



REPLY TO
ATTENTION OF

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

Planning, Programs, and
Project Management Division
Environmental Planning
and Compliance Branch

Decision Record

Individual Environmental Report Supplemental #6
LAKE PONTCHARTRAIN AND VICINITY,
EAST CITRUS LAKEFRONT LEVEE
ORLEANS PARISH, LOUISIANA

IERS #6

Description of Proposed Action. The proposed action consists of raising the East Citrus Lakefront Levee reaches LPV 105.02, LPV 106 and LPV 107 by the addition of a floodwall rather than raising the existing levee. A new I-wall would be placed near the crown of the existing 1,915 linear feet (ft) of earthen levee. The new I-wall on LPV 105.02 would be constructed to +15.5 ft NAVD 88, approximately 2 ft above the existing levee elevation. The new I-wall would be constructed between approximate baseline (B/L) station 56+00 to station 76+00 (east of Lamb Road to west of Danube Road). The remainder of the work to be completed on the LPV 105.02 reach would be as described in IER #6. A new I-wall on LPV 106 would be placed near the crown of the existing earthen levee. The design would be similar to LPV 105.02, except that the new I-wall would be constructed to +14.5 ft NAVD 88, approximately 2 ft above the existing levee elevation. The existing I-wall and earthen levee on LPV 107 would be replaced by a T-wall to a height of +15.5 ft NAVD 88. The LPV 107 floodwall alignment would be shifted approximately 12 ft south as described in IER #6, aligning LPV 107 with the LPV 106 alignment. The existing floodgate would be replaced with a new floodgate at elevation +15.5 ft NAVD 88 for access to the Lincoln Beach area.

Draft IERS #6, which detailed the impacts of the proposed action, was released for public review on December 18, 2009. Stakeholders had until January 16, 2010 to comment on the document. Comments were received from two Federal agencies, two state agencies, one tribal government and two citizens.

Factors Considered in Determination. CEMVN has assessed the impacts of the proposed action on significant resources in the project area, including non-wet uplands, wildlife, recreational resources and aesthetics (visual resources). Other significant resources in the project area were discussed in IER #6, but were not discussed in this supplemental document because the proposed action would pose no additional impact to these resources.

- Non-wet Uplands – The proposed action would convert approximately 14 acres of the maintained turf grass of the existing levee to concrete, either in the form of slope paving, splash pads or floodwall.
- Wildlife – The new floodwall will eliminate the existing terrestrial wildlife access to Lake Pontchartrain along the subject reaches.
- Recreational Resources – passive recreational uses of the levee crown would still be available, but access to Lake Pontchartrain would be hindered.
- Aesthetic (Visual) Resources – The visual quality of the lakefront would be altered by the construction of a wall in lieu of a levee.

Environmental Design Commitments. All comments made by US Fish and Wildlife Service were incorporated into the Final IER under Section 6.2 of IER #6, and are incorporated by reference. The US Fish and Wildlife Service believes that the project-specific recommendations provided in the 29 May 2009 Final Fish and Wildlife Coordination Act Report continue to remain valid.

If any unrecorded cultural resources are determined to exist within the proposed project site, then no work will proceed in the area containing these cultural resources until a CEMVN staff archeologist has been notified and final coordination with the Louisiana State Historic Preservation Officer (SHPO) and Tribal Historic Preservation Officer has been completed.

Agency & Public Involvement. Various governmental agencies, non-governmental organizations, and stakeholders were engaged throughout the preparation of IERS #6. Agency staff from US Fish and Wildlife Service, National Marine Fisheries Service, US Environmental Protection Agency, US Geologic Survey, National Park Service, Louisiana Department of Natural Resources, Louisiana Department of Environmental Quality, and the Louisiana Department of Wildlife and Fisheries were part of an interagency team that has and will continue to have input throughout the HSDRRS planning process (IERS #6, Appendix C).

There have been over 100 public meetings since March 2007 about proposed HSDRRS work in the New Orleans area. In addition, www.nolaenvironmental.gov was set up to provide information to the public regarding proposed HSDRRS work. Below is a list of the comments received.

1. Public Comments (found in IERS #6, Appendix B)
 - a. Mr. Sebastian Valverde: Comment letter dated January 4, 2010
 - b. Ms. Vanessa M. Bertrand: Comment letter dated January 16, 2010
2. Agency and Tribal Government Comments (found in IERS #6, Appendix D)
 - a. National Marine Fisheries Service, Habitat Conservation Division: Comment letter dated December 22, 2009
 - b. Natural Resources Conservation Service: Comment letter dated December 31, 2009
 - c. Alabama-Coushatta Tribe of Texas: Comment letter dated January 7, 2010

- d. Louisiana Department of Health and Hospitals, Office of Public Health: Comment letter dated January 8, 2010
- e. Louisiana Department of Wildlife and Fisheries: Comment letter dated January 8, 2010.

Decision. In accordance with the Alternative Arrangements for NEPA Compliance, as published in the Federal Register on March 13, 2007, CEMVN has assessed the potential environmental impacts of the proposed action described in this IER, and performed a review of the above comments received for Draft IERS #6.

Furthermore, all practicable means to avoid or minimize adverse environmental effects have been incorporated into the recommended plan.

The public interest will be best served by implementing the proposed action in IERS #6 in accordance with the design commitments discussed above. CEMVN will prepare a Comprehensive Environmental Document (CED) that may contain additional information related to IERS #6 that becomes available after the execution of the Final IER. The CED will provide a final system wide mitigation plan, comprehensive cumulative impacts analysis, and any additional information that addresses outstanding data gaps in any of the IERs in accordance with the Federal Register notice dated March 13, 2007.

I have reviewed IERS #6, and have considered agency comments and recommendations and comments received from the public during the scoping phase and comment periods. I find the recommended plan fully addresses the objectives as set forth by the Administration and Congress.

The plan is justified, in accordance with environmental statutes, and it is in the public interest to construct the actions as described in this document and IERS #6, which is attached hereto and made a part hereof.

2/8/10
Date

Alvin B. Lee
Alvin B. Lee
Colonel, US Army
District Commander

**FINAL INDIVIDUAL ENVIRONMENTAL REPORT
SUPPLEMENTAL**

LAKE PONTCHARTRAIN AND VICINITY

EAST CITRUS LAKEFRONT LEVEE

ORLEANS PARISH, LOUISIANA

IERS #6



**US Army Corps
of Engineers®**

February 2010

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1. INTRODUCTION

The U.S. Army Corps of Engineers (USACE), Mississippi Valley Division, New Orleans District (CEMVN), has prepared this Individual Environmental Report Supplemental #6 (IERS #6) to evaluate the potential impacts associated with the proposed project modifications to the original IER #6. The proposed project modifications are located in Orleans Parish, Louisiana. For the purposes of this IER Supplemental, the proposed project modifications are shown by reaches. Each reach is identified by a project identification number (e.g., LPV 106). Only those reaches associated with the proposed project revisions, referred to as the proposed action throughout this Supplemental, are discussed in this document.

On June 25, 2009, the District Commander signed the Decision Record for IER #6. IER #6 is hereby incorporated by reference into this supplemental document. Copies of the document and other supporting information are available upon request or at www.nolaenvironmental.gov. This supplemental document has been prepared to address proposed changes in the Government's approved plan.

1.1 PRIOR REPORTS

A number of studies and reports on water resources development in the proposed project area have been prepared by the USACE, other Federal, state, and local agencies, research institutes, and individuals. Pertinent studies, reports and projects completed since June 2009 are discussed below:

- On 18 December 2009, the CEMVN Commander signed a Decision Record on IERS #3a entitled "Lake Pontchartrain and Vicinity, Jefferson East Bank, Jefferson Parish, Louisiana." The supplemental document evaluates the potential effects associated with proposed project revisions to the original IER #3.
- On 10 December 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 the potential impacts associated with construction of a vertical lift gate in lieu of the previously approved sector gate on Bayou Bienvenue within the Lake Borgne Barrier.
- On 5 November 2009, the CEMVN Commander signed a Decision Record on IERS #2 entitled "West Return Floodwall, Jefferson and St. Charles Parishes, Louisiana." The document was prepared to evaluate the potential impacts associated with replacement of the existing floodwall along the east embankment of the Parish Line Canal with a new T-wall approximately 35 feet west of the current alignment.
- On 29 October 2009, the CEMVN Commander signed a Decision Record on Individual Environmental Report Supplemental (IERS) #2 entitled "Lake Pontchartrain and Vicinity, West Return Floodwall, Jefferson and St. Charles Parishes, Louisiana." The

supplemental document evaluates the potential effects associated with proposed project revisions to the original IER #2.

