# Volume IV

# APPENDIX D:

# 404 (b)(1) Water Quality Report

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# Louisiana Coastal Area
# Small Diversion at Convent/Blind River
# Section 404(b)(1) Water Quality Evaluation

## 1.0 Project Description

### 1.1 Location and General Description

The study area for this project includes as portions of the Mississippi River Deltaic Plain within coastal southeast Louisiana in the Lake Pontchartrain Basin. Louisiana parishes in the study area include St. John the Baptist, St. James, and Ascension. The Upper Lake Pontchartrain Sub-basin includes Lake Maurepas, Maurepas Swamp, Blind River, and portions of the Amite River. The project area consists of the Maurepas Swamp and Blind River southwest of I-10 and is almost entirely located within the Maurepas Wildlife Management Area.

The Maurepas Swamp is one of the largest remaining tracts of coastal freshwater swamp in Louisiana. The Blind River flows from St. James Parish, through Ascension Parish and St John the Baptist Parish, and then discharges into Lake Maurepas.

The Maurepas Swamp serves as a buffer between the open water areas of Lakes Maurepas and Pontchartrain and developed areas along the I-10/Airline Highway corridor. Development along the I-10/Airline Highway corridor in this area includes residential, commercial, and industrial land use. The Maurepas Swamp is used for fishing, hunting, and other recreational activities, and as a large contiguous tract of cypress/tupelo swamp near the New Orleans metropolitan area, has considerable cultural significance.

### 1.2 Authority and Purpose

Title VII of the Water Resources Development Act (WRDA) of 2007 authorizes the Louisiana Coastal Area Near-term Restoration Plan. The authority includes requirements for comprehensive coastal restoration planning, program governance, project modification investigations, a Science and Technology (S&T) program, restoration project construction, a program for beneficial use of previously dredged material, feasibility studies for restoration plan components, and other program elements.

In total the LCA Near-term Restoration Plan has authority for 25 elements falling into various components including investigations, research, demonstrations, and construction. This report outlines the study elements requiring Congressional reporting that will be undertaken in partnership between the USACE and the State of Louisiana.

Specifically, Section 7006(e)(3) requires the Secretary of the Army to submit feasibility reports to Congress on six projects by December 31, 2008 and a Chief's Report by 31 December 2010. The six elements are:

1) LCA Multipurpose Operation of Houma Navigation Lock

2) LCA Terrebonne Basin Barrier Shoreline Restoration

3) LCA Small Diversion at Convent/Blind River

4) LCA Amite River Diversion Canal Modification

5) LCA Medium Diversion at White Ditch

6) LCA Convey Atchafalaya River Water to Northern Terrebonne Marshes

The Convent/Blind River Diversion Project is proposed to be a small freshwater diversion from the Mississippi River to the southeastern Maurepas Swamp, with a flow rate of 1,000 to 5,000 cfs. The purpose of the project is to reintroduce freshwater, sediment, and nutrients to the Swamp, approximating the natural historic flooding cycle to rebuild wetlands at a rate greater than the subsidence rate. This is to improve biological productivity and reverse the current trend of degradation and restore the Swamp.

An excerpt from WRDA 07 outlining the project authority is listed below:

**SEC. 7003. LOUISIANA COASTAL AREA.**

(a) IN GENERAL.—The Secretary may carry out a program for ecosystem restoration, Louisiana Coastal Area, Louisiana, substantially in accordance with the report of the Chief of Engineers, dated January 31, 2005.

(b) PRIORITIES.—
(1) IN GENERAL.—In carrying out the program under subsection a), the Secretary shall give priority to—
(A) any portion of the program identified in the report described in subsection (a) as a critical restoration feature;
(B) any Mississippi River diversion project that—
(i) will protect a major population area of the Pontchartrain, Pearl, Breton Sound, Barataria, or Terrebonne basins; and
(ii) will produce an environmental benefit to the coastal Louisiana ecosystem;
(C) any barrier island, or barrier shoreline, project that—
(i) will be carried out in conjunction with a Mississippi River diversion project; and
(ii) will protect a major population area;
(D) any project that will reduce storm surge and prevent or reduce the risk of loss of human life and the risk to public safety; and
(E) a project to physically modify the Mississippi River-Gulf Outlet and to restore the areas affected by the Mississippi River-Gulf Outlet in accordance with the comprehensive plan to be developed under section 7002(a) and consistent with sections 7006(c)(1)(A) and 7013.

Sec 7006. Construction
(c) Initial Projects
(3) PROJECTS SUBJECT TO REPORTS.—
(A) FEASIBILITY REPORTS.—Not later than December 31, 2008, the Secretary shall submit to Congress feasibility reports on the following projects referred to in the restoration plan:

(i) Multipurpose Operation of Houma Navigation Lock at a total cost of $18,100,000.

(ii) Terrebonne Basin Barrier Shoreline Restoration at a total cost of $124,600,000.

**(iii) Small Diversion at Convent/Blind River at a total cost of $88,000,000.**

(iv) Amite River Diversion Canal Modification at a total cost of $5,600,000.

(v) Medium Diversion at White's Ditch at a total cost of $86,100,000.

(vi) Convey Atchafalaya River Water to Northern Terrebonne Marshes at a total cost of $221,200,000.

(B) CONSTRUCTION.—The Secretary may carry out the projects under subparagraph (A) substantially in accordance with the plans and subject to the conditions, recommended in a final report of the Chief of Engineers if a favorable report of the Chief is completed by not later than December 31, 2010

## 1.3 General Description of Excavated or Dredged and Fill Material

**General Characteristics of Material**. Some of the project components may involve the excavation of previously dredged (spoil) or fill material during construction. Construction of the diversion structure, the transmission canal, the berm gaps, and gated control structures or culverts may require material excavation, predominantly in upland areas. There will be excavation of previously dredged material (that was used to create berms along the transmission canal) to create berm gaps. The excavated material will be placed behind the remaining berms and spread out to build up these upland areas adjacent to the swamp for natural regeneration of upland flora. Excavated material to restore existing gaps will be placed in small mounds in the swamp adjacent to the restored existing gaps to provide for areas for baldcypress and tupelo germination and sapling survival and/or to improve the success of cypress and tupelo tree plantings. Generally, soil characterization in the project area (NRCS, 2009) will consist of silty clay loam with very little sand. Chemical and biological characteristics of the fill material are expected to be of similar composition and quality as those at the previous disposal sites (refer to Section 3.0 Evaluation of Fill Material). The Phase I Environmental Site Assessment completed for this project did not produce any findings to indicate that previously dredged or excavated material will contain hazardous, toxic, or radiological wastes (HTRW).

