

**DRAFT INDIVIDUAL ENVIRONMENTAL REPORT
SUPPLEMENTAL**

**LA BRANCHE WETLANDS LEVEE
LPV 04.2B ACCESS ROAD AND DITCH RELOCATION
ST. CHARLES PARISH, LOUISIANA**

IERS 1b



**US Army Corps
of Engineers®**

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1.0 INTRODUCTION

The U.S. Army Corps of Engineers (USACE), Mississippi Valley Division, New Orleans District (CEMVN), has prepared this draft Individual Environmental Report Supplemental #1b (Draft IERS #1b) to evaluate the potential impacts associated with the relocation of the access road for levee reach 1B from I-310 floodwall to the Walker drainage structure. In 1999 the access road was inadvertently constructed partially on privately owned land. The landowners would like full access to their land for development and are therefore not willing to sell this small portion separately. The road relocation would also require a shift in location of a small drainage ditch.

Draft IERS #1b has been prepared in accordance with the National Environmental Policy Act (NEPA) of 1969 and the Council on Environmental Quality's Regulations (40 Code of Federal Regulations [CFR] § 1500-1508), as reflected in the USACE Engineering Regulation, ER 200-2-2. The execution of an IER, in lieu of a traditional Environmental Assessment (EA) or Environmental Impact Statement (EIS), is provided for in ER 200-2-2, Environmental Quality (33 CFR §230) Procedures for Implementing the NEPA and pursuant to the Council on Environmental Quality (CEQ) NEPA Implementation Regulations (40 CFR §1506.11).

The CEMVN implemented alternative arrangements on March 13, 2007, under the provisions of the CEQ Regulations for Implementing the NEPA (40 CFR §1506.11). This process was implemented in order to expeditiously complete environmental analysis for any changes to the authorized system and the 100-year level of the Hurricane and Storm Damage Risk Reduction System (HSDRRS) (formerly known as the Hurricane Protection System) authorized and funded by Congress and the Administration. The proposed actions would be located in southeastern Louisiana and would be part of the Federal effort to rebuild and complete construction of the HSDRRS in the New Orleans Metropolitan area as a result of Hurricanes Katrina and Rita. The alternative arrangements can be found at www.nolaenvironmental.gov, and are herein incorporated by reference.

The draft IERS is being distributed for a 30-day comment period. A public meeting will be held if requested by the stakeholders during the 30-day comment period. Any comments received during the public meeting will be considered as part of official record. After the 30-day comment period and a public meeting, if requested, the CEMVN District Commander will review all comments received and make a determination if they rise to the level of being substantive in nature. If comments are not considered to be substantive, the District Commander will make a decision on the proposed action. This decision will be documented in the form of an IER Decision Record. If comments are determined to be substantive in nature an addendum to the Draft IERS will be prepared and published for an additional 30-day public comment period. After the expiration of the public comment period the District Commander will make a decision on the proposed action. The decision will be documented in the form of an IER Decision Record.

On June 9, 2008, the CEMVN Commander signed the Decision Record for IER #1. On June 29, 2009, the CEMVN Commander signed the Decision Record for IERS #1a. IER #1 and IERS #1a are incorporated by reference into this supplemental document. Copies of the documents and

other supporting information are available upon request or at www.nolaenvironmental.gov. This supplemental document has been prepared to address the proposed modification to the Government's approved plan.

1.1 PURPOSE AND NEED FOR THE PROPOSED ACTION

The purpose of the action as described in IER #1 and IERS #1a is to provide 100-year level of risk reduction for St. Charles Parish, Louisiana (LA). The term "100-year level of risk reduction" refers to a level of protection that reduces the risk of hurricane surge and wave-driven flooding that the New Orleans Metropolitan area has a 1 percent chance of experiencing in any given year.

The purpose of the proposed action is to provide appropriate access to the 1B levee reach for maintenance and future levee lifts. The term appropriate speaks to the need for the access road to be relocated within the existing Pontchartrain Levee District (PLD) easement and off of privately owned land.

1.2 AUTHORITY FOR THE PROPOSED ACTION

The authority for the proposed action was provided as part of a number of hurricane risk reduction projects spanning southeastern Louisiana, including the LPV Hurricane Protection Project and the West Bank and Vicinity (WBV) Hurricane Protection Project. Congress and the Administration granted a series of supplemental appropriations acts following Hurricanes Katrina and Rita to repair and upgrade the project systems damaged by the storms that gave additional authority to the USACE to construct 100-year HSDRRS projects.

The LPV project was authorized under the Flood Control Act of 1965 (P.L. 89-298, Title II, Sec. 204) which authorized a "project for hurricane protection on Lake Pontchartrain, Louisiana ... substantially in accordance with the recommendations of the Chief of Engineers in House Document 231, Eighty-ninth Congress." The original statutory authorization for the LPV Project was amended by the Water Resources Development Acts (WRDA) of 1974 (P.L. 93-251, Title I, Sec. 92); 1986 (P.L. 99-662, Title VIII, Sec. 805); 1990 (P.L. 101-640, Sec. 116); 1992 (P.L. 102-580, Sec. 102); 1996 (P.L. 104-303, Sec. 325); 1999 (P.L. 106-53, Sec. 324); and 2000 (P.L. 106-541, Sec. 432).

The Department of Defense, Emergency Supplemental Appropriations to Address Hurricanes in the Gulf of Mexico, and Pandemic Influenza Act of 2006 (3rd Supplemental - P.L. 109-148, Chapter 3, Construction, and Flood Control and Coastal Emergencies) authorized accelerated completion of the project and restoration of project features to design elevations at full Federal expense. The Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery of 2006 (4th Supplemental - P.L. 109-234, Title II, Chapter 3, Construction, and Flood Control and Coastal Emergencies) authorizes construction of a 100-year level of protection; the replacement or reinforcement of floodwalls; the construction of permanent closures at the outfall canals; the improvement of the Inner Harbor Navigation Canal (IHNC); and the construction of levee armoring at critical locations. Additional Supplemental Appropriations include the U.S. Troop Readiness, Veterans' Care, Katrina Recovery, and Iraq

1.3 PRIOR REPORTS

- On March 22, 2011, the CEMVN signed a Decision Record on IERS #11.c (Tier 2 Borgne-IHNC) entitled “Improved Protection on the Inner Harbor Navigation Canal, Orleans and St. Bernard Parishes, Louisiana.” The document was prepared to evaluate potential impacts associated with the construction of those actions approved in IER #11 Tier 2 Borgne, with the exception of expanded size of the access channel due to erosion of the bankline.
- On November 29, 2010, the CEMVN Commander signed a Decision Record on IERS #11.b (Tier 2 Borgne-IHNC) entitled “Improved Protection on the Inner Harbor Navigation Canal, Orleans and St. Bernard Parishes, Louisiana.” The document was prepared to evaluate potential impacts associated with restoring and reinforcing portions of levees and floodwalls that do not meet the necessary factors of safety for stability and seepage, as dictated by current HSDRRS design guidelines.
- On April 1, 2010, the CEMVN Commander signed a Decision Record on IER #11 (Tier 2 Pontchartrain) entitled “Improved Protection on the Inner Harbor Navigation Canal, Orleans and St. Bernard Parishes, Louisiana.” The document was prepared to evaluate potential impacts associated with the construction of a sector gate and two vertical lift gates in the IHNC 540 feet south of the Senator Ted Hickey Bridge (also known as Seabrook Bridge) and the Bascule Railroad Bridge with floodwall tie-ins to LPV 104 to the west and LPV 105 to the east. This alternative also included a 20 ft-wide vehicle gate in the eastern floodwall to provide access to Jourdan Road.
- On December 10, 2009, the CEMVN Commander signed a Decision Record on IERS #11 (Tier 2 Borgne) entitled “Improved Protection on the Inner Harbor Navigation Canal, Orleans and St. Bernard Parishes, Louisiana.” The document was prepared to evaluate potential impacts associated with the construction of those actions approved in IER #11 Tier 2 Borgne, with the exception of a vertical lift gate in lieu of a sector gate on Bayou Bienvenue.
- On December 18, 2009, the CEMVN Commander signed a Decision Record on IERS #3.a entitled “Jefferson East Bank, Jefferson Parish, Louisiana.” The document was prepared to evaluate potential impacts associated with the construction of wave attenuation berms and foreshore protection along the Jefferson Parish lake front and a T-Wall, overpass bridge, and traffic detour lane bridge spans at the Lake Pontchartrain Causeway Bridge abutment.
- On October 29, 2009, the CEMVN Commander signed a Decision Record on IERS #2 entitled “Lake Pontchartrain and Vicinity, West Return Flood Wall, Jefferson and Orleans Parishes, Louisiana.” The document was prepared to evaluate potential impacts associated with replacing the existing floodwall with a new T-wall along the east embankment of the Parish Line Canal on the border of Jefferson and Orleans Parishes.

- On October 21, 2008, the CEMVN Commander signed a Decision Record on IER #11 (Tier 2 Borgne) entitled “Improved Protection on the Inner Harbor Navigation Canal, Orleans and St. Bernard Parishes, Louisiana.” The document was prepared to evaluate potential impacts associated with the construction of a new floodwall/gated system extending from the Michoud Canal floodwall north of the Gulf Intracoastal Waterway (GIWW) to the HSDRRS levee on the west side of the deauthorized Mississippi River Gulf Outlet (MRGO).
- On July 18, 2008, the CEMVN Commander signed a Decision Record on IER #2 entitled “Lake Pontchartrain and Vicinity, West Return Flood Wall, Jefferson and Orleans Parishes, Louisiana.” The document was prepared to evaluate potential impacts associated with replacing the existing floodwall with a new T-wall along the east embankment of the Parish Line Canal on the border of Jefferson and Orleans Parishes.
- On July 25, 2008, the CEMVN Commander signed a Decision Record on IER #3 entitled “Lake Pontchartrain and Vicinity, Lakefront Levee, Jefferson Parish, Louisiana.” The document was prepared to evaluate potential impacts associated with rebuilding earthen levees, upgrading foreshore protection, replacing floodgates, constructing fronting protection for four pump stations, and constructing or modifying breakwaters at four pump stations.
- On March 14, 2008, the CEMVN Commander signed a Decision Record on IER #11 (Tier 1) entitled "Improved Protection on the Inner Harbor Navigation Canal, Orleans and St. Bernard Parishes, Louisiana." The document was prepared to evaluate potential impacts associated with building navigable and structural barriers to prevent storm surge from entering the IHNC from Lake Pontchartrain and/or the GIWW- MRGO-Lake Borgne complex. A Tier 2 document discussing alignment alternatives and designs of the navigable and structural barriers, and the impacts associated with exact footprints, is being completed.
- On February 21, 2008, the CEMVN Commander signed a Decision Record on IER # 18 entitled “Government Furnished Borrow Material, Jefferson, Orleans, Plaquemines, St. Charles, and St. Bernard Parishes, Louisiana.” The document was prepared to evaluate the potential impacts associated with the actions taken by the USACE as a result of excavating borrow areas for use in construction of the HSDRRS.
- On February 14, 2008, the CEMVN Commander signed a Decision Record on IER # 19 entitled “Pre-Approved Contractor Furnished Borrow Material, Jefferson, Orleans, St. Bernard, Iberville, and Plaquemines Parishes, Louisiana, and Hancock County, Mississippi.” The document was prepared to evaluate the potential impacts associated with the actions taken by commercial contractors as a result of excavating borrow areas for use in construction of the HSDRRS.
- In July 2006, the CEMVN Commander signed a Finding of No Significant Impact (FONSI) on an EA #433 entitled, “USACE Response to Hurricanes Katrina & Rita in Louisiana.” The document was prepared to evaluate the potential impacts associated with the actions taken by the USACE as a result of Hurricanes Katrina and Rita.