- On 28 September 2009, the CEMVN Commander signed a Decision Record on IER #30 entitled “Contractor-Furnished Borrow Material #5, St. Bernard and St. James 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.
- On 8 September 2009, the CEMVN Commander signed a Decision Record on IER #29 entitled “Contractor-Furnished Borrow Material #4, Orleans, St. John the Baptist, and St. Tammany Parishes, Louisiana.” 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.
- On 30 June 2009, the CEMVN Commander signed a Decision Record on IER # 5 entitled “Lake Pontchartrain and Vicinity, Permanent Protection System for the Outfall Canals Project on 17th Street, Orleans Avenue, and London Avenue Canals, Jefferson and Orleans Parishes, Louisiana.” The document evaluates the potential effects associated with the construction and maintenance of a permanent protection system for the 17th Street, Orleans Avenue, and London Avenue Canals.
- On 29 June 2009, the CEMVN signed a Decision Record on Individual Environmental Report Supplemental (IERS) # 1 entitled “Lake Pontchartrain and Vicinity, La Branche Wetlands Levee, St. Charles Parish, Louisiana.” The supplemental document evaluates the potential effects associated with the proposed project revisions to the original IER #1.
- On 23 June 2009, the CEMVN signed a Decision Record on IER # 8 entitled “Lake Pontchartrain and Vicinity, Bayou Dupre Control Structure, St. Bernard Parish, Louisiana.” The document evaluates the potential effects associated with the proposed improvement or replacement of a flood control structure on Bayou Dupre.
- On 19 June 2009, the CEMVN signed a Decision Record on IER # 7 entitled “Lake Pontchartrain and Vicinity, New Orleans Lakefront to Michoud Canal, Orleans Parish, Louisiana.” The document evaluates the potential effects associated with proposed improvements to three reaches of the East Orleans Hurricane Risk Reduction Levee that were originally constructed as part of the LPV project.

2. ALTERNATIVES

2.1 DESCRIPTION OF THE ALTERNATIVES

At the time of the completion of the original IER #6 report, engineering designs had not been finalized for all of the actions and alternatives. Since that time, engineering details of the action have been further developed and revised. Therefore, the changes to the action that could result in

further impact to the natural or human environment are being addressed in this IER Supplemental.

No Action. Under the no action alternative, the Government-approved action as described in IER #6 would be constructed.

Proposed Action. The proposed action would be instrumental in providing 100-year level of risk reduction for Orleans Parish, Louisiana. The following reaches would be raised by the addition of floodwall rather than the raising of the existing levee: LPV 105.02, LPV 106 and LPV 107.

2.2 PROPOSED ACTION

LPV 105.02

A new I-wall would be placed near the crown of the existing 1,915 linear feet (ft) of earthen levee along the existing levee alignment. The new I-wall would be constructed to +15.5 ft NAVD 88, approximately 2 ft above the existing levee elevation. The I-wall would be supported on steel sheet piling driven to an elevation varying from -22 ft to -40 ft. The crown of the existing levee and the floodside slope would be paved (figure 1). The new I-wall would be constructed between approximate baseline (B/L) station 56+00 to station 76+00 (east of Lamb Road to west of Danube Road). The remainder of the work to be completed on the LPV 105.02 reach would be as described in IER #6.

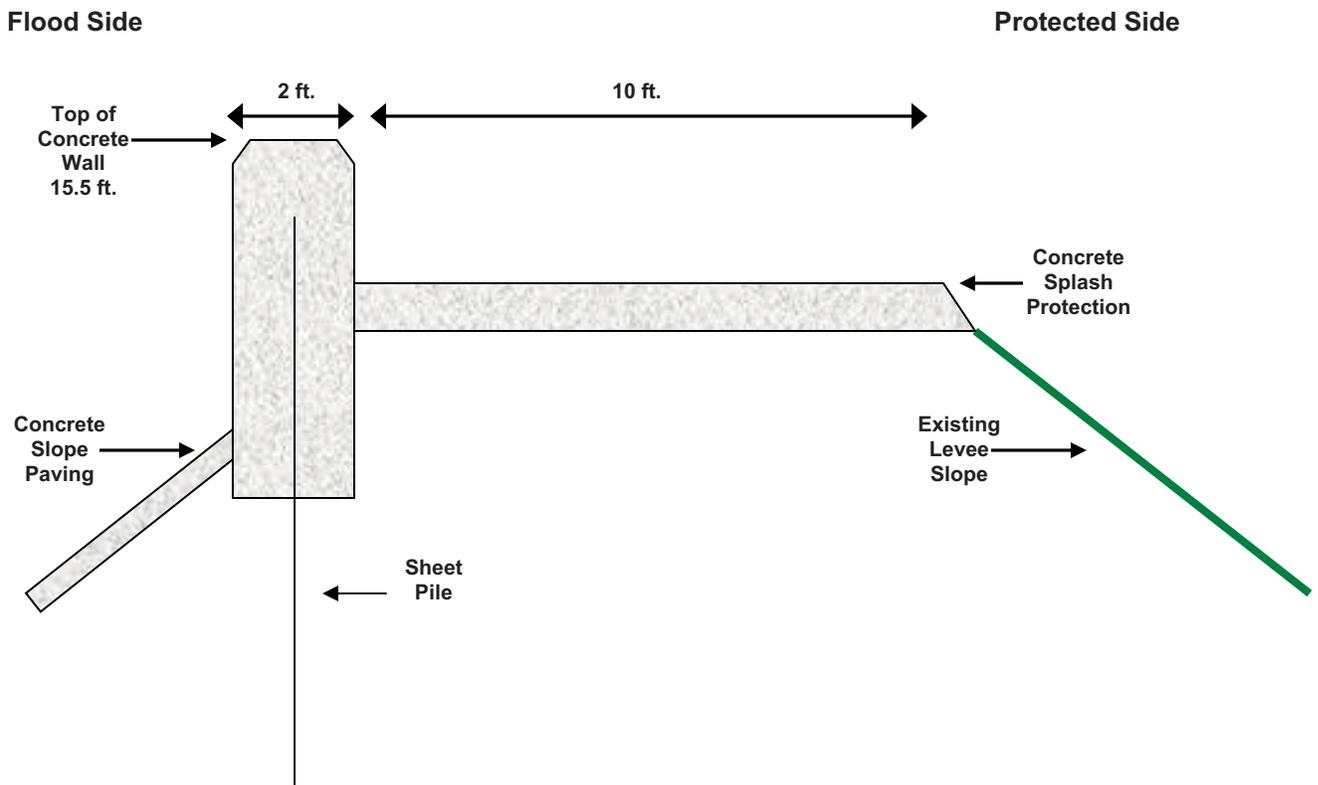


Figure 1: Conceptual design for addition of floodwall to LPV 105.02. All dimensions are approximate.

LPV 106

A new I-wall would be placed near the crown of the existing earthen levee along the existing levee alignment. The design would be similar to LPV 105.02 (figure 1), except that the new I-wall would be constructed to +14.5 ft NAVD 88, approximately 2 ft above the existing levee elevation. The I-wall would be supported on steel sheet piling driven to an elevation varying from -22 ft to -40 ft. The crown of the existing levee and the floodside slope would be paved. The new I-wall would be constructed between B/L Station 103+00 to Station 292+68 and between Station 307+81 to Station 331+00. A 480 linear ft T-wall transition between LPV-106 and LPV-108 would be constructed between Station 331+00 to Station 335+80.

LPV 107

The existing I-wall and earthen levee would be replaced by a T-wall to a height of +15.5 ft NAVD 88. The T-wall would be supported on piling driven to an elevation of approximately -60 ft with a sheetpile cutoff drive to elevation approximately -20 ft. The floodwall alignment would be shifted approximately 12 ft south (further away from the NSRR embankment), aligning LPV 107 with the LPV 106 alignment. The existing floodgate would be replaced with a new floodgate at elevation +15.5 ft NAVD 88 for access to the Lincoln Beach area.

Construction Information Common to All Reaches

The project will be constructed utilizing both conventional levee embankment construction equipment and I-wall construction equipment. This includes bulldozers, cranes, pile driving rigs, excavators, compactors, lowboys, concrete trucks, and dump trucks. As described in IER #6, a portion of Hayne Blvd. will be temporarily closed during the construction to allow for positioning of required construction equipment. The estimated construction duration is 450 days from Notice to Proceed.

2.3 ALTERNATIVES TO THE PROPOSED ACTION

No Action

LPV 105.02

The 1,915 linear ft of existing levee from east of Lamb Road to west of Danube Road would be raised with earthen embankment to an elevation that would not settle below a net grade of approximately +13.5 ft NAVD 88 in 10 years.

LPV 106

The existing levee crown would be initially lowered to create a working platform for construction equipment and a cutoff wall would be constructed. One of several different types of cutoff walls may be constructed and include cement-bentonite and soil-cement bentonite. The preferred option would be to construct a sheet pile cutoff wall (to prevent seepage beneath the levee) at the flood side toe of the levee to a depth of -17 ft below ground surface (bgs). After completion of the cutoff wall construction, the 4.18 miles of levee would be raised to an elevation that would not settle below a net grade of approximately +13.5 ft NAVD 88 in 10

years, with appropriate side slopes. An approximately 1-foot high cement curb would be constructed at the toe of the levee adjacent to Hayne Boulevard.