**Quantity of Material**. Because the TSP will not require dredging or fill in the swamp, it is currently estimated that no spoil materials will be generated as a result (0.00 cubic yards). It is not anticipated that annual O&M activities will generate material.

**Source of Material**. Excavated or previously dredged material for canal spoil banks and berm expansion will be generated during construction of the diversion, the transmission canal, the berm gaps, and several types of control structures as well as from O&M activities to maintain integrity of the transmission canal, berms, and structures. This material will be excavated from areas not located in any waterway, wetland or waterbody, but from upland areas.

## 1.4 Description of Proposed Discharge Sites

**Location and Size**. Designated disposal sites for previously dredged or excavated materials that are generated during construction of the Blind River diversion system include areas adjacent to the diversion structure, berms adjacent to the transmission canal, and in swamp areas adjacent to control structures and berm gaps.

**Type of Site.** The types of disposal sites include canal spoil banks and berms..

**Type of Habitat**. The area adjacent to the diversion location is considered disturbed riparian habitat, in association with the Mississippi River levee. The areas adjacent to the transmission canal are considered prime agricultural land and have been farmed for sugarcane.

Approaching and going into the project benefit area, two types of habitat exist:

Swamp Habitat consists of mature stands of bald cypress tupelo swamps, understory, and ground cover associated with indigenous flora and fauna, much of which is all in one state of degradation or another. Since the construction of the Mississippi River flood control levees, the Maurepas Swamp has been virtually cut off from periodic overflows from the River, which included freshwater, sediment, and nutrient input. Thus, the only soil building has come from organic production within the wetlands, and vegetative productivity may be substantially depressed compared to normal conditions. Subsidence in this area is classified as intermediate, at about 1.1 to 2.0 feet/century. With minimal soil building and moderately high subsidence rates, there has been a net lowering of ground surface elevation, so that now the swamps are persistently inundated.

Bottomland Hardwood Habitat consists of a forest association found on higher ground and is inundated less frequently than the surrounding swamp. Bottomland hardwoods cannot tolerate much inundation during the growing season. Transitional bottomland hardwoods are only slightly elevated above the marsh and can tolerate wet soil conditions, making the entire bottomland hardwood habitat diverse in terms of herbaceous cover. Bottomland hardwoods provide habitat for many species of wildlife including white-tailed deer, grey squirrels, raccoons, and birds. These areas typically were the first to be cleared when logging in the area occurred. Today, less than 3% of the project area consists of bottomland hardwood habitat.

**Timing and Duration of Discharge.** The entire project construction schedule is expected to last about 24-36 months. The excavation/dredging activities would occur simultaneously with placement of previously dredged material to disposal areas.

**Description of Disposal Method.** Previously dredged material will be excavated using various types of equipment for construction of the diversion, the transmission canal, the berm gaps, and for placement of control structures. Front end loaders, backhoes, and trackhoes, as well as barge supported excavators may be used.

# 2.0 Factual Determinations

## 2.1 Physical Substrate Determinations

**Comparison of Existing Substrate and Fill.**
Previously dredged or excavated material will be consistent with existing substrate at the disposal sites (silty clay loam). The sediment will contain varying degrees of organic material not unlike the substrate. Placement of excavated material will increase existing substrate elevation resulting in altered water flow through areas of the swamp. This satisfies one of the objectives for this project—to improve hydrologic connectivity.

**Changes to Disposal Area Elevation.** Excavated or previously dredged materials used for canal banks and berm expansion will be placed to an initial elevation of 3 to 5 feet above existing grade. The material is expected to settle initially in about 12 months to an elevation of 2 to 4 feet above existing grade after dewatering and compaction.

**Migration of Fill.** For previously dredged material placed adjacent to canals, some small percentage of migration of finer materials is expected initially until the spoils have stabilized. Similarly, berm expansion with excavated or previously dredged material will result in some percentage of migration into lower-lying areas adjacent to the disposal sites. However, this material is expected to consolidate and stabilize.

**Duration and Extent of Substrate Change.** Excavated or previously dredged material used for berm enhancement along the channels will be discharged to an initial elevation of 3 to 5 feet. Substrates at the excavation site and disposal areas are of similar physical quality and natural plant colonization would increase organic content of the newly deposited sediments. Tree plantings along berm enhancement areas also will serve to stabilize disposal sites.

**Changes to Environmental Quality and Value.** The placement of excavated or previously dredged material for spoil banks and berm enhancement will be the foundation for improved habitat. Hydrology will be improved and areas will be created for tree plantings (cypress and tupelo). It is the objective of this project to overall improve the quality and the value of the swamp area.

**Actions to Minimize Impacts.** The entire project design includes minimizing impacts to the swamp that we are trying to restore. Only temporary disruptions are anticipated during construction activities.

### 2.1.1 Water Circulation, Fluctuation, and Salinity Determination

Normal water fluctuations in the area consist of daily, seasonal, and annual tidal and flood fluctuations in water level and salinity gradients. Water circulation, stratification, and chemistry as they relate to the discharge/placement of excavated or previously dredged material are currently being evaluated; this section will be updated as chemical analyses and modeling results are finalized with the TSP.

**Alteration of Current Patterns and Water Circulation.** The distribution of flow into the swamp, its canals, and ultimately into the Blind River will be altered as a result of this project; however, the impacts are designed to be positive rather than adverse—bringing freshwater and nutrients to degraded, stagnant areas in the swamp interior. One of the primary project objectives is to improve the existing hydrology to help reverse degradation. Ongoing hydraulic and sediment modeling will result in additional information to be added to this section.

