

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

**DRAFT FINDING OF NO SIGNIFICANT IMPACT
(DFONSI)**

**SOUTHEAST LOUISIANA (SELA)
URBAN FLOOD CONTROL PROJECT
W-14 DRAINAGE CANAL, SLIDELL AREA
ST. TAMMANY PARISH, LOUISIANA**

EA # 409

Description of Proposed Action. The U.S. Army Corps of Engineers (USACE) proposes to reduce the risk of flooding to human life and economic infrastructure within the W-14 Canal drainage basin, in the City of Slidell, in southeast Louisiana. Environmental Assessment #409 (EA # 409) assesses the impacts of improving approximately 4.1 miles of the existing W-14 Canal by widening the canal and lowering its invert elevation to improve flood flow capacity, excavating two new detention ponds with overflow weirs, expanding a pond, installing culverts, replacing three bridges, and constructing a new pump station. The proposed improvements include the following features:

- Installation of a 30-foot wide, rectangular concrete “U” framed channel from the downstream side of the North Boulevard bridge to the upstream side of the Robert Road box culvert (approx 4,700 feet in length);
- Improvements to an existing detention pond located on the west side of Robert Road that receives water from the W-14 Canal during high water. Improvements to this existing pond would include deepening it to an invert elevation of +1.5 feet and enlarging it from 19.6 acres to 31.3 acres. A lateral broad-crested weir would be constructed to connect the W-14 Canal to the pond. The weir would have a top elevation of 10.5 feet and a length of 100 feet. The pond would be drained by one 24-inch reinforced concrete pipe (RCP) that would be approximately 25 feet in length with an invert elevation of +1.5 feet. The excavation required for the pond would be approximately 217,400 cubic yards;

- Excavation of a 3.1 acre detention pond on the east side of Robert Road, deepening it to an invert elevation of +0.5 feet. A lateral broad-crested weir would be constructed to connect the W-14 Canal to the pond. The weir would have an approximate top elevation of 9.5 feet and a length of 50 feet. The pond would be drained by one 24-inch RCP that would be approximately 35 feet in length with an invert elevation of +0.5 feet. The excavation required for the pond would be approximately 60,800 cubic yards;
- Improvements to the existing canal would include the installation of a 45-foot wide, rectangular concrete “U” framed channel from the downstream side of the Robert Road box culvert to the upstream side of Fremaux Avenue (approx 6,435 feet in length);
- Replacement of the existing Independence Drive bridge would include the removal of the existing bridge and installation of a new clearspan bridge with vertical wall and a 45-foot wide opening;
- Replacement of the existing Florida Avenue bridge would include the removal of the existing bridge and installation of a new clearspan bridge with vertical wall and a 45-foot wide opening;
- Improvements to the existing canal would include the clearing and de-snagging of the existing canal of vegetation, trees, and debris and reshaping the existing canal to a trapezoidal section having a 10-foot bottom width with 3H:2V side slopes from the downstream side of Fremaux Avenue to the upstream side of the Daney Street bridge (approx 2,960 feet in length);
- Replacement of the existing Cousin Street bridge would include the removal of the existing bridge and installation of a new clearspan bridge. The channel type is a trapezoidal section having a 10-foot bottom width with 3H:1V side slopes. The new bridge construction would include concrete wingwalls from the bridge to the channel;
- Excavation of an 18-acre detention pond just north of Daney Street and east of the existing W-14 Canal, thus deepening it to an invert elevation of -3.5 feet. A lateral broad-crested weir would be constructed to connect the W-14 Canal to the pond. The weir would have a top elevation of +4.5 feet and a length of 100 feet. The pond would be drained by one 24-inch RCP that would be approximately 65 feet in length with an invert elevation of -3.5 feet. The excavation required for the pond would be approximately 182,600 cubic yards;
- Two new detention ponds to be located south of the existing Daney Street bridge, known as the Upper and Lower Ponds, as part of a current property development proposal by Slidell Development Company, LLC. A Section 404 Regulatory permit dated 8 April 2008, issued to Slidell Development Company, LLC, includes these two ponds as part of a multi-commercial and residential development. The ponds would provide storage areas for the overflow of the W-14 Canal during high water events;

- Improvements to the existing canal would include the clearing and de-snagging of the existing canal of vegetation, trees, and debris and reshaping the existing canal to a trapezoidal section with a 20-foot bottom width with 3H:1V side slopes from the downstream side of the Daney Street bridge to the upstream side of the Interstate Highway 10 bridge (approx 6,400 feet in length); and
- Installation of a gated pump station located approximately 1 mile east and downstream of the Interstate Highway 10 bridge. The pump station would allow the passage of ordinary flows with sluice gates. The pump station would be used to reduce flooding in the protected area as necessary using three 600 cfs pumps that would be operated when the flows from the canal begin to backup into the protected area.
- Restoration measures would be implemented to reduce visual impacts by replanting trees and other vegetation to as near pre-project conditions as practicable.

