



United States Department of the Interior

FISH AND WILDLIFE SERVICE

646 Cajundome Blvd.

Suite 400

Lafayette, Louisiana 70506

January 11, 2008

PM
w/3
P. 206
Gib

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

Dear Colonel Lee

Please reference the Individual Environmental Report (IER) Lake Pontchartrain and Vicinity (LPV) Jefferson East Bank, Jefferson, Louisiana (IER3). 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 Corps of Engineers (Corps) to upgrade some existing hurricane protection projects to provide protection against a 100-year hurricane event. This report contains an analysis of the impacts on fish and wildlife resources that would result from the implementation of 100-year hurricane protection for that area, and provides recommendations to minimize and/or mitigate project impacts on those resources.

The proposed project was authorized by Supplemental 4 which instructed the Corps to proceed with engineering, design, and modification (and construction where necessary) of the LPV and the West Bank and Vicinity (WBV) Hurricane Protection Projects so those projects would provide 100-year hurricane protection. Procedurally, project construction has been authorized in the absence of the report of the Secretary of the Interior that is required by Section 2(b) of the Fish and Wildlife Coordination Act (FWCA) (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.). In this case, the authorization process has precluded the normal procedures for fully complying with the FWCA. The FWCA requires that our Section 2(b) report be made an integral part of any report supporting further project authorization or administrative approval. Therefore, to fulfill the coordination and reporting requirements of the FWCA, the Service will be providing post-authorization 2(b) reports for each IER.

This draft report incorporates and supplements our FWCA Reports that addressed impacts and mitigation features for the WBV of New Orleans (dated November 10, 1986, August 22, 1994, November 15, 1996, and June 20, 2005) and the LPV (dated July 25, 1984 and January 17, 1992) Hurricane Protection projects and the November 26, 2007 Draft Programmatic FWCA Report that addresses the hurricane protection improvements authorized in Supplemental 4. However, this report does not constitute the report of the Secretary of the Interior as required by Section 2(b) of the FWCA. This report has been provided to the Louisiana Department of Wildlife and Fisheries

and the National Marine Fisheries Service; their comments will be incorporated into our final report.

DESCRIPTION OF THE STUDY AREA

The IER3 project area runs along the existing Jefferson east bank levee system on the north side of Jefferson Parish where it meets Lake Pontchartrain (Figure 1). There are 9.5 miles of existing earthen levee, foreshore protection, two floodgates, and four pump stations.

Figure 1. Individual Environmental Report (IER) Lake Pontchartrain and Vicinity (LPV) Jefferson East Bank, Jefferson, Louisiana (IER3).



FISH AND WILDLIFE RESOURCES

The Service has provided a November 26, 2007 draft programmatic FWCA Report for the LPV project. That report contains a thorough discussion of the significant fish and wildlife resources (including those habitats) that occur within the study area. For brevity, that discussion is incorporated by reference herein.

ALTERNATIVES UNDER CONSIDERATION

No-Action Alternative

For each levee reach, floodwall, flood gate, and structure within IER3, the no-action alternative was evaluated. Under the no-action alternative, the proposed action would not be constructed. The current levee reaches and associated structures would remain or be brought to the authorized heights of approximately 16 ft. Routine maintenance of the levee system would continue, but no height would be added to the system.

Levee Alternatives

As part of the initial evaluation of Levee LPV 00, 01, 02, 19, and 20 four alternatives were considered but eliminated from detailed impact analysis: T-wall floodwall, earthen levee with T-wall floodwall cap, earthen levee using deep soil mixing, and a protected-side shift of the existing levee alignment. Since a stable earthen levee is already in place on these reaches, replacement with floodwalls, floodwall caps, or the use of deep zone mixing was eliminated due to engineering inferiority and practicality. Based on the presence of a substantial number of residential neighborhoods and commercial establishments, a protected-side shift of the existing levee was also eliminated from detailed consideration.

Levee Modification (17.5 ft) with Rock Foreshore Protection was also considered but eliminated from further consideration due to cost and the volume of fill material required for the alternative. In addition, a modification of the foreshore protection to better accommodate recreational activities was evaluated. Based on the increased costs associated with this alternative, it was eliminated from detailed consideration.

Pumping Station Alternatives

Variations on the configurations and heights of the fronting protection and breakwaters were evaluated, including higher fronting protection and lower breakwaters as well as lower fronting protection and higher breakwaters. However, the preferred alternative was determined to provide the best engineering value to the overall flood protection system and these potential alternatives were eliminated from further consideration.

Floodwalls and Gates at Bonnabel boat launch and Williams Blvd boat launch

As part of the initial evaluation, modification of the existing floodwalls and gates (addition of approximately 2 ft of height) was considered. However, a stability analysis was performed on this alternative, and it was determined that the sheet pile support in the existing I-walls is not deep enough to adequately support a modified structure. Therefore, it was eliminated from detailed evaluation.

Bridge abutment and floodwall tie-ins at Causeway Bridge

As part of the initial evaluation, demolition and reconstruction of the existing bridge abutment and floodwall tie-ins to height of 16.5 ft along with a rolling gate closure (double closure gap) across Causeway Blvd was considered. Although this is a feasible alternative, it was eliminated from detailed evaluation because it would add complexity to the flood fighting in the area and might not satisfy all stakeholders.