**Interference with Water Level Fluctuation.** The project area is primarily influenced by rainfall and tidal fluctuations. Excavation to create berm gaps, and placement of water control structures to improve water flow through the swamp are key components of this project. Water level fluctuation will be altered to improve the hydroperiod within the swamp; however, this project will not impact the range of water level fluctuation in Blind River.

**Salinity Gradient Alteration.** Salinity gradients in the swamp remain fairly stable with the exception of hurricane events and storm surge; these events may push saltwater into the swamp.. This project should help in reducing storm surge effects and increased salinity levels. However, ongoing hydraulic modeling will result in additional information to be added to this section.

**Cumulative Effects on Water Quality:**

**Salinity.** No cumulative effects are expected, however, ongoing hydraulic models will result in additional information to be added to this section.

**Clarity.** Dredging activities and placement of previously dredged or excavated material in the disposal areas will temporarily reduce water clarity (increase turbidity). The significance of the increase in turbidity will vary with the water stages. During high flows, it would be difficult to detect the increase in turbidity due to already high turbidity in the channels. At low flow, the impacts related to turbidity may become more significant.

**Color.** Dredging activities and placement of previously dredged or excavated material in the disposal areas will temporarily induce color change from increased particulate matter in the water column (increased turbidity).

**Water Chemistry and Dissolved Gases.** Excavated and previously dredged material will contain low but variable concentrations of organic matter. Decomposition of organic material within the disposal areas following placement of previously dredged or excavated material may result in a temporary reduction of dissolved oxygen or release of ammonia. However, ongoing hydraulic models will result in additional information to be added to this section.

**Temperature.** No effect.

**Nutrients.** Excavated and previously dredged material will contain low but variable concentrations of organic matter. Decomposition of organic material within the disposal areas

following placement of previously dredged or excavated material may result in a temporary reduction of dissolved oxygen or release of ammonia. However, ongoing hydraulic models will result in additional information to be added to this section.

**Changes to Environmental Quality and Value.** The placement of excavated or previously dredged material for spoil banks and berm enhancement will be the foundation for improved upland habitat. Hydrology will be improved and small mounds will be created to provide for areas for bald cypress and tupelo germination and sapling survival and/or to improve the success of cypress and tupelo tree plantings. It is the objective of this project to overall improve the quality and the value of the swamp area, by improving water quality and flow through the swamp.

**Actions Taken to Minimize Impacts.** Water column turbidity alterations will be temporary in nature taking place during excavation/dredging activity, and are expected to return to normal once these activities are completed. Minimal impacts would occur if construction and excavation/dredging were timed with low water stages.

### 2.1.2 Suspended Material/Turbidity Determination

Typical of swamp channels and canals, including Blind River, suspended particulate matter such as very fine silt and organic matter are common in the aquatic ecosystem. Excavation and potential dredging activity and previously dredged material placement will temporarily increase levels of suspended matter. However, the existence of fairly turbid runoff and high naturally occurring levels of suspended matter, make it unlikely that temporary increases in turbidity would adversely impact habitat arrangements.

**Alteration of Suspended Particulate Type and Concentration.** Particulates suspended at the dredging locations and within the disposal areas during project construction, or by natural forces after project construction, are not expected to differ in type from particulates currently within the project area.

**Particulate Plumes Associated with Discharge.** Temporary and local particulate plumes may occur during construction activities but will quickly dissipate after construction is complete.

**Changes to Environmental Quality and Value.** Particulate plumes resulting from any construction activity are not expected to persist after project completion. Particulates suspended within disposal areas during project construction, or by natural forces after construction, are not expected to differ in type from particulates currently within the project area.

**Actions to Minimize Impacts.** Water column turbidity alterations will be temporary in nature, taking place during excavation/dredging activity, and are expected to return to normal once these activities are completed. Minimal impacts would occur if construction and excavation were timed with low water stages.

### 2.1.3 Contaminant Determinations

A Phase I Environmental Site Assessment was completed for the project study area and indicated no findings of any HTRW impacts. It is not expected, based on these findings, that any contaminants will go into suspension during the construction of this project.

## 2.2 Aquatic Ecosystem and Organisms Determinations

**Effects on Plankton.** Plankton do not exist in the project area as it is a fresh to brackish water environment.

**Effects on Benthos.** Benthic organisms will be smothered by the discharge of excavated material at disposal areas; however, benthic organisms from adjacent habitat would recolonize substrate material in the disposal areas, but would be precluded from enhancement areas.

**Effects on Nekton.** Nekton would be temporarily displaced during construction activities and are expected to migrate to adjacent habitats.

**Effects on the Aquatic Food Web.** All aquatic organisms, in all of their life stages, could potentially be impacted temporarily during construction activities and placement of excavated material that would cause increased turbidity and change in water circulation patterns. Excavation during periods of reproduction/spawning will be minimized or avoided. Impact to or reduction of detrital feeding species or lower trophic level species (immobile or sedentary bottom feeders) will be minimized as much as possible to preserve the food chain populations and nutrient export capability of the ecosystem. While no adverse cumulative effects on the aquatic organisms are expected to result from this project, it is expected that some effects will improve and/or benefit aquatic life within the ecosystem.

**Effects on Threatened and Endangered Species.** Species that have been found within the study area that are either considered threatened or endangered include the Gulf Sturgeon and Pallid Sturgeon, and the West Indian manatee. Avoidance of other species during any project work will also be required.

**Effects on Other Wildlife**. Other wildlife associated with the project study area includes resident or transient mammals, birds, reptiles, and amphibians. All species could potentially be impacted temporarily as a result of construction and excavation activities. However, adverse cumulative effects on these organisms are not expected and some effects will improve or benefit the wildlife within this ecosystem.

**Actions to Minimize Impacts.** Timing of construction, excavation activities to avoid spawning, nesting, or migration seasons and other biologically critical times will be considered.

