency actions associated with the emergency levee repairs. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An “after the fact” environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

A jurisdictional wetlands determination has been prepared, it was determined that the Creedmore Borrow Site Expansion is non-wet and, therefore, not regulated by the 404 regulations or Section 10 of the Clean Water Act. Further coordination with the appropriate agencies will be completed through coordination of this report, and an “after the fact” Section 404 evaluation will be prepared and mitigation requirements provided if needed.

The site has been evaluated for presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

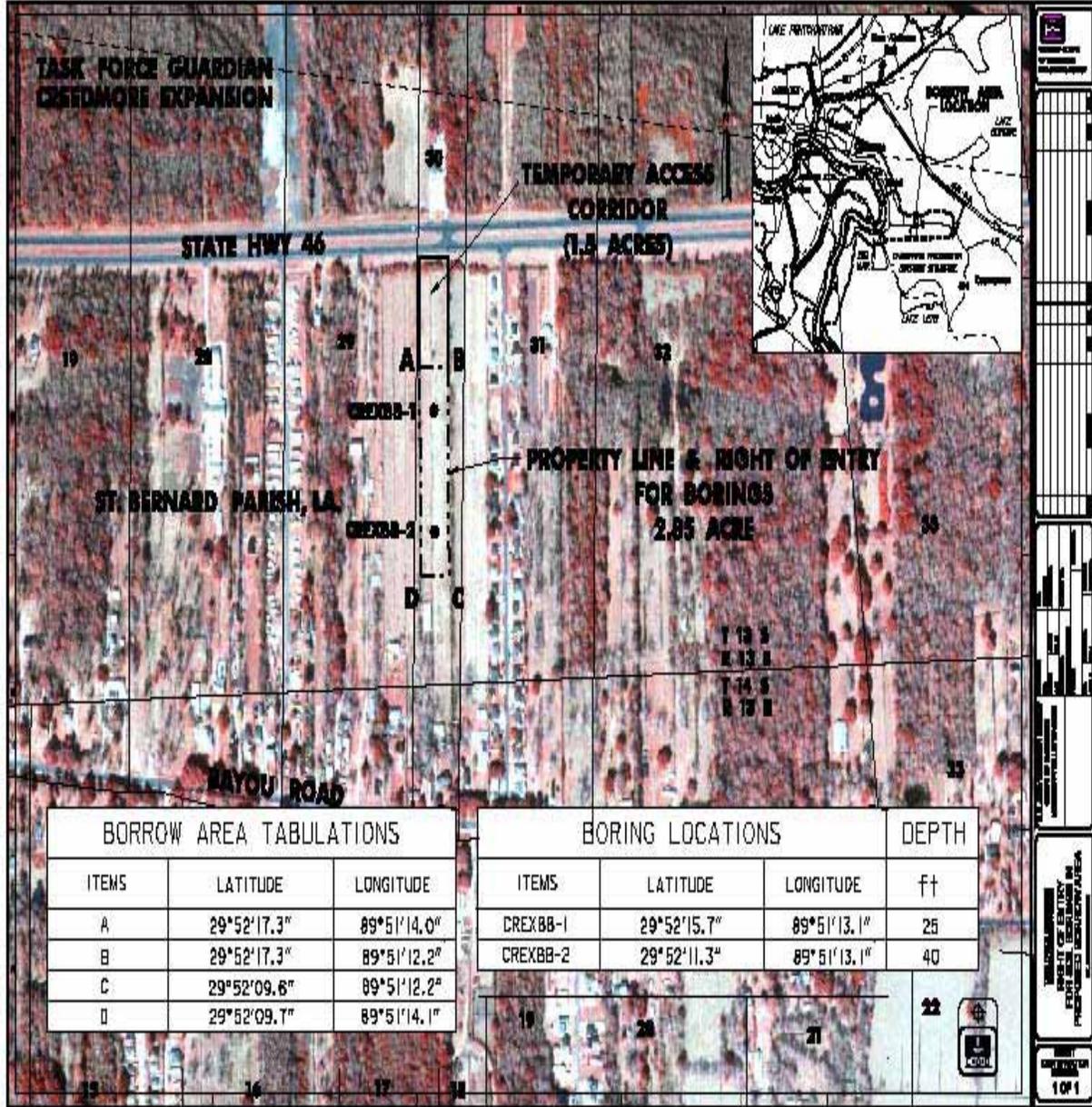
**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. In this case, the borrow site was evaluated, and no wetlands exist; therefore, no 404(b)(1) will be required.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources and the area is not tidally influenced. The USFWS has reviewed the proposed project and noted in the November 30, 2005 e-mailed statement that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies. In addition, the USFWS does support construction of the proposed environmental features noted for the pit to the greatest extent feasible.

The LDNR has no objection to the proposed activity, but their full authorization will follow the filing of a formal Consistency Determination as part of the “after the fact” environmental documentation.

As stated in a December 5, 2005 statement, the SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project. This effect determination could change if new information comes to is discovered.

**DETAILED SITE PHOTO**



BORROW AREA TABULATIONS		
ITEMS	LATITUDE	LONGITUDE
A	29°52'17.3"	89°51'14.0"
B	29°52'17.3"	89°51'12.2"
C	29°52'09.6"	89°51'12.2"
D	29°52'09.7"	89°51'14.1"

BORING LOCATIONS			DEPTH
ITEMS	LATITUDE	LONGITUDE	ft
CREXBB-1	29°52'15.7"	89°51'13.1"	25
CREXBB-2	29°52'11.3"	89°51'13.1"	40

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# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Myrtle Grove Borrow Site St. Bernard Parish Hurricane Protection (Back Levee)**

**December 8, 2005**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the St. Bernard Hurricane Protection Back Levee System.

**PROPOSED ACTION:** The action involves constructing two borrow pits totaling 45 acres in size (18 acres and 27 acres) near Myrtle Grove in Plaquemines Parish, Louisiana. The site is cleared of trees and is improved open pasture that can be cleared with small bulldozers. The cleared area will be cleaned, scraped, and grubbed with bulldozers and backhoe prior to excavation. The cleared material will be pushed into piles, then used as wildlife cover, oriented to assist in runoff control, and placed in the pit to decrease the pit depth and create structure for fish habitat. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. Any woody debris removed from the site should be placed in such a way that the wetlands are not impounded and the hydrological connections are not affected. The excavated depth is estimated to be 20 feet. There is currently access to the 18-acre site via Louisiana State Highway 23 (see drawing 1). The 27-acre site, located the farthest west of Louisiana Highway 23, can be accessed through a moderately improved shell and dirt road that bounds the northern side of the property and intersects Louisiana Highway 23 (see drawing 1).

**DESCRIPTION OF THE AREA:** The borrow location investigated is located within the footprint of the proposed Myrtle Grove Diversion Channel associated with the Myrtle Diversion Project presently under evaluation through the Coastal Wetlands Planning, Protection and Restoration Act (CWPPRA) and Louisiana Coastal Area (LCA) programs. The site is located near Myrtle Grove, Louisiana on the east bank of the Mississippi River. The location is south and on the protected side of the east bank (left descending bank) of the Mississippi River Flood Control Levee and immediately west of Louisiana State Highway 23. The proposed borrow site is located on the east bank of the Mississippi River between the Mississippi River Levee and the St Bernard Back Levee, west of Louisiana Highway 23.

The two tracts, totaling 45 acres, are well drained, maintained pasture. During and following the storms, the property was inundated (ponded) by several feet of water for a sufficient period to kill and rot most of the herbaceous vegetation. Vegetation consisted of Bermuda grass. Most other herbaceous vegetation was unrecognizable due to severe decomposition.

The site is under forced drainage and is dissected by two large canals with numerous small drainage swales leading to them. The canals are subject to Section 404 of the Clean Water Act. If it is necessary to place culverted crossings in these canals, they probably would qualify for a non-reporting Nationwide Permit 14 without mitigation. With the exception of the flooding/ponding that occurred during the storms, no evidence of hydrology indicative of a wetland was observed. The site exhibits the characteristics of cleared disturbed sites with no hydrological connections to water bodies, streams, or surrounding wetlands. A wetland evaluation of the site was made, and it was determined that the Myrtle Grove site is not a wetland subject to USACE jurisdiction except as noted above for the canals.

There is no cover for wildlife and little diversity in forage or browse. There was little evidence of wildlife in the area except rabbit, nutria, and a few wading birds in the canals. A few passerine birds and terrestrial meadowland species such as rodents may utilize the area. The canals in the area may provide feeding and resting areas for occasional wading birds or migratory species. Occasional deer may pass through the area when pasture is productive.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow site will result in converting a total of 45 acres of improved pasture to open water. The overall site is low habitat quality for most wildlife due to sparse cover and lack of mast bearing trees or browse.