- On October 30, 1998, the CEMVN Commander signed a FONSI on EA #279 entitled “Lake Pontchartrain Lakefront, Breakwaters, Pump Stations 2 and 3.” The report evaluates the impacts associated with providing fronting protection for outfall canals and pump stations. It was determined that the action would not significantly impact resources in the immediate area.
- On October 2, 1998, the CEMVN Commander signed a FONSI on EA #282 entitled “LPV, Jefferson Parish Lakefront Levee, Landside Runoff Control: Alternate Borrow.” The report investigates the impacts of obtaining borrow material from an urban area in Jefferson Parish. No significant impacts to resources in the immediate area were expected.
- On July 2, 1992, the CEMVN Commander signed a FONSI on EA #169 entitled “LPV, Hurricane Protection Project, East Jefferson Parish Levee System, Jefferson Parish, Louisiana, Gap Closure.” The report addresses the construction of a floodwall in Jefferson Parish to close a “gap” in the levee system. The area was previously leveed and under forced drainage, and it was determined that the action would not significantly impact the already disturbed area.
- On July 2, 1991, the CEMVN Commander signed a FONSI on EA #133 entitled “LPV Hurricane Protection – Alternate Borrow at Highway 433, Slidell, Louisiana.” The report addresses the impacts associated with the excavation of a borrow area in Slidell, LA, for LPV construction.
- On February 22, 1991, the CEMVN Commander signed a FONSI on EA #164 entitled “LPV Hurricane Protection – Alternate Borrow Area for the St. Charles Parish Reach.” The report addresses the impacts associated with the use of borrow material from the Mississippi River on the left descending bank in front of the Bonnet Carré Spillway Forebay for LPV construction.
- On September 12, 1990, the CEMVN Commander signed a FONSI on EA #105 entitled “LPV Hurricane Protection – South Point to Gulf Intracoastal Waterway, A. V. Keeler and Company Alternative Borrow Site.” The report addresses the impacts associated with the excavation of a borrow area in Slidell, LA for LPV construction.
- On August 30, 1990, the CEMVN Commander signed a FONSI on EA #163 entitled “LPV Hurricane Protection – Alternate Borrow Area for Jefferson Parish Lakefront Levee, Reach III.” The report addresses the impacts associated with the use of a borrow area in Jefferson Parish for LPV construction.
- On March 12, 1990, the CEMVN Commander signed a FONSI on EA #102 entitled “LPV Hurricane Protection – 17th Street Canal Hurricane Protection.” The report addresses the use alternative methods of providing flood protection for the 17th Street Outfall Canal in association with LPV activity. Impacts to resources were found to be minimal.
- On August 4, 1989, the CEMVN Commander signed a FONSI on EA #89 entitled “LPV Hurricane Protection, High Level Plan - Alternate Borrow Site 1C-2B.” The report addresses

the impacts associated with the excavation of a borrow area along Chef Menteur Highway, Orleans Parish for LPV construction. The material was used in the construction of a levee west of the Inner Harbor Navigation Canal.

- On October 27, 1988, the CEMVN Commander signed a FONSI on EA #79 entitled “LPV Hurricane Protection – London Avenue Outfall Canal.” The report investigates the impacts of strengthening hurricane protection at an existing London Avenue Outfall Canal.
- On July 21, 1988, the CEMVN Commander signed a FONSI on EA #76 entitled “LPV Hurricane Protection – Orleans Avenue Outfall Canal.” The report investigates the impacts of strengthening hurricane protection at an existing Orleans Avenue Outfall Canal.
- SIR #30 entitled “LPV Hurricane Protection Project, Jefferson Lakefront Levee” was signed by the CEMVN Commander on October 7, 1987. The report investigates impacts associated with changes in Jefferson Parish LPV levee design.
- Supplemental Information Report (SIR) #25 entitled “LPV Hurricane Protection – Chalmette Area Plan, Alternate Borrow Area 1C-2A” was signed by the CEMVN Commander on June 12, 1987. The report addresses the use of an alternate contractor furnished borrow area for LPV construction.
- SIR #27 entitled “LPV Hurricane Protection – Alternate Borrow Site for Chalmette Area Plan” was signed by the CEMVN Commander on June 12, 1987. The report addresses the use of an alternate contractor furnished borrow area for LPV construction.
- SIR #28 entitled “LPV Hurricane Protection – Alternate Borrow Site, Mayfield Pit” was signed by the CEMVN Commander on June 12, 1987. The report addresses the use of an alternate contractor furnished borrow area for LPV construction.
- SIR #29 entitled “LPV Hurricane Protection – South Point to Gulf Intracoastal Waterway Levee Enlargement” was signed by the CEMVN Commander on June 12, 1987. The report discusses the impacts associated with the enlargement of the GIWW.
- SIR #22 entitled “LPV Hurricane Protection – Use of 17th Street Pumping Station Material for Lake Pontchartrain Hurricane Protection Levee” was signed by the CEMVN Commander on August 5, 1986. The report investigates the impacts of moving suitable borrow material from a levee at the 17th Street Canal in the construction of a stretch of levee from the IHNC to the London Avenue Canal.
- SIR #17 entitled “LPV Hurricane Protection – New Orleans East Alternative Borrow, North of Chef Menteur Highway” was signed by the CEMVN Commander on April 30, 1986. The report addresses the use of an alternate contractor furnished borrow area for LPV construction.
- On February 26, 1986, the CEMVN Commander signed a FONSI on EA #52 entitled “LPV Hurricane Protection – Geohegan Canal.” The report addresses the impacts associated with

the excavation of borrow material from an extension of the Geohegan Canal for LPV construction.

- SIR #10 entitled “LPV Hurricane Protection, Bonnet Carré Spillway Borrow” was signed by the CEMVN Commander on September 3, 1985. The report evaluates the impacts associated with using the Bonnet Carré Spillway as a borrow source for LPV construction, and found “no significant adverse effects on the human environment” were associated with the project.
- In December 1984, an SIR to complement the Supplement to final EIS on the LPV Hurricane Protection project was filed with the U.S. Environmental Protection Agency (USEPA).
- The final EIS for the LPV Hurricane Protection Project, dated August 1974. A Statement of Findings was signed by the CEMVN Commander on December 2, 1974. Final Supplement I to the EIS, dated July 1984, was followed by a Record of Decision (ROD), signed by CEMVN on February 7, 1985. Final Supplement II to the EIS, dated August 1994, was followed by a ROD signed by CEMVN on November 3, 1994.

1.4 INTEGRATION WITH OTHER INTERIM ENVIRONMENTAL REPORTS

In addition to this IERS, the CEMVN is preparing a draft Comprehensive Environmental Document (CED) that will describe the work completed and remaining to be constructed. The purpose of the draft CED will be to document the work completed by the CEMVN on a system-wide scale. The draft CED will describe the integration of individual IERs into a systematic planning effort. Overall cumulative impacts, some information on the mitigation plan, and future operations and maintenance requirements will also be included. Additionally, the draft CED will contain updated information for any IER that had incomplete or unavailable data at the time it was posted for public review.

The draft CED will be available for a 60-day public review period. The document will be posted on www.nolaenvironmental.gov, or can be requested by contacting CEMVN. A notice of availability will be mailed/e-mailed to interested parties advising them of the availability of the draft CED for review. Additionally, a notice will be placed in national and local newspapers. Upon completion of the 60-day review period all comments will be compiled and appropriately addressed. Upon resolution of any comments received, a final CED will be prepared, signed by the District Commander, and made available to any stakeholders requesting a copy.

1.5 DATA GAPS AND UNCERTAINTIES

At the time of completion of this report, engineering evaluations had not been completed. Engineering details of the proposed action could vary based on the final engineering report. Substantial changes to the proposed action resulting in further impact to the natural or human environment would be addressed in a supplemental IER.

It is believed that the access roads and staging areas, constructed in 1999, although not pointed out in detail, were accounted for under the umbrella of construction activity within the 1974 and 1984 documents and then mitigated for in the 1994 mitigation plan. CEMVN is currently reviewing the 1974, 1984 and 1994 documents and corresponding with team members who participated in the preparation of those documents to confirm this determination. Another supplemental will be prepared if, upon further investigation, it is determined that the 1999 impacts were not properly accounted and mitigated for.

2.0 ALTERNATIVES

2.1 Description of the alternatives

No-Action. Under the no action alternative, the Government-approved action, as described in IER #1 and IERS #1a, would be constructed. IER #1 and IERS #1a are incorporated by reference into this supplemental document.

Proposed Action. The proposed action (preferred alternative) would relocate the access road onto PLD property and provide proper access to the levee reach. This would allow maintenance and future upgrades to take place as needed.

2.2 Proposed action

A portion of the existing Fox Lane access road, built in 1999, was inadvertently constructed outside of the road easement acquired by PLD. The first 445 ft from Airline Highway is believed to be located within the road easement as delineated in Figure 1. The proposed action would relocate the portions of the 1,400 ft Fox Lane access road outside of this easement approximately 15 – 50 ft to the west of its current location. Relocating the 30 ft wide road will also require shifting an adjacent drainage ditch 10 – 20 ft west. At the north end of the existing access road, the road crosses a drainage canal running along the levee toe. The existing road crossing (Figure 1) and culverts in the canal would be removed and a new crossing would be constructed 40 ft to the west with new culverts of a similar size. Approximately 3,500 cy of sand fill would be placed on top of the existing canal to provide a firm surface for the relocated road which would be topped with approximately 3,000 cy of rock fill, some of which would be salvaged from the existing road. Any additional material needed could come from either a contractor or government furnished borrow site. Relocation of the drainage ditch parallel to the road would require excavation of approximately 1,500 cy of earthen material from within the PLD easement which would then be used to fill the existing ditch. Approximately 0.40 acres of existing road outside of ROW would be removed and returned to the same elevation as the adjacent land. Any waste material generated would be re-cycled and/or placed in a solid waste land fill. Existing access and staging areas for LPV 04.2b would be utilized for the proposed action.



Figure 1. Aerial of project area

2.3 Alternatives to the proposed action

The no action alternative was the only alternative analyzed in this IERS since relocating onto PLD property, which was originally acquired for the road, is the only way to obtain appropriate access to the levee reach.

2.3.1 No action

Under the no action alternative, the CEMVN would not relocate the access road. The access road would remain partially on privately owned land. The landowners would like full access to their land that was in-advertently used for the existing access road. The land owners could remove the access road to reclaim their land. Without an access road, routine maintenance of the levee reach, and therefore, storm risk reduction would be compromised.

3.0 AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 ENVIRONMENTAL SETTING

The environmental setting for the entire IER #1 area is described in detail in IER #1, which is incorporated by reference. The environmental setting for the immediate project area consists of wet bottomland hardwood forest (BLH) (figure 2). This habitat consists of such species as live oak, green ash, box elder, sweet gum, and red mulberry. Also within the immediate project area is the drainage canal that runs parallel to the levee (figure 3), the drainage ditch within the BLH, which runs parallel to the access road (figure 4) and the existing access road. The existing access road is a dirt and rock/gravel surface approximately 30 feet wide.



Figure 2. Photo of Habitat Type (BLH)



Figure 3. Photo of Drainage Canal Parallel to Levee



Figure 4. Photo of Drainage Ditch Within BLH

3.2 SIGNIFICANT RESOURCES

This section contains a list of the significant resources located in the vicinity of the proposed action, and describes in detail those resources that would be impacted, directly or indirectly, by the alternatives. Direct impacts are those that would be caused by the action taken and occur at the same time and place (40 CFR 1508.8(a)). Indirect impacts are those that would be caused by the action and would be later in time or farther removed in distance, but are still reasonably foreseeable (40 CFR 1508.8(b)).

The resources described in this section are those recognized as significant by laws, executive orders, regulations, and other standards of national, state, or regional agencies and organizations; technical or scientific agencies, groups, or individuals; and the general public. Table 1 shows those significant resources found within the project area, and notes whether they would be impacted by any of the alternatives analyzed in this IER.

Existing conditions for significant resources were discussed in IER #1 and IERS #1a and are incorporated by reference. Additional discussion is provided for those resources where the

proposed project modification incorporates an area that has differing existing conditions than what is described in IER #1 and IERS #1a.

**Table 1
Significant Resources in Project Study Area**

Significant Resource	Impacted	Not Impacted
Air Quality	X	
Water Quality	X	
Upland Resources		X*
Aquatic Habitat	X	
Essential Fish Habitat		X*
Fish and Wildlife	X	
Wetlands/drainage ways/canals	X	
Threatened and Endangered Species		X*
Recreational Resources		X*
Aesthetic Resources		X
Cultural Resources		X*
Farmland		X*
Environmental Justice		X
Socioeconomics	X	
HTRW		X
Noise	X	
*- Not a significant resource in the project study area		

The following resources would not be affected by the proposed action and therefore are not discussed in this IERS: upland/non-wetland, essential fish habitat, threatened and endangered species, aesthetic resources, recreational resources, cultural resources, farmland, environmental justice, and HTRW.

3.2.1 Air quality

Future Conditions with No Action

Under the no action alternative, the Government’s approved action as discussed in IER #1 and IERS #1a would be constructed. Consequently, direct, indirect, and cumulative impacts to air quality would not differ from those previously described in IER #1 and IERS #1a.

Future Conditions with Proposed Action

Direct Impacts, Indirect Impacts, and Cumulative Impacts

Under the proposed action, there would be further increase in direct, indirect, and cumulative impacts to air quality due to emissions which could include: 1) exhaust emissions from operations of material delivery/dump trucks and various types of non-road construction equipment such as loaders, excavators, etc. and 2) fugitive dust due to earth disturbance. These emissions would be from mobile sources for which emissions performance standards would be

applicable to source manufacturers and they are not regulated under the Clean Air Act (CAA) air permit regulations. Therefore, it is not necessary to quantify these emissions given the lack of ambient emissions thresholds that could be used to make the determination of air quality level of effect from these mobile sources.

The principal air quality concern associated with the proposed activities would be emission of fugitive dust near the construction area. The on-road trucks and private autos used to access the work area would also contribute to construction phase air pollution in the project area when traveling along local roads. These impacts would be minimal and temporary.

