

DRAFT Environmental Assessment
PORT FOURCHON

Lafourche Parish

FEMA-1603-DR-LA

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FEMA

U.S. Department of Homeland Security
Louisiana Transitional Recovery Office
New Orleans, Louisiana 70112

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LIST OF ACRONYMS

ABFE	Advisory Base Flood Elevation
APE	Area of Potential Effect
BMP	Best Management Practices
CAA	Clean Air Act
CBRA	Coastal Barrier Resources Act
CBRS	Coastal Barrier Resources System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CUP	Coastal Use Permit
CWA	Clean Water Act
CZMA	Coastal Zone Management Act
DFIRM	Digital Flood Insurance Rate Map
EA	Environmental Assessment
EDMS	Electronic Document Management System
EIS	Environmental Impact Statement
EO	Executive Order
EPA	Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
GOHSEP	Governor's Office of Homeland Security and Emergency Preparedness
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NOAA	National Oceanic & Atmospheric Administration
NRHP	National Register of Historic Places
NRCS	Natural Resources Conservation Service
OSHA	Occupational Safety and Health Act
PA	Public Assistance
RCRA	Resource Conservation and Recovery Act
RHA	Rivers and Harbors Act
SHPO	State Historic Preservation Office/Officer
US	United States
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
VRP	Volunteer Remedial Program

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**ENVIRONMENTAL ASSESSMENT
FOR
PORT FOURCHON
LAFOURCHE PARRISH, LOUISIANA
FEMA-1603-DR-LA**

1.0 INTRODUCTION

1.1 Project Authority

Hurricane Katrina, a Category four hurricane with a storm surge above normal high tide levels, moved across the Louisiana, Mississippi and Alabama gulf coasts on August 29, 2005. Maximum sustained winds at landfall were estimated at 140 miles per hour. President Bush declared a major disaster for the State of Louisiana due to damages from Hurricane Katrina and signed a disaster declaration (FEMA-1603-DR-LA) on August 29, 2005, authorizing the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide federal assistance in designated areas of Louisiana. FEMA proposes to administer this disaster assistance pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), PL 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA's Public Assistance Program to repair, restore and replace facilities damaged as a result of the declared event.

This Environmental Assessment (EA) has been prepared in compliance with the National Environmental Policy Act of 1969 (NEPA) the President's Council on Environmental Quality regulations implementing NEPA (40 CFR 1500-1508) and FEMA's regulations implementing NEPA (44 CFR Parts 9 and 10). The purpose of this EA is to analyze potential environmental impacts of the proposed project at Port Fourchon in Lafourche Parrish, Louisiana. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

1.2 Background

On August 29, 2005, high winds from Hurricane Katrina caused both storm surge and wave conditions in the extensive salt marsh areas surrounding Port Fourchon. Wave action carried sediment from the marsh area located to the north of the Port into the Port Fourchon area where the existing buildings, structures, and large land and water based equipment broke up the wave action causing the sediment to drop out of suspension. Large amount of sediment settled into Bayou Lafourche, the Flotation Canal, Slips A and B and the commercial marina. Additionally, Hurricane Katrina storm surges and wave actions eroded 20 to 35 linear feet of soil embankment from the southern embankment of the Mitigation Area (MA) forming the northern side of the Port's Flotation Canal. Port Fourchon is owned and operated by the Greater Lafourche Port Commission and is located on A. O. Rappelet Road, in Lafourche Parrish, Latitude 29.141984, Longitude -90.209151.

2.0 PURPOSE AND NEED

The northern bank of the flotation canal has lost significant amounts of soil material due to erosion as a result of Hurricane Katrina. In some places all bank material has been lost and the flotation canal is no longer separated from the mitigation marsh by embankment. Exchange of water between the flotation canal and mitigation marsh can lead to additional shoaling within the flotation canal. Additionally, since the northern bank has lost so much bank material there is less of a barrier to prevent sediment from washing into the flotation canal from subsequent storm events.

The Greater Lafourche Canal Port Commission has the responsibility of maintaining the Port and canal facilities at 24 feet in depth. The Port is a major hub servicing the offshore oil and gas industry and its uninterrupted operation is vital to the economy of the area. Due to the sediments deposited by Hurricane Katrina boats have been grounding because depths at the Port are no longer at the required 24 feet. The Port has received FEMA assistance to dredge the sediments from the canals but is seeking a long-term solution to storm related sedimentation of the Port's facilities.