LPV 107

LPV 107 would replace existing I-wall and earthen levee with an earthen levee at an elevation that would not settle below net grade of approximately +13.5 ft NAVD 88. The existing levee and floodwall alignment would be shifted approximately 12 ft south (further away from the NSRR embankment), aligning 1,472 linear ft of new levee with the LPV 106 alignment. The earthen levee would be constructed with 3:1 (horizontal:vertical) side slopes and a retaining (*i.e.*, mechanically stabilized earth) wall constructed along Hayne Boulevard. Improvements to subgrade soils below the new levee would be accomplished through deep soil mixing. The existing floodgate would be replaced with a new gate structure and floodgate at elevation +15.5 ft NAVD 88 for access to the Lincoln Beach area.

3. AFFECTED ENVIRONMENT AND ENVIRONMENTAL CONSEQUENCES

3.1 ENVIRONMENTAL SETTING

IER #6 contains a complete discussion of the Environmental Setting for the project area and is incorporated by reference into this document. As such, no discussion of environmental setting will be made in this document.

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 are caused by the action taken and occur at the same time and place (40 CFR §1508.8(a)). Indirect impacts are those that are caused by the action and are later in time or further removed in distance, but are still reasonably foreseeable (40 CFR §1508.8(b)). Cumulative impacts are discussed in section 4.

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. Further detail on the significance of each of these resources can be found by contacting the CEMVN, or on www.nolaenvironmental.gov, which offers information on the ecological and human value of these resources, as well as the laws and regulations governing each resource. Search for “Significant Resources Background Material” in the website’s digital library for additional information. 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.

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

Significant Resource	Impacted	Not Impacted
Lake Pontchartrain		X*
Wetlands		X*
Non-wetland Resources/Upland Resources	X	
Fisheries		X*
Wildlife	X	
Essential Fish Habitat		X*
Endangered or Threatened Species		X*
Cultural Resources		X*
Recreational Resources	X	
Aesthetics (Visual Resources)	X	
Air Quality		X*
Noise		X*
Transportation		X*
Social and Economic Resources		X*
Hazardous, Toxic, and Radioactive Waste		X*

*= The proposed action poses no additional impacts above those described in IER #6; therefore these significant resources are not discussed in this document.

Existing conditions for the below resources were discussed in IER #6 and are incorporated by reference for each significant resource discussed in this document.

3.2.1 Non-wetland /Upland Resources

Discussion of Impacts

No Action

Direct, Indirect and Cumulative Impacts

Without implementation of the proposed action, the originally selected plan as discussed in IER #6 would be constructed. Consequently, direct, indirect, and cumulative impacts on non-wetland/upland resources would not differ from those described previously in IER #6.

Proposed Action

LPV 105.02

Direct Impacts

The proposed action would convert approximately 1 acre of the maintained turf grass of the existing levee to concrete, either in the form of slope paving, splash pads or floodwall. A portion of the protected side levee slope would remain turf grass.

Indirect and Cumulative Impacts

No new indirect or cumulative impacts to non-wetland/upland resources are anticipated.

LPV 106

Direct, Indirect and Cumulative Impacts

The proposed action would convert approximately 13 acres of the maintained turf grass of the existing levee to concrete, either in the form of slope paving, splash pads or floodwall. A portion of the protected side levee slope would remain turf grass.

LPV 107

Direct, Indirect and Cumulative Impacts

Because this reach is currently comprised of I-wall and T-wall on top of levee, the amount of maintained turf grass and concrete would remain essentially unchanged on this reach. Direct, indirect, and cumulative impacts on non-wetland/upland resources would not differ from those described previously in the original IER #6.

3.2.2 Wildlife

Discussion of Impacts

No Action

Direct, Indirect and Cumulative Impacts

Without implementation of the proposed action, the originally selected plan as discussed in IER #6 would be constructed. Consequently, direct, indirect, and cumulative impacts on wildlife resources would not differ from those described previously in the original IER #6.

Proposed Action

LPV 105.02

Direct Impacts

The new floodwall will eliminate the existing terrestrial wildlife access to Lake Pontchartrain. This could impact species such as nutria, red fox, raccoon, Virginia opossum, and nine-banded armadillo. However, this access within the LPV 105 reach is limited to

1,915 linear ft of existing levee from east of Lamb Road to west of Danube Road. Secondly, because terrestrial wildlife currently has to cross both Hayne Boulevard and the Norfolk Southern Railroad (NSRR) to access Lake Pontchartrain, this area is already considerably fragmented and is not considered high quality wildlife habitat.

Indirect Impacts

Because the floodwall will create a new barrier to movement, there could be increased wildlife fatalities along Hayne Boulevard as terrestrial species attempt to find alternate pathways to Lake Pontchartrain. Although many individuals would likely travel the length of the floodwall until they reach the LPV 108 levee reach and are able to cross to Lake Pontchartrain, some may attempt to backtrack across Hayne Boulevard.

Cumulative Impacts

The combined conversion of LPV 105.02 and LPV 106 will require terrestrial species attempting to cross to Lake Pontchartrain to travel a greater distance to reach Lake Pontchartrain. Wildlife inhabiting the western portions of the New Orleans East polder would have to travel to the LPV 108 reach to pass to Lake Pontchartrain. Most of the common terrestrial species in this area would not be expected to be significantly impacted by this increased travel distance as these species do not have relatively small home ranges and, with the exception of the nutria, are omnivorous and do not rely on the lake edge habitat for feeding. Furthermore, the LPV 108 reach is adjacent to the Bayou Sauvage National Wildlife Refuge, which presumably serves as a more favorable corridor to Lake Pontchartrain because Hayne Boulevard terminates at the refuge and does not serve as a barrier to movement from the refuge to the lake.

LPV 106

Direct, Indirect and Cumulative Impacts

Impacts are expected to be similar to those anticipated for LPV 105.02.

LPV 107

Direct, Indirect and Cumulative Impacts

No new permanent impacts to wildlife are anticipated since the existing conditions in this area include floodwall.

3.2.3 Recreational Resources

Discussion of Impacts

No Action

Direct, Indirect and Cumulative Impacts

Without implementation of the proposed action, the originally selected plan as discussed in IER #6 would be constructed. Consequently, direct, indirect, and cumulative impacts on

recreational resources would not differ from those described previously in the original IER #6.

Proposed Action

LPV 105.02

Direct, Indirect and Cumulative Impacts

This portion of LPV 105, although currently comprised of levee, does not currently provide direct pedestrian access to Lake Pontchartrain. This portion of the reach is also bounded by floodwall on the adjacent portions of this reach; therefore, this reach is not readily used for passive recreation such as biking and walking. Therefore, direct, indirect and cumulative impacts to recreational resources would not differ from those described in the original IER #6.

LPV 106

Direct Impacts

Because LPV 106 is currently levee, it provides for passive recreational uses such as walking and biking along the levee crown. The reach currently has intermittent concrete steps that aid pedestrian traffic to the top of the levee from Hayne Boulevard, from which access to Lake Pontchartrain can be obtained by crossing the adjacent railroad tracks and foreshore protection. The local sponsor has plans to remove these steps. Pedestrians could still access the levee crown without the aid of these concrete steps; however, pedestrian traffic would be restricted to the protected side of the new floodwall. Therefore, passive recreational uses of the levee crown would still be available, but access to Lake Pontchartrain would be hindered. This restriction would impact fishing opportunities along this portion of the lakefront.

Indirect and Cumulative Impacts

No new indirect or cumulative impacts to recreation are anticipated.

LPV 107

Direct, Indirect and Cumulative Impacts

Because the visual character and pedestrian access of this reach would remain essentially unchanged, direct, indirect and cumulative impacts to recreational resources would not differ from those described in the original IER #6.

3.2.4 Aesthetic (Visual) Resources

Discussion of Impacts

No Action

Direct, Indirect and Cumulative Impacts

Without implementation of the proposed action, the originally selected plan as discussed in IER #6 would be constructed. Consequently, direct, indirect, and cumulative impacts on aesthetic resources would not differ from those described previously in the original IER #6.

Proposed Action

LPV 105.02

Direct Impacts

The visual quality of the lakefront would be altered by the construction of a wall in lieu of a levee. However, the project area is highly urbanized including roadways, railroad transportation corridors, and residential, commercial and public services. This portion of the HSDRRS is adjacent to the New Orleans Lakefront Airport and directly in front of the parking lot adjacent to South Shore Harbor parking lot. The adjacent neighborhood currently has an obstructed view of the lake along this reach, as the levee height and floodwalls on the adjacent portions of this reach preclude such views.

Indirect and Cumulative Impacts

No new indirect or cumulative impacts to aesthetics are anticipated.

LPV 106

Direct Impacts

As in LPV 105.02, the visual quality of the lakefront would be altered by the construction of a wall in lieu of a levee. However, the project area is highly urbanized including roadways, railroad transportation corridors, and residential, commercial and public services. The adjacent neighborhood currently has an obstructed view of the lake along this reach, as the levee height and adjacent floodwalls preclude such views.

Indirect and Cumulative Impacts

No new indirect or cumulative impacts to aesthetics are anticipated.

