

Appendix D

404(b)(1) WATER QUALITY REPORT

SECTION 404(b)(1) EVALUATION

AMITE RIVER DIVERSION CANAL MODIFICATION PROJECT, LIVINGSTON AND ASCENSION PARISHES, LOUISIANA

I. INTRODUCTION

A. Purpose and General Description.

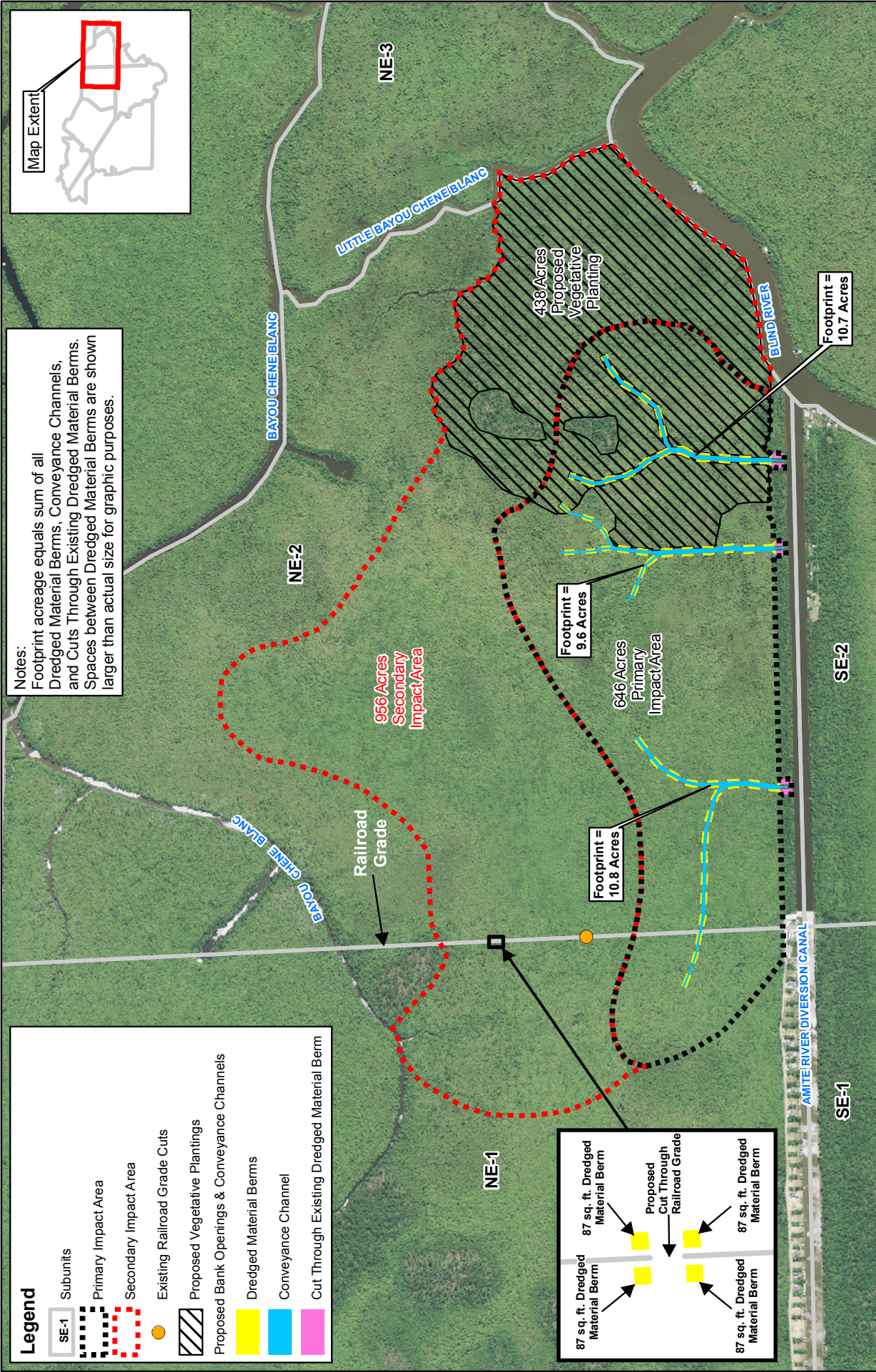
The placement of material dredged to construct the Amite River Diversion Canal (ARDC) adjacent to the canal created a hydrologic barrier that has isolated the swamps north and south of the ARDC. This has created standing water conditions that have led to degradation of the swamp habitats and prevented the introduction of nutrients that would promote the healthy growth and regeneration of plants.

The purpose of this project is to construct cuts in the dredged material banks on the north side of the ARDC to promote the exchange of water between the ARDC and the adjacent swamps. This action would allow periodic drying of the swamps, thereby enabling regeneration of trees. The action would enable the introduction of nutrients from the ARDC into the swamps, thereby promoting healthy growth of plants.

Features of the proposed action (Figure 1) include:

- Three dredged material bank openings and three bifurcated conveyance channels in the north bank of the ARDC in NE-2 with the westernmost channel in the north bank of the ARDC also extending through the railroad grade into NE-1 to add connectivity between NE-1, NE-2, and the ARDC.
- Dredged material (5.0 acres) from the bank openings and the conveyance channel would be sidecast on both sides of the proposed channel. Gaps will be left in the disposal berms so sheet flow is not reduced.
- One cut would be created in the railroad grade approximately 0.9 miles north of the ARDC to improve sheet flow.
- Vegetative plantings of bottomland hardwood/freshwater swamp tree species on 5.0 acres of dredged material berms.
- Vegetative plantings of freshwater swamp tree species within 438 acres of the swamp floor.