## 2.3 Special Aquatic Sites

### 2.3.1 Effect on Sanctuaries and Refuges

The project study area is almost wholly within the Maurepas Wildlife Management Area (WMA). The purpose, along with objectives and goals of this project, is to improve the existing degrading swamp conditions within the WMA and in surrounding swamp areas.

### 2.3.2 Effect on Wetlands

Wetlands, as defined within the Corps of Engineers Wetlands Delineation Manual (1987), include swamps, marshes, bogs, and similar areas. The beneficial use of excavated or previously dredged material resulting from this project is intended to enhance, restore, or create wetlands in areas that have been gradually degrading due to naturally occurring or manmade circumstances such as impoundment, logging, subsidence, sea level rise, and pipeline canals.

### 2.3.3 Effect on Mud Flats

Currently there are no project components proposed in areas where mudflats occur.

### 2.3.4 Effect on Vegetated Shallows

Some vegetated shallows will be impacted temporarily by construction and excavation/dredging activities. However, cumulative impact to these areas is not expected.

### 2.3.5 Effect on Coral Reefs

Not applicable to this project.

## 2.4 Human Use Characteristics

### 2.4.1 Effect on Municipal and Private Water Supplies

No municipal or private water supplies exist within the project area.

### 2.4.2 Effect on Recreational and Commercial Fisheries

Harvestable fish, crustaceans, shellfish, and other aquatic species used by man will not be impacted in any way as to jeopardize availability or consumability and will actually be improved by this project. However, during construction and excavation activities and disposal placement, certain areas in the vicinity of the project may be temporarily off limits or otherwise restricted to both commercial and recreational activities until at which time the work is completed.

### 2.4.3 Effect on Water-related Recreation

Water-related activities, including both consumptive (hunting and fishing) and non-consumptive (canoeing, sightseeing) activities, will not be impacted in any way as to jeopardize availability or consumability and will actually be improved by this project. However, during construction and excavation/dredging activities and disposal placement, certain areas in the vicinity of the project may be temporarily off limits or otherwise restricted to both commercial and recreational activities until at which time the work is completed.

### 2.4.4 Aesthetic Effects

Aesthetics of the swamp and aquatic ecosystems apply to the perception of beauty and quality of life enjoyed by the general public and property owners. It is expected that all project

components will be in keeping with general characteristics of the area that will likely enhance areas of the aquatic ecosystem.

### 2.4.5 Effect on Parks, National and Historical Monuments, National Seashores, Wilderness Areas, Research Sites, and Similar Preserves

The project study area is almost wholly within the Maurepas Wildlife Management Area (WMA). The purpose, along with objectives and goals of this project, is to improve degrading swamp conditions within the WMA and in surrounding swamp areas. Project components at this time are not intended to affect other type areas; however if project components or plans are adjusted, they would be intended to enhance environmental conditions at these types of sites within or adjacent to the project area.

## 3.0 Findings of Compliance or Non Compliance with the Restrictions on Discharge

1) No significant adaptations of the guidelines were made relative to this evaluation.

2) No practicable alternative exists which meets the study objectives that does not involve discharge of fill into waters of the United States.

3) The discharges of fill materials will not cause or contribute to, after consideration of disposal site dilution and dispersion, violation of any applicable State water quality standards for waters. The discharge operations will not violate the Toxic Effluent Standards of Section 307 of the Clean Water Act.

4) The placement of fill materials in the project area(s) will not jeopardize the continued existence of any species listed as threatened or endangered or result in the likelihood of destruction or adverse modification of any critical habitat as specified by the Endangered Species Act of 1973.

5) The placement of fill materials will not result in significant adverse effects on human health and welfare, including municipal and private water supplies, recreational and commercial fishing, fish, shellfish, wildlife, and special aquatic sites. The life stages of aquatic species and other wildlife will not be adversely affected. Significant adverse effects on aquatic ecosystem diversity, productivity and stability, and recreational, aesthetic, and economic values will not occur.

## 4.0 Evaluation Responsibility

Evaluation Prepared By:

Jammie Favorite, Office of Coastal Protection and Restoration Authority, Plan Development Section, P.O. Box 44027, Capital Station, Baton Rouge, LA 70804-4027

Jamie M. Bartel, P.G. Project Manager, CDM Federal Programs, 6120 Perkins Road, Suite 200 Baton Rouge, LA 70808

Evaluation Reviewed By:

William P. Klein, Jr., Ed.D. U.S. Army Corps of Engineers, New Orleans District, P.O. Box 60267, New Orleans, LA 70118

The proposed plan for the project which incorporates sites for dredging and excavation and the placement of fill, complies with the requirements of guidelines and includes appropriate and practicable methods to minimize adverse effects to the aquatic ecosystem.

Date: Sept 27, 2010

Joan M Exnicios

Joan M. Exnicios, Chief
Environmental Planning and Compliance Branch

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**PUBLIC NOTICE**

**LOUISIANA COASTAL AREA - ECOSYSTEM RESTORATION PROJECT**
**Small Diversion at Convent/Blind River**
**St. James Parish, Louisiana**

Introduction. This Public Notice is issued in accordance with provisions of Title 33 CFR Parts 336.1(b)(1) and 337.1, which establish policy, practices, and procedures to be followed on federal actions involving the disposal of dredged or fill material into waters of the United States.

Project Authority. The authority for the proposed action is Title VII of the Water Resources Development Act (WRDA) 2007 authorizes the Louisiana Coastal Area (LCA) ecosystem restoration program.

Location. The proposed action is located in St. James Parish, Louisiana. The project area consists of the Maurepas Swamp and Blind River southwest of I-10 and is almost entirely located within the Maurepas Wildlife Management Area.