St. Charles Parish is currently in attainment of all National Ambient Air Quality Standards (NAAQS). This classification is the result of area wide air quality modeling studies. Because the project area is designated as an attainment area, no Conformity review would be required for the proposed action.

3.2.2 Water quality

Future Conditions with No Action

Under the no action alternative, the Government's approved action as discussed in IER #1 and IERS #1a would be constructed. Consequently, direct, indirect, and cumulative impacts to water quality would not differ from those previously described in IER #1 and IERS #1a.

Future Conditions with Proposed Action

Direct

With the implementation of the proposed action, temporary increases in turbidity and sediment disturbance during the relocation of the road across the drainage canal and the relocation/construction of the drainage ditch would be expected. These turbidity and sediment impacts would be anticipated to be local, temporary, and would remain in the vicinity of construction.

Indirect and Cumulative

No indirect or cumulative impacts to water quality would be expected.

3.2.3 Aquatic habitat

Future Conditions with No Action

Under the no action alternative, the Government's approved action as discussed in IER #1 and IERS #1a would be constructed. Consequently, direct, indirect, and cumulative impacts to aquatic habitat would not differ from those previously described in IER #1 and IERS #1a.

Future Conditions with Proposed Action

Direct

Approximately less than half an acre of aquatic habitat would be directly impacted by the proposed action. The impacts would be due to the placement of fill material across the drainage canal and within the existing drainage ditch. This action would include removal of material which currently makes up the existing road crossing within the drainage canal and placement of 3,500 cy of sand plus 3,000 cy of rock to relocate the road to the west. It also includes the placement of 1,500 cy of material into the existing drainage ditch.

Indirect

Indirect impacts to aquatic habitat would include increased local turbidity, vibration, and subsurface noise. These impacts would be temporary and localized to the construction area.

Cumulative

Potential cumulative impacts to aquatic habitat primarily involve the loss of open water. The impacts evaluated for the proposed action would be less than half of an acre and would be disturbances not losses as areas lost would be replaced. This would contribute minimally to the aquatic habitat impacts of the overall HSDRRS project. Aquatic habitat impacts of the overall HSDRRS project have the potential to be significant. To date, approximately 231 acres of open water impacts have been identified in previous IERs and are summarized in table 3.

3.2.4 Fish and wildlife

Future Conditions with No Action

Under the no action alternative, the Government's approved action as discussed in IER #1 and IERS #1a would be constructed. Consequently, direct, indirect, and cumulative impacts to fish and wildlife would not differ from those previously described in IER #1 and IERS #1a.

Future Conditions with Proposed Action

Direct

Under the proposed action there would be minimal temporary impacts to fish and wildlife due to the removal of approximately 1.5 acres of wooded habitat and disturbance to less than half of an acre of aquatic habitat where the road would cross the canal and the ditch would be relocated. Mobile species would be expected to leave the area but would return after construction is complete.

Indirect

Indirect effects would include disturbance to fish and wildlife species due to noise, vibration, and turbidity, which could cause mobile species to leave the area until construction is complete.

Cumulative

Because of the goal of completing the HSDRRS construction activities by June 2011, numerous construction activities in the IERS #1b project area could be underway concurrently. This would

result in temporary cumulative effects to fish and wildlife. Permanent effects to fish and wildlife would occur from the loss of both wetland and terrestrial habitat associated with the construction of the overall HSDRRS project and would contribute to the cumulative loss of fish and wildlife habitat. To date, impacts to approximately 870 acres of bottomland hardwood (BLH) and another 1,454 acres of wetlands have been identified for the construction of the proposed HSDRRS features (table 3). Compensatory mitigation for these habitat losses will be discussed in separate mitigation IERs.

3.2.5 Wetlands/Drainage ways/Canals

Existing Conditions

The project area currently consists of approximately 1.5 acres of bottomland hardwood forest (BLH). This habitat consists of such species as live oak, green ash, box elder, sweet gum, and red mulberry. Also within the project area is a drainage canal, which runs parallel to the levee and a drainage ditch that is within the BLH forest and runs parallel to the access road. The drainage canal is approximately 30 feet wide and is rather shallow. The drainage ditch is approximately 10 feet wide and very shallow.

Future Conditions with No Action

Under the no action alternative, the Government's approved action as discussed in IER #1 and IERS #1a would be constructed. Consequently, direct, indirect, and cumulative impacts to wetlands/drainage ways/canals would not differ from those previously described in IER #1 and IERS #1a.

Future Conditions with Proposed Action

Direct

Under the proposed action there would be approximately 1.5 acres of wetlands (wet BLH) permanently impacted by clearing and filling. In addition, less than half of an acre of open water would be temporarily disturbed by construction activities associated with the road and ditch relocations. Areas filled within the canal and ditch would be replaced when the ditch and road are relocated.

Indirect

No indirect impacts to wetlands would be expected.

Cumulative

To date, the clearing, grubbing, or filling of approximately 1,454 acres of wetlands has been identified for the construction of the proposed HSDRRS features (table 3). Construction of the HSDRRS project features would cumulatively impact wetlands. Compensatory mitigation for these habitat losses will be discussed in separate mitigation IERs. Additionally, other authorized Federal flood control projects including Morganza to the Gulf, Larose to Golden Meadow, and Plaquemines Parish West Bank non-Federal levee construction would likely impact wetlands because these flood control projects are designed to provide flood damage risk reduction from

coastal storm events, and as such, the alignments are located in the wetland/non-wetland interfaces. Additionally, it is expected that non-Federal flood control projects and regional private development would continue to occur and cause some wetlands impact.

3.2.6 Noise

Future Conditions with No Action

Under the no action alternative, the Government’s approved action as discussed in IER #1 and IERS #1a would be constructed. Consequently, direct, indirect, and cumulative impacts from noise would not differ from those previously described in IER #1 and IERS #1a.

Future Conditions with Proposed Action

Direct Impacts

Table 2 describes noise emission levels for construction equipment expected to be used during the proposed construction activities.

Table 2 Weighted (dBA) Sound Levels of Construction Equipment and Modeled Attenuation at Various Distances¹					
Noise Source	50 ft	100 ft	200 ft	500 ft	1,000 ft
Backhoe	78	72	68	58	52
Dump Truck	76	70	64	56	50
Excavator	81	75	69	61	55
Front end loader	79	73	67	59	53
Dozer	82	76	70	62	56
Motor Grader	85	NA	NA	NA	NA

Data from the Federal Highway Administration (FHWA 2006).

1. The dBA at 50 ft is a measured noise emission. The 100- to 1,000-ft results are modeled estimates.

Source: FHWA 2006. “Highway Construction Noise Handbook”.

Not Available (NA)

There is no residential housing in the immediate project area. Commercial businesses do exist in the project vicinity. Assuming the worst case scenario of 56 dBA (Dozer), all areas within 1,000 ft of the project corridor would not experience noise levels exceeding 65 dBA. The construction activities would be expected to create temporary noise impacts below 65 dBA on the limited number of sensitive receptors within 1,000 ft of the project corridor. In addition to noise created by construction equipment, there would also be impacts from noise generated by construction

vehicles and personal vehicles for laborers that may use public roads and highways for access to the construction site. Following construction, noise levels would return to existing conditions.

Indirect Impacts

Indirect impacts from noise could be those related to avoidance of the area by wildlife and residents during construction. These indirect impacts would be construction related, minimal, and temporary.

Cumulative Impacts

Cumulative impacts from noise in the project area due to the proposed action and other construction activities within the area that could be occurring concurrently would be temporary. After the construction period, there would be no incremental contribution to cumulative impacts from noise due to the proposed action.

3.3 SOCIOECONOMIC RESOURCES

3.3.1 Population and Housing

Existing Conditions

The road relocation is on privately owned and undeveloped land bordered by Highway 61 (Airline Highway) to the south and a waterway to the north. There is no residential population or housing located in the immediate vicinity of the proposed road relocation.

Future Conditions with No Action

Under the no action alternative, the Government's approved action as discussed in IER #1 and IERS #1a would be constructed. Consequently, direct, indirect, and cumulative impacts to population and housing would not differ from those previously described in IER #1 and IERS #1a.

Future Conditions with Proposed Action

Direct, indirect and cumulative

There would be no direct impacts to population and housing in the vicinity of this site as a result of the proposed Action.

3.3.2 Impacts to Employment, Business, and Industry

Existing Conditions

The road relocation is on privately owned and undeveloped land bordered by Highway 61 (Airline Highway) to the south and a waterway to the north. There is no employment, business, or industry located on the land, but there are commercial businesses located adjacent to or across Highway 61.

Future Conditions with No Action

Direct

There could be significant direct impacts to employment, business, and industry around this site if the proposed action was not implemented. The owners have indicated a desire to sell the existing property; however, the existing dirt road intrudes on privately owned land. The property owner's desire to market the property for commercial development may be impeded due to the road's infringement on their lands.

Indirect

There could be indirect impacts to employment, business and industry around this site if the proposed action was not implemented. Development of the site could result in an increase of workers who would utilize surrounding businesses; no development would not provide this opportunity.

Cumulative

Unless otherwise indicated, cumulative socioeconomic impacts to employment, business and industry consist simply of the sum of the direct and indirect impacts for this alternative and with all other activities associated with the construction of the HSDRRS.

Under the no action scenario, direct cumulative impacts remain no greater than the sum of those impacts indicated individually for each HSDRRS project component.

Under the no-action scenario, indirect cumulative impacts remain no greater than the sum of those impacts indicated individually for each HSDRRS project component.

Future Conditions with Proposed Action

Direct

There could be significant direct impacts to employment, business, and industry around this site if the proposed action is implemented. The land could be developed into commercial property, increasing employment opportunity, and business opportunity for the area.

Indirect

There could be indirect impacts to employment, business, and industry in the vicinity of this site as a result of the proposed action. Increased employment would increase ancillary business activity in the area.

Cumulative

Unless otherwise indicated, cumulative socioeconomic impacts for employment, business, and industry consist simply of the sum of the direct and indirect impacts for this alternative and with all other activities associated with the construction of the HSDRRS.

Cumulative impacts that include the proposed action are no greater than the sum of those impacts indicated individually for each HSDRRS project component.

3.3.3 Availability of Public Facilities and Services

Existing Conditions

There are no public facilities in the vicinity of the proposed road relocation.

Future Conditions with No Action

Direct, indirect, and cumulative

There would be no direct, indirect, or cumulative impacts to public facilities around this site if the proposed action was not implemented.

Future Conditions with Proposed Action

Direct, indirect, and cumulative

There would be no direct impacts to public facilities around this site as a result of the proposed action.

3.3.4 Effects on Transportation

Existing Conditions

The road relocation is on privately owned and undeveloped land bordered by Highway 61 (Airline Highway) to the south and a waterway to the north.

Future Conditions with No Action

Direct, indirect, and cumulative

There would be no direct, indirect, or cumulative impacts to transportation around this site if the proposed action was not implemented.

Future Conditions with Proposed Action

Direct and indirect

There could be direct and indirect impacts to transportation in the vicinity of this site as a result of the proposed action. Increased vehicle and heavy equipment traffic may cause some short delays or traffic congestion in the project area, including on Hwy 61 during construction. However, impacts are expected to be localized within areas adjacent to the project.

Cumulative

There would be no cumulative socioeconomic impacts to transportation associated with the proposed action.

3.3.5 Disruption of Community and Regional Growth

Existing Conditions

Community and regional growth are generally influenced by national trends, but otherwise depend significantly upon relatively local attributes that allow it to be evaluated apart from the national economy. For the purposes of socioeconomic impact analysis, the project area is first described in summary terms with respect to prevailing trends in the growth of population, housing, income, and employment. Against this baseline, the relative effects of the proposed and alternative actions are evaluated.

According to U.S. Census data from 2000 and 2009 the following trends were observed in St. Charles Parish: population grew from 48,072 to 52,780; employment grew from 21,610 to 25,886; and median household income grew from \$41,994 to \$59,884. Preliminary 2010 Census data will be available in 2011 at the earliest.

Future Conditions with No Action

Direct, indirect, and cumulative

There would be no direct, indirect, or cumulative impacts to community and regional growth around this site if the proposed action was not implemented.

Future Conditions with Proposed Action

Direct

There could be direct impacts to community and regional growth in the vicinity of this site as a result of the proposed action. The undeveloped land could be used for commercial development, resulting in an increase in business activity and employment within the immediate area.

Indirect and Cumulative

There would be no indirect impacts to community and regional growth in the vicinity of this site as a result of the proposed action.

3.3.6 Impacts to Tax Revenues and Property Values

Existing Conditions

The road relocation is on privately owned and undeveloped land bordered by Highway 61 (Airline Highway) to the south and a waterway to the north. No economic data is available for the immediate area, but median income in St. Charles Parish in 2000 was \$59,884. The median value of homes in St. Charles Parish in 2000 was \$160,500.

Future Conditions with No-Action

Direct, indirect, and cumulative

There would be no direct, indirect, or cumulative impacts to tax revenue and property values around this site if the proposed action was not implemented.