During construction, there will be a possibility of increased levels of ambient dust and localized turbid runoff. This possibility is expected to be minimal, and the area currently has little to no population in the vicinity of the construction site. Runoff will be primarily captured in the pit. Turbidity control measures will be used to retain the runoff onsite within the pit to the maximum extent practicable. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence. A USACE archeologist noted a foundation remnant that will require further evaluation, but it appears to be out of the borrow site boundary and, therefore, out of the impacted area.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. The subject borrow site is located in a non-wetland area.

Borrow pit design will include irregular shorelines, peninsulas, and slope sufficiently shallow for both near edge and submergent vegetative growth to the greatest extent practicable. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas (peninsulas or beach) for wildlife. During

clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

Clearing at the site shall be limited to areas being used for access and the borrow area. The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed the water retention dikes are to be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues was noted from the initial site inspection. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control where practicable. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources. If potential historical sites are noted, they will be declared a no work zone, and the areas will be avoided.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action.

Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

A jurisdictional wetlands determination has been prepared, and it was determined that the Myrtle Grove site is non-wet and, therefore, not regulated by the 404 regulations or Section 10 of the Clean Water Act. Further coordination with the appropriate agencies will be completed through coordination of this report, and an "after the fact" 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed.

The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed as part of the “after the fact” environmental document. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies. The endangered species concurrence was received by e-mail dated December 12, 2005. In addition, the USFWS does support construction of the proposed environmental features noted for the pit to the greatest extent feasible.

The LDNR has no objection to the proposed activity, but their full authorization will follow the filing of a formal Consistency Determination as part of the “after the fact” environmental documentation.

Initially, there was concern for a potential historical site based on the presence of a building foundation within a small portion of the proposed borrow site. A representative of the USACE Cultural Resource section conducted a Phase I archeological investigation of the site. Based on the results of this investigation, the SHPO concurs by letter dated January 25, 2006 that no known archeological sites or historic properties will be affected by the project provided that the area containing the brick foundation is well marked and protected by a buffer zone encompassed in a no work area. This effect determination could change if new information is discovered. The determination of no affect was dated December 6, 2005.

## **SITE PHOTOS**



Myrtle Grove Site Overview



Structural foundation remains



Myrtle Grove Typical field drainage

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Woodlands Plantation Borrow Site Mississippi River and or New Orleans to Venice Protection Levees**

**January 3, 2006**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the Mississippi River levee in Plaquemines Parish or the New Orleans to Venice Hurricane Protection Levee System.

**PROPOSED ACTION:** The action will involve constructing three borrow pits on the Woodland Plantation site located 23 miles south of Belle Chase in Plaquemines Parish, Louisiana. The proposed action will affect a total of approximately 5 acres comprised of three sites (Area 1, approximately 1 acre; Area 2, approximately 1.7 acres; and Area 3, approximately 2 acres). Area 1 is cleared of trees and is maintained lawn associated with the Woodland Plantation grounds. Areas 2 and 3 are comprised of river batture currently strewn with uprooted or damaged willow and various types of flood-related debris ranging from trees and woody debris to miscellaneous house parts and construction materials that will need to be cleared from the site. These areas can be cleared with small bulldozers and backhoe. The cleared areas will be dewatered (Areas 2 and 3 only if necessary due to recent rainfall), cleaned, scraped, and grubbed with bulldozers and backhoe prior to excavation. The cleared material will be pushed into piles, used as wildlife cover if applicable, oriented to assist in runoff control, and placed in the pit to decrease the pit depth and create structure for fish habitat. Excavated overburden will be stockpiled onsite and used beneficially later as noted in the impact reduction section below. Any woody debris removed from the site should be placed so the wetlands are not impounded and the hydrological connections are not affected. The excavated depth is estimated to be 10 feet. There is currently access to the site via Louisiana State Highway 23.

**DESCRIPTION OF THE AREA:** The borrow sites are located adjacent to the Mississippi River Levee on the west bank of the Mississippi River south of Belle Chase, Louisiana. The three areas investigated are located on the site of Woodland Plantation, which is currently being used as a bed and breakfast establishment. The plantation is located between State Highway 23 and the Mississippi River Levee. Area 1 is maintained lawn grasses and may have at one time been pasture that was converted from sugar cane fields many years ago. This site is located on the natural river levee estimated to be approximately 4 feet above sea level. The site is bounded by State Highway 23 to the south and the old abandoned railroad embankment and the Mississippi River Levee to the north. The area is well drained, and no hydrological connections to wetlands or tidal waters are present. The vegetation is dominated by Bermuda Grass and other weed species typically found in lawns.

Area 1 has little wildlife value due to its constantly maintained condition and lack of cover, trees, and browse. The large grassed area may occasionally be used by some passerine birds for resting and opportunistic feeding. It may also be possible that some terrestrial meadowland species such as rodents may utilize the area.

Area 2 was initially dominated by Black Willow. It is an area that was excavated to a depth of approximately 5 feet in past. While it currently ponds 6-12 inches of water for 8-9 months of the year, it is not subject to Department of the Army regulation. It is a vegetated borrow pit excavated in non-wetlands that is not hydrologically connected to a water of the U.S. or to coastal waters that nourish wetlands.

There are no apparent hydrological connections to wetlands or coastal waters. The area has been previously disturbed (as noted by excavation) and the storm has uprooted, defoliated, and destroyed most of the standing trees. The understory and overstory have been severely damaged or destroyed. The wildlife value of this area is minimal at this time except for its usefulness as protective cover. There may be some passive usage by deer, raccoon or passerine birds moving through the area. Browse in the area is not supportive of significant wildlife.

Area 3 is similar to Area 2. Area 3 has been previously excavated, to a slightly shallower depth than Area 2, and ponds 4-8 inches of water for most of the year. The overstory is dominated by Black Willow, but Sugarberry also is a common component. Area 3 is a vegetated borrow pit excavated in non-wetlands that is not hydrologically connected to a water of the U.S. Area 3 was also heavily storm damaged, and the storm surge removed most of the overstory and understory. The amount of standing timber is somewhat greater than in Area 2. Like Area 2, the browse and any mast producing vegetation has been removed, and the wildlife value of the area is very minimal.

Both Areas 2 and 3 are bound by Mississippi River Levee to the north and the old abandoned railroad bed on the south. These sites are seasonally wet due to the impoundment of water during heavy rainfall events. There are no hydrological connections to either tidal waters or waters of the U.S. and therefore are not wetlands under the jurisdiction of the USACE.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow areas will result in converting 1 acre of maintained lawn to open water along and approximately 4 acres of willow river batture to open water. The overall site is low habitat quality for most wildlife due to sparse cover and lack of mast bearing trees or browse.

During construction there will be a possibility of increased levels of localized turbid runoff. Runoff will be primarily captured in the pit. Turbidity control measures will be used to retain the runoff onsite within the pit to the maximum extent practicable. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence. A

USACE archeologist onsite noted no cultural resources, remains, or artifacts in soil test holes dug to depths of 10 to 14 feet. The USACE archeologist will coordinate findings with the SHPO and possibly suggest that an archeologist observer be onsite during excavation.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. The subject borrow site is located in a non-wetland area.

Borrow pit design will include irregular shorelines, peninsulas, and slope sufficiently shallow for both near edge and submergent vegetative growth to the greatest extent practicable. Overburden material will be used, to the maximum extent practicable, to create fringe wetlands and resting areas (peninsulas or beach) for wildlife. During clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

Clearing at the site shall be limited to the areas being used for access and the borrow area. The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. Suggested shapes for the brush piles are 12-15 foot circles or rectangles 20-50 feet long by 10-15 feet wide to provide wildlife cover at sites 2 and 3. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes will be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues was noted from the initial site inspection. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control where practicable. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources. If potential historical sites are noted, they will be declared a no work zone, and the areas will be avoided.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents addressing the impacts of the emergency actions associated with the emergency levee repairs. The LDNR office will be notified of further changes if any occur and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An “after the fact” environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

A jurisdictional wetlands determination has been prepared, and it was determined that the Woodland Plantation sites are non-wet and, therefore, not regulated by the 404 regulations or Section 10 of the Clean Water Act. Further coordination with the appropriate agencies will be completed through coordination of this report, and an “after the fact” 404(b)(1) evaluation will be prepared and mitigation requirements provided if needed.