Project Description. The USACE proposes to construct a freshwater diversion project from the Mississippi River in the vicinity of Romeville, Louisiana to provide freshwater, nutrients, and sediments to the southeast portion of the Maurepas Swamp. Some of the project components may involve the excavation of previously dredged (spoil) or fill material during construction. Construction of the diversion structure, the transmission canal, the berm gaps, and gated control structures or culverts may require material excavation, predominantly in upland areas. There will be excavation of previously dredged material (that was used to create berms along the transmission canal) to create berm gaps. The excavated material will be placed behind the remaining berms and spread out to build up these upland areas adjacent to the swamp for natural regeneration of upland flora. Excavated material to restore existing gaps will be placed in small mounds in the swamp adjacent to the restored existing gaps. *The proposed action itself consists of measures to minimize the adverse effects of storm water erosion and thus requires no separate measures or controls for compliance with CWA Section 402(p) and LAC 33:IX.2341.B.14.j.*

Discharges by Others.

Other Information. A Draft Environmental Impact Statement (DEIS), entitled Integrated Louisiana Coastal Area - Ecosystem Restoration Project Feasibility Study and Supplemental Environmental Impact Statement for Small Diversion at Convent/Blind River St. James Parish, Louisiana, was mailed to the public for a 45-day review on May 21, 2010. The DEIS addressed the impacts associated with the construction of a proposed dredge openings in the existing Amite River Diversion Canal (ARDC) spoil banks, construct bifurcated conveyance channels.

Properties Adjacent to Disposal Sites. The proposed action is adjacent to Amite River Diversion Canal.

Status of EIS and Other Environmental Documents. Environmental compliance for the proposed action would be achieved upon: coordination of the EIS and supporting documents with appropriate agencies, organizations, and individuals for their review and comments; U.S. Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) confirmation that the proposed action would not be likely to adversely affect any endangered or

threatened species; Louisiana Department of Natural Resources concurrence with the determination that the proposed action is consistent, to the maximum extent practicable, with the Louisiana Coastal Resources Program; receipt of a Water Quality Certificate from the State of Louisiana; public review of the Section 404(b)(1) Public Notice; signature of the Section 404(b)(1) Evaluation; receipt of the Louisiana State Historic Preservation Officer Determination of No Affect on cultural resources; receipt and acceptance or resolution of all USFWS Fish and Wildlife Coordination Act recommendations; receipt and acceptance or resolution of all Louisiana Department of Environmental Quality comments on the air quality impact analysis documented in the EA; and receipt and acceptance or resolution of all NMFS Essential Fish Habitat recommendations. The draft ROD would not be signed until the proposed action achieves environmental compliance with applicable laws and regulations, as described above.

Coordination. The following is a partial list of agencies to which a copy of this notice is being sent:

U.S. Environmental Protection Agency, Region VI
U.S. Fish and Wildlife Service
National Marine Fisheries Service
U.S. Coast Guard, Eighth District
Louisiana Department of Environmental Quality
Louisiana Department of Natural Resources
Louisiana Department of Wildlife and Fisheries
Louisiana Department of Transportation and Development
Louisiana State Historic Preservation Officer

This notice is being distributed to these and other appropriate Congressional, federal, state, and local interests, environmental organizations, and other interested parties.

Evaluation Factors. Evaluation includes application of the Section 404(b)(1) guidelines promulgated by the Administrator of the U.S. Environmental Protection Agency, through 40 CFR 230.

Public Involvement. Interested parties may express their views on the disposal of material associated with the proposed action or suggest modifications. All comments postmarked on or before the expiration of the comment period for this notice will be considered.

Any person who has an interest that may be affected by deposition of excavated or dredged material may request a public hearing. The request must be submitted in writing to the District Engineer within the comment period of this notice and must clearly set forth the interest that may be affected and the manner in which the interest may be affected by the proposed action.

You are requested to communicate the information contained in this notice to any parties who may have an interest in the proposed action.

For further information regarding the proposed action, please contact Dr. Klein at (504) 862-2540. Dr. Klein's FAX number is (504) 862-2572 and his E-mail address is William .P.Klein@usace.army.mil.

**1.0 JOAN M. EXNICIOS**

Chief, Environmental Planning
and Compliance Branch

COMMENT PERIOD FOR THIS PUBLIC NOTICE EXPIRES: June 21, 2010

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## APPLICATION FOR DEPARTMENT OF THE ARMY PERMIT *(33 CFR 325)*

**OMB APPROVAL NO. 0710-003**

Public reporting burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Department of Defense, Washington Headquarters Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302; and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Please DO NOT RETURN your form to either of those addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the location of the proposed activity.

**PRIVACY ACT STATEMENT**

Authority: 33 USC 401, Section 10: 1413, Section 404. Principal Purpose: These laws require authorizing activities in, or affecting, navigable waters of the United States, the discharge or fill material into waters of the United States, and the transportation of dredged material for the purpose of dumping it into ocean waters. Routine Uses: Information provided on this form will be used in evaluating the application for a permit. Disclosure: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed nor can a permit be issued.

One set of original drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see sample drawings and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

***(ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS)***

| 1. APPLICATION NO. | 2. FIELD OFFICE CODE | 3. DATE RECEIVED | 4. DATE APPLICATION COMPLETED |
|---|---|---|---|
| | | | |

***(ITEMS BELOW TO BE FILLED BY APPLICANT)***

| 5. APPLICANT'S NAME | 8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required) |
|---|---|
| US Army Corps of Engineers, New Orleans District | Not Applicable |
| **6. APPLICANT'S ADDRESS** | **9. AGENT'S ADDRESS** |
| CEMVN<br>P.O. Box 60267<br>New Orleans, LA 70160-0267 | Not Applicable |
| **7. APPLICANT'S PHONE NOs. W/AREA CODE** | **10. AGENT'S PHONE NOs. W/AREA CODE** |
| a. Residence<br>b. Business 504-862-1958 | a. Residence Not Applicable<br>b. Business Not Applicable |

11. **STATEMENT OF AUTHORIZATION**

I hereby authorize, _____ to act in my behalf as my agent in the processing of this application and to furnish, upon request, supplemental information in support of this permit application.