Future Conditions with Proposed Action

Direct

There could be direct impacts to tax revenue and property values in the vicinity of this site as a result of the proposed action. Commercial businesses could operate on the currently undeveloped property, resulting in increased sales and property tax revenues for the parish

Indirect and Cumulative

There would be no indirect impacts to tax revenue and property values in the vicinity of this site as a result of the proposed action.

3.3.7 Changes in Community Cohesion

Existing Conditions

Community cohesion refers to the common vision and sense of belonging within a community that is created and sustained by the extensive development of individual relationships that are social, economic, cultural, and historical in nature. The degree to which these relationships are facilitated and made effective is contingent upon the physical and spatial configuration of the community itself: the functionality of the community owes much to the physical landscape within which it is set. The viability of community cohesion is compromised to the extent to which these physical features are exposed to interference from outside sources.

Future Conditions with No Action

Direct, indirect, and cumulative

There would be no direct, indirect, or cumulative impacts to community cohesion around this site if the proposed action was not implemented.

Future Conditions with Proposed Action

Direct, indirect, and cumulative

There would be no direct impacts to community cohesion in the vicinity of this site as a result of the proposed action.

4.0 CUMULATIVE IMPACTS

NEPA requires a Federal agency to consider not only the direct and indirect impacts of a proposed action, but also the cumulative impact of the action. A cumulative impact is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions (40 CFR§1508.7).”

Cumulative impacts can result from individually minor, but collectively significant actions taking place over a period of time. These actions include on- or off-site projects conducted by

government agencies, businesses, or individuals that are within the spatial and temporal boundaries of the actions considered in this IERS.

As indicated previously, in addition to this IERS, the CEMVN is preparing a draft CED that will describe the work completed and the work remaining to be constructed. The purpose of the draft CED will be to document the work completed by the USACE on a system-wide scale. The draft CED will describe the integration of individual IERS into a systematic planning effort. Additionally, the draft CED will contain updated information for any IER that had incomplete data at the time it was posted for public review. The draft CED to be released in 2011 will address overall cumulative impacts and the future operation, maintenance, repair, replacement, and rehabilitation requirements that have been finalized at that time. Additional documents will be prepared to provide updates to cumulative impacts as well as information about additional commitments (i.e., long term monitoring and analysis of the Bayou Aux Carpes and Inner Harbor Navigation Canal project areas) as monitoring or additional NEPA documents are completed. The discussion provided below describes an overview of other actions, projects, and occurrences that may contribute to the cumulative impacts previously discussed.

Without implementation of the proposed action the maintenance and therefore functionality of this portion of the St. Charles levee system would be compromised. Providing access for maintenance to this portion of the LPV, which provides the 100-year level of risk reduction, would contribute to the protection of life and to the reduction of physical and environmental damage. Significant flooding often results in contamination of drinking water supplies, dispersion of HTRW, and dispersion of large quantities of solid waste that require clean up and disposal. Experience has shown that vast quantities of debris (e.g., homes, vehicles, mobile homes, etc.) and sediment must be collected and hauled away after a flooding event. Hauling the collected debris to a local municipal landfill requires significant transportation and involves large quantities of solid waste that fill available landfill space. Providing and maintaining the 100-year level of risk reduction significantly reduces the probability that these environmental consequences of flooding would be incurred.

Negative effects associated with implementation of the proposed action that could contribute cumulatively with the effects of other projects include temporary construction-related increases in truck traffic, noise and vibration, vehicle and equipment emissions, and localized temporary degradation of water quality. The total loss of habitat related to the implementation of all actions under all of the IERS has not yet been compiled, but the current totals are presented in table 3. When available, the loss from IERS # 1b will be included in the total cumulative loss.

The WBV project extends approximately 66 miles in length from the Western Tie-in to the Hero Canal Levee and Eastern Terminus in Belle Chasse (IERS # 1-17). The LPV Project (IERS # 1 through 11) extends an even larger distance protecting the East Bank of New Orleans. The construction-related negative effects, as well as the positive consequences (e.g., spending in the local economy) resulting from providing the 100-year level of hurricane damage risk reduction for these projects, may potentially represent the largest cumulative environmental consequences in the New Orleans region for the next 4 to 7 years.

Table 3. : HSDRRS Impacts and Compensatory Mitigation to be Completed

IER	Parish	Side	Non-wet BLH	Non-wet BLH	BLH (acres)	BLH AAHUs	Swamp (Acres)	Swamp AAHUs	Marsh (Acres)	Marsh AAHUs	Water Bottoms
			<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>
1 LaBranche Levee	St. Charles	Protected	-	-	-	-	137.50	73.99	-	-	-
		Flood	-	-	11.33	8.09	143.57	110.97	-	-	
1 Supplemental LaBranche Levee	St. Charles	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	
2 West Return Floodwall	St. Charles, Jefferson	Protected	-	-	-	-	-	-	-	-	75.00
		Flood	-	-	-	-	-	-	17.00	9.00	
3 Jefferson Lakefront Levee	Jefferson	Protected	-	-	-	-	-	-	-	-	26.40
		Flood	-	-	-	-	-	-	-	-	
4 Orleans Lakefront Levee	Orleans	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	
5 Lakefront Pump Stations	Jefferson, Orleans	Protected	-	-	-	-	-	-	-	-	3.20
		Flood	-	-	-	-	-	-	-	-	
6 Citrus Lands Levee	Orleans	Protected	-	-	-	-	-	-	-	-	6.90
		Flood	-	-	-	-	-	-	0.00	-	
7	Orleans	Protected	-	-	151.70	79.30	-	-	100.40	36.80	106.00

IER	Parish	Side	Non-wet BLH	Non-wet BLH	BLH (acres)	BLH AAHUs	Swamp (Acres)	Swamp AAHUs	Marsh (Acres)	Marsh AAHUs	Water Bottoms
			<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>
Lakefront Levee		Flood	-	-	30.00	11.90	-	-	70.00	37.20	
Supplemental Lakefront Levee	Orleans	Protected	-	-	17.30	9.90	-	-	18.60	6.10	-
		Flood	-	-	2.80	0.30	-	-	56.00	29.80	
8 Bayou Bienvenue/ Dupre Structures	St. Bernard	Protected	-	-	-	-	-	-	-	-	0.30
		Flood	-	-	-	-	-	-	-	-	
9 Caenarvon Floodwall	St. Bernard	Protected	-	-	-	-	-	-	-	-	-
		Flood	10.00	4.65	1.16	0.66	-	-	1.90	1.20	
10 Chalmette Loop	St. Bernard	Protected	-	-	38.32	16.44	-	-	106.55	57.31	95.00
		Flood	-	-	35.31	15.22	-	-	323.04	209.94	
11 Tier 2 Borgne IHNC	Orleans, St. Bernard	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	15.00	2.59	-	-	122.00	24.33	
11 Tier 2 Pontchartrain IHNC	Orleans, St. Bernard	Protected	-	-	-	-	-	-	-	-	7.00
		Flood	-	-	-	-	-	-	-	-	
12 GIWW, Harvey, Algiers	Jefferson, Orleans, Plaquemines	Protected	-	-	251.70	177.3	-	-	-	-	-
		Flood	-	-	2.30	1.90	74.90	38.50	-	-	
13	Plaquemines	Protected	-	-	13.00	7.80	-	-	-	-	-

IER	Parish	Side	Non-wet BLH	Non-wet BLH	BLH (acres)	BLH AAHUs	Swamp (Acres)	Swamp AAHUs	Marsh (Acres)	Marsh AAHUs	Water Bottoms
			<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>
Hero Canal, Eastern Terminus		Flood	-	-	19.00	10.59	39.00	28.87	-	-	
14 Westwego to Harvey Levee	Jefferson	Protected	-	-	45.00	30.00	-	-	-	-	-
		Flood	-	-	45.50	18.58	29.75	17.02	-	-	-
14 Supp. Westwego to Harvey Levee	Jefferson	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	-	-	42.00	24.00	-	-	-
15 Lake Cataouatche Levee	Jefferson	Protected	-	-	23.50	6.13	-	-	-	-	-
		Flood	-	-	3.60	1.35	-	-	-	-	-
16 Western Tie-in	Jefferson, St. Charles	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	137.80	66.30	-
16 Supplemental Western Tie-in	Jefferson, St. Charles	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	79.10	37.26	-	-	-	-	-
17 Company Canal Floodwall	Jefferson	Protected	-	-	5.50	2.69	-	-	-	-	-
		Flood	-	-	-	-	19.00	17.09	-	-	-
18 GFBM	Jefferson, Orleans, Plaquemines, St. Bernard, St. Charles	Protected	379.30	152.32	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-

IER	Parish	Side	Non-wet BLH	Non-wet BLH	BLH (acres)	BLH AAHUs	Swamp (Acres)	Swamp AAHUs	Marsh (Acres)	Marsh AAHUs	Water Bottoms
			<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>
19 CFBM	Hancock County, MS; Iberville, Jefferson, Orleans, Plaquemines, St. Bernard	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-
22 GFBM	Jefferson, Plaquemines	Protected	244.69	118.54	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-
23 CFBM	Hancock County, MS; Plaquemines, St. Bernard, St.	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-
25 GFBM	Jefferson, Orleans, Plaquemines	Protected	933.00	284.00	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-
26 CFBM	Jefferson, Plaquemines, St. John the Baptist; Hancock County,	Protected	-	-	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-
28 GFBM	Jefferson, Plaquemines, St. Bernard	Protected	19.94	8.45	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-
29 CFBM	Orleans, St. Tammany, St. John the Baptist	Protected	107.30	48.60	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-
30 CFBM	St. Bernard and St. James; Hancock, MS	Protected	225.00	189.40	-	-	-	-	-	-	-
		Flood	-	-	-	-	-	-	-	-	-
32	Ascension,	Protected	202.10	97.43	-	-	-	-	-	-	-

IER	Parish	Side	Non-wet BLH	Non-wet BLH	BLH (acres)	BLH AAHUs	Swamp (Acres)	Swamp AAHUs	Marsh (Acres)	Marsh AAHUs	Water Bottoms
			<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>	<i>AAHUs</i>	<i>acres</i>
CFBM	Plaquemines, St. Charles	Flood	-	-	-	-	-	-	-	-	
Totals		Protected	1772.03	708.32	545.52	329.22	137.50	73.99	225.55	100.21	00.00
		Flood	10.00	4.65	323.80	163.33	350.02	237.30	740.54	388.42	230.99
		Both	178.03	712.97	869.32	492.55	487.52	311.29	966.09	488.63	230.99

- Not applicable to the IER or number impacted is 0 GFBM: Government Furnished Borrow Material // CFBM: Contractor Furnished Borrow Material

5.0 SELECTION RATIONALE

On the basis of the assessment of potential environmental impacts presented in this IERS and the evaluation of feasibility based on the engineering effectiveness, economic efficiency, and environmental and social acceptability criteria, the proposed action is selected and is environmentally preferred.

The CEQ regulations for implementing NEPA require that the Record of Decision (ROD) for an environmental impact statement specify "the alternative or alternatives which were considered to be environmentally preferable" (40 CFR §1505.2(b)). This has generally been interpreted to mean the alternative that would promote the national environmental policy as expressed in NEPA's Section 101 (CEQ's "Forty Most-Asked Questions," 46 Federal Register, 18026, March 23, 1981). Ordinarily, this means the alternative that causes the least damage to the biological and physical environment; it also means the alternative that best protects, preserves, and enhances historic, cultural, and natural resources.

The proposed action for IERS #1b presents an engineering-effective, cost-efficient, environmentally-preferable selection to the no action alternative. Taking no action, although avoiding the direct effects from relocation/construction of the access road, may lead to indirect effects from potential flooding to area residences and businesses (due to lack of levee maintenance), and associated costs for clean up due to flooding.

The proposed action was selected because it would simultaneously (1) provide the necessary access for the proper maintenance of the levee reach (2) and minimize impacts to private properties by staying within PLD's existing easement and ROW.

6.0 COORDINATION AND CONSULTATION

6.1 Public involvement

Extensive public involvement has been sought in preparing IER #1 and IERS #1a. Proposed Federal projects analyzed by IERs were publicly disclosed and described in the Federal Register on March 13, 2007, (72 FR 11337) and on the website www.nolaenvironmental.gov. The public has been able to provide verbal comments during the meetings and written comments after each meeting in person, by mail, and via the www.nolaenvironmental.gov website. A project-specific public meeting will be held during the 30 day public review period for this IERS if requested.

Since this project could potentially include unavoidable adverse impacts to jurisdictional wetlands under Section 404 of the Clean Water Act, a 404 public notice is being made available to the public and other interested parties on the www.nolaenvironmental.gov website. The 404 public notice is being advertised concurrently with the 30-day period for this IERS.