Three natural low areas or relict channels have been identified as potential bank opening and conveyance channel sites. Openings would enable impounded water to be drained from the swamp and provide hydrologic connectivity between the swamp and the ARDC. Additionally, the placement of a cut in the railroad grade would provide further hydrologic connectivity between NE-1 and NE-2. Openings would promote the introduction of freshwater, sediments, and nutrients into the swamp and allow the oxidation of sediments and removal of toxic metabolites. This alternative is anticipated to improve the degraded swamp and decrease the transition to marsh and ultimately, open water. This alternative represents the minimum effort

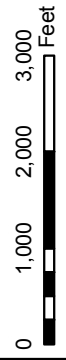
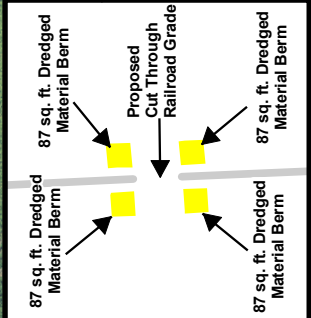
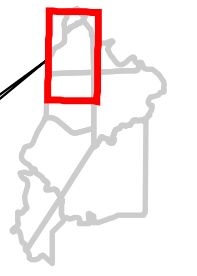


Legend

- SE-1 Subunits
- Primary Impact Area
- Secondary Impact Area
- Existing Railroad Grade Cuts
- Proposed Vegetative Plantings
- Proposed Bank Openings & Conveyance Channels
- Dredged Material Berms
- Conveyance Channel
- Cut Through Existing Dredged Material Berm

Notes:
Footprint acreage equals sum of all Dredged Material Berms, Conveyance Channels, and Cuts Through Existing Dredged Material Berms. Spaces between Dredged Material Berms are shown larger than actual size for graphic purposes.

Map Extent



ALTERNATIVE 33
Amite River Diversion Canal Modification
Ascension and Livingston Parishes, Louisiana

Image: 2009 Livingston Parish USDA-FSA-A-PFO NAIP MrSID Mosaic

	Figure: 1
	Date: December 2009
	Scale: 1:24,000
	Source: USGS/GEC
	Map ID: 27850108-1868

that would meet the goals and objectives of the project. Alternative 33 would benefit approximately 1,602 acres of existing freshwater swamp, recreate 144 acres of freshwater swamp from freshwater marsh, and create 5.0 acres of upland habitat from dredged material placement.

Three natural low areas or relict channels have been identified as potential bank opening and conveyance channel sites. Openings would enable impounded water to be drained from the swamp and provide hydrologic connectivity between the swamp and the ARDC. Additionally, the placement of a cut in the railroad grade would provide further hydrologic connectivity between NE-1 and NE-2. Openings would promote the introduction of freshwater, sediments, and nutrients into the swamp and allow the oxidation of sediments and removal of toxic metabolites. This alternative is anticipated to improve the degraded swamp and decrease the transition to marsh and ultimately, open water. This alternative represents the minimum effort that would meet the goals and objectives of the project. Alternative 33 would benefit approximately 1,602 acres of existing freshwater swamp, recreate 144 acres of freshwater swamp from freshwater marsh, and create 5.0 acres of upland habitat from dredged material placement.

B. Location.

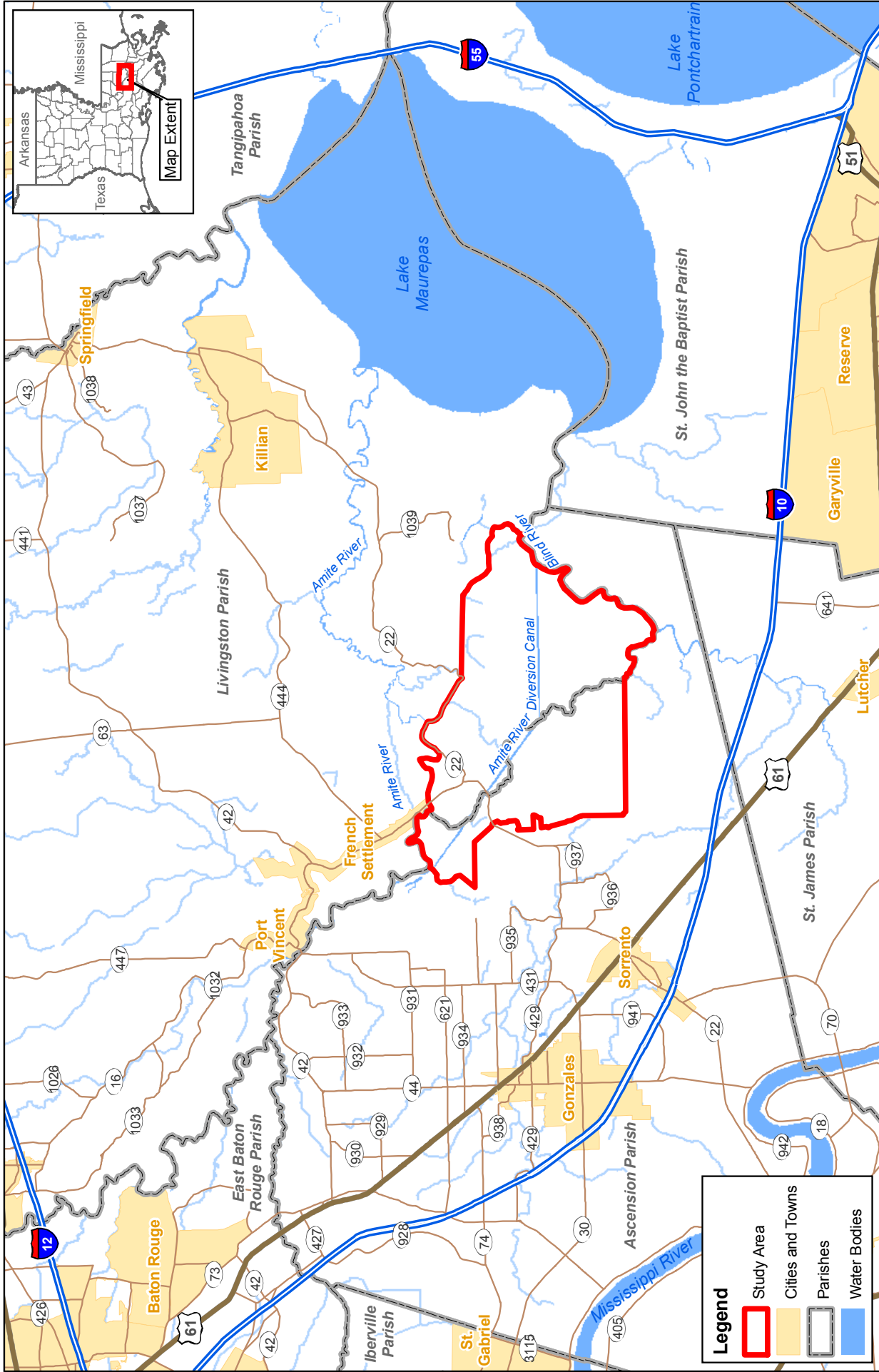
The Louisiana Coastal Area-Amite River Diversion Canal (LCA-ARDC) study area is located in LCA Subprovince 1 and is situated along the ARDC in Ascension and Livingston parishes, in the vicinity of Head of Island, Louisiana. A map of the study area is presented in Figure 2. The study area is bounded to the north by the old channel of the Amite River, Old River, and Bayou Chene Blanc; to the east by the Blind River; to the south by the Petite Amite River and the New River Canal; and to the west by the Saveiro Canal, Ascension Parish flood protection levees, and the Laurel Ridge Canal; and is located in the following sections:

- Township 9 South, Range 4 East- Sections 9-16, 22-27, and 34-36;
- Township 9 South, Range 5 East- Sections 7, 14-36;
- Township 9 South, Range 6 East- Section 30;
- Township 10 South, Range 4 East- Sections 1-3 and 10-12; and
- Township 10 South, Range 5 East- Sections 2-11.

C. Authority.

Title VII of Water Resource Development Act (WRDA) 2007 authorizes the LCA program. 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 dredged material, feasibility studies for restoration plan components, and other program elements.

In total, the LCA program 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 U.S. Army Corps of Engineers (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



Legend

- Study Area
- Cities and Towns
- Parishes
- Water Bodies



STUDY AREA REGION

Amite River Diversion Canal Modification
Ascension and Livingston Parishes, Louisiana



Figure: 2
Date: October 2009
Scale: 1:260,000
Source: USDA/GEC
Map ID: 27850108-1781

elements by December 31, 2008 and one Chief's Report by December 31, 2010. The six elements are:

- 1) Multipurpose Operation of Houma Navigation Lock,
- 2) Terrebonne Basin Barrier Shoreline Restoration,
- 3) Small Diversion at Convent/Blind River,
- 4) Amite River Diversion Canal Modification,**
- 5) Medium Diversion at White Ditch, and
- 6) Convey Atchafalaya River Water to Northern Terrebonne Marshes.

D. General Description of Dredged and Fill Material.

(1) General Characteristics of Material.

(a) Construction of Gaps in ARDC Dredged Material Banks (Figure 3). The material to be dredged for creating gaps in the ARDC dredged material bank is former swamp floor sediment that was previously dredged to construct the ARDC and placed adjacent to the channel. This material is primarily alluvial silt and clay that was deposited by annual flooding of the Mississippi and Amite Rivers along with varying amounts of organic matter.

Excavation of the gaps within the existing dredged material berms would be carried out by two amphibious, short-reach excavators a D-6 dozer, and a log skidder. As the equipment cuts its way into the gap locations, the dredged material removed would be placed on the swamp floor at the interface of the existing dredged material berm and the conveyance channels to create bottomland hardwood (BLH) "islands" that would serve as wildlife refugia during time of high water. A total of 5.0 acres of dredged material would be placed within the construction footprint for the proposed action. It is anticipated that it would be necessary to remove stumps that are encountered during the dredging of the gaps. Best management practices, such as silt fencing and hay bales would be utilized during the construction process to prevent the transport of sediments within the construction and placement areas.

All excavation through the dredged material berms, as well as the conveyance channels through the swamp, would be based on a design cross section (Figure 3). This cross section was developed in an effort to mimic natural, existing cuts within the study area, which have been determined to be self-maintaining.

(b) Construction of Cuts in Railroad Grade (See Figure 1). Material dredged to create cuts in the railroad grade is former swamp floor material that was used to construct the railroad grade. This material is primarily alluvial silt and clay that was deposited by annual flooding of the Mississippi and Amite Rivers along with varying amounts of organic matter.