LPV 107

Direct, Indirect and Cumulative Impacts

Because the visual character of this reach would remain essentially unchanged, direct, indirect and cumulative impacts to aesthetic resources would not differ from those described in the original IER #6.

4. CUMULATIVE IMPACTS

Aside from cumulative impacts disclosed in IER #6, the only additional impacts would be those associated with the elimination of terrestrial wildlife access to Lake Pontchartrain from the combined conversion of LPV 105.02 and 106 from levee to floodwall. This impact could cause terrestrial species to have to travel farther to gain access to Lake Pontchartrain. This impact is discussed in greater detail in section 3.2.2 Wildlife.

5. SELECTION RATIONALE

IER #6 explained that for LPV 106, raising the existing levee was selected as the proposed action based on its lower cost, reduced construction time and maintenance of existing recreational opportunities. As designs for the levee enlargement were refined, new information regarding cost, schedule and constructability became available changing the relative differences between the levee and t-wall alternatives. Although a full T-wall would be more expensive than a levee enlargement, the current design requires a much smaller wall which would be roughly equivalent in cost to the levee enlargement. Because this new wall design would require less turf removal and reestablishment than the levee enlargement, the proposed modification would be less sensitive to weather delays and therefore could have a shorter construction duration than the levee enlargement. The new wall design also would not require additional lifts to meet the 100-year level of risk reduction over the 50 year life of the project, whereas the levee enlargement would require several such lifts.

The new information regarding cost and schedule for LPV 106 led the Project Delivery Team to revisit those portions of the LPV 105 and LPV 107 proposed actions that contained levee enlargements. Given the realized benefits of the new wall design, the proposed modification to LPV 105.02 could have a shorter construction schedule than the levee enlargement at a roughly equivalent cost.

LPV 107 is situated between two segments of LPV 106. Because the proposed modification to LPV 106 would build floodwall along this reach, the conversion of the existing LPV 107 floodwalls to levee would not be efficient engineering; doing so would introduce unnecessary transitions between levee and floodwall that increases risk and reduces the reliability of the system.

6. COORDINATION AND CONSULTATION

6.1 AGENCY COORDINATION

Preparation of this IER Supplemental has been coordinated with appropriate 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 and alternative analysis phases of the project (members of this team are listed in appendix C). This interagency environmental team was

integrated with the CEMVN PDT 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 held concerning this and other IER projects.

The U.S. Fish and Wildlife Service (USFWS) reviewed the proposed action to see if it would affect any T&E species, or their critical habitat. The USFWS concurred with the CEMVN in a letter dated 13 November 2009 that the proposed action would not have adverse impact on T&E species.

In a letter dated 5 October 2009, The CEMVN requested a modification to the Coastal Zone Consistency Determination C20090065 for IER #6. The Louisiana Department of Natural Resources (LaDNR) concurred with the modified Consistency Determination in a letter dated 22 January 2010.

A modified Fish and Wildlife Coordination Act Report (CAR) was provided by the USFWS on 2 December 2009. The 2 December 2009 report along with the 29 May 2009 Final Fish and Wildlife Coordination Act (FWCA) Report addresses the study area, significant fish and wildlife species, and project construction to be conducted within the IER #6 project area. The Final and modified CARs concluded that the USFWS does not object to the construction of the proposed project provided that fish and wildlife conservation recommendations are implemented concurrently with project implementation.

The USFWS believes that the project-specific recommendations provided in the 29 May 2009 Final FWCA Report continue to remain valid.

7. MITIGATION

No new wetland impacts are anticipated from the proposed action. The compensatory mitigation discussed in IER #6 remains valid.

8. 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. Environmental compliance for the proposed action will be achieved upon coordination of this IER with appropriate agencies, organizations, and individuals for their review and comments.

9. CONCLUSIONS

9.1 FINAL DECISION

The CEMVN proposes to construct a new I-wall near the crown of the existing earthen levee on the 1,915 ft. of existing levee within LPV 105.02 and the entire LPV 106 reach. A 480 linear ft T-wall transition between LPV-106 and LPV-108 would be constructed between Station 331+00 to Station 335+80. The CEMVN also proposes to replace the existing I-wall and earthen levee on LPV 107 with T-wall.

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

Non-wetland/ Upland Resources

A portion of the LPV 105.02 and 106 currently maintained turf grass would be converted to concrete.

Wildlife

Terrestrial wildlife passage to Lake Pontchartrain would be eliminated along the western portion of the New Orleans East polder, necessitating wildlife to travel into Bayou Sauvage National Wildlife Refuge to pass to Lake Pontchartrain.

Recreational Resources

Pedestrian access to Lake Pontchartrain would be hindered, but passive use of the levee crown would still be available.

Aesthetic (Visual) Resources

The viewshed from the street level along all three reaches would remain essentially unchanged as the adjacent neighborhood and businesses do not currently have an unobstructed view of Lake Pontchartrain.

9.2 PREPARED BY

The point of contact for this IER Supplemental is Ms. Joan M. Exnicios, USACE, New Orleans District, CEMVN-PM-RS. Table 2 lists the preparers of relevant section of this report. Ms. Exnicios can be reached at the U.S. Army Corps of Engineers, New Orleans District; CEMVN-PM-RS, P.O. Box 60267, New Orleans, Louisiana 70118.

Table 2 IER Preparation Team	
Environmental Coordinator	Laura Lee Wilkinson, USACE
Environmental Project Manager	Lee Walker, Evans-Graves Engineers
Socioeconomic Analysis	Joseph Mann, USACE
Technical Editor	Jennifer Darville, USACE
Internal Technical Review	Thomas Keevin, USACE
Office of Counsel	Rita Trotter, USACE

APPENDIX A: LIST OF ACRONYMS AND DEFINITIONS OF COMMON TERMS

CEMVN	U.S. Army Corps of Engineers, New Orleans District
CAR	Coordination Act Report
FWCA	Fish and Wildlife Coordination Act
IER	Individual Environmental Report
IERS	Individual Environmental Report Supplemental
LPV	Lake Pontchartrain and Vicinity
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service

APPENDIX B: PUBLIC COMMENT AND RESPONSES

01/04/2010.

Dear Patricia Leroux;

I agree in the point of view that no take action is not even an option, however even that the Draft Individual Environmental Report Supplemental IERS #6) is almost perfect.

But is not perfect because by implement the IERS #6 as plan will result in the elimination of the existing Terrestrial Wildlife species such as nutria, Red fox and the raccoon, and ~~in~~ that part I don't agree at all.

I also don't agree at all in the elimination of 1 acre of the maintained turf grass of the existing levee.

Please reconsider another options
before implement~~ing~~ the IERS #6,
for the best interest of everyone
(Humans, Wildlife, Turf Grass,
the US Army)

Please pass the letter to each one
of the members of IER Preparation team
as well as to each one of the members
of Interagency Environmental
Team.

Thank You
Sebastian Valverde
42 East Pine ST #3
Leona PA 17042
3EMartin02@gmail.com



REPLY TO
ATTENTION OF

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

FEB 05 2010

Planning, Programs, and
Project Management Division
Environmental Planning
and Compliance Branch

Re: IERS #6, Lake Pontchartrain and Vicinity, East Citrus Lakefront Levee, Orleans Parish,
Louisiana Comment

Dear Mr. Valverde:

This letter is in response to your letter dated January 4, 2010 and received during the IERS #6 public review process. The US Army Corps of Engineers, New Orleans District (CEMVN), would like to thank you for your participation in the IERS #6 public review process.

The Commander considered the information provided in the IER document as well as those comments received from the public and from interested agencies. Colonel Lee made his decision based upon what is in the best interest of the people of southeastern Louisiana. The human environmental impacts were considered along with traditional engineering criteria that include risk and reliability, constructability, construction schedule, operation and maintenance, real estate requirements and cost. Public safety is the primary consideration for the Hurricane Storm Damage Risk Reduction System and the CEMVN District is committed to completing the work necessary to provide a 100 year level of protection to the community by June 2011.

Again, we would like to thank you for your comments and for taking the time to participate in the IERS #6 public review process. Should you have additional questions please contact Ms. Laura Lee Wilkinson at (504) 862-1212 or at laura.l.wilkinson@usace.army.mil.

Sincerely,


for Joan M. Exnicios
Chief, Environmental Planning
and Compliance Branch

From: vanessabe@aol.com [<mailto:vanessabe@aol.com>]

Sent: Saturday, January 16, 2010 11:51 PM

To: MVN Environmental

Subject: Fwd: Attn: Patricia Leroux -Comments on Draft IERS Lake Pontchartrain and
Vacinity East Citrus Lakefront Levee, Orleans Parish, Louisiana

Attention: Patricia Leroux

PM - RS

US Army Corps of Engineer

P.O. Box 60267

New Orleans, Louisiana 70160-0267

Attached please my concerns regarding the proposed changes to IERS # 6, East Citrus
Lakefront Levee.