Draft IER #1 was distributed for the 30-day public review of April 29, 2008, to May 28, 2008. Draft IERS #1a was distributed for the 30-day public review of May 15, 2009, to June 13, 2009. This IERS will be released for public review and comment. Public meetings were held for both IER #1 and IERS #1a. A public meeting specific to the proposed action will be held during the 30 day public review period, if requested. Comments received during this public meeting will be considered part of the official record. After the expiration of the public comment period, the CEMVN Commander will make a decision on the proposed action. The decision will be documented in the IERS Decision Record.

6.2 Agency coordination

Preparation of this IERS has been coordinated with appropriate Congressional, Federal, state, and local interests, as well as environmental groups and other interested parties. An interagency environmental team was established for this project in which Federal and state agency staff played an integral part in the project planning of the project (members of this team are listed in appendix C). This interagency environmental team was integrated with the CEMVN Project Delivery Team to assist in the planning of this project and to complete a mitigation determination of the potential direct and indirect impacts of the proposed action. Monthly meetings with resource agencies were also held concerning this and other CEMVN IER projects. Project specific discussion of the proposed IERS #1b project took place during the April 2011 interagency environmental team meeting and an update was transmitted to them on May 2, 2011. The following agencies, as well as other interested parties, received copies of the draft IERS:

U.S. Department of the Interior, Fish and Wildlife Service
U.S. Department of the Interior, National Park Service
U.S. Environmental Protection Agency, Region VI
U.S. Department of Commerce, National Marine Fisheries Service
U.S. Natural Resources Conservation Service, State Conservationist
Advisory Council on Historic Preservation
Governor's Executive Assistant for Coastal Activities
Louisiana Department of Wildlife and Fisheries
Louisiana Department of Natural Resources, Coastal Management Division
Office of Coastal Protection and Restoration
Louisiana Department of Environmental Quality
Louisiana State Historic Preservation Officer

The U.S. Fish and Wildlife Service (USFWS) has reviewed the proposed action and in a letter dated April 21, 2011, stated that the USFWS is unaware of any known threatened or endangered species under its jurisdiction in the proposed project area. National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS) has received a copy of the IERS for their review of the proposed action to ensure compliance with Section 305 of the Magnuson-Stevens Fishery Conservation and Management Act and the Fish and Wildlife Coordination Act.

In their November 8, 2007, correspondence, the NMFS Protected Resources Division provided a list of threatened and endangered species under their jurisdiction in Louisiana. Based on that

information, the CEMVN made a determination of no effect for species under NMFS jurisdiction. In addition, Essential Fish Habitat (EFH) has not been designated for the proposed project area, so no coordination on EFH is required (NMFS, 2009).

In compliance with the Coastal Zone Management Act, the CEMVN has coordinated with the Louisiana Department of Natural Resources (LDNR) for consistency with the Louisiana Coastal Resource Program (LCRP). By letter dated May 16, 2011, LDNR provided consistency C20080104. A copy of the Consistency Determination is included in appendix D of this IERS.

A Water Quality Certification has been received from the Louisiana Department of Environmental Quality (LDEQ) by letter dated April 19, 2011, (appendix D). An Air Quality certification is being coordinated with LDEQ through the 30-day public review period associated with IERS #1b.

Section 106 of the National Historic Preservation Act, as amended, requires consultation with SHPO and Native American tribes. SHPO is reviewing the proposed action and will determine if they concur with CEMVN's determination of "no historic properties affected". SHPO and THPO consultation for this project under Section 106 of the National Historic Preservation Act is not yet concluded. The DR will not be signed until SHPO and THPO coordination is complete.

The USFWS reviewed the proposed action in accordance with the Fish and Wildlife Coordination Act and prepared a draft Coordination Act Report including recommendations for IERS #1b dated May 3, 2011. A final report will be received after the 30-day public comment period. All comments related to USFWS trust resources have been addressed and/or resolved. The USFWS also provided programmatic recommendations, in the "Draft Fish and Wildlife Coordination Act Report for the Individual Environmental Reports (IER), Public Law 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006 (Supplemental 4)" in November 2007. At that time the uncertainties in the design of several projects prohibited a complete evaluation of the impacts to fish and wildlife species and the reporting responsibilities under Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended: 16 U.S.C. 661 et seq.). Therefore, a subsequent final supplemental report will be provided by the USFWS at a later date. The draft (programmatic) Fish and Wildlife Coordination Act Report for the IERS, dated November 2007, can be accessed through the www.nolaenvironmental.gov website.

The USFWS' programmatic recommendations applicable to this project will be incorporated into project design studies to the extent practicable, consistent with engineering and public safety requirements. The USFWS' programmatic recommendations applicable to this project, and the CEMVN's response to them, are listed below:

Recommendation 1: The Service recommends that any impacts to forested wetlands should be avoided or minimized to the greatest extent practicable and any unavoidable impacts should be mitigated.

CEMVN Response 1: Concur. The removal of approximately 1.5 acres (0.19 AAHU) of forested wetlands due to the proposed action would be unavoidable and would be mitigated.

Recommendation 2: The Service recommends the installation of a minimum of 18-24 inch culverts every 250 ft. when constructing access roads through wetlands. Additional culverts should be installed at stream crossings and drainage features. Culverts should be maintained to ensure that existing flow of surface water is uncompromised.

CEMVN Response 2: The access road would not be constructed through wetlands. The east side of the proposed access road is privately owned land, which after removal of the existing road would be un-forested land adjacent to forested land which is planned for development. The west side of the proposed access road is already developed. Where the road crosses the drainage canal, culverts equal in size and number to the existing culverts, would be installed.

Recommendation 3: All gates and/or culverts being replaced or modified should be operated according to previously developed operational plans to avoid further degradation of the project area hydrology.

CEMVN Response 3: Concur. The culverts that would be installed during road relocation would operate the same as the existing culverts.

Recommendation 4: Any proposed change in levee, floodwall, or drainage structure features, locations or plans shall be coordinated in advance with The Service, National Marine Fisheries Service, LDWF, and Louisiana Dept. of Natural Resources.

CEMVN Response 4: Concur.

Recommendation 5: If the proposed project has not been constructed within 1 year or if changes are made to the proposed project, the Corps should re-initiate Endangered Species Act consultation with the Service to ensure that the proposed project would not adversely affect any federally listed threatened or endangered species or their habitat.

CEMVN Response 5: Concur

7.0 MITIGATION

Mitigation for unavoidable impacts to the human and natural environment described in this and other IERs will be addressed in separate mitigation IERs. The CEMVN has partnered with Federal and state resource agencies to form an interagency mitigation team that is working to assess and verify these impacts, and to look for potential mitigation sites in the appropriate hydrologic basin. This effort is occurring concurrently with the IER planning process in an effort to complete mitigation work and construct mitigation projects expeditiously. As with the planning process of all other IERs, the public will have the opportunity to give input about the proposed work. These mitigation IERs will be available for a 30-day public review and comment period.

Quantitative analysis utilizing existing methodologies for water resource planning has identified the acreages and habitat type for the direct or indirect impacts of implementing the proposed action. 1.5 acres have been identified that would require compensatory mitigation.

The methodology being utilized in determining appropriate mitigation, which would include no net loss of wetland values, is the interagency Wetland Value Assessment (WVA). The WVA computes the Average Annualized Habitat Units (AAHUs) lost by project implementation. The AAHUs are converted to acres needed to meet the nation's no-net-loss of wetlands policy once the mitigation site is selected.

1.5 acres of bottomland hardwoods would be impacted by this project such that mitigation for 0.19 AAHUs would be required. CEMVN would provide compensatory mitigation for this habitat loss. Compensatory mitigation for habitat losses associated with HSDRRS construction will be discussed in separate mitigation IERs.

A complementary comprehensive mitigation IER or IERs will be prepared documenting and compiling these unavoidable impacts and those for all other proposed actions within the HSDRRS that are being analyzed through other IERs. Mitigation planning is being carried out for groups of IERs, rather than within each IER, so that large mitigation efforts could be taken rather than several smaller efforts, thus increasing the relative economic and ecological benefits of the mitigation effort. The forthcoming mitigation IER will implement compensatory mitigation as early as possible. All mitigation activities will be consistent with standards and policies established in appropriate Federal and state laws and USACE policies and regulations.

8.0 COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Construction of the proposed action would not commence until the proposed action achieves environmental compliance with all applicable laws and regulations, as described below.

Environmental compliance for the proposed action would be achieved upon coordination of this IERS with appropriate agencies, organizations, and individuals for their review and comments; USFWS and NMFS confirmation that the proposed action would not adversely affect any threatened or endangered species or require completion of Endangered Species Act Section 7 consultation; LDNR concurrence with the determination that the proposed action is consistent, to the maximum extent practicable, with the LCRP; receipt of a Water Quality Certification from the State of Louisiana; public review of the Section 404(b)(1) Public Notice and signature of the Section 404(b)(1) Evaluation; coordination with the Louisiana SHPO; receipt and acceptance or resolution of all Fish and Wildlife Coordination Act recommendations; and receipt and acceptance or resolution of all EFH recommendations.

Executive Order (E.O.) 11988. E.O. 11988, Floodplain Management, addresses minimizing or avoiding adverse impacts associated with the base floodplain unless there are no practicable alternatives. It also involves giving public notice of proposed actions that may affect the base

floodplain. The proposed action would not accelerate development of the floodplain for the following reasons: development of the study area is more closely related to access routes and the need for affordable housing space than flooding potential and conditions conducive for development were established initially when the area was levied and forced drainage was initiated in the middle 1960s.

Executive Order 11990. E.O. 11990, Protection of Wetlands, has been important in project planning.

Consistency with Coastal Zone Management (CZM) Program. The CEMVN has determined that additions associated with the construction and maintenance of 100-year level of risk reduction along the WBV, WCC, are consistent to the maximum extent practicable, with the guidelines of the State of Louisiana's approved Coastal Zone Management Program. A CZM consistency determination was prepared and provided to the LDNR on April 15, 2011. The consistency letter of approval from the LDNR (C20080104) completes the consistency requirements.

Clean Air Act. The original 1970 Clean Air Act (CAA) authorized the USEPA to establish National Ambient Air Quality Standards (NAAQS) to limit levels of pollutants in the air. USEPA has promulgated NAAQS for six criteria pollutants: sulfur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), ozone, lead, and particulate matter (PM-10). All areas of the United States must maintain ambient levels of these pollutants below the ceilings established by the NAAQS; any area that does not meet these standards is considered a "non-attainment" area (NAA). The 1990 Amendments require that the boundaries of serious, severe, or extreme ozone or CO non-attainment areas located within Metropolitan Statistical Areas (MSAs) or Consolidated Metropolitan Statistical Areas (CMSAs) be expanded to include the entire MSA or CMSA unless the governor makes certain findings and the Administrator of the USEPA concurs. Consequently, all urban counties included in an affected MSA or CMSA, regardless of their attainment status, will become part of the NAA. The project is located in St Charles Parish, which is classified as an attainment area; therefore NAAQS are not applicable to this project.

Clean Water Act. The Clean Water Act (CWA; 33 U.S.C. 1251-1387; Act of June 30, 1948, as amended) is a very broad statute with the goal of maintaining and restoring waters of the United States. The CWA authorizes water quality and pollution research, provides grants for sewage treatment facilities, sets pollution discharge and water quality standards, addresses oil and hazardous substances liability, and establishes permit programs for water quality, point source pollutant discharges, ocean pollution discharges, and dredging or filling of wetlands. The intent of the CWA's §404 program and its §404(b)(1) "Guidelines" is to prevent destruction of aquatic ecosystems including wetlands, unless the action will not individually or cumulatively adversely affect the ecosystem. Section 404(b)(1) guidelines were used to evaluate the discharge of dredged or fill material for adverse impacts to the aquatic ecosystem. The proposed project complies with the requirements of the guidelines. The LDEQ Water Quality Certification letter, WQC 080327-01/AI 156863/CER 20110002, dated April 19, 2011, completes the certification process.

Endangered Species Act. The Endangered Species Act (16 U.S.C. 1531-1543; P.L. 93-205, as amended) was enacted in 1973 to provide for the conservation of species that are in danger of

extinction throughout all or a significant portion of their range. "Species" is defined by the Act to mean either a species, a subspecies, or, for vertebrates (*i.e.*, fish, reptiles, mammals, etc.) only, a distinct population. No threatened or endangered species or their critical habitat would be impacted by the proposed action. The USFWS concurred with the CEMVN's determination in their letter dated April 21, 2011.

Fish and Wildlife Coordination Act. The Fish and Wildlife Coordination Act (16 U.S.C. 661-666c; Act of March 10, 1934, as amended) requires that wildlife, including fish, receive equal consideration and be coordinated with other aspects of water resource development. This is accomplished by requiring consultation with the USFWS and NMFS whenever modifications are proposed to a body of water and a Federal permit or license is required. This consultation determines the possible harm to fish and wildlife resources, and the measures that are needed to both prevent the damage to and loss of these resources, and to develop and improve the resources, in connection with water resource development. NMFS submits comments and recommendations to Federal licensing and permitting agencies, and to Federal agencies conducting construction projects on the potential harm to living marine resources caused by proposed water development projects, and suggests recommendations to prevent harm. The USFWS provided the "Draft Fish and Wildlife Coordination Act Report for the Individual Environmental Reports (IER), Public Law 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006 (Supplemental 4)" in November 2007 (USFWS, 2007). To fulfill the responsibilities of the Fish and Wildlife Coordination Act, the USFWS will provide a post-authorization final supplemental 2(b) report to the draft programmatic report. A draft project-specific Coordination Act Report was received from USFWS by letter dated May 3, 2011. A final report will be prepared after the 30-day public review period. All comments regarding USFWS trust resources have been resolved.