The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

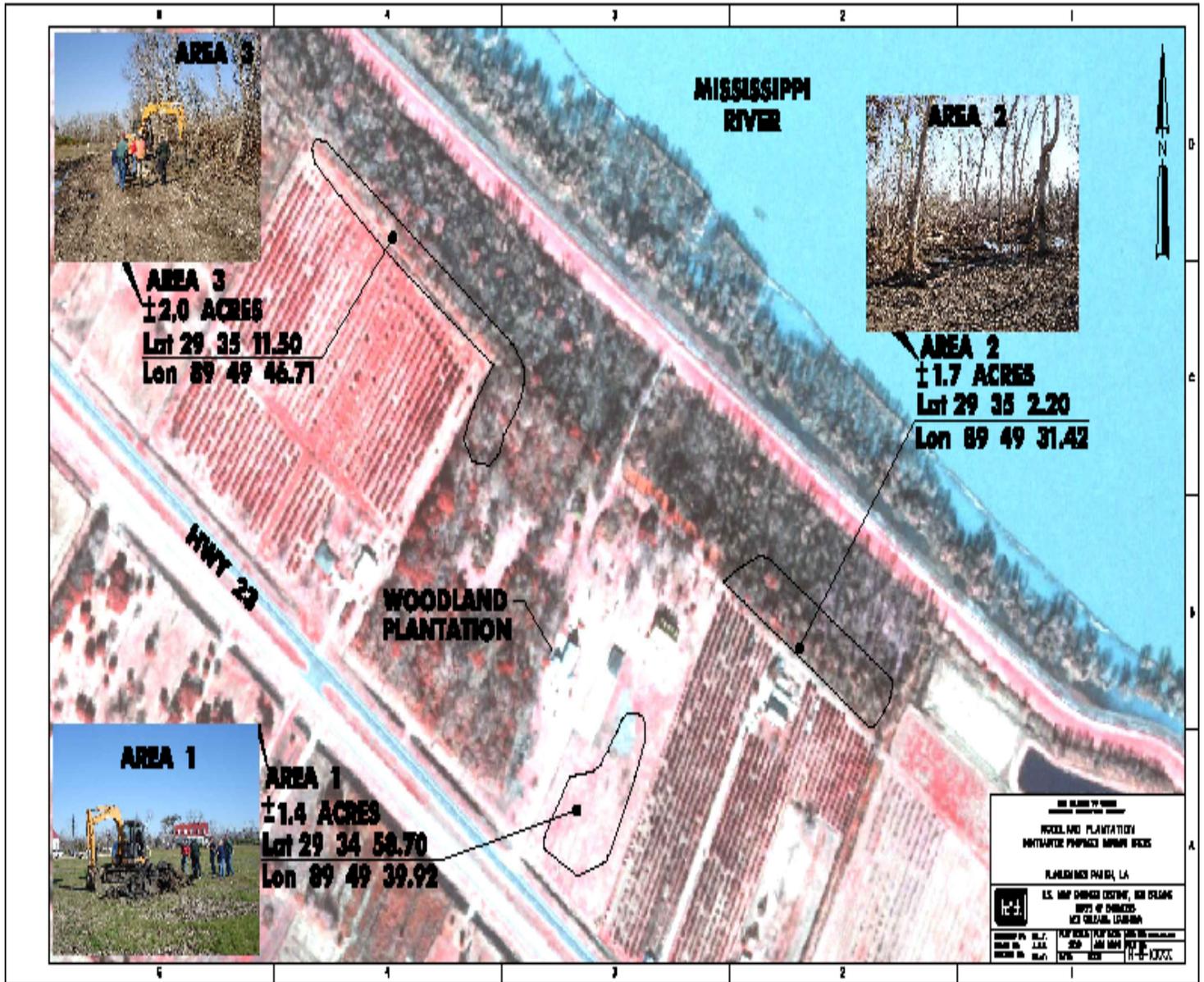
**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed as part of the “after the fact” environmental document. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be done as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** The NMFS has no objection to the proposed work since it would not adversely impact essential fish habitat and marine fishery resources and the area is not tidally influenced. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as noted in the e-mail statement dated January 5, 2006. In addition, the USFWS

does support incorporation of proposed environmental features into the borrow pit construction to the greatest extent feasible. Determination of mitigation needs will be addressed in the “after the fact” environmental documentation, and the type and amount of mitigation needed will be determined and initiated at that time. The LDNR has no objection to the proposed activity, but their full authorization will follow the filing of a formal Consistency Determination.

The Louisiana SHPO noted, by letter dated January 12, 2006, that since the proposed borrow was located on historic register property, at least a phase 1 archeological survey was required before a decision could be made to use the area. The USACE has abandoned this site since the small amount of material available from the site was not worth the risk and costs associated with the potential disturbance of cultural resources.

## **DETAILED SITE MAP**



# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Kenilworth Borrow Site St. Bernard Hurricane Protection Levees**

**February 7, 2006**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repair to the St. Bernard Hurricane Protection Levees (Federal or non-federal) in St. Bernard Parish, Louisiana.

**PROPOSED ACTION:** The action involves constructing a borrow pit on an 11.5-acre site near Kenilworth, Louisiana in St. Bernard Parish. The site is located on Bayou Road (13336) on the west bank of the Mississippi River between Bayou Road and the Verret to Caernarvon Hurricane Protection Levee and the Mississippi River Levee. The portion of the property closest to and fronting Bayou Road was comprised of home sites prior to Katrina, but presently only rubble and foundation piling remain on this portion of the site. The remainder of the site is open, maintained pasture with a 35-foot strip of wooded area on the eastern side of the property. The house originally at the front of the property was displaced approximately 200 feet behind its original location and is now located on the eastern boundary of the property. The house may need to be removed if the entire property is used for the pit. The small amount of clearing needed to remove the wooded strip could probably be done with small bulldozers and backhoe. The pit will be excavated to a depth of 20 feet. The cleared areas will be cleaned, scraped, and grubbed with bulldozers and backhoe prior to excavation. The cleared woody material will be pushed into piles and used as wildlife cover where possible. The woody debris and overburden should be placed in a manner that will not impact or impound wetlands. The woody debris should also be oriented so it may provide a buffer for site runoff. There is currently access to the site via Bayou Road. If any additional roads are needed, they should be constructed in non-wetland portions of the site.

**DESCRIPTION OF THE AREA:** The borrow site is located adjacent to the Verret to Caernarvon Hurricane Protection Levee (VCL). The area investigated is located on a former home site and an adjoining pasture.

The site varies in habitat type from the front of the property closest to Bayou Road to the back of the property closest to the VCL. In general, the site is drier toward the front of the property and becomes increasingly wet as the property approaches the VCL. The site has been previously disturbed as noted by excavation associated with the crawfish pond near the rear of the property and the converted pasture that makes up the majority of the property. The area has been drained, ditched, leveed, and placed under forced pump drainage.

Since this site is not homogeneous throughout, the following descriptions note the variations in habitat and vegetation type within the site.

**Site Segment A ranging from 0 to 2,200 feet south of Bayou Road (5.5 acres):** This is a well-drained portion of the site within a leveed and pumped area. This portion of the site is primarily cleared, mowed pasture. Herbaceous vegetation is dominated by common bermuda and other pasture grasses with some white clover, wild geranium, and smooth dock. The eastern 35 feet of this area has been allowed to return to trees and is populated by a young stand dominated by stems of American elm, sweetgum, Chinese tallow, and live oak. Scattered older stems of live oak and sweet pecan occur throughout. This area does not have any wetlands that are under USACE jurisdiction.

**Site Segment B ranging from 2200 ft –3200 ft south of Bayou Road (3 acres):** This is a partially drained portion of the site within a leveed and pumped area. This portion of the site is primarily cleared, mowed pasture with wetlands along the lateral and cross drains. Herbaceous vegetation is dominated by common Bermuda and other pasture grasses with some pennywort, ranunculus, and smooth dock. Scattered stems of bald cypress are present as well. The eastern 35 feet of this area is still in trees and is dominated by sugarberry, Drummond red maple, bald cypress, green ash, bitter pecan, and Chinese tallow. This site does contain wetlands subject to USACE jurisdiction.

**Site Segment C ranging from 3200 ft - 4200ft south of Bayou Road (3 acres):** This is a poorly drained portion of a site within a leveed and pumped area. This portion of the site is primarily a permitted crawfish pond. The pond is dominated by sedges with scattered bald cypress trees. The adjacent area is dominated by bald cypress, Drummond red maple, green ash, and bitter pecan, with the herbaceous layer dominated by sedges.

This portion of the site is a wetland subject to USACE jurisdiction. The levee for the crawfish pond is permitted fill in wetland. A change in use of this area would require approval of the USACE.

There are no apparent hydrological connections to wetlands or coastal waters. The area has been previously disturbed, and the storm has uprooted, defoliated, and destroyed some of the standing trees. The wildlife value of this area is minimal at this time except for its usefulness as protective cover along the treed edges. There may be some passive usage by deer, raccoon, wild hog, and rabbit moving through the area. Browse in the area is not supportive of significant wildlife.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow areas will result in converting approximately 5.3 acres of maintained open pasture, 3 acres of mixed wetlands (1 acre early successional bottomland hardwood and 2 acres of wet improved pasture), and 3 acres composed of an abandoned crawfish pond and improved wet pasture to open water. The overall site is low habitat quality for most wildlife due to sparse cover and lack of mast bearing trees or browse.