Vanessa M. Bertrand

Comments on
Draft Individual Environmental Report Supplemental
LAKE Pontchartrain and Vicinity
East Citrus Lakefront Levee
Orleans Parish, Louisiana
IERS # 6

“2.1 Proposed Action
LPV 105.02

A new I-wall would be placed near the crown of the existing, 1915 linear feet of earthen levee along the existing levee alignment. The new I-wall would be constructed to +15.5 ft NAVD88, approximately 2 ft above the existing levee elevation. The I-wall would be supported on steel sheet piling driven to an elevation varying from -22 ft to -40 ft. The crown of the existing levee and the floodside slope would be paved (figure 1).”

The substitution of an I-wall placed near the crown of the existing earthen levee is a compromise of the structural integrity of the planned flood protection. First, though the stated elevation of the I-wall is 2.5 above the proposed raised levee, the I-wall does not resist overturning loads as a widened levee would. For example refer to the 50 plus levee breaches in New Orleans in August 2005.

Secondly, the sheet pile must be able to resist the bending load applied to it by the hydrostatic pressure of the lake water. Is the section modulus of the sheet pile capable of resisting this overturning moment?

Thirdly, the proposed altered design relies on both the earthen levee as well as the sheet pile being driven to a depth which allows the soil pressure on the lake side of the pile to resist this overturning moment. This requires an earthen levee that is substantial in width and height and piles driven to a substantial depth.

In my cursory review of the proposed levee upgrades in the metropolitan area, I did not notice an I-wall proposed elsewhere. This proposed alternative, with the paving as shown would not allow for appropriate monitoring of the condition of the supporting levee.

This proposed alternative poses an increased threat of flooding to the community this flood protection system is supposed to protect. This is the very decision making process that lead to the destruction of New Orleans in 2005.

This proposal smacks of desperate treatment for Eastern New Orleans in matters related to flood protection. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana. The alternative to the proposed action in section 2.3, LPV 105.02 is preferred.

LPV 106

“A new I-wall would be placed near the crown of the existing...The design would be similar to LPV 105.02 (figure 1), except the new I-wall should be constructed to +14.5 ft NAVD 88...”

The substitution of an I-wall placed near the crown of the existing earthen levee is a compromise of the structural integrity of the planned flood protection. First, though the stated elevation of the I-wall is 2.5 above the proposed raised levee, the I-wall does not resist overturning loads as a widened levee would. For example refer to the 50 plus levee breaches in New Orleans in August 2005.

Secondly, the sheet pile must be able to resist the bending load applied to it by the hydrostatic pressure of the lake water. Is the section modulus of the sheet pile capable of resisting this overturning moment?

Thirdly, the proposed altered design relies on both the earthen levee as well as the sheet pile being driven to a depth which allows the soil pressure on the lake side of the pile to resist this overturning moment. This requires an earthen levee that is substantial in width and height and piles driven to a substantial depth.

In my cursory review of the proposed levee upgrades in the metropolitan area, I did not notice an I-wall proposed elsewhere. This proposed alternative, with the paving as shown would not allow for appropriate monitoring of the condition of the supporting levee.

This proposed alternative poses an increased threat of flooding to the community this flood protection system is supposed to protect. This proposal smacks of desperate treatment for Eastern New Orleans in matters related to flood protection. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana

Alternative to the proposed action in section 2.3, LPV 106 is preferred.

LPV 107

“The existing I-wall and earthen levee would be replaced by a T-wall to a height of 15.5 ft NAVD 88. A new I-wall would be placed near the crown of the existing...The design would be similar to LPV 105.02 (figure 1), except the new I-wall should be constructed to +14.5 ft NAVD 88...”

Not enough information provided. No sketch or details presented about the proposed T-wall. The subgrade soils improvements mentioned in the original document have been eliminated.

This proposed alternative may pose an increase threat of flooding to the community this flood protection system is supposed to protect. This proposal smacks of desperate treatment for Eastern New Orleans in matters related to flood protection. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana

1. “Affected Environment and Environmental Consequences
3.2.1 Non-wetland/Upland Resources

LPV 105.02

The proposed action would convert approximately 1 acre of the maintained turf grass of the existing levee to concrete...”

The proposed alternative does indeed have a negative impact on the environment with the loss of grass. This should not be tolerated.

LPV 106

“The proposed action would convert approximately 13 acres off the maintained turf grass of the existing levee to concrete...”

The proposed alternative does indeed have a negative impact on the environment with the loss of grass. This impact occurs in spite of no benefit of increased robustness of the flooding protection. This should not be tolerated.

3.2.3. Recreational Resources

Proposed Action LPV 106

Has a negative impact on enjoyment of the lake by recreational walkers, joggers, bikers, and fishermen. This proposal smacks of desperate treatment for Eastern New Orleans in matters related to flood protection. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana

3.2.4 Aesthetic (Visual) Resources

Proposed Action LPV 105.02

“The visual quality of the lakefront would be altered by the construction of a wall in lieu of a levee. However, the project area is highly urbanized including roadways, railroad, transportation corridors, and residential, commercial and public services.”

This area is no more “urbanized” than any other area with a levee along Lake Pontchartrain in the New Orleans’ metropolitan area. All areas along the levees / lakefront are highly urbanized. The use of the term urbanized, which according to the definition provided by Webster, should apply to all areas of this metropolitan area, is suspicious. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana. This proposal smacks of desperate treatment for Eastern New Orleans in matters related to flood protection. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana.

“The adjacent neighborhood currently has an obstructed view of the lake along this reach, as the levee height and floodwalls on the adjacent portions of this reach preclude such views. “

All area along the Lake Pontchartrain levee in the metropolitan area has obstructed views of the lake. The question is “Is it more esthetically pleasing to look at a concrete wall of a grassy levee?” I say the wall is much more of an eyesore. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana.

Proposed Action LPV 105.02

“The visual quality of the lakefront would be altered by the construction of a wall in lieu of a levee. However, the project area is highly urbanized including roadways, railroad, transportation corridors, and residential, commercial and public services.”

This area is no more “urbanized” than any other area with a levee along Lake Pontchartrain in the New Orleans’ metropolitan area. All areas along the levees / lakefront are highly urbanized. The attempt to use this as a reason for the disparate treatment of this area of the city is questionable. This decision to treat this area in a substantially different manner than you have other Lake Pontchartrain levee areas based upon such a trumped up distinction, begs the question of whether race may have been the real consideration. This proposal smacks of desperate treatment for Eastern New Orleans in matters related to flood protection. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana, in the definition provided by Webster. Only the train makes this area different from other lake levee areas in this metropolitan area. There should be no substantial difference in the quality and impact of flood protection system in this area as you have proposed / constructed in IERS #3, in Jefferson, Louisiana.



REPLY TO
ATTENTION OF

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

FEB 05 2010

Planning, Programs, and
Project Management Division
Environmental Planning
and Compliance Branch

Re: IERS #6, Lake Pontchartrain and Vicinity, East Citrus Lakefront Levee, Orleans Parish,
Louisiana Comment

Dear Ms. Bertrand:

This letter is in response to your letters dated January 16, 2010 and received during the IERS #6 public review process. The US Army Corps of Engineers, New Orleans District (CEMVN), would like to thank you for your participation in the IERS #6 public review process through your submission of written comments and attendance at our January 27th public meeting.

The Commander considered the information provided in the IER document as well as those comments received from the public and from interested agencies. Colonel Lee made his decision based upon what is in the best interest of the people of southeastern Louisiana. The human environmental impacts were considered along with traditional engineering criteria that include risk and reliability, constructability, construction schedule, operation and maintenance, real estate requirements and cost. Public safety is the primary consideration for the Hurricane Storm Damage Risk Reduction System and the CEMVN is committed to completing the work necessary to provide a 100 year level of protection to the community by June 2011.

CEMVN wishes to thank you for taking the time to submit your concerns and would like to address a few of the issues that you brought up in your letter.

LPV 105.02, LPV 106 and LPV 107 use of I-walls

Hurricane Katrina produced the largest storm surge ever recorded in this region. This surge resulted in the overtopping and breaching of the levee system in many locations. In addition, several I-walls were breached. The necessity for an impartial investigation of the I-wall breaches resulted in the formation of the Interagency Performance Evaluation Taskforce (IPET). Along with analysis of the system's ability to perform as intended, the final IPET reports discussed potential improvements to design criteria that could be made. These recommendations resulted in the development of the Hurricane Storm Damage Risk Reduction Design Guidelines (HSDRRS). The HSDRRS design guidelines are more

stringent and conservative than the pre-Katrina design criteria. These guidelines can be accessed at <http://www.mvn.usace.army.mil/eng/hurrdesign.asp>.

The I-wall proposed action is designed to the new HSDRRS guidelines resulting in considerably deeper sheet piling than those used in the breached I-walls. A key design element is the cut-off of seepage potential through and beneath the existing levee. The I-wall solution serves this purpose. The proposed design meets all required factors of safety including those for overturning. In fact to meet the seepage cut-off requirement, the sheet pile is being driven much deeper than required by design. The proposed I-walls stick-up approximately 2 feet above the levee as opposed to the approximately 10 feet of I-wall stick-up above the levee in the breached sections, therefore the comparison between the two systems is not accurate. In addition, the proposed action includes levee armoring on the protected side of the wall. All of these considerations result in a more robust system to provide the 100-year level of risk reduction than that which existed pre-Katrina.