Excavation of the cuts within the railroad grade would be carried out by an amphibious short-reach, excavator. As the equipment cuts its way into the cut locations, the dredged material removed would be placed on the swamp floor adjacent to the railroad grade. Material excavated from the gaps in the railroad grade (approximately 0.02 acres) represents a small percentage of the total acres of dredged material and is accounted for in the total 5.0 acres of dredged material

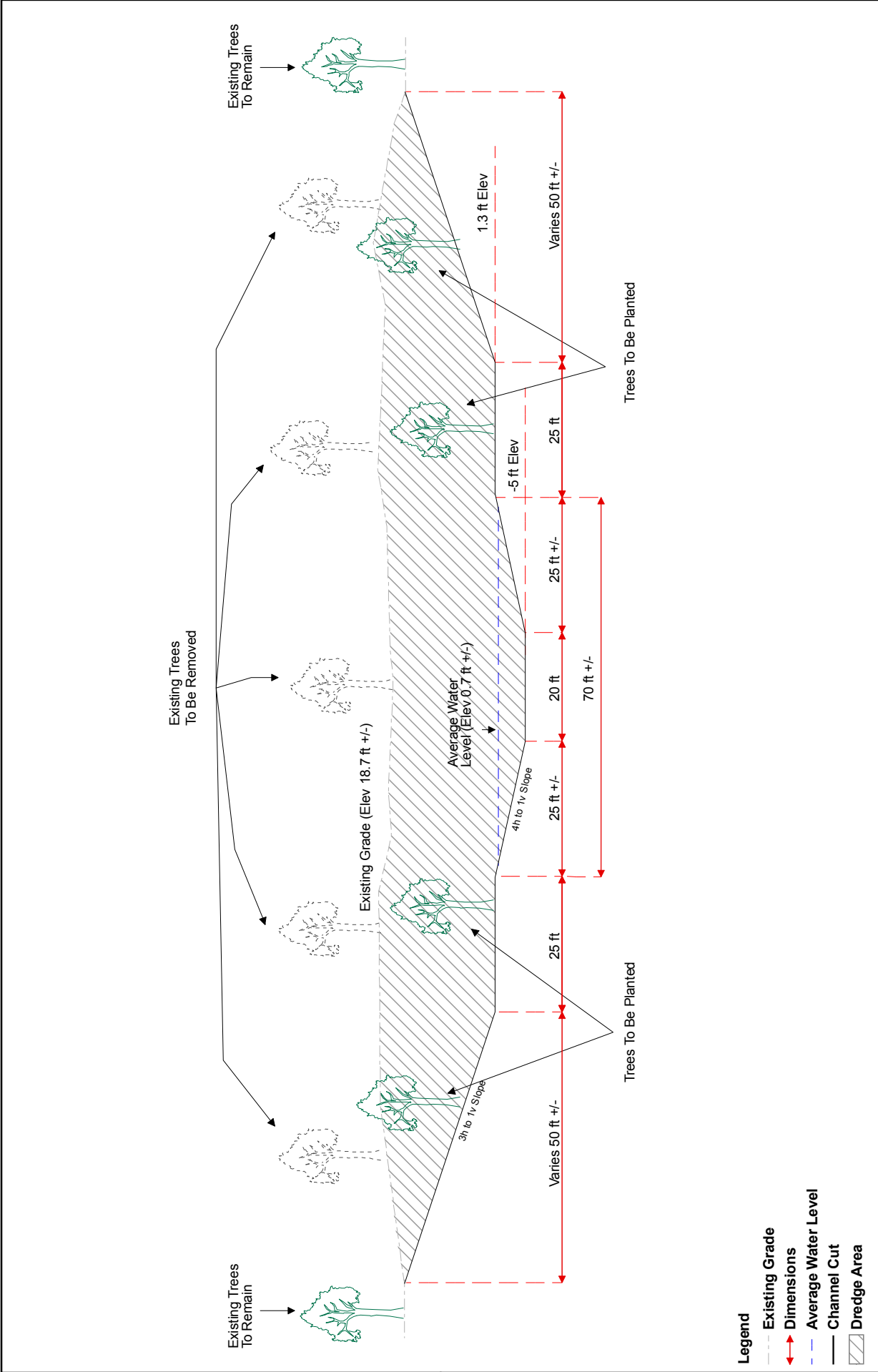


	
Figure: 3	Date: January 2010
Not to Scale	Source: GEC
Map ID: 27850108-1741	

Typical 70 ft. Cross Section through ARDC Dredged Material Berm

Amite River Diversion Canal Modification
Ascension and Livingston Parishes, Louisiana

that would be placed within the construction footprint for the proposed action. It is anticipated that it would be necessary to remove stumps that are encountered during the dredging of the cuts. Best management practices, such as silt fencing and hay bales, would be utilized during the construction process to prevent the transport of sediments within the construction and placement areas.

(c) Construction of Conveyance Channels (Figure 4). Material dredged to create conveyance channels is sediment that would be removed from the floor of the swamp. This material is primarily alluvial silt and clay that was deposited by annual flooding of the Mississippi and Amite Rivers along with varying amounts of organic matter.

Excavation of the conveyance channels would be carried out by two short-reach, amphibious excavators. As the equipment cuts its way into the conveyance channel locations, the dredged material would be placed on the swamp floor along the sides of the proposed conveyance channels. The material will be placed in lengths of 300 feet with 50-foot gaps between the placement areas. Material excavated during the construction of the conveyance channels would be used to create BLH “islands” that would serve as wildlife refugia during time of high water. This 50-foot gaps in the spoil placement will be added to prevent the placement of this material from interrupting sheet flow throughout the areas of impact (See Figure 5). A total of 5.0 acres of dredged material would be placed within the construction footprint for the proposed action. It is anticipated that it would be necessary to remove stumps that are encountered during the dredging of the gaps. Best management practices, such as silt fencing and hay bales, would be utilized during the construction process to prevent the transport of sediments within the construction and placement areas.