During construction, there will be a possibility of increased levels of localized turbid runoff. Runoff will be primarily captured in the pit. Turbidity control measures will be used to retain the runoff onsite within the pit to the maximum extent practicable. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the

results coordinated with the State Historic Preservation Officer (SHPO) for concurrence. A USACE archeologist onsite noted no cultural resources, remains, or artifacts. The USACE archeologist will coordinate findings with the SHPO and will do further investigations on the site if necessary.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. The USACE continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas. Part of the subject borrow site is located in low quality wetlands, and the remainder is in improved pasture. The entire sight has been disturbed, and portions have been developed as either residential or agricultural (cattle). The wetland functions are, for the most part, absent since the site has been ditched, leveed, and under pump.

During clearing operations, brush piles will be established for wildlife cover and arranged to filter runoff from the site to the maximum extent possible. These measures, along with silt screens and other alternatives, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water quality within the coastal zone.

Clearing at the site shall be limited to areas being used for access and the borrow area. The cleared trees will be placed perpendicular to the pit at 500-foot intervals around the perimeter of the pit. The remaining brush and trees should be placed in the deepest part of pit as brush piles.

After the borrow material has been removed, the water retention dikes are to be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where practicable.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues was noted from the initial site inspection. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control where practicable. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources. If potential historical sites are noted, they will be declared a no work zone, and the areas will be avoided.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and has complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the

National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An “after the fact” environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 of the Clean Water Act is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

A jurisdictional wetlands determination has been prepared, and it was determined that a 6-acre portion of the site is regulated by the 404 process and will require mitigation of the impacts of these wetlands. Approximately 5 acres of the site is non-wet and, therefore, is not regulated by the 404 regulations or Section 10 of the Clean Water Act. Further coordination with the appropriate agencies will be completed through coordination of this report, and an “after the fact” 404(b)(1) evaluation will be prepared and mitigation requirements provided as needed.

The site has been evaluated for the presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed as part of the “after the fact” environmental document. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but a further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** In their e-mail dated 9 March 7, 2006, the NMFS has no objection to the proposed work since the area affected is not tidally influenced, is not classified as an essential fish habitat, and provides no marine fishery resources support functions. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as stated in their February 10, 2006 e-mailed statement. In addition, the USFWS does support

incorporation of proposed environmental features into the borrow pit construction to the greatest extent feasible. The LDNR has no objection for the emergency activity. As stated in their February 15, 2006 e-mail, complete authorization from the LDNR will follow the submission of a formal Consistency Determination as part of the after the fact environmental documentation.

The SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project, as noted in their December ????? 2006 statement. This effect determination could change if new information is discovered.

**DETAILED VICINITY MAP AND  
DETAILED SITE PHOTOS**









# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation 2938 Bayou Rd Borrow Pit, St. Bernard St. Bernard Parish Hurricane Protection (Back Levee)**

**February 9, 2006**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency borrow for levee repairs to the St. Bernard Hurricane Protection Back Levee System.

**PROPOSED ACTION:** The action initially involves constructing one 6.3-acre borrow pit, with the potential for constructing an additional 11-acre pit if needed. The proposed borrow sites are located near Kenilworth in St. Bernard Parish, Louisiana. Site preparation would be minimal for both sites due to scarcity of trees. Almost the entire site is open pasture that can be cleared with small bulldozers. The cleared area will be cleaned, scraped, and grubbed with bulldozers and backhoe prior to excavation. Any cleared woody material will be pushed into piles, then used as wildlife cover, oriented to assist in runoff control, and placed in the pit to decrease the pit depth and create structure for fish habitat to the greatest extent allowable. The woody debris removed from the site should be placed so the wetlands are not impounded and the hydrological connections are not affected. The excavated depth is estimated to be 20 feet. There is currently access to the site via Bayou Road through Louisiana State Highways 46 and 39. If additional haul roads are needed, they will be sited on existing unimproved roads or old access routes within the property or in non-wetland areas to the greatest extent practicable.

**DESCRIPTION OF THE AREA:** The site is located near Kenilworth, Louisiana on the east bank of the Mississippi River (see attachments) south of Bayou Road between Bayou Road and the Federal Verret to Caernarvon Hurricane Protection Levee (VCL). The areas under consideration have been previously disturbed and are leveed, ditched, and under the influence of forced drainage (pump). There is no appearance of hydrological connections of either site to coastal waters or other wetlands.

The 6.3-acre site has been manipulated and disturbed as described above and currently is fallow pasture dominated by Bermuda grass and other improved species. A few live oaks are also present. This area is well drained by internal swales and a perimeter ditch. The area is under forced drainage, and with the exception of the flooding and or ponding that occurred during the storms, no evidence of hydrology indicative of a wetland was observed. The area exhibits the characteristics of cleared disturbed sites with no hydrological connections to water bodies, streams, or surrounding wetlands. A wetland evaluation of the site was made, and it was determined that this portion of the property is not a wetland subject to USACE jurisdiction under Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act of 1899.

The 11 acre site was the former site of a crawfish pond prior to Katrina. The site has been partially drained and is currently dominated by herbaceous vegetation that includes sicklepod, soft rush, cranesbill, and spotted medic. Wetland hydrology included soils saturated to the surface and an apparent water table at 8 inches. Sharkey soil, identified by the Natural Resources Conservation Service as a hydric soil, occurs throughout the site. This site is a wetland subject to USACE jurisdiction under Section 404 of the Clean Water Act.

There is limited cover for wildlife and little diversity in forage or browse. There was little to no evidence of wildlife in the area except rabbit, alligator, and occasional deer and wild hog. A few passerine birds and terrestrial meadowland species such as rodents may utilize the area, and occasional squirrels may use the areas where trees remain.

**IMPACTS OF THE PROPOSED WORK:** The proposed borrow site will result in converting a total of 6.3 acres of improved pasture and 11 acres of emergent wetlands (formerly crawfish pond bottom) to open water. The overall site is low habitat quality for most terrestrial wildlife due to sparse cover and lack of mast bearing trees. The former crawfish pond may provide some habitat for alligator, nutria, and occasional wading birds in its present state. The resulting borrow pit would still provide limited habitat for these species and possibly occasional migratory waterfowl and water side browsers such as raccoon.

Turbidity control measures will be used to retain the runoff onsite within the pit to the maximum extent practicable. If additional internal haul roads are needed, existing unimproved roads on the property may be upgraded, or new roads may be constructed in the adjacent non-wet area. The need for additional roads is expected to be minimal, and the area currently has little to no population in the vicinity of the construction site. Runoff will be primarily captured in the pit. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are expected, but they will be evaluated, and the results will be coordinated with the State Historic Preservation Officer (SHPO) for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands, and low value wooded wetlands and marsh fringes where possible. The current 6-acre site proposed for initial use is a non-wet pastureland that can be accessed through a non-wetland area, greatly reducing overall wetland impacts.

The 11-acre portion of the site is a previously disturbed site that has been used as a pond. This area is not considered a high quality wetland since it has been ditched, leveed, and forced drained. The USACE continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas.

Borrow pit design will include irregular shorelines, peninsulas, and slope sufficiently shallow for both near edge and submergent vegetative growth to the greatest extent

practicable. Overburden material will be used to the maximum extent practicable to create fringe wetlands and resting areas for wildlife. During clearing operations, brush pile will be established for wildlife cover. These brush piles should be placed downstream of site runoff or stockpile areas, where practicable, to aid with turbidity control. These measures, along with silt screens and other alternative, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

Clearing at the site shall be limited to areas being used for access and the borrow area. The woody debris will be placed to filter turbidity coming from the site and minimize erosion to the maximum extent possible. After the borrow material has been removed, the water retention dikes will be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit. A representative from the Ecological Planning and Compliance Branch will evaluate the site for a reforestation plan for all disturbed areas, areas where levees were degraded, newly created peninsulas, and all access routes utilized during the excavation project where allowable.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues is noted at this time. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no

threatened and endangered species or their habitat is affected by this action. Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and has put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of the review, the USACE has consulted the CZM surface alterations guidelines and has complied, to the maximum extent practicable, by utilizing overburden beneficially to create fringe wetlands and littoral shallows within the pit that may provide long-term benefit to fish and wildlife that may utilize the water's edge. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory routes. Unavoidable impacts will be mitigated as necessary in the "after the fact" environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the "after the fact" environmental compliance documents addressing the impacts of the emergency actions associated with the emergency levee repairs. The LDNR will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An "after the fact" environmental document will be prepared, addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted, to the maximum extent practicable, either in areas where there is prior National Environmental Policy Act (NEPA) documentation or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