3.0 ALTERNATIVES

3.1 Alternative 1 - No Action

Under this alternative, Port Fourchon would not stabilize the north bank of the flotation canal. This alternative would result in continued sedimentation within Port facilities during storm events and may result in interruptions of Port operations. Additionally, it is likely that the Port will continue to seek disaster assistance to help defray the cost of dredging the sediment from the Port's channels.

3.2 Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action)

Port Fourchon has prepared and submitted an application to FEMA for funding under FEMA's Public Assistance (PA) Program being administered in response to FEMA-1603-DR-LA. As a Section 406 Hazard Mitigation project, the applicant proposes to construct, a rip-rap (rock) revetment (wall) along the north shore of the flotation canal in order to stabilize the canal bank from subsequent erosion during storm events.

The proposed action includes the construction of a 5,500 linear foot rip-rap revetment along the north shore of the flotation canal. The rip-rap revetment would be constructed to elevation +3 Mean High Water (MHW) to deflect wave energy. The purpose of the rip-rap is to stabilize the north shoreline of the flotation canal from storm induced wave energy and prevent the shore from eroding and filling in the flotation canal shipping channel.

Construction of the rip-rap revetment will involve bringing in fill material (likely material dredged from the bottom of the flotation canal) to construct a base for the rock material.

This will involve filling in areas of existing wetland marsh. Additionally, because the flotation canal shoreline is not a uniform linear feature, areas of open water may need to be filled to above mean sea level to allow the rock revetment to be as linear as possible. It is estimated that approximately 3 acres of marsh and open water will be filled to construct the rip-rap revetment.

After an earthen base is constructed and compacted a geotextile fabric will be laid on the earth base to prevent it from being eroded by water. Large rocks will then be placed on the base. The rocks will be placed at approximately 1.5:1 slope to assist in dissipating wave energy along the entire rock face.

3.3 Alternative Eliminated From Further Consideration

Two alternatives considered were the restoration of the north bank as previously permitted by the United States Army Corps of Engineers (USACE) and the construction of a seawall instead of rip-rap revetment.

The alternative of restoring the north shoreline to the previously permitted design elevation of +2 MSL was not considered viable as future storm events may once again breach the bank and wash sediments into the flotation canal.

Additionally, the construction of a seawall along the north shoreline of the flotation canal was not considered viable because of potential for negative environmental effects. Seawalls deflect wave energy in a fashion that causes severe erosion on unprotected parcels directly adjacent to the wall. Also, severe scour can occur at the base of seawalls subjected to constant wave energy thus shortening the effective life of the wall. Additionally, seawalls do not provide opportunity for sea life habitat when compared to rip-rap revetments.

Because restoration to pre-disaster conditions would be ill-suited to meet the needs of the Port and the construction of a seawall has a potential negative environmental effect they are, not considered practicable alternatives and will not be studied in detail in this EA.

4.0 AFFECTED ENVIRONMENT AND IMPACTS

4.1 Geology and Soils

The geology of the proposed location predominantly consists of Holocene coastal marsh. Holocene coastal marsh consists of gray-to-black clays in places with thin peat beds, or bodies of brackish/salt-water (<http://www.lgs.lsu.edu>).

The topography of the area is generally flat. According to the United States Department of Agriculture (USDA), National Resources Conservation Service (NRCS) Web Soil Survey, the soil of the proposed site is Bellpass-Scatlake association which consists of poorly drained, very slowly permeable, semifluid organic and mineral soils that are

ponded or flooded most of the time. These soils are found in saline marshes. They are not considered a prime and unique soil.

The Farmland Protection Policy Act (FPPA) (7 U.S. Code 4201, et seq.) was enacted to minimize the unnecessary conversion of farmland to non-agricultural uses as a result of federal actions. The Act requires federal agencies to evaluate the adverse effects of their activities on prime and unique farmland. The Act requires federal agencies to consult with NRCS regarding impacts to prime and unique farmland, and farmland of statewide importance. Since the above referenced soils are not considered prime and unique by the NRCS there is no adverse effect on prime and unique farmland.