All excavation of the conveyance channels through the swamp will be based on three design cross sections (Figures 4 through 6). These cross sections were developed in an effort to mimic natural, existing cuts within the study area, which have been determined to be self-maintaining.

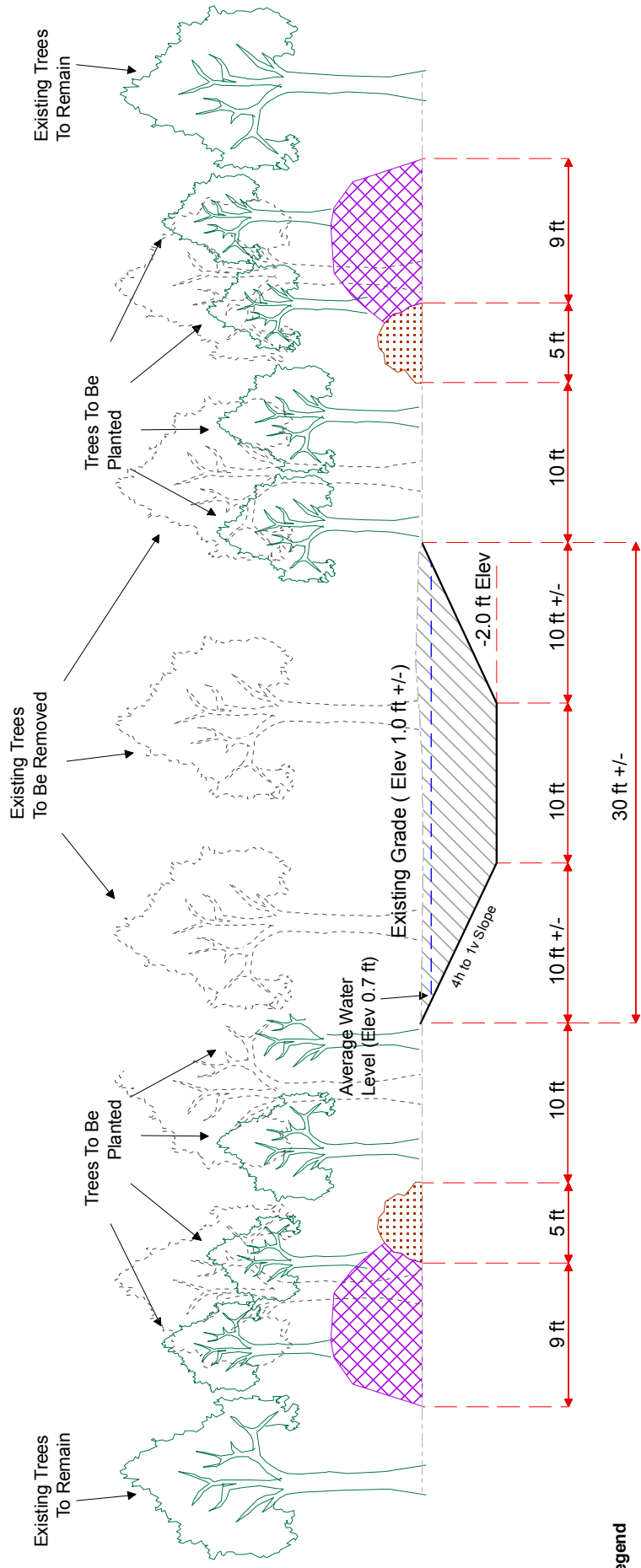
(d) Vegetative Plantings. Swamp vegetation, primarily bald cypress seedlings with accompanying nutria protection, would be planted on the swamp floor. Bottomland hardwood vegetation would be planted on BLH “islands” (See Figure 1.)

(2) Quantity of Material.

(a) Construction of Gaps in ARDC Dredged Material Banks. Approximately 13,753 cubic yards of material would be removed from the ARDC dredged material banks to construct cuts.

(b) Construction of Cuts in Railroad Grade. Approximately 60 cubic yards of material would be removed to construct cuts in the railroad grade.

(c) Construction of Conveyance Channels (Figure 7). Approximately 81,694 cubic yards of material would be removed from the swamp floor to construct conveyance channels.