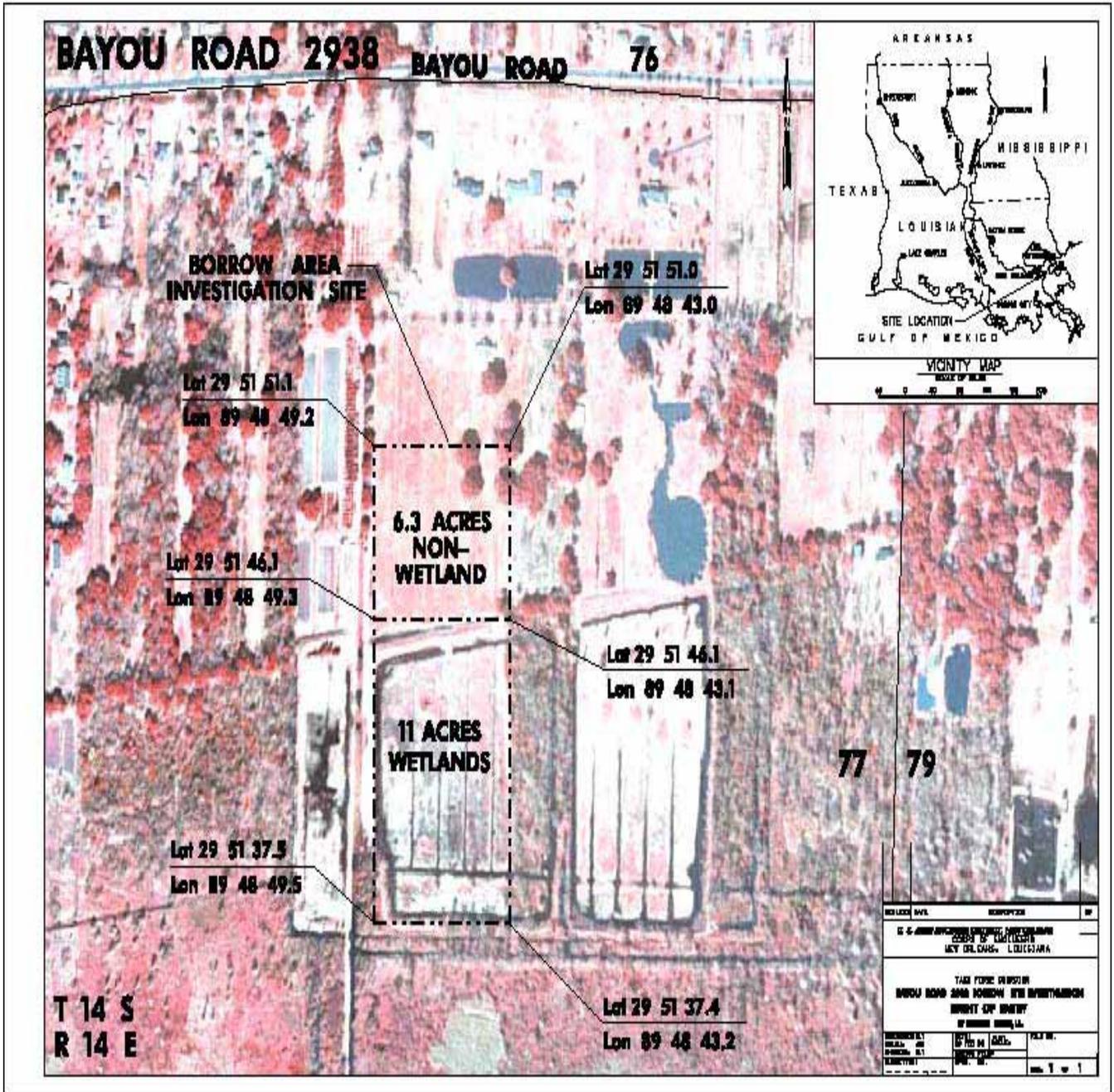
A jurisdictional wetlands determination has been prepared, and it was determined that the 6-acre portion of the 2938/2936 Bayou Road site is non-wet and, therefore, not regulated by the 404 regulations or Section 10 of the Clean Water Act. It was also determined that the proposed 11-acre portion of the site is a wetland, is regulated under the 404 process, and is under USACE jurisdiction. Further coordination with the appropriate agencies will be completed through coordination of this report, and an "after the fact" Section 404 evaluation will be prepared and mitigation initiated if the 11-acre site is used.

The site has been evaluated for presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is determined as part of the “after the fact” environmental document addressing emergency operations. The visual inspection revealed no cultural resource concerns, but further search of in-house data and maps is being performed, and findings will be coordinated with the Louisiana SHPO for final recommendations.

**AGENCY RESPONSES:** In their e-mail response dated February 10, 2006, the NMFS had no objection to the proposed work since the area affected is not tidally influenced and does not support NMFS trust resources. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as stated in their February 15, 2006 e-mailed statement. In addition, the USFWS does support incorporation of proposed environmental features into the borrow pit construction to the greatest extent feasible. The USFWS understands that mitigation for any impacts to wetlands or bottomland hardwoods would be addressed after the fact if necessary. The LDNR also has no objection for the emergency activity. Complete authorization from the LDNR will follow the submission of a formal Consistency Determination as part of the after the fact environmental documentation, as stated in the conversation with Jeff Harris on March 8, 2006. Mr. Harris advised his e-mailed statement would be forthcoming. In their February 15, 2006 statement, the SHPO concurred with the USACE that no known archeological sites or historic properties will be affected by the project as noted. This effect determination could change if new information is discovered.

**VICINITY MAP AND  
DETAILED SITE PHOTOS**





Overview of 6 acre non wetland piece of property



Remnant of crawfish pond



Overview from crawfish pond looking toward Bayou Rd.



Interior of crawfish pond

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Florissant Pit St. Bernard Hurricane Protection (Non-Federal Interior Levees)**

**March 8, 2006**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency Borrow for levee repairs to the St. Bernard Hurricane Protection Levee System.

**PROPOSED ACTION:** The action will involve constructing a 6.3 acre borrow pit in the area located off State Highway 46 near the community of Reggio in St. Bernard Parish, Louisiana. The majority of the site is open pasture mostly clear of trees with a scrub/shrub fringe which will have to be cleared of woody vegetation prior to use. The pasture area will require minor grubbing to prepare land for excavation. The wooded scrub/shrub areas will be cleared by bulldozer, and the cleared areas will be cleaned, scraped, and grubbed with bulldozers and backhoe prior to excavation. It is suggested that woody vegetation be pushed into piles to provide wildlife cover where possible. This material can also be oriented to assist in runoff control. The woody debris removed from the site should be placed so that wetlands are not impounded, hydrological connections are not affected, and sediment transport is not disrupted. The excavated depth is estimated to be 20 feet. No additional access roads are anticipated due to direct access to State Highway 46.

**DESCRIPTION OF THE AREA:** The site is located in a rural setting with sparse residential use on the area fronting Florissant Highway (State Highway 46) and the pastureland between the houses and the St. Bernard local hurricane protection levee near Reggio in St. Bernard Parish, Louisiana. The site has been previously excavated and currently contains a small, .1 acre test pit on the site. The property has been manipulated, ditched, drained, and pumped. The proposed borrow location has three north/south drainage ditches that intersect an east/west collection ditch located parallel and adjacent to the St. Bernard Parish local protection levee. There is no evidence that hydrologic connections to the river or other watercourses or wetlands exist under non-flood conditions. The proposed borrow site has been continually maintained as farmed grassland or improved pasture except for the scrub/shrub fringe, which has been allowed to revegetate with volunteer species indicated of manipulated and disturbed lands. The vegetation currently onsite is characteristic of manipulated land and is comprised of cleared pasture presently dominated by bahia grass, vassey grass, bermuda grass, and other improved pasture grasses (picture 1010003 poor). The scrub/shrub vegetation along the pasture's edge is as noted above, but was thinned due to blow over, erosion, and intense prolonged flooding and sedimentation. Presently dwarf palmetto is also noted, along with small occasional volunteer oaks, along the pasture scrub/shrub interface

(see scrub/shrub fringe pictures 1010008 and 1010005, attached). The vegetation in general was either heavily damaged or destroyed due to the prolonged flooding, defoliation, blow over, and heavy sediment deposition associated with Katrina (see pictures 1010004 and 1010008).

The site provides little to no cover for wildlife and little diversity in forage or browse. There was little to no evidence of wildlife in the area except possibly transient wild hog and rabbit using the area to access other areas that may provide better habitat. A few passerine birds and terrestrial meadowland species such as rodents may utilize the area, and occasional squirrels may use the areas where trees remain.