Non-Structural Alternatives

Non-structural alternatives included elevating all residential and commercial properties and public acquisition of properties in areas subject to flooding. Both these alternatives were eliminated due to excessive cost.

DESCRIPTION OF SELECTED PLAN

The proposed plan for the levee reaches (LPV00, LPV01, PLV02, LPV 19, and LPV 20) consists of raising the levee from its current height of 16.5 ft to 17.5 ft, modifying the levee to widen the levee crown from 7 ft to 10 ft in a straddle configuration to the extent possible (a slight flood-side shift could be incorporated as needed), and adding rock foreshore protection to 5.5 ft on the flood-side of the existing breakwater.

The proposed action for the four pumping stations (LPV09 Bonnabel, LPV10 Suburban, LPV11 Elmwood, and LPV12 Duncan) consists of adding fronting protection to each of the pumping stations. The fronting protection would be similar to a concrete T-wall, with a sluice or vertical-lift gate to allow discharge from the pumping station. The fronting protection would be constructed to an approximate height of 17 ft, and new T-wall tie-ins would be constructed to connect the new fronting protection to the adjacent levee reaches at a height of 17 ft.

In addition, modifications and/or construction of breakwaters would be incorporated at three of the pumping stations (Bonnabel, Elmwood, and Duncan) and would be located where the drainage canals meet Lake Pontchartrain. At the Bonnabel pumping station, a new breakwater would be added at a height of 14 ft and would extend from onshore into the lake (Figure 2). At the Elmwood pumping station, the existing breakwater would be modified to increase its height from 6.5 ft to approximately 10 ft. At the Duncan pumping station, a new breakwater would be added at a height of 14 ft and would begin approximately 150 feet offshore; connected to shore by a bridge (Figure 2).

Figure 2. New breakwater at the Bonnabel and Duncan pump stations.



The proposed action for LPV16 (floodwall and gate at the Bonnabel boat launch) and LPV18 (floodwall and gate at Williams Blvd boat launch) consists of demolition of the existing floodwalls and gates and construction of new T-walls, I-wall transitions, and gates. The new gate structure would include a rolling gate closure at a height of 16.5 ft.

The proposed action for LPV17 (bridge abutment and floodwall tie-ins at Causeway Bridge) consists of extending the existing levee system across Causeway Boulevard. The new levee would have a crown/crest height of 16.5 ft. Causeway Boulevard would be modified, beginning at 6th Street, and would slope up to the crest elevation of the levee. The roadway would then slope back down to the elevation of the bridge abutment. The new road would be supported by vertical and mechanically stabilized earth walls to minimize the impact at the base and allow construction of sidewalks and accesses to existing buildings and streets.

Access Roads

Truck access to the project sites will be via existing roads (I-10 to Loyola Dr., to Bonnabel Blvd., to Causeway Blvd, or Williams Blvd.). Barges may also be used during construction and would access the project area via Lake Pontchartrain.

Borrow

The earthen fill material would be obtained from the Bonnet Carré Spillway. The fill will be mined from an area of the spillway's 900-acre all-terrain vehicle (ATV) recreation area, off Airline Highway (U.S. 61), approximately 13-21 miles from the project area. Impacts from borrow are being addressed in separate IERs.

PROJECT IMPACTS

There will be no habitat impacted as a result of the proposed project. As with the future without project, fish and wildlife and their habitats, in the future with project scenario, are expected to remain relatively stable with some decline from development, subsidence, and erosion. No Federally listed threatened or endangered species presently occur within the proposed project area. Therefore, no further endangered species consultation is required unless there are changes in the scope or location of the project, or project construction has not been initiated within one year. If project construction has not been initiated within 1 year, follow-up consultation should be accomplished prior to making expenditures for construction. If the scope or location of the proposed work is changed, both threatened and endangered species and FWCA consultation should be reinitiated as soon as such changes are made.

FISH AND WILDLIFE CONSERVATION MEASURES


Coastal marshes are considered by the Service to be aquatic resources of national importance due to their increasing scarcity and high habitat value for fish and wildlife within Federal trusteeship (i.e., migratory waterfowl, wading birds, other migratory birds, threatened and endangered species, and interjurisdictional fisheries). Because of the Services' close coordination with the USACE on this project, and because the project is not expected to have any adverse impacts to wetlands, the Service has no conservation measures to offer at this time.

SERVICE POSITION AND RECOMMENDATIONS

There will be no fish and wildlife resources impacted as a result of the proposed project. 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. 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.
2. 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.
3. Any proposed change in levee, floodwall, or drainage structure features, locations or plans shall be coordinated in advance with the Service, NMFS, LDWF, and LDNR.
4. If the proposed project has not been constructed within 1 year or if changes are made to the proposed project, the USACE 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.

Sincerely,



James F. Boggs
Supervisor
Louisiana Field Office

Enclosures

cc: EPA, Dallas, TX
NMFS, Baton Rouge, LA
LA Dept. of Wildlife and Fisheries, Baton Rouge, LA
LA Dept. of Natural Resources (CMD/CRD), Baton Rouge, LA