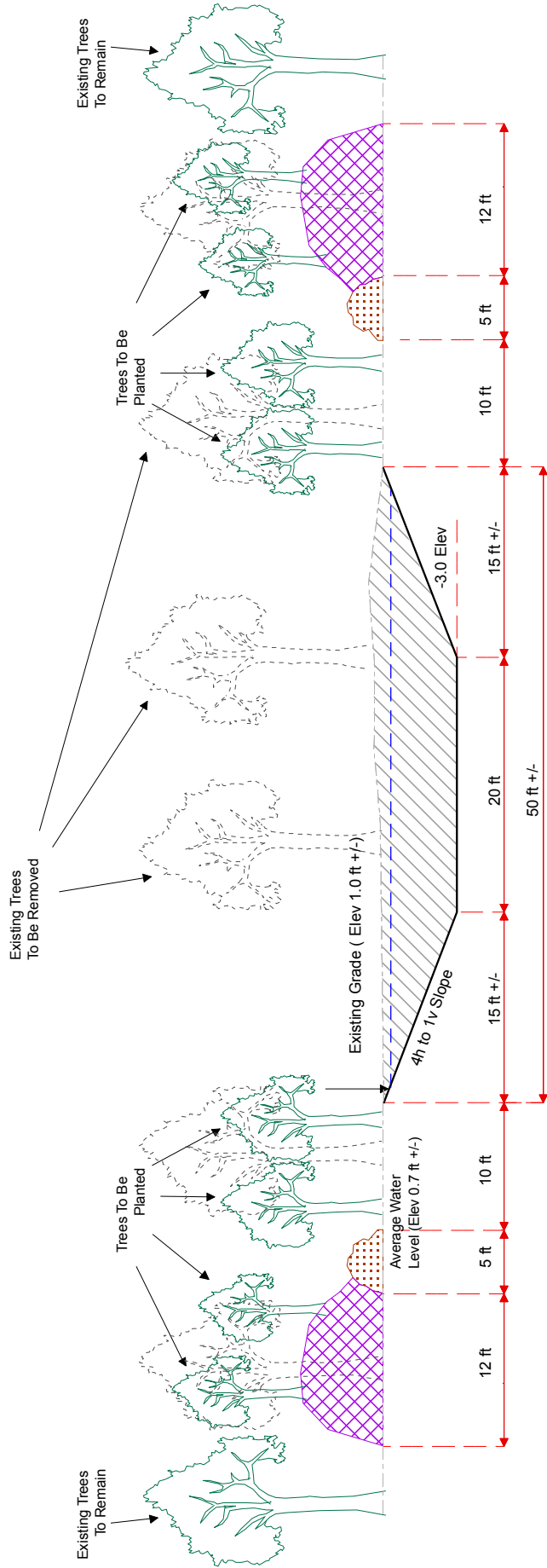
Note: Dredged material to be deposited along the proposed conveyance channel at approximately 300 foot intervals with 50 foot gaps included.



Figure: 4
Date: January 2010
Not to Scale
Source: GEC
Map ID: 27850108-1741

Typical 30 ft. Cross Section through ARDC Native Swamp

Amite River Diversion Canal Modification
Ascension and Livingston Parishes, Louisiana



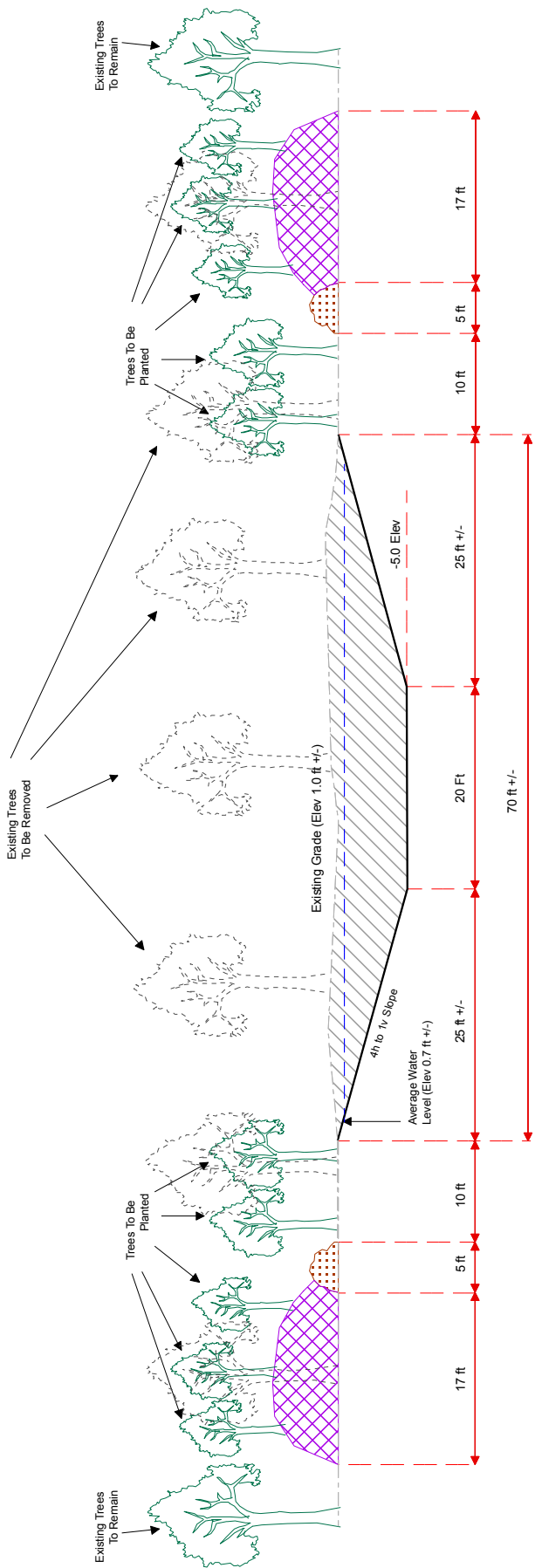
- Legend**
- Existing Grade
 - Dimensions
 - Average Water Level
 - Channel Cut
 - Dredge Material Placement
 - Stumps
 - Dredge Area

Note: Dredged material to be deposited along the proposed conveyance channel at approximately 300 foot intervals with 50 foot gaps included.

	Figure: 5
	Date: January 2010
	Not to Scale
	Source: GEC
	Map ID: 27850108-1741

Typical 50 ft. Cross Section through ARDC Native Swamp

Amite River Diversion Canal Modification
Ascension and Livingston Parishes, Louisiana



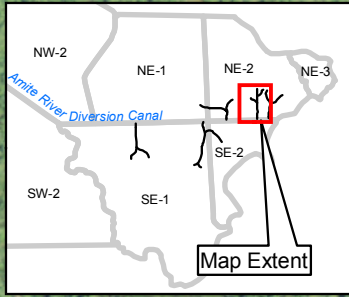
- Legend**
- - - Existing Grade
 - ↔ Dimensions
 - - - Average Water Level
 - Channel Cut
 - ⊗ Dredge Material Placement
 - ⋯ Stumps
 - ▨ Dredge Area

Note: Dredged material to be deposited along the proposed conveyance channel at approximately 300 foot intervals with 50 foot gaps included.