The current wetland evaluation for the property indicates that the area is classified as wetland. Based on the wetland designation of the site, the area would be within the jurisdictional wetlands of the USACE and would be subject to 404(b)(1) of the Clean Water Act depending on construction practices.

**IMPACTS OF THE PROPOSED WORK:** Approximately 6.3 acres of improved pasturelands would be converted to open water by the project. During construction, there will be a possibility of increased levels of ambient dust and localized turbid runoff. Turbidity control measures will be used to retain the runoff on site within the pit to the maximum extent practicable. If additional internal haul roads are needed, the new roads will either utilize existing pasture roads or attempt to use the highest land on the property to minimize wetland impacts. Following construction, roads should be removed and the ground elevations restored to pre-construction level. Depending on pit depth, some anoxic conditions could occur seasonally in the deeper portions of the pit. Cultural impacts are not expected, but they will be evaluated, and the results will be coordinated with SHPO for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of the environmental, engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub/shrub habitat, pasturelands and low value marsh fringes where possible. The current site, while considered a jurisdictional wetland, is a low quality wetland that has been previously manipulated, ditched, and drained. The habitat value is low, and the wetland functions of the property have been greatly reduced by manipulation over the years. Utilizing this low quality wetland prevents the more damaging alternative of obtaining borrow material from higher quality wetland sites. The USACE continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas. Preventative measures will be in place during construction to ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone.

During clearing operations, brush piles will be established for wildlife cover. These brush piles should be placed downstream of temporary stockpile areas, where practicable, to minimize site runoff and provide additional turbidity control. These measures, along with silt screens, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or waters within the coastal zone.

Clearing at the site shall be limited to the areas being used for access and the borrow area.

After the borrow material has been removed, the water retention dikes are to be degraded to elevation 0. An Environmental Planning and Compliance Branch representative will be notified by the Construction Division Contracting Office 30 days before the Contractor completes the final dressing of the borrow pit.

Surface alterations will be limited to only the area needed for the pit and will be constructed to minimize or avoid blocking or destroying hydrological connections, migratory routes, and large sediment releases into nearby streams, marshes, or water bodies. Upon completion of construction, the area will be seeded and planted to establish grasses that will reduce runoff. These measures, along with silt screens and brush pile filters, will help ensure that the construction does not adversely affect the hydrology, sediment transport, or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of hazardous or toxic materials. Assuring the absence of toxic waste prevents the construction of pits that may have water quality issues relating to unacceptable chemical constituents and ensures that there will be no toxic runoff associated with the levee material being provided from the pit. A hazardous, toxic, and radioactive waste (HTRW) assessment is presently ongoing, but no evidence of HTRW issues is noted at this time. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition, some woody debris will be placed around the pit for use as wildlife cover and turbidity control. After the construction has been completed, the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area will be consulted to gauge the potential of impact to known or unknown cultural resources.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action.

Additionally, the National Marine Fisheries Service (NMFS) is also reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the coastal zone management (CZM) guidelines for the state. The USACE has reviewed the applicable CZM guidelines pertinent to this activity and put preventive measures in place to avoid or minimize impacts to hydrology, discharges, or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied to the maximum extent practicable. Surface alterations resulting from borrow pit construction are sited, to the maximum extent practicable, to avoid draining, impounding, or filling of wetlands and to avoid critical wildlife habitat, vegetation, spawning areas, and migratory

routes. Unavoidable impacts will be mitigated to the extent required in the “after the fact” environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the coastal zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina-induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the “after the fact” environmental compliance documents addressing the impacts of the emergency actions associated with the emergency levee repairs. The LDNR office will be notified of further changes if any occur, and further immediate coordination will be initiated as needed.

The Louisiana SHPO was also consulted to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). If cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An “after the fact” environmental document will be prepared addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted to the maximum extent practicable in areas where there is either prior NEPA documentation, or in non-wetland areas where Section 404 is not applicable. If the emergency levee repair work does result in deposition of fill material into waters of the United States, a Section 404 evaluation and Public Notice would be prepared after the fact.

A jurisdictional wetlands determination has been prepared and a determination has been made that the Florissant Borrow Site is a wetland regulated by the 404 regulations of the Clean Water Act. Further Coordination with the appropriate agencies will be completed through coordination of this report and an “after the fact” 404(b) (1) evaluation will be prepared and the amount of mitigation required and location of the mitigation site will be determined.

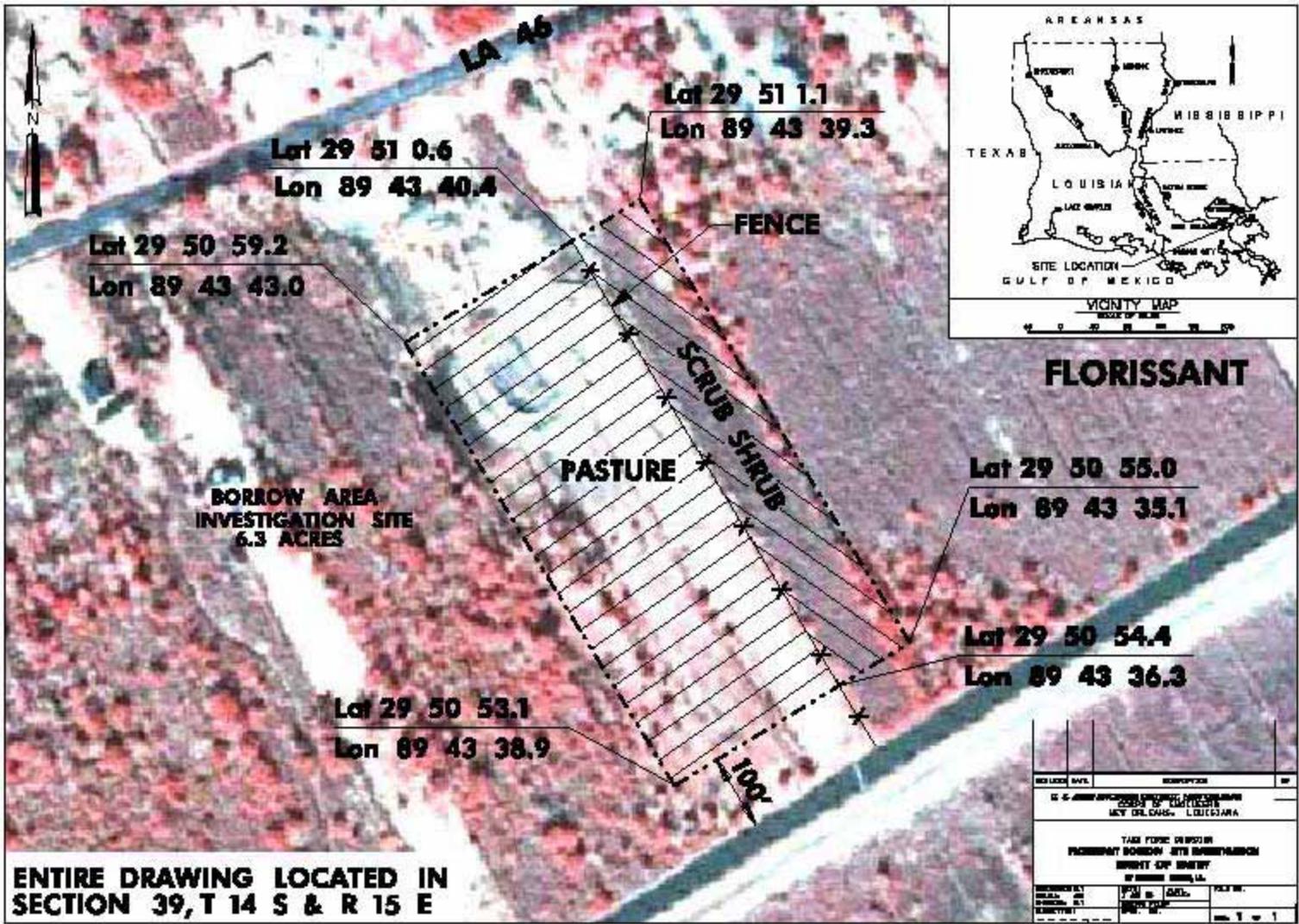
The site has been evaluated for presence of toxic waste, and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made, and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b)(1) of an existing USACE project will be evaluated as need is