Migratory Bird Treaty Act. The Migratory Bird Treaty Act of 1918 (MBTA) is the domestic law that affirms, or implements, the United States' commitment to four international conventions with Canada, Japan, Mexico, and Russia for the protection of shared migratory bird resources. The MBTA governs the taking, killing, possessing, transporting, and importing of migratory birds, their eggs, parts, and nests. The taking of all migratory birds is governed by the MBTA's regulation of taking migratory birds for educational, scientific, and recreational purposes and requiring harvest to be limited to levels that prevent over-utilization. Section 704 of the MBTA states that the Secretary of the Interior is authorized and directed to determine if, and by what means, the taking of migratory birds should be allowed and to adopt suitable regulations permitting and governing taking. The MBTA prohibits the taking, possessing, importing, exporting, transporting, selling, purchasing bartering, or offering for sale, purchase or barter, of any migratory bird, their eggs, parts, and nests, except as authorized under a valid permit (50 CFR §21.11). The USFWS addressed compliance with this Act in the "Draft Fish and Wildlife Coordination Act Report for the IER, Public Law 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006 (Supplemental 4)" in November 2007 (USFWS, 2007). To fulfill the responsibilities of the Fish and Wildlife Coordination Act, the USFWS will provide a post-authorization final supplemental 2(b) report to the draft programmatic report.

National Environmental Policy Act. The NEPA (42 U.S.C. 4321-4347; Pub. L. 91-190, as amended) requires Federal agencies to analyze the potential effects of a proposed Federal action that would significantly affect historical, cultural, or natural aspects of the environment. It specifically requires agencies to use a systematic, interdisciplinary approach in planning and decision-making, to insure that environmental values may be given appropriate consideration, and to provide detailed statements on the environmental impacts of proposed actions including: (1) any adverse impacts; (2) alternatives to the proposed action; and (3) the relationship between short-term uses and long-term productivity. The agencies use the results of this analysis in decision-making. The preparation of this IERS is a part of compliance with NEPA.

National Historic Preservation Act. Congress established the most comprehensive national policy on historic preservation with the passage of the National Historic Preservation Act of 1966 (NHPA). In this act, historic preservation was defined to include "the protection, rehabilitation, restoration and reconstruction of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, or culture." The act led to the creation of the National Register of Historic Places, a file of cultural resources of national, regional, state, and local significance. The act also established the Advisory Council on Historic Preservation (the Council), an independent Federal agency responsible for administering the protective provisions of the act. The major provisions of the NHPA are Sections 106 and 110. Both sections aim to ensure that historic properties are appropriately considered in planning Federal initiatives and actions. Section 106 is a specific, issue-related mandate to which Federal agencies must adhere. It is a reactive mechanism that is driven by a Federal action. Section 110, in contrast, sets out broad Federal agency responsibilities with respect to historic properties. It is a proactive mechanism with emphasis on ongoing management of historic preservation sites and activities at Federal facilities. Coordination of this project with SHPO is occurring concurrently with the preparation and release of this IERS. Coordination of this project with SHPO fulfills the requirements to comply with the NHPA, and a SHPO will conclude this process.

9.0 CONCLUSION

9.1 Proposed decision

The proposed action would require the removal (clearing, grubbing and filling) of approximately 1.5 acres of wet BLH and the disturbance of less than half an acre of open water during the relocation of the access road and drainage ditch associated with LPV 04.2b.

The CEMVN has assessed the environmental impacts of the proposed action and has determined that the proposed action would have the following impacts:

- Short-term impact to air quality from heavy equipment and trucks used during the 10 month construction period,
- Short-term direct impact to water quality in the drainage canal and ditch from construction and the placement of fill into the canal and ditch,

- Short-term disturbance to nearby businesses and wildlife from construction noise and vibration,
- Permanent loss of approximately 1.5 acres of BLH (clearing, grubbing, and filling), which will be mitigated,
- Disturbance of less than half of an acre of aquatic habitat,
- Temporary construction related traffic impacts on Hwy 61.

9.2 Prepared by

Table 4. IERS #1b Preparation Team

Environmental Team Leader	Sandy Stiles, CEMVN
Environmental Manager	Tammy Gilmore, CEMVN
Sr. Project Manager	Carl Anderson, CEMVN
Review	Aven Bruser CEMVN – Office of Counsel
Review	Thomas Keevin, CEMVS - Independent Technical Review
HTRW	J. Christopher Brown, CEMVN
Cultural Resources	Paul Hughbanks, CEMVN
Recreational Resources	Andrew Perez, CEMVN
Aesthetic Resources	Kelly McCaffrey, CEMVN
Environmental Justice	Paul Hughbanks, CEMVN
Economics	Joseph Mann, CEMVN
Technical Editor	Jennifer Darville, CEMVN

9.3 Literature cited

Department of the Army, Corps of Engineers, New Orleans District. 2008. Final Individual Environmental Report – Lake Pontchartrain and Vicinity, La Branche Wetlands Levee, St. Charles Parish, Louisiana, IER#1, June 9, 2009.

Department of the Army, Corps of Engineers, New Orleans District. 2009. Final Individual Environmental Report Supplemental– Lake Pontchartrain and Vicinity, La Branche Wetlands Levee, St. Charles Parish, Louisiana, IERS#1, June 29, 2009.

APPENDICES

APPENDIX A - LIST OF ACRONYMS AND DEFINITIONS OF COMMON TERMS

AAHUs	Annual Average Habitat Units
AD	Anno Domini
ASTM	American Society for Testing and Materials
BFI	Browning-Ferris Industries Landfill
BLH	Bottomland Hardwood Forest
BNSF	Burlington Northern Santa Fe
BOD	Biological Oxygen Demand
CED	Comprehensive Environmental Document
CEMVN	Corps of Engineers, Mississippi Valley Division, New Orleans District
CEQ	The President's Council on Environmental Quality
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CFS	Cubic Ft Per Second
CW	Civil Works Program
CWA	Clean Water Act
CY	Cubic Yard
CSMA	Consolidated Metropolitan Statistical Area
CZM	Coastal Zone Management
dBA	Decibels
EA	Environmental Assessment
EFH	Essential Fish Habitat
EIS	Environmental Impact Statement
EM	Engineering Manual
EO	Executive Order
EPW	Evaluation Of Planned Wetlands
ER	Engineering Regulation
ESA	Environmental Site Assessment
FCU	Functional Capacity Units
FCI	Functional Capacity Index
FEMA	Federal Emergency Management Agency
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FWCA	Fish and Wildlife Coordination Act
DPR	Detailed Project Report
DPR/EA	Detailed Project Report/Environmental Assessment
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FPPA	Farmland Protection Policy Act
FTA	Federal Transit Administration
FWCA	Fish and Wildlife Coordination Act
HSDRRS	Greater New Orleans Hurricane and Storm Damage Risk Reduction System
HTRW	Hazardous, Toxic, and Radioactive Waste
HPS	Hurricane Protection System
IER	Individual Environmental Report
LCRP	Louisiana Coastal Resources Program
LDEQ	Louisiana Department of Environmental Quality
LDNR	Louisiana Department of Natural Resources
LDWF	Louisiana Department of Wildlife and Fisheries
LPV	Lake Ponchartrain and Vicinity

MBTA	Migratory Bird Treaty Act
ML	Milliliters
MPH	Miles per Hour
MSA	Metropolitan Statistical Area
NAA	Non Attainment Area
NAAQS	National Ambient Air Quality Standards
NAVD	North American Vertical Datum of 1988
NEPA	National Environmental Policy Act
NFIP	National Flood Insurance Program
NHP	Natural Heritage Program
NHPA	National Historic Preservation Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRCS	National Resources Conservation Service
NWR	National Wildlife Refuge
O&M	Operations And Maintenance
OMRR&R	Operations, Maintenance, Repair, Replacement, & Rehabilitation
OSE	Other Social Effects
PA	Programmatic Agreement
PDT	Project Delivery Team
PL	Public Law
PPA	Project Partnering Agreements
PSI	Pounds Per Square Inch
P&G	Economic and Environmental Principles and Guidelines for Water and Related Land Resources Implementation Studies
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
RED	Regional Economic Development
ROD	Record of Decision
ROW	Right-of-Way
SCORP	State Comprehensive Outdoor Recreation Plan
SHPO	State Historic Preservation Officer
SIP	State Implementation Plan
SPH	Standard Project Hurricane
TMDL	Total Maximum Daily Load
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
USGS	United States Geological Survey
VOC	Volatile Organic Compounds
WBV	West Bank and Vicinity
WRDA	Water Resources Development Act
WVA	Wetlands Value Assessment

APPENDIX B

PUBLIC COMMENT AND RESPONSE SUMMARY

To be added after public comment review period

APPENDIX C - MEMBERS OF INTERAGENCY ENVIRONMENTAL TEAM

Kyle Balkum	Louisiana Dept. of Wildlife and Fisheries
Catherine Breaux	U.S. Fish and Wildlife Service
Mike Carloss	Louisiana Dept. of Wildlife and Fisheries
David Castellanos	U.S. Fish and Wildlife Service
Frank Cole	Louisiana Department of Natural Resources
Greg Ducote	Louisiana Department of Natural Resources
John Ettinger	U.S. Environmental Protection Agency
David Felder	U.S. Fish and Wildlife Service
Michelle Fischer	U.S. Geologic Survey
Deborah Fuller	U.S. Fish and Wildlife Service
Mandy Green	Louisiana Department of Natural Resources
Jeffrey Harris	Louisiana Department of Natural Resources
Richard Hartman	NOAA National Marine Fisheries Service
Brian Heimann	Louisiana Dept. of Wildlife and Fisheries
Jeffrey Hill	NOAA National Marine Fisheries Service
Christina Hunnicutt	U.S. Geologic Survey
Barbara Keeler	U.S. Environmental Protection Agency
Kirk Kilgen	Louisiana Department of Natural Resources
Tim Killeen	Louisiana Department of Natural Resources
Brian Lezina	Louisiana Dept. of Wildlife and Fisheries
Brian Marks	Louisiana Dept. of Wildlife and Fisheries
Ismail Merhi	Louisiana Department of Natural Resources
David Muth	U.S. National Park Service
Clint Padgett	U.S. Geologic Survey
Jamie Phillippe	Louisiana Dept. of Environmental Quality
Molly Reif	U.S. Geologic Survey
Kevin Roy	U.S. Fish and Wildlife Service
Manuel Ruiz	Louisiana Dept. of Wildlife and Fisheries
Reneé Sanders	Louisiana Department of Natural Resources
Angela Trahan	U.S. Fish and Wildlife Service
Nancy Walters	U.S. Fish and Wildlife Service
David Walther	U.S. Fish and Wildlife Service
Patrick Williams	NOAA National Marine Fisheries Service

APPENDIX D

Agency Coordination

BOBBY JINDAL
GOVERNOR



SCOTT A. ANGELLE
SECRETARY

State of Louisiana
DEPARTMENT OF NATURAL RESOURCES
OFFICE OF COASTAL MANAGEMENT

May 16, 2011

Joan Exnicios
Chief, Environmental Planning and Compliance Branch
U. S. Army Corps of Engineers, New Orleans District
P. O. Box 60267
New Orleans, Louisiana 70160-0267

RE: **C20080104**, Coastal Zone Consistency Modification 4
U. S. Army Corps of Engineers, New Orleans District
Direct Federal Action
IER 1: Lake Pontchartrain and Vicinity, Labranche Wetlands Hurricane Protection
Levee; Modification to relocate an access road and drainage ditch constructed outside of
the authorized right-of-way, **St. Charles Parish, Louisiana**

Dear Ms Exnicios:

The above referenced project modification has been reviewed for consistency with the approved Louisiana Coastal Resource Program (LCRP) as required by Section 307 of the Coastal Zone Management Act of 1972, as amended. The modification, as proposed in the application, is consistent with the LCRP. If you have any questions concerning this determination please contact Jeff Harris of the Consistency Section at (225) 342-7949.