_____

APPLICANT'S SIGNATURE DATE

**NAME, LOCATION, AND DESCRIPTION OR PROJECT OR ACTIVITY**

12. PROJECT NAME OR TITLE (see instructions)
Louisiana Coastal Area-Small Diversion at Convent/Blind River

| 13. NAME OF WATERBODY, IF KNOWN (if applicable) | 14. PROJECT STREET ADDRESS (if applicable) |
|---|---|
| Maurepas Swamp and indirectly Blind River | Not Applicable |

15. LOCATION OF PROJECT
St. James Parish LA

COUNTY STATE

16. OTHER LOCATION DESCRIPTIONS, IF KNOWN (see instructions) **Section, Township, Range, Lat/Lon, and/or Accessors's Parcel Number, for example.**

17. DIRECTIONS TO THE SITE

The project site extends from the Mississippi River at Romeville northeast into the Maurepas Swamp

18. Nature of Activity (Description of project, include all features)

Features of the proposed diversion (Figure 1) include:
1) A diversion culvert: (3-10x10 feet multi-cell cast-in-place reinforced concrete box culverts under the east levee and LA 44 and 3-10x10 cast iron sluice gates with motor operators on the culvert inlets, and inlet canal across the batture from the Mississippi River to the culvert inlet))
2) Transmission canal: an earthen trapezoidal channel approx. 3 miles in length, 155-foot bottom width, 250 foot top width, 4:1 side slopes, and depth of 12 feet
3) Control Structures and Berm Gaps: control structures will utilize the existing drainage canal system, the berm gaps will consist of 500-foot wide gaps along the existing banks created when the drainage canals were constructed
4) Cross culverts at Hwy 61: culvert crossings under the KCS railroad and Hwy 61 consisting of 3-3x4 feet reinforced concrete box culverts

19. Project Purpose (Describe the reason or purpose of the project, see instructions)

Purpose of the project is to restore hydraulic connectivity in the Maurepas Swamp (within the study area) and deliver freshwater and nutrients to it from the Mississippi River. Construction of the project as well as O&M associated with the project will create dredged material to create berms along the transmission canal, while excess can be used to enhance elevated areas within the project study area for tree growth and animal refuge during high water.

## USE BLOCKS 20-22 IF DREDGED AND/OR FILL MATERIAL IS TO BE DISCHARGED

20. Reason(s) for Discharge

The placement of material dredged to construct the drainage canals, along with pipeline canals, and logging in the area have created hydrologic barriers or impounded areas that have isolated the swamps east and west of the Blind River. This has created standing water conditions that have led to degradation of the swamp habitats and prevented the introduction of nutrients that would promote the healthy growth and regeneration of plants. The degraded swamps are in the process of transitioning to freshwater marshes and open water. Without the proposed action, this transition will continue.

21. Type(s) of Material Being Discharged and the Amount of Each Type in Cubic Yards

The material to be dredged and excavated is former swamp floor sediment. The material is primarily alluvial silt and clay that was deposited by annual flooding from the Mississippi River. It is estimated that between 10,000 and 45,000 cubic yards of material will be removed during construction; however, steps to minimize disturbance and reduce this amount will be taken. During O&M dredging of the transmission canal, dredged material will be removed on an annual basis and place in areas of the swamp that are already elevated to promote tree growth and provide refuge for animals at high water

22. Surface Area in Acres of Wetlands or Other Waters Filled (see instructions)

No waters will be filled, all dredged material placed in the swamp will be placed on existing high elevation areas.

23. Is Any Portion of the Work Already Complete? Yes ___ No _x_ IF YES, DESCRIBE THE COMPLETED WORK

24. Addresses of Adjoining Property Owners, Lessees, Etc., Whose Property Adjoins the Waterbody (If more than can be entered here, please attach a supplemental list).

25. List of Other Certifications or Approvals/Denials Received from other Federal, State, or Local Agencies for Work Described in This Application.

| AGENCY | TYPE APPROVAL* | IDENTIFICATION NUMBER | DATE APPLIED | DATE APPROVED | DATE DENIED |
|---|---|---|---|---|---|
| LDEQ | Water Quality Certification | | TBD | | |

* Would include but is not restricted to zoning, building, and flood plain permits

26. Application is hereby made for a permit or permits to authorize the work described in this application. I certify that the information in this application is complete and accurate. I further certify that I possess the authority to undertake the work described herein or am acting as the duly authorized agent of the applicant.