4.2 Water Resources and Water Quality

4.2.1 Surface Water and Groundwater

A site visit conducted by a FEMA Environmental Specialist on July 28, 2009 found that the project site is influenced by tidal waters from the Gulf of Mexico and freshwater flow from Bayou Lafourche. Surface water levels are dependent upon tidal fluctuations and freshwater inputs from upstream sources. Typically, high marshes adjacent to the project site at elevation +2 MSL are occasionally inundated, but not on a daily basis. Groundwater in the area is also dependent of the tidal cycle and freshwater flows.

Alternative 1 - No Action: The No Action alternative would have no impacts on surface and groundwater resources.

Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action): Construction of a rip-rap revetment is likely to increase short term sedimentation of surface waters directly adjacent to the project site. Additionally, fill material brought into the site should be clean and free of pollutants to ensure that pollutants in the fill do not cause surface water quality violations. A construction pollution prevention plan should be prepared and best management practices (BMP's) for surface water quality management should be implemented to minimize any detrimental effects to water quality during construction. Assuming that these mitigation measures are adhered to, impacts to local water quality are expected to be minor, localized and short-term in duration.

4.2.2 Wetlands

The United States Army Corps of Engineers (USACE) regulates the discharge of dredged or fill material into waters of the U.S., including wetlands, pursuant to Section 404 of the CWA. Wetlands are identified as those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. The USACE also regulates the building of structures in waters of the U.S. pursuant to Section 10 of the Rivers and Harbors Act (RHA). In addition, Executive Order 11990 of 44 CFR Part 9, Protection of Wetlands, directs federal agencies to

minimize the destruction, loss or degradation of wetlands and to preserve and enhance the values of wetlands for federally funded projects.

Review of aerial photographs of the proposed site, along with site visit on July 28, 2009 confirmed the presence of wetland marsh. At that time, FEMA determined that all vegetated and un-vegetated marsh areas appeared to be inundated by surface water with frequency sufficient to support vegetation and aquatic life typically adapted to life in saturated soil conditions. The USACE has claimed wetland jurisdiction over the project area through several permits issued for dredge and fill activities within the project area including a permit for the construction of the north bank of the flotation canal by the placement of spoil material (See *Appendix C*). Construction of the rip-rap revetment has been authorized by the USACE through permit numbers CX-19-980-1340-3 and MVN 2008-37 CZ. (See *Appendix C*)

Alternative 1 - No Action: The No Action alternative would have no effect on wetlands or other waters of the U.S. and would not require permits under Section 404 of the CWA or Section 10 of the RHA.

Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action): Construction at the proposed project site would result in adverse effects to the natural value of the approximately 3 acres of wetland. In accordance with Executive Order 11990, mitigation of potential adverse impacts to wetland functions and values were addressed by the applicant through wetland mitigation required by the USACE permits which include construction of wetland within the Port's mitigation marsh. The mitigation required by the USACE satisfies the requirements of Executive Order 11990.

4.2.3 Floodplain

In compliance with FEMA policy implementing Executive Order 11988, Floodplain Management, the project was reviewed for possible impacts associated with occupancy or modification to a floodplain. Lafourche parish is enrolled in the national flood insurance program (NFIP) as of 04/17/1985.

Alternative 1 - No Action: The No Action alternative would not result in impacts to the 100-year floodplain.

Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action): Per Preliminary Digital Flood Insurance Rate Map (DFIRM) panel number 22057C0900E, dated 07/30/08 the proposed project is located within an "AE (el 12)" zone, special flood hazard areas (SFHAS) subject to inundation by the 1% annual chance flood, base flood elevations determined. Project is addition of rip rap to embankment. The applicant is required to coordinate with local floodplain administrator regarding floodplain permit(s) prior to the start of any activities. Applicant is responsible for meeting all requirements of the permit(s). Per 44 CFR 9.12, a cumulative final public notice was published 10/26/2007.

4.3 Coastal Resources

Louisiana Department of Natural Resources (LDNR) regulates development in the designated coastal zone under the Coastal Zone Management Act (CZMA) of 1978. The Act established a system of Coastal Use Permits (CUP) to regulate uses and activities in the coastal zone. These permits are required for those projects which have a direct impact on coastal waters.

The United States Fish and Wildlife Service (USFWS) regulates federal funding in Coastal Barrier Resource System Units (CBRS) under the Coastal Barriers Resource Act (CBRA). The Act protects undeveloped coastal barriers and related areas (Otherwise Protected Areas) by prohibiting direct or indirect federal funding of projects in these areas that might support development. The purpose is to promote more appropriate use and conservation of coastal barriers along the Gulf of Mexico.