Sincerely yours,

for 
Gregory J. DuCote
Administrator

GJD/jdh

cc: David Butler, LDWF
David Walther, USFWS
Angela Trahan, USFWS
Barbara Keeler, USEPA
John Ettinger, USEPA
Rick Hartman, NMFS
Tim Killeen, CMD FI

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Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7751
Fax: (318) 473-7626

April 19, 2011

Ms. Tammy Gilmore
U.S. Army Corps of Engineers
Planning, Programs, and Project Management Division
P.O. Box 60267
New Orleans, Louisiana 70160-0267

RE: IERS #1b LPV 04.2b Road and Ditch Relocation

Dear Ms. Gilmore:

Per your request, we have reviewed the soils information for the project location as it pertains to prime and unique farmlands. The review of the recent aerial imagery indicates this project area is already devoted to urban and built-up areas. Soils in these areas are not considered prime farmland and are exempt from the Prime Farmland Protection Policy Act. No prime farmlands will be impacted. Please find the attached AD-1006 Farmland Conversion Impact Rating form with our agencies information completed.

Please contact me regarding all future requests at the address shown above.

Respectfully,

A handwritten signature in black ink, appearing to read "W. Norton", written over a horizontal line.

Kevin D. Norton **ACTING FOR**
State Conservationist

Attachment

cc: Charles Guillory, SSS, SO, NRCS, Alexandria, LA
Michael Trusclair, DC, FO, NRCS, Boutte, LA
Burnell Muse, MLRA SS Leader, NRCS, Denham Springs, LA

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I (To be completed by Federal Agency)		Date Of Land Evaluation Request <u>4/15/11</u>	
Name Of Project <u>IERS 1b WBV 04.2b Road and Ditch Relocation</u>		Federal Agency Involved <u>US Army Corps of Engineers</u>	
Proposed Land Use <u>Access Road</u>		County And State <u>St. Charles Parish, Louisiana</u>	
PART II (To be completed by NRCS)		Date Request Received By NRCS <u>4/18/11</u>	

Does the site contain prime, unique, statewide or local important farmland? (If no, the FPPA does not apply -- do not complete additional parts of this form)		Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %			Amount Of Farmland As Defined In FPPA Acres: %	
Name Of Land Evaluation System Used	Name Of Local Site Assessment System			Date Land Evaluation Returned By NRCS <u>4/19/11</u>	

PART III (To be completed by Federal Agency)		Alternative Site Rating			
		Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	1.5				
B. Total Acres To Be Converted Indirectly	0.0				
C. Total Acres In Site	1.5	0.0	0.0	0.0	0.0

PART IV (To be completed by NRCS) Land Evaluation Information:					
A. Total Acres Prime And Unique Farmland					
B. Total Acres Statewide And Local Important Farmland					
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted					
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value					

PART V (To be completed by NRCS) Land Evaluation Criterion:					
Relative Value Of Farmland To Be Converted (Scale of 0 to 100 Points)	0	0	0	0	0

PART VI (To be completed by Federal Agency)		Maximum Points			
Site Assessment Criteria (These criteria are explained in 7 CFR 658.5(b))					
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0

PART VII (To be completed by Federal Agency)					
Relative Value Of Farmland (From Part V)	100	0	0	0	0
Total Site Assessment (From Part VI above or a local site assessment)	160	0	0	0	0
TOTAL POINTS (Total of above 2 lines)	260	0	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Reason For Selection:		

(See instructions on reverse side)

BOBBY JINDAL
GOVERNOR



PEGGY M. HATCH
SECRETARY

State of Louisiana
DEPARTMENT OF ENVIRONMENTAL QUALITY
ENVIRONMENTAL SERVICES

APR 19 2011

U.S. Army Corps of Engineers- New Orleans District
P.O. Box 60267
New Orleans, LA 70160-0267

Attention: Tammy Gilmore

RE: Water Quality Certification (WQC 080327-02/AI 156863/CER 20110002)
Individual Environmental Report #1 revision
St. Charles Parish

Dear Ms. Gilmore:

The Louisiana Department of Environmental Quality (the Department) has reviewed your revised application to construct the LaBranche Wetlands Levee in St. Charles Parish. This revision concerns the relocation of an access road and drainage ditch.

Based on the information provided in the application, the Department made a determination that the requirements for a Water Quality Certification have been met and concludes that the placement of the fill material will not violate water quality standards of Louisiana as provided for in LAC 33:IX.Chapter 11. Therefore, the Department hereby issues a Water Quality Certification to U.S. Army Corps of Engineers- New Orleans District.

If you have any questions, please call Jamie Phillippe at 225-219-3225.

Sincerely,

A handwritten signature in black ink, appearing to read "Melvin C. Mitchell, Sr.", written over a horizontal line.

Melvin C. Mitchell, Sr.
Administrator
Water Permits Division

MCM/jjp



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

April 15, 2011

Regional Planning and
Environmental Division South
New Orleans Environment Branch

Mr. James F. Boggs
Field Supervisor
U.S. Fish and Wildlife Service
646 Cajundome Blvd - Suite 400
Lafayette, Louisiana 70506

This project has been reviewed for effects to Federal trust resources under our jurisdiction and currently protected by the Endangered Species Act of 1973 (Act). The project, as proposed,

Will have no effect on those resources

Is not likely to adversely affect those resources.

This finding fulfills the requirements under Section 7(a)(2) of the Act.

Deborah A. Fuller April 21, 2011
Date

Acting Supervisor
Louisiana Field Office
U.S. Fish and Wildlife Service

Dear Mr. Boggs:

The U.S. Army Corps of Engineers (USACE) requests re-initiation for Endangered Species Act (ESA) Coordination for a modification to Individual Environmental Report (IER) #1 titled Lake Pontchartrain and Vicinity, La Branche Wetlands Levee, St. Charles Parish, Louisiana. USACE is conducting investigations and preparing National Environmental Policy Act (NEPA) compliance documentation for the proposed modification to the above levee project. This documentation describes the modification to the design of project features previously described in IER #1 and IERS #1. Coordination was conducted for IER #1 and IERS #1 in April 2008 and April 2009 respectively. IER #1 was released for public review on April 29, 2008 and IERS #1 was released for public review on May 15, 2009. The Decision Record for IER #1 was signed on June 6, 2008 and IERS #1 on June 29, 2009. The U.S. Fish and Wildlife Service (USFWS) in their letters dated April 8, 2008 (IER #1) and April 3, 2009 (IERS #1), indicated that the proposed action would not adversely impact any known threatened or endangered species or their critical habitat. Since IER #1 and IERS #1 were prepared, a modification to the project design has been proposed. Additional impacts would occur due to this project change including the need for an expanded project area. Due to this project design change we are re-initiating ESA coordination.

The proposed project is identified as IERS #1b WBV 04.2b Access Road and Ditch Relocation. The project area is located in St. Charles Parish, Louisiana. The proposed addition is described in the Enclosure.

Based on review of existing data it is the opinion of CEMVN that the completion of this work would have no effect on listed species or critical because neither is found in the project area.



United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506
May 3, 2011



Colonel Edward R. Fleming
District Commander
U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Colonel Fleming:

Please refer to the Flood protection efforts for the Individual Environmental Report 1 (IER) projects. The Fish and Wildlife Service (Service) provides this supplemental Fish and Wildlife Coordination Act Report (CAR) addressing changes to the proposed flood protection efforts. This report is provided in accordance with, but does not fulfill our responsibilities under, Section 2(b) of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C 661 et seq.). This CAR supplements our previous CAR sent June 23, 2009, and previous supplemental CAR sent on April 24, 2009. The Service has provided copies of this report to the Louisiana Department of Wildlife and Fisheries (LDWF) and their comments will be incorporated into our final report.

A portion of the existing Fox Lane access road, built in 1999, was inadvertently constructed outside of the road easement acquired by Pontchartrain Levee District. The first 445 feet from Airline Highway is believed to be located within the road easement as delineated in Figure 1. The proposed action would relocate the portions of the 1,400 foot (ft) Fox Lane access road that were constructed outside of this easement approximately 15 – 50 ft to the west of its current location. Relocating the 30 ft wide road will also require shifting an adjacent drainage ditch 10 – 20 ft west. The existing crossing and culverts in the canal parallel to the levee at the northern end of the road would be removed and a new crossing would be constructed 40 ft to the west with new culverts of a similar size. Relocation of the drainage ditch parallel to the road would require excavation of approximately 1,500 cubic yards (cy) of earth which would then be used to fill the existing ditch. An additional 3,500 cy of sand fill would then be placed on top of the existing canal to provide a firm surface for the relocated road which would then be topped with 3,000 cy of rock fill, some of which would be salvaged from the existing road. Approximately 0.40 acres of existing road outside of the right of way would be removed and returned to the same elevation as the adjacent land. A total of 1.5 acres of wetland impacts are expected from the relocation of the ditch and road.



Figure 1. Aerial of existing Fox Lane Access Rd. and location of new proposed access road. Almedia, LA

Prior to the construction of the road, the area was likely classified as swamp and bottomland hardwood with plant species such as: black willow, English ivy, trumpet creeper, water oak, live oak, green ash, sweet gum, box elder, privet, mulberry, elm, ragweed, palmetto, raspberry, and red maple. This type of habitat can support a variety of wildlife such as: migratory song birds, raccoon, and frogs.

The Service quantified unavoidable project impacts to Bottomland hardwood forest and calculated mitigation needs through the use of Wetland Value Assessment (WVA). That methodology utilizes an assemblage of the variable considered important to the suitability of each habitat type to support a diversity of fish and wildlife species. A numeric comparison of each future condition (i.e., future with and future without the project) provides an estimate of project-related effects of fish and wildlife habitat quality and quantity. That estimate provides the basis for determining impacts and mitigation.

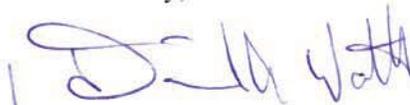
A site visit was conducted on April 28, 2011. The site had a few live oaks but was generally considered to have a low concentration of hard mast trees; however, several soft mast species (i.e. green ash, box elder, sweet gum, and red mulberry) were identified in the project area. The under story and midstory were thick with saplings and vines but only a few mature trees existed in on site. The non-native invasive tree chinese tallow was observed growing along the edge of the forest to the east of the road. A drainage ditch runs directly through the project area and likely keeps the area very wet. The west side of the project area is mowed regularly and is developed while the east side is the location of the current road which cuts the project area off from the contiguous forest. Based on these observations and the calculations from the WVA model, it is estimated that 0.19 average annual habitat units (AAHU) would be lost by removal of these trees.

The Service does not object to the construction of the proposed project, provided the following fish and wildlife conservation recommendations are implemented concurrently with project implementation:

1. The Service recommends that any impacts to forested wetlands should be avoided or minimized to the greatest extent practicable and any unavoidable impacts should be mitigated.
2. The Service recommends the installation of a minimum of 18-24 inch culverts every 250 ft. when constructing access roads through wetlands. Additional culverts should be installed at stream crossings and drainage features. Culverts should be maintained to ensure that existing flow of surface water is uncompromised.
3. All gates and/or culverts being replaced or modified should be operated according to previously developed operational plans to avoid further degradation of the project area hydrology.
4. Any proposed change in levee, floodwall, or drainage structure features, locations or plans shall be coordinated in advance with the Service, National Marine Fisheries Service, LDWF, and Louisiana Dept. of Natural Resources.
5. If the proposed project has not been constructed within 1 year or if changes are made to the proposed project, the Corps should re-initiate Endangered Species Act consultation with the Service to ensure that the proposed project would not adversely affect any federally listed threatened or endangered species or their habitat.

We appreciate the cooperation of your staff on this study. Should you or your your staff have any questions regarding the enclosed report, please have them contact Jennifer Hogue (337/291-3144) of this office.

Sincerely,



Carrie Thompson
Acting Field Supervisor

Louisiana Ecological Services Field Office



APPENDIX E: Section 404(b)(1) Evaluation

The following short form 404(b)(1) evaluation follows the format designed by the Office of the Chief of Engineers, (OCE). As a measure to avoid unnecessary paperwork and to streamline regulation procedures while fulfilling the spirit and intent of environmental statutes, New Orleans District is using this format for all proposed project elements requiring 404 evaluation, but involving no adverse significant impacts.

PROJECT TITLE: IERS 1B ACCESS ROAD AND DITCH RELOCATION

PROJECT DESCRIPTION. A portion of the existing Fox Lane access road, built in 1999, was inadvertently constructed outside of the road easement acquired by Pontchartrain Levee District. The first 445 feet from Airline Highway is believed to be located within the road easement as delineated in Figure 2. The proposed action would relocate the portions of the 1,400 ft Fox Lane access road outside of this easement approximately 15 – 50 ft to the west of its current location. Relocating the 30 ft wide road will also require shifting an adjacent drainage ditch 10 – 20 ft west. The existing crossing and culverts in the canal parallel to the levee at the northern end of the road would be removed and a new crossing would be constructed 40 ft to the west with new culverts of a similar size. Relocation of the drainage ditch parallel to the road would require excavation of approximately 1500 cy of earth which would then be used to fill the existing ditch. An additional 3500 cy of sand fill would then be placed on top of the existing canal to provide a firm surface for the relocated road which would be topped with 3,000 cy of rock fill some of which would be salvaged from the existing road. Approximately 0.40 acres of existing road outside of ROW would be removed and returned to the same elevation as the adjacent land. A total of 1.5 acres of wetland impacts are expected from the relocation of the ditch and road.