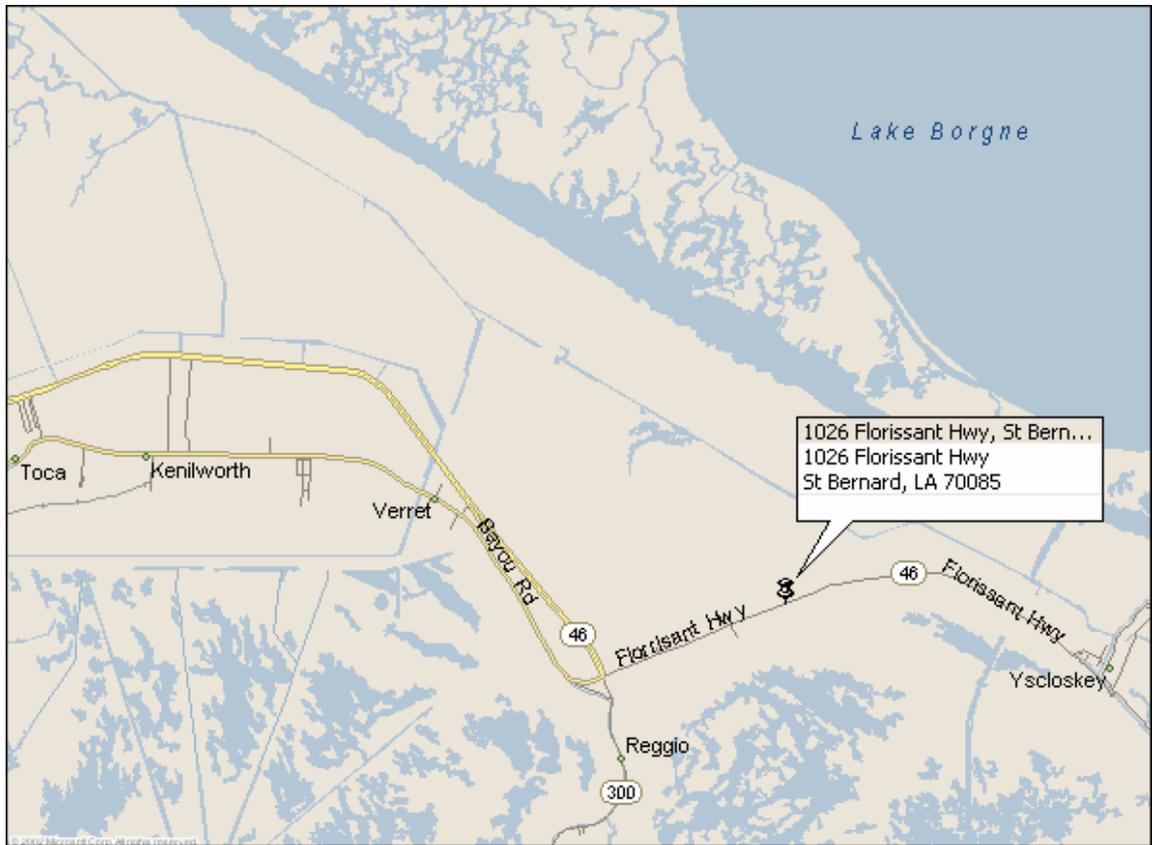
determined as part of the “after the fact” environmental document addressing emergency operations. In this case, the borrow site was evaluated, and mitigation will be required as noted above in the environmental compliance and coordination section.

**AGENCY RESPONSES:** In their e-mail response dated March 9, 2006, the NMFS has no objection to the proposed work since the area affected is not tidally influenced and does not support NMFS trust resources. The USFWS has reviewed the proposed project and noted that there would be no effect on Federal trust resources under their jurisdiction and currently protected by the Endangered Species Act of 1973 or on colonial wading bird colonies, as stated in their March 15, 2006 e-mailed statement. In addition, the USFWS does support incorporation of proposed environmental features into the borrow pit construction to the greatest extent feasible. The USFWS understands that mitigation for any impacts to wetlands or bottomland hardwoods would be addressed “after the fact” if necessary. The LDNR has no objection for the emergency activity. Complete authorization from the LDNR will follow the submission of a formal Consistency Determination as part of the “after the fact” environmental documentation, as noted in their March 14, 2006 e-mailed response statement. SHPO concurs with the USACE that no known archeological sites or historic properties will be affected by the project, as noted in their January 10, 2006 statement. This effect determination could change if new information is discovered.

**VICINITY MAP AND  
DETAILED SITE PHOTOS**



NO.	DATE	DESCRIPTION	BY
G. C. AND ASSOCIATES, INC. ENGINEERS 2004 P. LAFAYETTE NEW ORLEANS, LOUISIANA			
THIS FIGURE IS PART OF PROJECT NO. 00000000 SITE INVESTIGATION PROJECT OF THE OF THE STATE OF LOUISIANA			
PROJECT NO.	00000000	DATE	
DRAWN BY		CHECKED BY	
SCALE	AS SHOWN	DATE	
		SHEET NO. 1 OF 1	





**Scrub Shrub Edge Near the Field**



**Open Maintained Pasture**



**Sedimentation Within the Scrub Shrub Edge**

# **Environmental Coordination Report Post-Katrina Emergency Operations**

## **Borrow Pit Evaluation Citrus Lands Alternative Borrow Citrus Back Levee Plaquemines Parish (Non-Federal Interior Levees)**

**March 10, 2006**

**NEED:** The United States Army Corps of Engineers (USACE) is responding to an immediate need for emergency Borrow for levee repairs to the non-Federal Citrus Back Levee, which protects an essential hurricane evacuation route in Plaquemines Parish (Louisiana Highway 23).

**PROPOSED ACTION:** The action will involve constructing a 25-acre borrow pit in the area located off Louisiana Highway 23 near the community of Pointe Celeste in Plaquemines Parish, Louisiana. The majority of the site is open pasture with a scrub /shrub fringe which will have to be cleared of woody vegetation prior to use. The pasture area will require minor grubbing to prepare land for excavation. The scrub/shrub areas will be cleaned, scraped and grubbed with bulldozers and backhoe prior to excavation. It is suggested that woody vegetation be pushed into piles to provide wildlife cover where possible. This material can also be oriented to assist in runoff control. The woody debris removed from the site should be placed in such a way that wetlands are not impounded, hydrological connections affected or interfere with sediment transport. The excavated depth is estimated to be 20 feet. An access road is anticipated to access portions the site beyond Grand bayou. The contractor has been instructed to put in a culverted crossing where the bayou will be traversed to prevent interruption of flow. Upon completion of the job the culvert must be removed and elevations returned to pre construction conditions. Stockpile and soil processing areas if needed will be located on the non wet portion of the site. The material will be loaded by back hoe into "clay hauler" trucks and taken to the site of the north and south Citrus Lands Back levee repair near Pointe Celeste.

**DESCRIPTION OF THE AREA:** Due to the immediate need for repairing the leaking Citrus lands levee the contractor identified an alternate borrow site he negotiated with the landowner and began operations prior to our site visit. As a result of our site visit changes to his site development plan was required and mitigation will be required as discussed in the sections that follow. The site is located in a rural setting surrounded by pastureland. This 25 acre tract is located within the leveed and pumped Citrus Lands property in Section 14, T. 17 S., R. 26 E. It is dissected by several relatively shallow ditches that run perpendicular to LA 23. These ditches discharge into larger canals forming a forced drainage network. The site is on and immediately adjacent to the natural levee formed by Grand Bayou, a Water of the U.S. running through the property.

The tract was a well-maintained pasture that appears to have been grazed immediately prior to hurricane Katrina. During and following the storm the pasture lands were inundated by floodwaters from a breach in the south (back) Citrus Lands levee. Several inches of ponded water still covered the rear portion of the site. The property drops in elevation from north to south. The southernmost 50 to 150 feet is wetland pasture dominated by Bermuda grass and other improved species. With the exception of Grand Bayou, the remainder of the tract is upland pasture dominated by winter rye, buttercup, Bermuda grass, smooth dock, and white clover. Several large live oaks occur on the highest elevation of the natural levee adjacent to Grand Bayou. The area appears to have no natural hydrological connections to tidal water during normal non flood conditions.

During the field investigation it was noted that some initial excavation had begun including excavation and deposition/redistribution of fill material on the subject tract. Some of the excavated material had been deposited in wetlands for the construction of a borrow pit dike, and in the remnant of Grand Bayou to construct two unculverted access roads. Additionally, a considerable amount of fill material had been deposited in and immediately adjacent to Grand Bayou for stockpiling and processing. The contractor was instructed to remove the material from Grand Bayou and replace with culverts which will be removed after the work is complete. In addition the stockpile/soil processing area will be moved to a non wetland portion of the site.

The site provides little to no cover for wildlife with little diversity in forage or browse. There was little to no evidence of wildlife in the area excepting possibly transient wild hog and rabbit using the area to access other areas where that may provide better habitat. It is probable that a few passerine birds and terrestrial meadowland species such as rodents may utilize the area as well as occasional squirrels in the areas where trees remain.

The Citrus Lands Alternate Borrow Site contains approximately 1.4 acres of wetlands that are subject the Corps' jurisdiction under Section 404 of the Clean Water Act. Additionally, Grand Bayou is an "other water" of the U.S. and, therefore, also subject to Corps' regulatory authority.