The slope paving is not reinforced. If a void develops beneath the paving, it will bend resulting in cracking and eventual breaking. This allows for levee monitoring and is identical to the standard slope paving design for the entire Mississippi River Levee system.

The entire hurricane storm damage risk reduction system is designed using the HSDRRS guidelines regardless of location, and the designs take the local geography and site conditions into account. For example, the wall height is designed to a lower height in the LPV 106 reach than the New Orleans metro lakefront due to the wave knock-down impact from the breakwater along LPV 106. The proposed action for LPV 106 was also developed due to the space/footprint restrictions of the area. Photograph 2 on page 15 of IERS #6 depicts the close proximity of the Norfolk Southern Railroad (NSRR) and Haynes Boulevard to the existing levee crown. The proposed action of levee enlargement in Jefferson Parish is not encumbered with these physical restrictions.

LPV 107 elimination of subgrade soil improvements

Deep soil mixing was proposed in the original levee design to compensate for the added load of additional fill material to raise the levee. Because the new wall design is supported and no additional load would be added to those soils which were originally in need of subgrade improvements, deep soil mixing is no longer necessary.

Loss of turf grass

One of the most damaging forces experienced by levees during Katrina was erosion. Paving of the existing grass slope on the levee will minimize erosion potential of the levee during future hurricane events. Also, due to the steep slope of the existing levee, paving is necessary for safety reasons. Paving the slope will minimize the need for Levee District personnel to perform grass cutting and/or slope maintenance in the close vicinity of the railroad.

Recreational Resources

This project is part of the Hurricane and Storm Damage Risk Reduction System. While recreation is very important, it is not the primary purpose of the system. Therefore no recreational features were designed as a part of this project; however, the paved crown would allow access along the levee with views of Lake Pontchartrain for recreational walkers, joggers and/or bikers. The two foot high concrete wall on top of the levee will not interfere with pedestrian activities. Currently, fishermen are not allowed to cross the railroad tracks due to safety regulations from the railroad; therefore, access over the concrete wall is not necessary.

Use of the term “urbanized” and aesthetic impact of wall versus levee

We agree with your assessment that there is an aesthetic difference between a wall and levee, and the IERS #6 impacts analysis recognized this difference. The entire hurricane risk reduction system is designed to the HSDRRS guidelines regardless of location. From a traffic engineering perspective, the corridor discussed in this IER is considered highly urbanized. Urban development was used to describe the visual aspects of the area defined as having characteristics of a city or town versus a rural area, not the socioeconomic component of the area. The project footprint is bounded by the NSRR, an industrial corridor along Haynes Boulevard, Downman Road, and Jourdan Road; as well as industrial and residential tenants in the area. The fact that this area, like more western portions of the lakefront, is urbanized was not the reason for designing an I-wall for this reach. As described in the Selection Rationale portion of the IER, the criteria which drove this decision were risk and reliability, constructability, cost and schedule.

Again, we would like to thank you for your comments and for taking the time to participate in the IERS #6 public review process. Should you have additional questions please contact Ms. Laura Lee Wilkinson at (504) 862-1212 or at laura.l.wilkinson@usace.army.mil.

Sincerely,


for Joan M. Exnicios
Chief, Environmental Planning
and Compliance Branch

APPENDIX C: MEMBERS OF INTERAGENCY ENVIRONMENTAL TEAM

Kyle Balkum	Louisiana Dept. of Wildlife and Fisheries
Catherine Breaux	U.S. Fish and Wildlife Service
David Castellanos	U.S. Fish and Wildlife Service
Frank Cole	Louisiana Department of Natural Resources
John Ettinger	U.S. Environmental Protection Agency
Jeffrey Harris	Louisiana Department of Natural Resources
Richard Hartman	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
David Muth	U.S. National Park Service
Jamie Phillippe	Louisiana Dept. of Environmental Quality
Heather Finley	Louisiana Dept. of Wildlife and Fisheries
Reneé Sanders	Louisiana Department of Natural Resources
Angela Trahan	U.S. Fish and Wildlife Service
David Walther	U.S. Fish and Wildlife Service
Patrick Williams	NOAA National Marine Fisheries Service
Ismail Merhi	Office of Coastal Protection and Restoration

**APPENDIX D: INTERAGENCY AND
TRIBAL GOVERNMENT CORRESPONDENCE**



United States Department of the Interior

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



November 13, 2009

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

Dear Colonel Lee,

Please reference an October 15, 2009, letter, from Ms. Laura Lee Wilkinson, requesting our review of the U.S. Army Corps of Engineers' (Corps) proposed modifications to the 100 Year Hurricane Protection Project for Individual Environmental Report (IER) #6 in Orleans Parish. In that letter, the Corps also requests the Service's concurrence with the Corps determination of no adverse effects to any threatened or endangered species or their critical habitat due to those modifications. That project would involve improvements to levees, floodwalls, floodgates, and construction of new barriers, closure structures, and/or permanent pump stations in New Orleans East. These improvements are necessary to provide 100-year level flood protection for the New Orleans Metropolitan area. The U.S. Fish and Wildlife Service (Service) has reviewed the information provided, and offers the following comments in accordance with the Endangered Species Act (ESA) of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.), the Migratory Bird Treaty Act (MBTA) (40 Stat. 755, as amended; 16 U.S.C. 703 et seq.), and the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.).

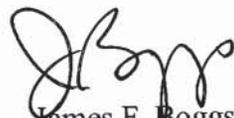
According to the Corps' letter, a new I-wall would be constructed within the existing levee for LPV 106 and 105.02, to an elevation of +15.5 feet NAVD 88, which would extend approximately 2 feet above the existing levee. The crown and floodside slope of the levee would also be paved with concrete. These modifications to the plan described in IER #6 would affect only the levee itself and not any surrounding wetlands, aquatic habitat, or forested areas. The 2-foot-high wall may impede the movement of smaller mammals and herpetofauna; however, the area on the protected side of this levee section is developed and the four lane road adjacent to the levee already limits wildlife crossings. Therefore, the Service does not object to the proposed modifications to the plans for IER #6.

In letters dated December 6, 2007, and January 30, 2009, the Service concurred with the Corps' determination that the proposed flood protection projects described in IERs #5 through #11 would not adversely affect any threatened or endangered species or their critical habitat. The Service believes that the proposed modifications to the plan would not cause additional or significantly different effects on fish and wildlife resources in the project area. The species with the greatest potential for impacts, the endangered West Indian manatee (*Trichechus manatus*) and the threatened Gulf sturgeon (*Acipenser oxyrinchus desotoi*), are aquatic and would not be affected by the completely land-based project modifications.

Based on our review, the Service concurs with your determinations that the proposed modifications to project features in IER #6 are not likely to adversely affect any threatened or endangered species or their critical habitat. The Service continues to recommend that a qualified biologist inspect the proposed work sites for the presence of undocumented waterbird nesting colonies during the nesting season (e.g. February through September depending on the species). If colonies exist, work should not be conducted within 1,000 feet of the colony during the nesting season

We appreciate the opportunity to review the proposed modifications to the 100 year hurricane protection plans for IER #6. If you need further assistance or have questions regarding this letter, please contact David Castellanos (337/291-3112) of this office.

Sincerely,



James F. Boggs
Supervisor
Louisiana Field Office

cc: Laura Lee Wilkinson, CEMVN-HPO, New Orleans, LA
EPA, Dallas, TX
NOAA, Baton Rouge, LA
LDWF, Natural Heritage, Baton Rouge, LA
LDNR, CMD, Baton Rouge, LA
OCPR, Baton Rouge, LA

cc: Ms. Laura Lee Wilkinson, CEMVN-HPO, New Orleans, LA
EPA, Dallas, TX
National Marine Fisheries Service, Baton Rouge, LA
LA Dept. of Wildlife and Fisheries, Baton Rouge, LA
LA Dept. of Natural Resources (CMD), Baton Rouge, LA
OCPR, Baton Rouge, LA



**UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration**

NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701

December 22, 2009 F/SER46/R11:jk
225/389-0508

Ms. Joan Exnicios, Chief
Environmental Planning and Compliance Branch
Planning, Programs, and Management Division
New Orleans District, U.S. Army Corps of Engineers
Post Office Box 60267
New Orleans, Louisiana 70160-0267

Dear Ms. Exnicios:

NOAA's National Marine Fisheries Service (NMFS) has received the draft **Individual Environmental Report (IER) Supplemental #6** transmitted for our review by your letter dated December 18, 2009. The draft IER evaluates and quantifies the impacts associated with revisions to a project that would help provide 100-year level of hurricane protection for the Lake Pontchartrain and Vicinity, East Citrus Lakefront Levee area in New Orleans, Louisiana.

Based on our review of the document and knowledge of the area, NMFS agrees that the proposed revisions to this project would not increase impacts to wetlands, essential fish habitat, and marine fishery resources over that disclosed in a previous IER. As such, NMFS has no comments to provide on the draft Supplemental IER #6 document.