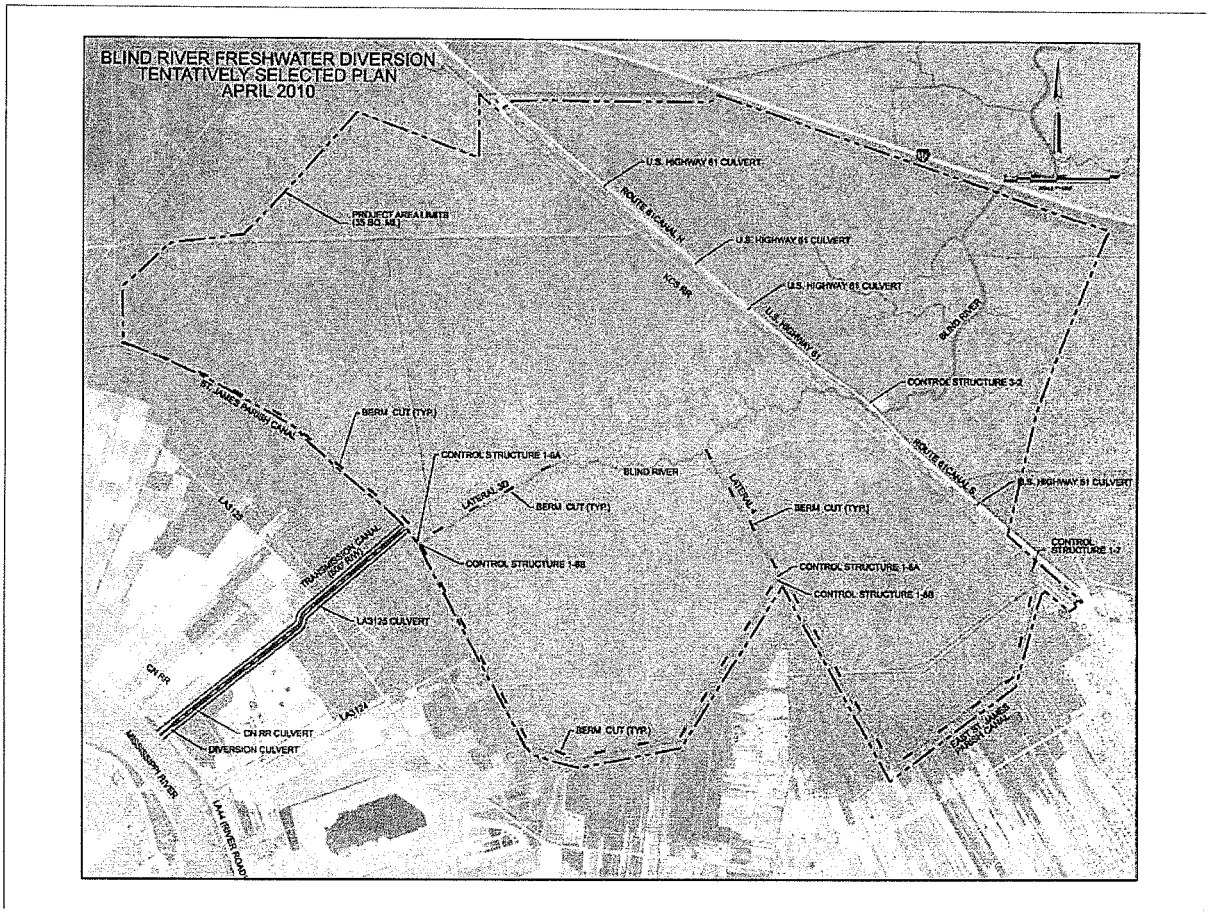
SIGNATURE OF APPLICANT — DATE: Sept 27, 2011

SIGNATURE OF AGENT — DATE: Sept 27, 2011

The application must be signed by the person who desires to undertake the proposed activity (applicant) or it may be signed by a duly authorized agent if the statement in block 11 has been filled out and signed.

18 U.S.C. Section 1001 provides that: Whoever, in any manner within the jurisdiction of any department or agency of the United States knowingly and willfully falsifies, conceals, or covers up any trick, scheme, or disguises a material fact or makes any false, fictitious or fraudulent statements or representations or makes or uses any false writing or document knowing same to contain any false, fictitious or fraudulent statements or entry, shall be fined not more than $10,000 or imprisoned not more than five years or both.

**Figure 1:**



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

REPLY TO
ATTENTION OF:

May 21, 2010

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

Melvin C. Mitchell, Sr.
Louisiana Dept. of Env. Quality
Water Quality Certifications Section
P.O. Box 4313
Baton Rouge, LA 70821-4313

Dear Mr. Mitchell, Sr.:

An application for a State Water Quality Certificate, prepared by the U.S. Army Corps of Engineers, New Orleans District (MVN) is enclosed. MVN staff request that a water quality certification be completed, pursuant to Section 401 of the Clean Water Act of 1977, as amended (33 U.S.C., Section 1341). The draft environmental impact statement (EIS) for the LCA Convent/Blind River Diversion, Louisiana, project is enclosed for your review and comment.

The 2004 programmatic environmental impact statement (EIS) for the Louisiana Coastal Area (LCA), Louisiana, Ecosystem Restoration study identified critical projects, multiple programmatic authorizations, and ten additional required feasibility studies for the LCA. The Water Resources Development Act of 2007 included authorization, under Title VII, for the LCA Restoration Plan and specific authorization for feasibility reports on six of the ten near-term elements.

Two elements were determined to be hydrologically intertwined and the planning efforts were combined into Convey Atchafalaya River Water to Northern Terrebonne Marshes and Multipurpose Operation of Houma Navigation Lock EIS Lafourche, Terrebonne, St. Mary Parish, Louisiana. The Terrebonne Basin Barrier Shoreline Restoration Study EIS (Volume V) is now being completed under a separate feasibility effort due to a need for additional alternative analysis and increasing uncertainties resulting from the Deepwater Horizon oil spill off the Louisiana coast. Consequently, only four draft EIS's and a Summary Document (Volume I) are available for public review at this time:

Amite River Diversion Canal Modification EIS (Volume II)
Convey Atchafalaya to Northern Terrebonne Marsh /
Multipurpose Operation of the Houma Navigation Lock EIS (Volume III)
Small Diversion at Convent / Blind River EIS (Volume IV)
Medium Diversion at White Ditch EIS (Volume VI)

Enclosed with this letter is Volume I and IV. A copy of the other draft EISs are available upon request.

The USACE proposes to construct a freshwater diversion project from the Mississippi River in the vicinity of Romeville, Louisiana to provide freshwater, nutrients, and sediments to the southeast portion of the Maurepas Swamp to reverse the trend of deterioration in the swamp. The Mississippi River levee system has cut off the Maurepas Swamp (and Blind River) from the natural periodic, flooding by the Mississippi River and past construction of logging trails, drainage channels, pipelines and roads through the swamp has disrupted the natural flow and drainage patterns, and impacted the biological productivity of the swamp.

Without action, the swamp is predicted to continue to deteriorate at the same or accelerated rates, with approximately 21,369 acres (8,647 ha) of baldcypress-tupelo swamp projected to become marsh or open water over the 50-year period of analysis. Recent studies generally show that protecting wetlands has a net effect of lowering storm surge and wave heights compared to a future condition with extensive wetland loss. In addition to no action, twelve alternative plans to address the problems of swamp deterioration were developed and evaluated with the assistance of the U.S. Fish and Wildlife Service as a Cooperating Agency. After an iterative screening process, alternative plans were eliminated from further consideration because they did not adequately address the problems, planning goals or objectives. In addition to No Action, four alternatives were examined in detail. These four alternatives provide significant fish and wildlife habitat values and when compared to no action, contain elements that would work together to produce a greater overall benefit to restoring the swamp with limited detrimental environmental impacts to the study area.