Figure 1 – General Project area.



Figure 2 Aerial of existing Fox Lane Access Rd and location of new proposed access road.

1. Review of Compliance (§230.10 (a)-(d)).

Preliminary¹

Final²

A review of this project indicates that:

a. The discharge represents the least environmentally damaging practicable alternative and if in a special aquatic site, the activity associated with the discharge must have direct access or proximity to, or be located in the aquatic ecosystem to fulfill its basic purpose (if no, see section 2 and information gathered for environmental assessment alternative);

YES	NO*	YES	NO
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b. The activity does not appear to: (1) violate applicable state water quality standards or effluent standards prohibited under Section 307 of the Clean Water Act; (2) jeopardize the existence of Federally listed endangered or threatened species or their habitat; and (3) violate requirements of any Federally designated marine sanctuary (if no, see section 2b and check responses from resource and water quality certifying agencies);

YES	NO*	YES	NO
-----	-----	-----	----

c. The activity will not cause or contribute to significant degradation of waters of the United States including adverse effects on human health, life stages of organisms dependent on the aquatic ecosystem, ecosystem diversity, productivity and stability, and recreational, esthetic, and economic values (if no, see section 2);

YES	NO*	YES	NO
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d. Appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem (if no, see section 5).

YES	NO*	YES	NO
-----	-----	-----	----

2. Technical Evaluation Factors (Subparts C-F).

N/A Not Significant Significant*

a. Physical and Chemical Characteristics of the Aquatic Ecosystem (Subpart C).

- (1) Substrate impacts.
- (2) Suspended particulates/turbidity impacts.
- (3) Water column impacts.
- (4) Alteration of current patterns and water circulation.
- (5) Alteration of normal water fluctuations/hydroperiod.
- (6) Alteration of salinity gradients.

	x	
	x	
	x	
	x	
x		
	x	

b. Biological Characteristics of the Aquatic Ecosystem (Subpart D).

- (1) Effect on threatened/endangered species and their habitat.
- (2) Effect on the aquatic food web.
- (3) Effect on other wildlife (mammals, birds, reptiles, and amphibians).

x		
	x	
	x	

c. Special Aquatic Sites (Subpart E).

- (1) Sanctuaries and refuges.
- (2) Wetlands.
- (3) Mud flats.
- (4) Vegetated shallows.
- (5) Coral reefs.
- (6) Riffle and pool complexes.

x		
	x	
x		
x		
x		
x		

d. Human Use Characteristics (Subpart F).

- (1) Effects on municipal and private water supplies.
- (2) Recreational and commercial fisheries impacts.
- (3) Effects on water-related recreation.
- (4) Esthetic impacts.
- (5) Effects on parks, national and historical monuments, national seashores, wilderness areas, research sites, and similar preserves.

x		
x		
x		
x		
x		

Remarks. Where a check is placed under the significant category, the preparer has attached explanation.

3. Evaluation of Dredged or Fill Material (Subpart G).³

a. The following information has been considered in evaluating the biological availability of possible contaminants in dredged or fill material.

(1) Physical characteristics	<u> X </u>
(2) Hydrography in relation to known or anticipated sources of contaminants	<u> X </u>
(3) Results from previous testing of the material or similar material in the vicinity of the project	<u> </u>
(4) Known, significant sources of persistent pesticides from land runoff or percolation	<u> </u>
(5) Spill records for petroleum products or designated (Section 311 of CWA) hazardous substances	<u> X </u>
(6) Other public records of significant introduction of contaminants from industries, municipalities, or other sources	<u> X </u>
(7) Known existence of substantial material deposits of substances which could be released in harmful quantities to the aquatic environment by man-induced discharge activities	<u> </u>
(8) Other sources ..See references below.....	<u> X </u>

Appropriate references:

- a. United States Army Corps of Engineers (USACE) 2008. *Individual Environmental Report, LPV, LaBranche Wetlands Levee, St. Charles Parish, Louisiana, IER #1.*
http://www.nolaenvironmental.gov/projects/usace_levee/IER.aspx?IERID=1.
- b. USACE 2009 *Supplemental Individual Environmental Report, LPV, LaBranche Wetlands Levee, St. Charles Parish, Louisiana, SIER #1.*
- c. US EPA, CERCLIS Database of Hazardous Waste Sites:
www.epa.gov/superfund/sites/cursites/index.htm
- d. US EPA, EnviroMapper StoreFront: <http://www.epa.gov/enviro/html/em/index.html>
- e. US EPA, National Recommended Water Quality Criteria, 2006:
<http://epa.gov/waterscience/criteria/wqcriteria.html>
- f. US EPA, Section 404(b)(1) Guidelines for Specification of Disposal Sites for Dredged or Fill Material, July 2004: <http://www.epa.gov/owow/wetlands/pdf/40cfrPart230.pdf>
- g. Louisiana Department of Environmental Quality (LDEQ) 2008a. Ambient Surface Water Quality Monitoring Data website.
<http://www.deq.louisiana.gov/portal/Default.aspx?tabid=2421>.
- h. LDEQ 2008b. Chapter 11 Surface Water Quality Standards.
<http://www.deq.louisiana.gov/portal/LinkClick.aspx?link=planning%2fregs%2fitle33%2f33v09.pdf&tabid=1674>
- i. National Oceanic and Atmospheric Administration (NOAA) 2006. *Screening Quick Reference Tables.*
[http://response.restoration.noaa.gov/type_topic_entry.php?RECORD_KEY%28entry_topic_type%29=entry_id,topic_id,type_id&entry_id\(entry_topic_type\)=90&topic_id\(entry_topic_type\)=2&type_id\(entry_topic_type\)=2](http://response.restoration.noaa.gov/type_topic_entry.php?RECORD_KEY%28entry_topic_type%29=entry_id,topic_id,type_id&entry_id(entry_topic_type)=90&topic_id(entry_topic_type)=2&type_id(entry_topic_type)=2).

b. An evaluation of the appropriate information in 3a above indicates that there is reason to believe the proposed dredge or fill material is not a carrier of contaminants, or the material meets the testing exclusion criteria.

YES NO*

4. Disposal Site Delineation (§230.11(f)).

a. The following factors, as appropriate, have been considered in evaluating the disposal site.

- | | |
|--|-------|
| (1) Depth of water at disposal site | x |
| (2) Current velocity, direction, and variability at disposal site | x |
| (3) Degree of turbulence | x |
| (4) Water column stratification | x |
| (5) Discharge vessel speed and direction | _____ |
| (6) Rate of discharge | _____ |
| (7) Dredged material characteristics (constituents, amount, and type of material, settling velocities) | x |
| (8) Number of discharges per unit of time | _____ |
| (9) Other factors affecting rates and patterns of mixing (specify) | _____ |

Appropriate references:

Same as 3(a)

b. An evaluation of the appropriate factors in 4a above indicates that the disposal site and/or size of mixing zone are acceptable.

YES NO*

5. Actions to Minimize Adverse Effects (Subpart H).

All appropriate and practicable steps have been taken, through application of the recommendations of §230.70-230.77 to ensure minimal adverse effects of the proposed discharge.

YES NO*

6. Factual Determination (§230.11).

A review of appropriate information as identified in items 2-5 above indicates that there is minimal potential for short- or long-term environmental effects of the proposed discharge as related to:

- | | | |
|---|------------------------------|-----|
| a. Physical substrate at the disposal site (review sections 2a, 3, 4, and 5 above). | <input type="checkbox"/> YES | NO* |
| b. Water circulation, fluctuation and salinity (review sections 2a, 3, 4, and 5). | <input type="checkbox"/> YES | NO* |
| c. Suspended particulates/turbidity (review sections 2a, 3, 4, and 5) | <input type="checkbox"/> YES | NO* |
| d. Contaminant availability (review sections 2a, 3, and 4). | <input type="checkbox"/> YES | NO* |
| e. Aquatic ecosystem structure and function (review sections 2b and c, 3, and 5). | <input type="checkbox"/> YES | NO* |
| f. Disposal site (review sections 2, 4, and 5). | <input type="checkbox"/> YES | NO* |
| g. Cumulative impact on the aquatic ecosystem. | <input type="checkbox"/> YES | NO* |
| h. Secondary impacts on the aquatic ecosystem. | <input type="checkbox"/> YES | NO* |

*A negative, significant, or unknown response indicates that the project may not be in compliance with the Section 404(b)(1) Guidelines.

¹Negative responses to three or more of the compliance criteria at this stage indicates that the proposed projects may not be evaluated using this "short form procedure". Care should be used in assessing pertinent portions of the technical information of items 2a-d, before completing the final review of compliance.

²Negative responses to one of the compliance criteria at this stage indicates that the proposed project does not comply with the guidelines. If the economics of navigation and anchorage of Section 404(b)(2) are to be evaluated in the decision-making process, the "short form" evaluation process is inappropriate.

³If the dredged or fill material cannot be excluded from individual testing, the "short form" evaluation process is inappropriate.

7. Evaluation Responsibility.

a. Water Quality input provided by: Stephen T. Servay

Position: Chemist

Date : 5/03/2011

b. This evaluation was reviewed by: Rodney Mach

Position: Supervisory Hydraulic Engineer, ED-HN

Date: 5/10/2011

c. Biological input provided by: Tammy Gilmore

Position: Biologist

Date: 5/11/2011

d. biological evaluation was reviewed by : Sandra Stiles

Position: Supervisor PDR-RS

Date: 5/11/2011

8. Findings.

a. The proposed disposal site for discharge of dredged or fill material complies with the Section 404(b)(1) guidelines X

b. The proposed disposal site for discharge of dredged or fill material complies with the Section 404(b)(1) guidelines with the inclusion of the following conditions _____

c. The proposed disposal site for discharge of dredged or fill material does not comply with the Section 404(b)(1) guidelines for the following reason(s):

(1) There is a less damaging practicable alternative _____

(2) The proposed discharge will result in significant degradation of the aquatic ecosystem _____

(3) The proposed discharge does not include all practicable and appropriate measures to minimize potential harm to the aquatic ecosystem _____

Date: _____

Joan M. Exnicios
Chief, New Orleans Environmental Branch

APPENDIX F
HTRW 07 - 32a

Phase I Environmental Site Assessment Update Memorandum
IER # 1, Fox Lane Access Road Relocation
St. Charles Parish, Louisiana

The existing Fox Lane access road, built in 1999, was inadvertently constructed outside of the road easement acquired by Pontchartrain Levee District. The proposed action would relocate the portions of the 1,400 ft Fox Lane access road now outside of this easement by approximately 15 to 40 ft to the west of its current location. Relocating the road will also require shifting an adjacent drainage ditch 10 to 20 ft to the west. The existing canal crossing and culverts at the northern end of the road would be removed, and a new crossing would be constructed 40 ft to the west. Relocation of the drainage ditch would require excavation of 2500 cubic yards (CY) of earth, which would then be used to fill the existing canal. An additional 5000 CY of sand fill would then be placed on top of the existing canal, to provide a firm surface for the relocated road, which would be topped with 4,800 CY of rock fill, some of which would be salvaged from the existing road. Approximately 0.25 acres of existing road outside of ROW would be removed and returned to the same elevation as the adjacent land. A total of 1.5 acres of new impacts are expected from the relocation of the ditch and road.

The proposed relocation area was evaluated in a Phase I Environmental Site Assessment (ESA) entitled "Final Phase I ESA Report, Hurricane Protection Levees and Floodwalls, IER 01 and IER 02, St. Charles and Jefferson Parishes, Louisiana." The report was written by Materials Management Group, Inc. and is dated 14 August 2007.

Ten Recognized Environmental Conditions (RECs) were identified within the study area, but none of these RECs would affect the proposed relocation area. There are some closed landfills in the area, which have been identified and avoided; the proposed proposed relocation would not encroach on the landfills.

CEMVN-PDR-RP personnel made a site visit to the proposed relocation area on 22 April 2011. The site was inspected for the presence of pipes, containers, tanks or drums, ponds or lagoons, car bodies, tires, refrigerators, trash dumps, electrical equipment, oil drilling equipment, gas or oil wells, discoloration of vegetation or water sheens, discoloration of soils, out-of-place dirt mounds or depressions in the landscape, evidence of fire, stressed soils with lack of vegetation, discoloration of vegetation, animal remains, unusual animal behavior, biota indicative of a disturbed environment, and odors indicative of poor water quality or chemical presence. None of these indicators was found. A database search of EPA files did not reveal any RECs that would affect the relocation area. The probability of encountering HTRW in the course of this proposed relocation is low. No further investigation of HTRW is recommended; however, if the project location changes, the HTRW status may need to be re-investigated.

FOX LANE ACCESS ROAD RELOCATION



J. Christopher Brown, Ph.D.
CEMVN-PDR-RP, Room 363
3 May 2011

APPENDIX G

IER #1 and IERS #1a can be found at

nolaenvironmental.gov