Sincerely,


for Miles M. Croom
Assistant Regional Administrator
Habitat Conservation Division

c:
FWS, Lafayette, Walther
EPA, Dallas, Mick
LA DNR, Consistency, Ducote
F/SER46, Swafford
Files





Natural Resources Conservation Service
3737 Government Street
Alexandria, LA 71302

(318) 473-7795
Fax: (318) 473-7750

December 31, 2009

Ms. Joan M. Exnicios
Chief, Environmental Planning and Compliance Branch
U.S. Army Corps of Engineers
Planning, Programs, and Project Management Division
P.O. Box 60267
New Orleans, Louisiana 70160-0267

Dear Ms. Exnicios:

RE: **Draft IER # 6 LAKE PONTCHARTRAIN AND VICINITY
EAST CITRUS LAKEFRONT LEVEE
ORLEANS PARISH, LOUISIANA**

In response to your request for NRCS review of the referenced project site location to identify natural resource constraints, if any, that may impact design and permitting, I have reviewed the Farmland and Hydric Soil Classifications.

Farmland Classification

The Farmland Protection Policy Act (FPPA)-Subtitle I of Title XV, Section 1539-1549 of PL 97-98, final rules and regulations were published in the Federal Register on June 17, 1994. These rules state that projects are subject to FPPA requirements if they may irreversibly convert farmland (directly or indirectly) to nonagricultural use and are completed by a federal agency or with assistance from a federal agency. For the purpose of FPPA, farmland includes prime farmland, unique farmland, and land of statewide or local importance. Farmland subject to FPPA requirements does not have to be currently used for cropland. It can be forestland, pastureland, cropland, or other land, but not water or urban built-up land.

NRCS policy clarifies the Rule by stating that activities not subject to FPPA include:

1. Federal permitting and licensing
2. Projects planned and completed without assistance of a federal agency
3. Projects on land already in urban development or used for water storage
4. Construction within an existing right-of-way purchased on or before August 4, 1984.
5. Construction for national defense purposes
6. Construction of on-farm structures needed for farm operations
7. Surface mining, where restoration to agricultural use is planned
8. Construction of new minor secondary structures, such as a garage or storage shed.

The soils on the proposed East Citrus Lakefront Levee are not Prime Farmland and will not require a farmland conversion impact rating. Furthermore, NRCS does not believe that the proposed project will impact any NRCS work in the vicinity. However, NRCS does recommend that appropriate erosion control measures are employed during the construction of the project to minimize any adverse effect on the surrounding environment.

I have attached the Farmland Classification with this response for your convenience and use.

Should you have any questions regarding the above comments, feel free to contact Mike Trusclair, District Conservationist, in our Boutte Field Office at (985) 758-2162, Ext. 3.

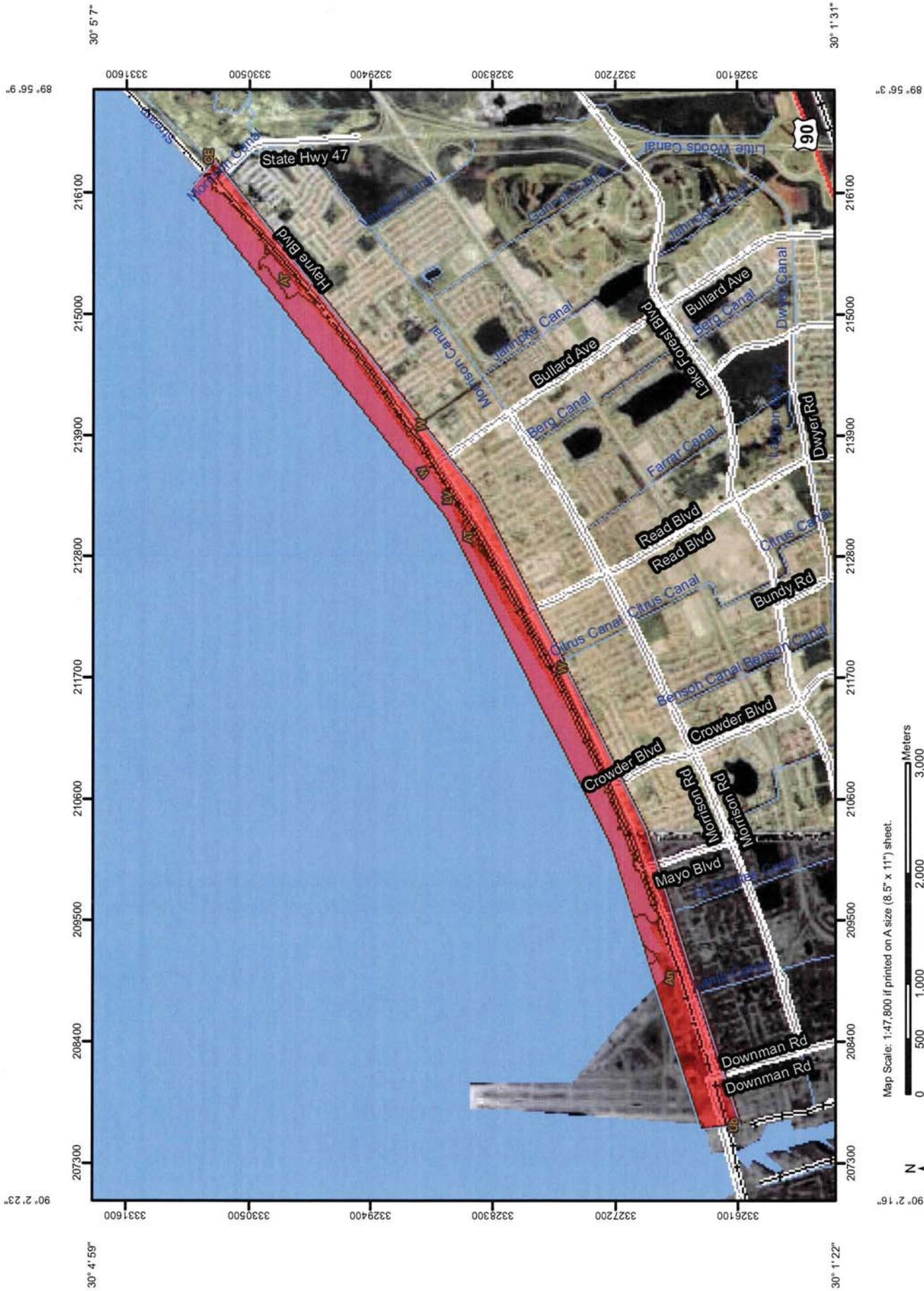
Sincerely,

A handwritten signature in black ink, appearing to read 'E.J. Giering III', with a stylized flourish at the end.

E.J. "Ed" Giering III, P.E.
State Conservation Engineer

cc: Mike Trusclair, District Conservationist, NRCS, Boutte, Louisiana

Farmland Classification—Orleans Parish, Louisiana
(Draft IER # 6-Lake Pontchartrain & Vicinity)



Map Scale: 1:47,800 if printed on A size (8.5" x 11") sheet.



MAP INFORMATION

Map Scale: 1:47,800 if printed on A size (8.5" x 11") sheet.
The soil surveys that comprise your AOI were mapped at 1:24,000.
Please rely on the bar scale on each map sheet for accurate map measurements.
Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>
Coordinate System: UTM Zone 16N NAD83
This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.
Soil Survey Area: Orleans Parish, Louisiana
Survey Area Data: Version 7, Sep 8, 2009
Date(s) aerial images were photographed: Data not available.
The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

MAP LEGEND

 Area of Interest (AOI)	 US Routes
 Area of Interest (AOI)	 Major Roads
 Soils	
 Soil Map Units	
Soil Ratings	
 Not prime farmland	
 All areas are prime farmland	
 Prime farmland if drained	
 Prime farmland if protected from flooding or not frequently flooded during the growing season	
 Prime farmland if irrigated	
 Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season	
 Prime farmland if irrigated and drained	
 Prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season	
 Prime farmland if irrigated removing the root inhibiting soil layer	
 Prime farmland if irrigated and the product of I (soil erodibility) x C (climate factor) does not exceed 60	
 Prime farmland if irrigated and reclaimed of excess salts and sodium	
 Farmland of statewide importance	
 Farmland of local importance	
 Farmland of unique importance	
 Not rated or not available	
Political Features	
 Cities	
Water Features	
 Oceans	
 Streams and Canals	
Transportation	
 Rails	
 Interstate Highways	

Farmland Classification

Farmland Classification— Summary by Map Unit — Orleans Parish, Louisiana				
Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
An	Aquents, dredged	Not prime farmland	377.7	42.7%
AT	Aquents, dredged, frequently flooded	Not prime farmland	20.2	2.3%
CE	Clovelly muck	Not prime farmland	1.2	0.1%
LV	Levees-Borrow pits complex, 0 to 25 percent slopes	Not prime farmland	105.1	11.9%
Ub	Urban land	Not prime farmland	0.4	0.1%
W	Water	Not prime farmland	379.0	42.9%
Totals for Area of Interest			883.4	100.0%

Description

Farmland classification identifies map units as prime farmland, farmland of statewide importance, farmland of local importance, or unique farmland. It identifies the location and extent of the soils that are best suited to food, feed, fiber, forage, and oilseed crops. NRCS policy and procedures on prime and unique farmlands are published in the "Federal Register," Vol. 43, No. 21, January 31, 1978.