Alternative 1- No Action: The No Action alternative would have no effect on the coastal zone or the Coastal Barrier Resource System.

Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action): The proposed project is located in the designated Louisiana Coastal Management Zone. Louisiana Department of Natural Resources (LDNR) has determined that project is consistent with the Louisiana Coastal Resource Program through the issuance of Coastal Use Permit Numbers P20030916 and P20071234.

Port Fourchon is not part of a CBRS and thus CBRA does not apply.

4.4 Biological Resources

4.4.1 Flora and Fauna

An inspection of the proposed site was conducted on July 28, 2009. There was abundant marsh vegetation on the project site, including saltmarsh cordgrass (*Spartina alterniflora*) and black mangrove (*Avicennia germinans*). Typical fauna in this area include wading birds such as the great blue heron (*Ardea herodias*), white ibis (*Eudocimus albus*), least bittern (*Ixobrychus exilis*), great egret (*Ardea alba*), and roseate spoonbill (*Platalea ajaja*).

Alternative 1- No Action: The No Action alternative would have no effect on flora or fauna.

Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action): The construction of the rip-rap revetment would result in clearing and filling of marsh vegetation and disturbance of any wildlife species in the immediate area. Through consultation dated June 9, 2009, the Fish and Wildlife Service has determined that the proposed project may affect but is not likely to adversely affect fish and wildlife resources (see *Appendix B*). Additionally, through consultation with the National Marine

Fisheries Service (NMFS) has determined that the construction of the rip-rap revetment may impact Essential Fish Habitat (EFH) (see *Appendix B*). NMFS has required that fish dips be installed in the rip-rap revetment to allow passage of fish between the marsh area and flotation canal. With the requirement that fish dips be installed in the revetment, impacts to wildlife and vegetative resources is expected to minor and localized.

4.4.2 Threatened and Endangered Species

The Endangered Species Act (ESA) of 1973 prohibits the taking of all listed threatened and endangered species unless specifically authorized by permit from USFWS or the National Marine Fisheries Service. "Take" is defined as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect or attempt to engage in any such conduct." Harm is further defined by the ESA regulations to include significant habitat modification or degradation that results in death or injury to listed species by significantly impairing behavioral patterns such as breeding, feeding, or sheltering.

According to a summary list of federal threatened and endangered species from the USFWS, nine threatened and endangered species occur in Lafourche Parish. These species include the Green Sea Turtle (*Chelonia mydas*), Hawksbill Sea Turtle (*Eretmochelys imbricata*), Kemp's Ridley Sea Turtle (*Lepidochelys kempii*), Leatherback Sea Turtle (*Dermochelys coriacea*), Loggerhead Sea Turtle (*Caretta caretta*), Gulf Sturgeon (*Acipenser oxyrinchus desotoi*), West Indian Manatee (*Trichechus manatus*), Brown Pelican (*Pelecanus occidentalis*), and the Piping Plover (*Charadrius melodus*).

Alternative 1- No Action: The No Action alternative would have no effect on federal threatened or endangered species.

Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action): A site inspection conducted on July 28, 2009, did not indicate the presence of federal threatened and endangered species within the project area. Through consultation with USFWS dated June 9, 2009, the service stated that the proposed project may affect, by is not likely to affect the West Indian manatee and the Gulf Sturgeon. (see *Appendix B*).

4.5 Cultural Resources

Alternative 1 - No Action: The No Action alternative would not affect cultural resources at Port Fourchon.

Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action): The Scope of Work indicates ground-disturbing activity associated with the construction of the rip-rap revetment. Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and its implementing regulation, 36 CFR Part 800, FEMA conducted a historic review of the dredging of the Port Fourchon flotation canal and the placement of rip-rap along the northern bank of the canal. Upon review of data provided by the State Historic Preservation Office (SHPO), there are no known archaeological sites within the project Area of Potential Affect (APE). The nearest known site (16LF249), 0.8 miles

away, is not eligible for listing on the National Register of Historic Places. The soils within the Areas of Potential Effect (APE) consist of the Bellpass-Scatlake association, a series of poorly drained, semi-fluid, organic and mineral soils commonly found in saline marshes. These areas remain ponded or flooded most of the time and are in low lying positions distant from natural streams.