	Figure: 6
	Date: January 2010
	Not to Scale
	Source: GEC
	Map ID: 27850108-1741

Typical 70 ft. Cross Section through ARDC Native Swamp

Amite River Diversion Canal Modification
Ascension and Livingston Parishes, Louisiana



30' Channel Through Swamp:
 10' Bottom Width
 Side Slopes 4 h to 1 v
 Invert Elevation -2.0' +/-

50' Channel Through Swamp:
 20' Bottom Width
 Side Slopes 4 h to 1 v
 Invert Elevation -3.0' +/-

70' Channel Through Existing
 Dredge Material Berm and Swamp:
 20' Bottom Width
 Side Slopes 4 h to 1 v
 Invert Elevation -5.0' +/-

Legend

- 30' Channel
- 50' Channel
- 70' Channel
- Cut Through Existing Dredge Material Berm
- Dredge Material & Stump Placement
- SE-1 Subunits

Amite River Diversion Canal



TYPICAL CONVEYANCE CHANNEL
 Amite River Diversion Canal Modification
 Ascension and Livingston Parishes, Louisiana

Image: 2009 Livingston Parish USDA-FSA-APFO NAIP MrSID Mosaic



Figure: 7
Date: January 2010
Scale: 1:5,600
Source: USDA/GEC
Map ID: 27850108-1889

(d) Vegetative Plantings. Approximately 438 acres of swamp floor would be planted with swamp vegetation. BLH “islands” used as wildlife refugia, which would total approximately 5.0 acres, would be planted with bottomland hardwood forest species.

(3) Source of Material.

All material excavated and placed within the project area is present or former swamp floor native material deposited by historic and prehistoric annual flooding of the Mississippi and Amite Rivers. No material would be brought into the project area from outside sources.

Seedlings and 1 and 3-gallon potted plants for vegetative plantings would be purchased from commercial nurseries.

E. Description of the Proposed Discharge Sites.

(1) Location and Size.

(a) Construction of Gaps in ARDC Dredged Material Banks. Material excavated for the construction of gaps in the ARDC banks would be placed on the swamp floor at the interface of the existing dredged material berm and the conveyance channels to create BLH “islands” that would serve as wildlife refugia (see Figure 3).

(b) Construction of Cuts in Railroad Grade. Material excavated for the construction of cuts in the railroad grade would be placed on the swamp floor adjacent to the gaps in the railroad grade (see Figure 1).

(c) Construction of Conveyance Channels. Material excavated for the construction of conveyance channels would be placed at alternating locations adjacent to the channels to create BLH “islands” that would serve as wildlife refugia (see Figures 4 through 6).

(d) Vegetative Plantings. Vegetative plantings would be made on the swamp floor and on BLH “islands” that would serve as wildlife refugia (see Figure 1).

(2) Type of Site.

(a) Construction of Gaps in ARDC Dredged Material Banks. Material excavated for the construction of gaps in the ARDC banks would be placed within adjacent swamps to create BLH “islands” that would serve as wildlife refugia.

(b) Construction of Cuts in Railroad Grade. Material excavated for the construction of cuts in the railroad grade would be placed within adjacent swamps.

(c) Construction of Conveyance Channels. Material excavated for the construction of conveyance channels would be placed along the proposed channel to create BLH “islands” that would serve as wildlife refugia.

(d) Vegetative Plantings. Seedlings and potted plants would be planted on the existing swamp floor and on the material placed within the swamps to create BLH “islands” that would serve as wildlife refugia.

(3) Type of Habitat.

(a) Construction of Gaps in ARDC Dredged Material Banks. Material excavated for the construction of gaps in the banks on the northern side of the ARDC would be placed within adjacent degraded swamps. Placement sites would include severely degraded areas that are impounded for a majority of the year by the ARDC dredged material banks.

(b) Construction of Cuts in Railroad Grade. Material excavated for the construction of cuts in the railroad grade on the northern side of the ARDC would be placed within adjacent degraded swamps. Placement sites may include severely degraded areas that are impounded for a majority of the year by the ARDC dredged material banks.

(c) Construction of Conveyance Channels. All material dredged during construction of the conveyance channels would be placed along the channels to also create BLH habitat “islands.” Placement sites may include severely degraded areas that are impounded for a majority of the year by the ARDC dredged material banks.

(d) Vegetative Plantings. Plantings located on the swamp floor on the northern side of the ARDC would be provided to promote the recovery of swamp degraded by inundation and a lack of hydrologic connectivity. With the establishment of hydrologic connectivity through the construction of gaps in the ARDC banks, the swamp is anticipated to regain sufficient health to allow vegetative plantings to survive and reestablish a forest canopy.

(4) Timing and Duration of Discharge.

It is estimated that total construction time, which would involve the excavation of gaps in the ARDC banks, excavation of gaps in the railroad grade, dredging of conveyance channels, placement of excavated and dredged materials to create BLH “islands” used for wildlife refugia, and plantings to revegetate the areas would take approximately six years.

F. Description of Disposal Method.

(a) Construction of Gaps in ARDC Dredged Material Banks. Excavation of the gaps within the existing dredged material berms would be carried out by a two short-reach, amphibious excavators.

(b) Construction of Cuts in Railroad Grade. Excavation of the gaps within the railroad grade would be carried out by a short-reach, amphibious excavator.