Rating Options

Aggregation Method: No Aggregation Necessary

Tie-break Rule: Lower



ALABAMA-COUSHATTA TRIBE OF TEXAS

571 State Park Rd 56 • Livingston, Texas 77351 • (936) 563-1100

January 7, 2010

Joan M. Exnicios
New Orleans District, Corps of Engineers
Attn: CEMVN-PM-R
P.O. Box 60267
New Orleans, LA 70160-0267

Dear Ms. Exnicios:

On behalf of Chief Oscola Clayton Sylestine and the Alabama-Coushatta Tribe, our appreciation is expressed on your efforts to consult us regarding Draft Individual Environmental Report Supplemental #6 for St. Bernard and Orleans Parishes.

Our Tribe maintains ancestral associations within Louisiana despite the absence of written records to completely identify Tribal activities, villages, trails, or grave sites. However, it is our objective to ensure significances of Native American ancestry, especially of the Alabama-Coushatta Tribe, are administered with the utmost attention.

Upon review of your December 18, 2009 submission, no known impacts to religious, cultural, or historical assets of the Alabama-Coushatta Tribe of Texas are anticipated in conjunction with this proposal. However, in the event of inadvertent discovery of human remains and/or archaeological artifacts, activity in proximity to the location must cease and appropriate authorities, including this office, notified without delay.

Should you require additional assistance, please do not hesitate to contact us.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Bryant J. Celestine".

Bryant J. Celestine
Historic Preservation Officer



BOBBY JINDAL
GOVERNOR

State of Louisiana

ROBERT J. BARHAM
SECRETARY

DEPARTMENT OF WILDLIFE AND FISHERIES
OFFICE OF WILDLIFE

JIMMY L. ANTHONY
ASSISTANT SECRETARY

January 8, 2010

Attn: Gib A. Owen
Planning, Programs, and Project Management Division
Environmental Planning and Compliance Branch
United States Army Corps of Engineers
P. O. Box 60267
New Orleans, LA 70160-0267

RE: *Application Number: Individual Environmental Report Supplemental #6 (IERS #6)*
Applicant: U.S. Army Corps of Engineers - New Orleans District
Public Notice Date: December 18, 2009

Dear Mr. Owen:

The professional staff of the Louisiana Department of Wildlife and Fisheries has reviewed the above referenced Public Notice. Based upon this review, the following has been determined:

It is anticipated that the proposed activity will have minimal or no long-term adverse impacts to wetland functions and, therefore, we have no objection.

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

Sincerely,

Kyle F. Balkum
Biologist Program Manager

cd

c: Chris Davis, Biologist



State of Louisiana
Department of Health and Hospitals
Office of Public Health

January 8, 2010

Joan Exnicios
USACE - New Orleans District
Environmental Planning and Compliance
CEMVN-PM-R
P.O. Box 60267
New Orleans, LA 70160-0267

Re: Draft IERS #6

This office is in receipt of your Solicitation of View regarding the above referenced project(s).

Based upon the information received from your office we have no objection to the referenced project(s) at this time. The applicant shall be aware of and comply with any and all applicable Louisiana State Sanitary Code regulations (LAC 51, as applicable). Furthermore, should additional project data become available to this office that in any way amend the information upon which this office's response has been based, we reserve the right of additional comment on the referenced project(s).

In the event of any future discovery of evidence of non-compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any applicable public health laws or statutes which may have escaped our awareness during the course of this cursory review, please be advised that this office's preliminary determination on this Solicitation of View of the project(s) shall not be construed as absolving the applicant of responsibility, if any, with respect to compliance with the Louisiana Administrative Code Title 51 (Public Health-Sanitary Code) and the Title 48 (Public Health-General) regulations or any other applicable public health laws or statutes.

Respectfully,

A handwritten signature in cursive script that reads "Johan Forsman".

Johan Forsman
Geologist
Engineering Services Section
Center for Environmental Health Services
Telephone: (225) 342-7309
Electronic mail: johan.forsman@la.gov



United States Department of the Interior

FISH AND WILDLIFE SERVICE
646 Cajundome Blvd.
Suite 400
Lafayette, Louisiana 70506
January 22, 2010



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

Dear Colonel Lee:

Please reference the "Individual Environmental Report (IER) Lake Pontchartrain and Vicinity (LPV) Orleans Parish, Louisiana (IER #6)". That study was conducted in response to Public Law 109-234, Emergency Supplemental Appropriations Act for Defense, the Global War on Terror, and Hurricane Recovery, 2006 (Supplemental 4). That law authorized the U.S. Army Corps of Engineers (Corps) to upgrade some existing hurricane protection projects to provide protection against a 100-year hurricane event. In a letter dated December 18, 2009, from Ms. Laura Lee Wilkinson, the Corps proposed modifications to the original plan in the "Draft Individual Environmental Report Supplemental Lake Pontchartrain and Vicinity East Citrus Lakefront Levee Orleans Parish, Louisiana" (IERS #6). The U.S. Fish and Wildlife Service (Service) provided recommendations on the previously proposed plan to the Corps in the March 27, 2009, Draft, and May 29, 2009, Final Fish and Wildlife Coordination Act (FWCA) Reports. This letter supplements those reports and is submitted in accordance with provisions of the FWCA (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). This letter constitutes the report of the Secretary of the Interior as required by Section 2(b) of the FWCA. A draft of this report was provided to the Louisiana Department of Wildlife and Fisheries and the National Marine Fisheries Service and their comments have been incorporated into this final report.

A description of the study area and a discussion of the significant fish and wildlife resources (including habitats) that occur within that study area are contained in our May 2009 report. For brevity, that information and discussion is incorporated by reference herein.

The proposed plan changes relevant to wildlife concern only LPV 105.2 and LPV 106. According to the Corps' letter, a new I-wall would be constructed within the existing levee for LPV 105.02 and 106, to an elevation of +15.5 and +14.5 feet NAVD 88, respectively, which would extend approximately 2 feet above the existing levee. The crown and floodside slope of the levee would also be paved with concrete. These modifications to the plan described in IER #6 would affect only the levee itself and not any surrounding wetlands, aquatic habitat, or forested areas. The 2-foot-high wall may impede the movement of smaller mammals and herpetofauna; however, the area on the protected side of this levee section is developed and the four lane road adjacent to the levee already limits wildlife crossings.

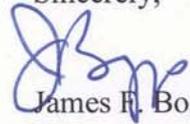
The proposed floodwall and paving changes to the original plan are not significant to wildlife in the area and they are located within the existing right of ways; therefore, impacts were already addressed in the previous FWCA reports.

The Service has reviewed the changes made to the IER #6 proposed plan and does not object to the construction of the newly proposed plan. The Service believes that the recommendations (presented below) provided in our May, 2009, Final FWCA Report continue to remain valid.

1. The Service shall be provided an opportunity to review and submit recommendations on the draft plans and specifications for all levee work addressed in this report.
2. The Corps should utilize Service provided guidance concerning the West Indian manatee and the Gulf sturgeon.
3. The Corps should monitor the recovery of the SAV beds in the shallower portions (i.e., less than 3 feet in depth) of Lake Pontchartrain along the entire extent of IER 6. If SAV has not re-colonized to pre-project conditions within one year following backfilling, the Corps should plant appropriate species of SAV in the project area. Coordination with the Service, NMFS and other interested natural resource agencies should be conducted to determine the adequacy of recovery and planting specification, if needed.
4. If practicable, any dredged material excavated for construction of the access channels determined to be in excess of what is required to refill the channels should be used beneficially. Placement along the south shore of Lake Pontchartrain adjacent to the foreshore rock protection would likely hasten emergent marsh habitat establishment.
5. If a proposed project feature is changed significantly or is not implemented within one year of the date of our Endangered Species Act consultation letter, we recommend that the Corps reinitiate coordination with this office to ensure that the proposed project would not adversely affect any federally listed threatened or endangered species or their habitat.

Thank you for the opportunity to review the proposed revisions to IER #6. If the project scope or design changes, the Service requests that the Corps reinitiate FWCA coordination to ensure that the above recommendations remain valid. If you or your staff has any questions regarding this matter, please have them contact David Castellanos (337/291-3112) of this office.

Sincerely,



James R. Boggs
Supervisor
Louisiana Field Office

cc: Ms. Laura Lee Wilkinson, CEMVN-HPO, New Orleans, LA
EPA, Dallas, TX
National Marine Fisheries Service, Baton Rouge, LA
LA Dept. of Wildlife and Fisheries, Baton Rouge, LA
LA Dept. of Natural Resources (CMD), Baton Rouge, LA
OCPR, Baton Rouge, LA