Alternative 2, a 3,000 cfs diversion near Romeville is the Tentatively Selected Plan (TSP). It would improve and protect 21,369 acres (8,647 ha) of baldcypress-tupelo swamp, negatively impact 53 acres (21 ha) of forested wetland, and have a net value of 6,421 Average Annual Habitat Units (AAHUs) over the 50-year period of analysis. The TSP has a total estimated cost of $123,140,000. The TSP best meets the screening criteria; would accomplish the planning objectives and goals; would be consistent with the Environmental Operating Principles; and would best satisfy the Congressional mandate provided in Public Law 110-114 to reverse the trend of deterioration in the southeast part of the Maurepas Swamp.

To the best of our knowledge any dredge/fill material will be free of contaminants. Please provide the public notice for publication in the Advocate of Baton Rouge to the person listed below, as soon as possible. In addition to sending us a hard copy of the public notice documents, we request that you send a complete electronic copy via E-Mail to

william.p.klein.Jr@usace.army.mil.

Please review the enclosed documents and provide comments within 45 days of the date stamped on the cover page of the EIS. Comments should be mailed to the attention of Dr. William Klein Jr.; U.S. Army Corps of Engineers; Planning, Programs, and Project Management Division; Environmental Planning and Compliance Branch; CEMVN-PM-RS; P.O. Box 60267; New Orleans, Louisiana 70160-0267.

Comments may also be provided by E-Mail to william.p.klein.Jr@usace. army.mil, or by fax to (504) 862-2088. Dr. Klein may be contacted at (504) 862-2540, if questions arise.

Sincerely,

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

Enclosures

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

Attention: Sandra Stiles

RE: Water Quality Certification (WQC 100824-01/AI 171484/CER 20100001)
Louisiana Coastal Area- Small Diversion at Convent/Blind River
St. James Parish

Dear Ms. Stiles:

We have received notice of your application for a 401 Water Quality Certification to construct a freshwater/sediment diversion canal, in the vicinity of Romeville, Louisiana. Prior to processing the certificate, this office requires:

1. **A proof of publication of the Public Notice in THE ADVOCATE of Baton Rouge.**

2. **Assurance that any excavated and fill material will be, to the best of your knowledge, free of contaminants and/or will be disposed of in an approved landfill.**

3. **A signed copy of the 404 permit application.**

4. **A list of landowners, adjacent to the project site.**

5. **A detailed description of the Best Management Practices (BMPs) and/or any other mitigating measures that will be implemented *during* the construction of the project to control stormwater runoff from the site.**

6. **Assurance that any exposed soils will be stabilized by the use of Best Management Practices (such as reseeding and revegetating the exposed area) in order to prevent potential future erosion and non-point source pollution from the site.**

Be sure to include our reference number (WQC 100824-01/AI 171484) on all responses. Please send all correspondence to the Louisiana Department of Environmental Quality to the following address:

Louisiana Department of Environmental Quality
Water Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313
Attn: Water Quality Certifications

Enclosed is a copy of the public notice to be published by you one time in the official State Journal, THE ADVOCATE of Baton Rouge. (As provided for by LRS 30:2074 A(3), the cost of this publication is to be at your expense). PLEASE REQUEST THAT THE NEWSPAPER FURNISH US WITH PROOFS OF PUBLICATION OF THIS NOTICE TO THE FOLLOWING ADDRESS:

Louisiana Department of Environmental Quality
Water Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313
Attn: Water Quality Certifications

A ten-day period after the date of publication will allow for public comment. After this ten-day period has expired, a decision as to whether to grant the certificate will be made in accordance with LAC 33:IX.1507.A-E and provisions of Section 401 of the Clean Water Act.

If we haven't received this information within 30 days from the date of this letter, your application will be considered inactive. If you have any questions, please call Jamie Phillippe at 225-219-3003.

Sincerely,

Tom Killeen, Environmental Scientist Manager
Municipal and General Water Permits Section

TK/jjp

PUBLIC NOTICE TO BE RUN IN

THE ADVOCATE OF BATON ROUGE
P.O. Box 588
Baton Rouge, LA 70821
Phone: 225-388-0128
Fax: 225-388-0164

Attn: Public Notices

Notice is hereby given that the Corps of Engineers- New Orleans District has applied for a 401 Water Quality Certification to construct a freshwater/sediment diversion canal, in the vicinity of Romeville, Louisiana. The applicant is applying to the Louisiana Department of Environmental Quality, Office of Environmental Services for a Water Quality Certification in accordance with statutory authority contained in the LAC 33:IX.1507.A-E and provisions of Section 401 of the Clean Water Act.

Comments concerning this application can be filed with the Water Permits Section within ten days of this notice by referencing WQC 100824-01/AI 171484 to the following address:

Louisiana Department of Environmental Quality
Water Permits Division
P.O. Box 4313
Baton Rouge, LA 70821-4313
Attn: Water Quality Certifications

A copy of the application is available for inspection and review at the LDEQ Public Records Center, on the first floor of the Galvez Building, Room 127 at 602 North Fifth Street Baton Rouge, LA 70802 from 8:00 a.m. to 4:30 p.m.

BOBBY JINDAL
GOVERNOR

PEGGY M. HATCH
SECRETARY

# State of Louisiana

## DEPARTMENT OF ENVIRONMENTAL QUALITY
## ENVIRONMENTAL SERVICES

SEP 20 2010

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

Attention: Sandra Stiles

RE: Water Quality Certification (WQC 100824-01/AI 171484/CER 20100001)
Louisiana Coastal Area- Small Diversion at Convent/Blind River
St. James Parish

Dear Ms. Stiles:

The Louisiana Department of Environmental Quality (the Department) has reviewed your application to construct a freshwater/sediment diversion canal, in the vicinity of Romeville, Louisiana.

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

Sincerely,

Melvin C. Mitchell, Sr.
Administrator
Water Permits Division

MCM/jjp