A site visit to the project area was conducted on July 28, 2009 by FEMA archaeologist Hanan Browning and Environmental Specialist Ted Murray. The APE consists of a regularly dredged flotation canal, and heavily disturbed bank line. This bank has been shaped and built up with dredge spoil over the years and appears to be entirely man-made. No archaeological resources or *Rangia* shell deposits were noted within the project area during this site visit and all work will occur within previously disturbed ground. Therefore, the scope of work meets the criteria in FEMA's Louisiana Statewide Programmatic Agreement (PA) dated December 3, 2004, Appendix A: Programmatic Allowances, Item I, Section A, L, and N. In accordance with this PA, FEMA is not required to consult with the SHPO where work performed meets these criteria. The applicant must comply with the Louisiana Unmarked Burial Sites Preservation Act (R.S. 8:671 et seq.) and the Inadvertent Discovery Clause.

The following procedure applies to unanticipated archaeological discoveries: If during the course of work, archaeological artifacts (prehistoric or historic) or human remains are discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The applicant shall inform their Public Assistance (PA) contacts at FEMA, who will in turn contact FEMA Historic Preservation (HP) staff. The applicant will not proceed with work until FEMA HP completes consultation with the SHPO. In addition, if unmarked graves are present, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The applicant shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The applicant shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery. Failure to comply with these stipulations may jeopardize receipt of FEMA funding.

4.6 Air Quality

The Clean Air Act (CAA) of 1963, as amended, provides for federal protection of air quality by regulating air pollutant sources and setting emissions standards for certain air pollutants. Under CAA, states adopt ambient air quality standards in order to protect the public from potentially harmful amounts of pollutants. The United States Environmental Protection Agency (EPA) has designated specific areas as National Ambient Air Quality Standards (NAAQS) attainment or non-attainment areas. Non-attainment areas are any areas that do not meet the quality standard for a pollutant, while attainment areas do meet ambient air quality standards. According to EPA, Lafourche Parish is an attainment area (EPA 2008).

Alternative 1- No Action: The No Action alternative would have no effect on air quality.

Alternative 2 – Construction of a Rip-rap – (Proposed Action): Particulate emissions from the generation of fugitive dust during project construction would be increased temporarily in the immediate project area as a result of this alternative. Other emission sources on site would be internal combustion engines and heavy construction equipment. These effects would be localized and of short duration.

To reduce potential short term effects to air quality from construction related activities, the contractor should be responsible for using BMP's to reduce fugitive dust generation and diesel emissions.

4.7 Noise

Noise is generally described as unwanted sound. Lafourche Parish limits noise from industrial related activities including construction to 75 decibels (db) at all times during the day and night. Permits can be granted for temporary construction activities that exceed the noise limits prescribed by Parish codes.

Alternative 1 - No Action: The No Action alternative would have no effect on noise in the associated areas.

Alternative 2 – Construction of a Rip-rap Revetment – (Proposed Action): Construction of a rip-rap revetment would result in a slight increase in noise as a result of construction equipment and vehicular activity. There are no noise sensitive receptors (i.e. hospitals, schools, churches) in or adjacent to the project area. Although the proposed action would result in increased noise during construction, the noise is expected to be minor, localized, and short term.

4.8 Traffic

The proposed construction site can not be accessed by vehicular traffic. Crews working on the project and trucks delivering supplies for the project will access Port Fourchon on A. O. Rappelet Road.

Alternative 1- No Action: The No Action alternative would have no effect on traffic.

Alternative 2 – Construction of Rip-rap Revetment – (Proposed Action): Construction at the proposed project site would have a temporary effect on traffic by increasing the number of trucks and heavy machinery on A. O. Rappelet Road. Construction traffic should be closely monitored and controlled as appropriate. All construction activities should be conducted in a safe manner in accordance with Occupational Safety and Health Act (OSHA) requirements.

Project implementation will not result in a permanent increase of traffic on surrounding roadways.

4.9 Safety

Safety and security issues that were considered include the health and safety of area residents, the public at-large, the population that would utilize the Port facility, and the protection of personnel involved in activities related to implementation of the proposed project.

Alternative 1 - No Action: The No Action alternative would have no effect on the general safety of the residents of Lafourche Parish.