**IMPACTS OF THE PROPOSED WORK:** Approximately 23.6 acres of improved pasturelands and 1.4 acres of wetlands would be converted to open water by the project. During construction there will be a possibility of increases in levels of ambient dust and localized turbid runoff. Turbidity control measures will be used to retain the runoff on site within the pit to the maximum extent practicable. Additional haul roads if needed will be constructed in the non wetland portion of the work area and board roads will be utilized to the greatest extent possible. Following construction roads will be removed and the ground elevations restored to pre-construction level. Depending on pit depth some anoxic conditions could occur seasonably in the deeper portions of the pit. No cultural impacts are expected but will be evaluated and the results will be coordinated with the SHPO for concurrence.

**REDUCTION AND AVOIDANCE OF IMPACTS:** Planning for borrow acquisition is being done by a multidisciplinary technical team that is aware of both environmental,

engineering, and cultural resource implications of locating borrow sources. Planning involves prioritizing acquisition of protected side borrow from upland scrub /shrub habitat, pasturelands and low value marsh fringes where possible. The current site which is improved pasture is non wet except for 1.4 acres of wetlands that are considered jurisdictional wetlands. These wetlands are considered low quality since they have been previously manipulated ditched and drained and afford very little mast production or cover for wildlife. The habitat value is low and the wetland functions of the property have been much reduced by manipulation over the years. Utilizing this low quality wetland prevents the more damaging alternatives of obtaining borrow material from higher quality wetland sites. The Corps continues to assess geotechnical conditions and seek additional borrow sites in non-wetland areas. In addition all sites are evaluated for the presence of Hazardous or Toxic materials that may be located in a proposed site. Preventative measures will be in place during construction that will assure that the construction does not adversely affect the hydrology, sediment transport or water within the coastal zone.

In addition where practicable, brush piles should be placed downstream of temporary stockpile areas to minimize site runoff and provide additional turbidity control. These measures along with silt screens will attempt to assure that the construction does not adversely affect the hydrology, sediment transport or waters within the coastal zone.

Clearing at the site shall be limited to areas being used for access and the borrow area.

After the borrow material has been removed the water retention dikes are to be degraded to elevation 0. Environmental Planning and Compliance Branch representative will be notified by Construction Division Contracting Office 30 days prior to completion of final dressing of borrow pit by Contractor.

Surface alterations will be limited to only the area needed for the pit and will be constructed in such a way to minimize or avoid the blocking or destruction of hydrological connections, migratory routes and large sediment releases into nearby streams, marshes or water bodies. Upon completion of construction the area will be seeded and planted to establish grasses that will reduce runoff. These measures along with silt screens and brush pile filters will attempt to assure that the construction does not adversely affect the hydrology, sediment transport or water within the coastal zone. Overburden or other dredged material will be placed in a manner as not to fill or impound wetlands or disrupt their hydrology.

The site is undergoing an evaluation for the presence of Hazardous or Toxic materials that may be located in a proposed site. The assurance of the absence of toxic waste prevents construction of pits that may have water quality issues relating to unacceptable chemical constituents, as well assuring that there will be no toxic runoff associated with the levee material being provided from the pit. An HTRW assessment is presently ongoing but no evidence of HTRW issues are noted at this time. Dust abatement will be implemented if necessary by altering truck speed in the work area or by wetting the area to control dust. Turbid runoff will be limited by the utilization of silt screens if necessary. In addition some woody debris will be placed around the pit for use as

wildlife cover and turbidity control. After the construction has been completed the bare ground areas will be seeded and fertilized to establish erosion control.

Maps and reports showing known cultural resources and previous cultural resource work in the area are consulted to gauge the potential of impact to known or unknown cultural resources.

**COORDINATION AND ENVIRONMENTAL COMPLIANCE:** This information is being provided to the United States Fish and Wildlife Service (USFWS) to ensure that no threatened and endangered species or their habitat is affected by this action.

Additionally, the National Marine Fisheries Service (NMFS) is reviewing this action to determine if any essential fish habitat will be impacted. The Louisiana Department of Natural Resources (LDNR) is also reviewing this action to determine consistency with the Coastal Zone Management (CZM) guidelines for the state. We have reviewed the applicable CZM guidelines pertinent to this activity, as well as put preventive measures in place to avoid or minimize impacts to hydrology, discharges or sediment distribution that may adversely affect the coastal waters within the coastal zone. As part of this review, the USACE has consulted the CZM surface alterations guidelines and complied to the maximum extent practicable. Surface alterations resulting from borrow pit construction are sited to the maximum extent practicable to avoid draining, impounding or filling of wetlands, as well as avoiding critical wildlife habitat, vegetation, spawning areas and migratory routes. Unavoidable impacts will be mitigated to the extent required in the “after the fact” environmental document that will address the impacts of the emergency operations. The above-mentioned measures have been initiated to minimize and avoid impacts to the Coastal Zone to the maximum extent practicable. It is understood that current time restraints associated with the Katrina induced emergency repairs may only allow an interim reply concerning coastal zone consistency issues. A complete Coastal Zone Consistency Determination will be prepared for review and included in the “after the fact” environmental compliance documents addressing the impacts of the emergency actions associated with the emergency levee repairs. The LDNR office will be notified of further changes if any occur and further immediate coordination will be initiated as needed.

Consultation is also undertaken with the Louisiana SHPO to determine that no existing or potential cultural resources are located within the proposed borrow area, in compliance with the National Historic Preservation Act (NHPA). In the case that cultural resources are known or suspected within proposed areas, steps are taken to document or avoid the cultural resource.

An “after the fact” environmental document will be prepared addressing borrow pit acquisitions along with other emergency operations. Borrow locations are being targeted to the maximum extent practicable in areas where there is either prior NEPA documentation, or in non-wetland areas where Section 404 is not applicable. However based on the wetland determination done for the site this work will impact 1.4 acres of wetlands as well as result in a temporary impact to a Water of the United States therefore a 404 evaluation will be prepared and included in the after the fact environmental documentation.. The wetland impacts will be evaluated and results coordinated with the

USFWS and appropriate mitigation will be determined. The site has been evaluated for presence of toxic waste and the risk is minimal to none. A preliminary Phase I Initial Site Assessment (ISA) for HTRW is ongoing. The risk of encountering HTRW for the proposed action is low to none based on preliminary results of the field investigation.

**ENVIRONMENTAL DOCUMENTATION:** Operating under Natural Disaster Procedures and in an emergency status for levee repairs, the USACE will prepare an “after the fact” environmental document that addresses impacts of all the emergency work including mitigation for unavoidable impacts incurred in accomplishing the emergency work. The State of Louisiana Department of Environmental Quality has provided an emergency waiver for water quality certification at this time. A preliminary site evaluation for the presence of HTRW has been made and an “after the fact” phase I assessment will be completed. As noted in the environmental compliance section above, borrow sources from an alternate site not originally covered by the environmental compliances for 404(b) (1) of an existing Corps project will be done as need is determined as part of the “after the fact” environmental document addressing emergency operations. In this case the borrow site was evaluated and mitigation will be required as noted above in the Environmental Compliance and Coordination Section noted above.

**AGENCY RESPONSES:** NMFS in their e-mail dated 13 March 2006 has no objection to the proposed work since the area affected is not tidally influenced and is not classified as an essential fish habitat and provides no marine fishery resources support functions.. The USFWS service has reviewed the proposed project and noted that there would be no effect on Federal trust resources under there jurisdiction and currently protected by the Endangered Species Act of 1973 or colonial wading bird colonies as stated in their 14 March 2006 e-mailed statement. In addition the USFWS does support incorporation of proposed environmental features into the borrow pit construction to the greatest extent feasible and acknowledge that “after the fact” mitigation will be initiated if required. Louisiana CMD has no objection to the emergency work at this time as long as the Corps is assuming responsibility for the impacts and mitigation will be implemented after the fact. Complete authorization from CMD will follow the submission of a formal Consistency Determination as part of the “after the fact” environmental documentation as stated in their 14 March 2006 e-mailed statement.

The SHPO concurs with the Corps that no known archeological sites or historic properties will be affected by the project as noted in their April 24, 2006. This effect determination could be changed should new information come to our attention.

**VICINITY MAP AND  
DETAILED SITE PHOTOS**





**Citrus Alternate Borrow  
Improved pasture prior to clearing near canal**



**Citrus Alternate Borrow**  
**Overview of cleared pasture and soil processing area**  
**Soil processing area will be moved**



**Material to be removed from Grand Bayou**



**Typical drainage ditch  
Looking south toward the Citrus lands back levee**



**Culverts to be placed at Grand Bayou crossings  
Fill will be remove and culverts placed  
Culverts will be removed**