Material removed during excavation operations to modify the shape of the W-14 Canal, detention ponds, and the pumping station would be beneficially used to create approximately 100 acres of brackish marsh at the Big Branch Marsh National Wildlife Refuge (NWR) in St. Tammany Parish, Louisiana. Approximately 750,000 cubic yards of material would be excavated and hauled by trucks to an offloading site off of U.S. Highway 11. Two options are available for the off-loading site, one of which would be selected during the project design phase. In option 1, a board access road would be installed and removed after construction. In option 2, the existing access road would need some improvement with rock placement to accommodate the heavy equipment.

Approximately 1 acre of brackish marsh would be mechanically cleared and grubbed to construct an off-loading site in order to provide an area for heavy equipment operations and for stockpiling the excavated material. In addition, approximately 5 to 6 acres of Big Branch Marsh NWR would be cleared and grubbed for the temporary pipeline corridor. This corridor is predominantly open water area, to minimize disturbing existing marsh. Some excavation may be necessary along the pipeline route to float or drag it through the corridor area. An earthen containment dike would be constructed to restrict the material from free-flowing into the open water area. The material would be deposited via hydraulic dredge into shallow open water areas designated within Big Branch Marsh NWR at an elevation conducive to marsh establishment. At the marsh development site, the material would be placed at an initial elevation of +5 feet NAVD 88 (North American Vertical Datum of 1988, 2004.65). The pumped sediments would consolidate to a final design elevation between +1 to +3 feet NAVD 88. Seed planting of smooth cordgrass (*Spartina alterniflora*) and wiregrass (*S. patens*) would be conducted after construction to increase the establishment period for marsh creation. Once established, the brackish marsh would be nourished and maintained by natural processes.

Factors Considered in Determination. The USACE assessed the environmental impacts of the proposed action in EA #409 and has determined that the proposed action

would have no significant impacts on air quality; water quality; aquatic resources; wetlands; wildlife; essential fish habitat; threatened and endangered species or their critical habitats; human urban environment; transportation; noise; cultural resources recreational resources; aesthetic (visual) resources; and the risk of encountering hazardous, toxic, and radioactive waste is low.

The unavoidable loss of 61.4 acres of mixed pine/bottomland hardwood habitat would be compensated through the acquisition, management, maintenance, and monitoring of a mitigation site. As there were insufficient pine-savannah mitigation bank credits available, a mitigation plan centered on land acquisition and rehabilitation of that property was required to meet project mitigation requirements. The proposed 146-acre mitigation area occurs on four tracts, which are adjacent to or in holdings within Big Branch Marsh NWR, St. Tammany Parish, Louisiana.

In a letter dated 31 October 2008 the U.S. Fish and Wildlife Service (USFWS) concurred that the proposed action is not likely to adversely affect any threatened or endangered species or their critical habitat. In a letter dated 2 October 2008, the Louisiana Department of Natural Resources concurred with the determination that the proposed action is consistent, to the maximum extent practicable, with the Louisiana Coastal resources Program (#C20080380). A State Water Quality Certificate (WQC 081015-04/AI 161334, dated 21 November 2008, was received from the Louisiana Department of Environmental Quality. Public review of the Section 404(b)(1) Public Notice was completed on _____. The Section 404(b)(1) evaluation was signed on _____. In a letter dated 7 October 2008, the Louisiana State Historic Preservation Officer (SHPO) concurred with a recommendation of no effect on historic properties. This office has concurred with, or resolved, all Fish and Wildlife Coordination Act recommendations contained in a letter from the U.S. Fish and Wildlife Service, dated _____. This office has concurred with, or resolved, all comments on the air quality impact analysis documented in the EA, which were contained in a letter from Louisiana Department of Environmental Quality, dated _____. This office has concurred with, or resolved, all comments addressing essential fish habitat contained in a letter from the National Marine Fisheries Service dated _____.

Environmental Design Commitments. The following commitments are an integral part of the proposed action:

1.) If the proposed action is changed significantly or is not implemented within 1 year of Endangered Species concurrence from USFWS, the USACE will reinstate coordination with the USFWS to ensure that the proposed action would not adversely affect any Federally listed threatened or endangered species, or their critical habitat.

2.) If any unrecorded cultural resources are determined to exist within the proposed project boundaries, then no work would proceed in the area containing these cultural resources until a USACE archeologist has been notified and final coordination with the SHPO and THPO has been completed. [USACE/SHPO Standard Operating Procedure]

3.) Impacts to Pine-Savannah habitat would be mitigated as outlined in the *Pine-Savannah Restoration Plan for the Slidell W-14 Canal* document.

Public Involvement. The proposed action has been coordinated with appropriate Federal, state, and local agencies and businesses, organizations, and individuals through distribution of EA # 409 for their review and comment. EA # 409 and the mitigation plan is attached hereto and made a part of this FONSI.

Conclusion. The USACE has assessed the potential environmental impacts of the proposed action. Based on this assessment, a review of the comments made on EA # 409, and the implementation of the environmental design commitments listed previously, a determination has been made that the proposed action of constructing this project would have no significant impact on the human environment. Therefore, an Environmental Impact Statement will not be prepared.

DRAFT

Date

Alvin B. Lee
Colonel, U.S. Army
District Commander