Alternative 2 – Construction of Rip-Rap Revetment – (Proposed Action): The construction of the rip-rap revetment is not likely to result in adverse effects to the safety of residents of Lafourche Parish.

The safety of workers involved with project implementation will be dependent on the policies of the contractor firms and the experience of the workers and supervisors. Contractors should ensure compliance with all state and federal occupational safety regulations.

4.10 Hazardous Materials

The management of hazardous materials is regulated under various federal and state environmental and transportation laws and regulations, including the Resource Conservation and Recovery Act (RCRA); the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); the Emergency Response and Community Right-to-Know Act; the Hazardous Materials Transportation Act; and the Louisiana Voluntary Investigation and Remedial Action statute. The purpose of the regulatory requirements set forth under these laws is to ensure the protection of human health and the environment through proper management (identification, use, storage, treatment, transport, and disposal) of these materials. Some of these laws provide for the investigation and cleanup of sites that have already been contaminated by releases of hazardous materials, wastes, or substances.

This section describes the potential for prior releases of hazardous materials to the environment on the proposed site or close enough to the proposed site to have affected its surface soils or subsurface media (soils and groundwater). This EA also evaluates the potential for the proposed project to use hazardous materials, generate hazardous wastes, and release hazardous substances.

A database search conducted for the proposed project site revealed that there are no Louisiana Volunteer Remedial Program (VRP)/Brownfield sites located on or within one mile of the proposed site. No sites of concern were found during a review of other hazardous waste management and disposal, solid waste disposal, storage tank, enforcement, and other databases of the proposed site. There are no recorded oil and gas wells on the proposed property; however, the nearest well is approximately 1.3 miles away.

A search of Louisiana Department of Environmental Quality (LDEQ) Liquid Underground Storage Tanks (LUST) database revealed no recorded LUST sites within one mile of the site. There are several waste water dischargers, large and small quantity hazardous materials generators and petroleum bulk storage/terminals within one mile of the site, however, there is no indication that any of these sites have impacted the proposed site. A search of the LDEQ Electronic Document Management System (EDMS) database revealed no other sites of obvious concern within one mile of the site. A hurricane debris burn site is located approximately 0.75 miles south of the proposed site however, the site was only used to burn vegetation.

Alternative 1- No Action: The No Action alternative would not disturb any hazardous materials or create any potential hazard to human health.

Alternative 2 –Construction of a Rip-rap Revetment– (Proposed Action): Findings indicate that no hazardous materials, wastes, or substances (including contaminated soil or groundwater) appear to be present at the proposed site. If hazardous constituents are unexpectedly encountered in the project area during the proposed construction operations, appropriate measures for the proper assessment, remediation and management of the contamination should be initiated in accordance with applicable federal, state, and local regulations.

Project construction will involve the use of hazardous materials (e.g., petroleum products, cement, caustics, acids, solvents, paint, electronic components, pesticides/herbicides and fertilizers, treated timber) and may result in the generation of small volumes of hazardous wastes. Appropriate measures to prevent, minimize, and control spills of hazardous materials should be taken, and any hazardous and non-hazardous wastes generated should be disposed of in accordance with applicable federal, state, and local requirements.

4.11 Environmental Justice

Executive Order 12898, entitled “Federal Action to Address Environmental Justice in Minority Populations and Low- Income Populations,” mandates that federal agencies identify and address, as appropriate, disproportionately high and adverse human health or environmental effects of programs on minority and low-income populations.

According to the 2000 U.S. Census, 87.4 percent of the population of the community in the vicinity of Port Fourchon is Caucasian, 0.7 percent is African American, 10.8 percent is American Indian, and 1.2 percent is Hispanic. The median family income in 1999 was \$33,657, and 20.1 percent of families earn below the poverty level.

Alternative 1- No Action: The No Action alternative would not have an adverse or disproportionate impact on minority or low-income populations.

Alternative 2 – Construction of a Rip-rap Revetment (Proposed Action): Construction of a rip-rap revetment would not have adverse or disproportionate impacts on low-income

or minority populations. The Port is a major employer in Lafourche Parish and the revetment will facilitate Port operations.

5.0 CUMULATIVE IMPACTS

Cumulative impacts are those effects on the environment that result from the incremental effect of the action when added to past, present, and reasonably foreseeable future actions, regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. There are no other known projects that, when added to the proposed project, would be expected to have a cumulative impact on the human and natural environment.

6.0 CONDITIONS AND MITIGATION MEASURES

Based upon the studies and consultations undertaken in this EA, several conditions must be met and mitigation measures must be taken by the applicant prior to and during project implementation.

- Applicant must be issued USACE permit No. MVN 2008 – 37 CZ prior to initiating work. All coordination pertaining to these activities should be documented and copies forwarded to the state and FEMA as part of the permanent project files.
- A storm water pollution prevention plan should be prepared and BMP's for storm water management should be implemented to minimize any detrimental effects to water quality during project implementation.
- The applicant shall implement construction best management practices for equipment and materials storage and construction activities (including equipment and materials staging) to prevent erosion and sedimentation to surrounding, nearby, or adjacent wetlands. These measures are to ensure that wetlands are not adversely affected per the Clean Water Act or Executive Order 11990.
- If during the course of work, archaeological artifacts (prehistoric or historic) or human remains are discovered, the applicant shall stop work in the vicinity of the discovery and take all reasonable measures to avoid or minimize harm to the finds. The applicant shall inform their Public Assistance (PA) contacts at FEMA, who will in turn contact FEMA Historic Preservation (HP) staff. The applicant will not proceed with work until FEMA HP completes consultation with the SHPO. In addition, if unmarked graves are present, compliance with the Louisiana Unmarked Human Burial Sites Preservation Act (R.S. 8:671 et seq.) is required. The

applicant shall notify the law enforcement agency of the jurisdiction where the remains are located within twenty-four hours of the discovery. The applicant shall also notify FEMA and the Louisiana Division of Archaeology at 225-342-8170 within seventy-two hours of the discovery. Failure to comply with these stipulations may jeopardize receipt of FEMA funding.

- To reduce potential short term effects to air quality from construction related activities, the contractor is responsible for using Best Management Practices to reduce fugitive dust generation and diesel emissions.
- All construction activities should be conducted in a safe manner in accordance with OSHA requirements.
- If hazardous constituents are unexpectedly encountered in the project area during the proposed construction operations, appropriate measures for the proper assessment, remediation and management of the contamination should be initiated in accordance with applicable federal, state, and local regulations.
- Appropriate measures to prevent, minimize, and control spills of hazardous materials should be taken, and any hazardous and non-hazardous wastes generated should be disposed of in accordance with applicable federal, state, and local requirements.
- All construction should be coordinated with the local floodplain administrator and comply with floodplain ordinance. All permits and certificates, and all coordination pertaining to these permit(s), should be documented and provided to the local floodplain administrator, to Louisiana Governor's Office of Homeland Security and Emergency Preparedness (LA GOHSEP) and to FEMA as part of the permanent project file.

7.0 PUBLIC INVOLVEMENT

The public has been notified of the proposed rip-rap projects through the USACE public notice process for permit numbers CX-19-980-1340-3 and MVN 2008-37 CZ. A copy of the most recent USACE public notice is attached to this EA. (See *Appendix C*). FEMA is also inviting the public to comment on the proposed action during a fifteen (15) day comment period. A public notice has been published in the local newspaper, the *Daily Comet* and the *Times Picayune*, announcing the availability of this EA for review at FEMA's website www.fema.gov/plan/ehp/envdocuments/ea-region6.shtm. A copy of the Public Notice is attached in Appendix D.

8.0 AGENCY COORDINATION

As part of the development of early interagency coordination related to the proposed action, state and federal resource protection agencies were contacted. These agencies include State Historic Preservation Officer, United States Fish and Wildlife Service, Natural Resources Conservation Service, the Governor's Office of Homeland Security and Emergency Preparedness, Louisiana Department of Environmental Quality, United States Environmental Protection Agency, Louisiana Department of Natural Resources, United States Army Corps of Engineers, and National Oceanic & Atmospheric Administration National Marine Fisheries Service. FEMA has received no objections to the project as proposed subsequent to these notifications.

9.0 CONCLUSION

Based upon the studies and consultations undertaken in the preparation of this EA, and given the precautionary and mitigating measures, there do not appear to be any significant environmental impacts associated with the construction of a rip-rap revetment at the proposed location.

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Figure 1 - Location of the Rip-rap Revetment