(c) Construction of Conveyance Channels. Excavation of conveyance channels would be carried out by a short-reach, amphibious excavator.

II. FACTUAL DETERMINATIONS

A. Physical Substrate Determinations.

(1) Comparison of Existing Substrate and Fill.

(a) Construction of Gaps in ARDC Dredged Material Banks. Material that would be excavated from the ARDC dredged material banks is former swamp substrate that was dredged to create the ARDC, which was completed in 1963. The proposed action would place this material back into the swamp. It is likely that the some of the physical characteristics of the excavated material differ to some degree from the swamp substrate on which it would be placed; the dredged material has likely consolidated and lost some of its original organic matter through oxidation. The inorganic components of the dredged material would be identical to the existing swamp substrate.

(b) Construction of Cuts in Railroad Grade. The railroad grade was constructed from adjacent swamp substrate. Material excavated to construct cuts in the railroad grade would be returned to the swamp substrate. The low elevation of the grade, which is less than one foot above the average water level of the swamp, has likely retained most of its original characteristics and is expected to be virtually identical to the existing swamp substrate.

(c) Construction of Conveyance Channels. Material excavated to construct conveyance channels is existing swamp substrate that would be placed on like material.

(2) Changes to Disposal Area Elevation.

(a) Construction of Gaps in ARDC Dredged Material Banks. Figure 3 shows a cross section of the construction for a typical gap in the ARDC bank; elevations are indicated. The removal of material from the ARDC bank would reduce the elevation to a minimum of approximately 5.5 feet below the average water level in the canal. Material removed to create the gaps would be placed on the swamp floor to create BLH “islands” that would provide refugia for wildlife during periods of high water in the swamp. The elevations of the BHL “islands” would be approximately 10 feet, before consolidation, and would change the habitat type from swamp to bottomland hardwood and upland forest.

(b) Construction of Cuts in Railroad Grade. The elevation of the railroad grade at the location of the cut would be reduced to a minimum of 1 foot below the average water level in the swamp. The material removed to construct the cut would be placed on the swamp floor, raising the elevation at the placement location to approximately two to four feet, which may change the habitat type at some locations to bottomland hardwood forest.

(c) Construction of Conveyance Channels. The construction of conveyance channels would reduce the elevation of the substrate to approximately 5.5 feet below the average water level of the swamp (Figures 4 through 6). Material removed to construct conveyance channels would be placed on the swamp floor, raising the elevation at those locations to approximately four feet, which would change the habitat type to bottomland hardwood forest.

(3) Migration of Fill.

Because of the low velocities of water flow across the swamp and the revegetation of areas where fill would be placed, it is anticipated that little or no migration of fill would occur.

(4) Duration and Extent of Substrate Change.

Material excavated for the construction of gaps in the ARDC banks, material excavated for the construction of cuts in the railroad grade, and material dredged for the construction of conveyance channels would be placed on the swamp floor in proximity to the construction area. Material removed would be placed on the swamp floor to create BLH “islands” that would provide refugia for wildlife during periods of high water in the swamp as recommended by representatives of the Louisiana Department of Wildlife and Fisheries. Figures 1, and 3 through 7, show the approximate locations of placement sites. It is intended that these sites would be permanent.

(5) Changes to Environmental Quality and Value.

Physical substrates would be altered by the excavation of material for the construction of gaps in the ARDC dredged material berms and the cuts in the railroad grade, as well as the dredging of conveyance channels. At these locations, existing elevations would be lowered. Material removed by excavation and dredging would be placed at locations on the swamp floor where the elevation would be raised to create BLH “islands” that would provide refugia for wildlife during periods of high water in the swamp. Although these actions would alter existing habitats, the overall effect of the proposed action would enhance the environmental quality of the study area.

(6) Actions to Minimize Impacts. It is anticipated that construction activities would involve the use short-reach, amphibious excavators, the use of which would result in fewer impacts to the physical substrate than alternative methods. Some clearing of vegetation would be necessary to provide access to the sites for construction activities, but revegetation of disturbed areas is included in the proposed action. Best management practices, such as silt fencing and hay bales, would be utilized during the construction process to prevent the transport of sediments within the construction and placement areas.

B. Water Circulation, Fluctuation, and Salinity Determinations.

(1) Alteration of Current Patterns and Water Circulation.

The proposed action is intended to reverse the effects of alterations in flow that were caused by the construction of the ARDC and deposition of dredged material along the banks thereby impeding the hydrologic connectivity needed for the maintenance of a healthy swamp. The construction of gaps in the banks and cuts in the railroad grade are intended to (1) remove the impoundments on the northern side of the ARDC and provide hydrologic connectivity between the swamp and the ARDC; (2) promote the introduction of flows from the ARDC to

swamps adjacent to the ARDC during periods of elevated water levels in the ARDC; (3) provide a degree of sheet flow by removing restrictions created by the railroad grade.

(2) Interference with Water Level Fluctuation.

The proposed action is intended to eliminate the impoundments created by the ARDC dredged material banks and provide the swamp with seasonal water level fluctuations necessary to maintain a healthy swamp.

(3) Salinity Gradient Alteration.

Salt water is currently being introduced into the swamp during storm tides, such as those experienced during tropical cyclone storm surges. Because of the lack of hydrologic connectivity, this salt water remains resident in the swamps for extended periods of time, which results in extensive mortality to swamp vegetation. The gaps in the ARDC banks and cuts in the railroad grade would provide a means for the salt water to be flushed from the swamp and reduce mortality through the resulting increase in hydrologic connectivity that would occur.

(4) Effects on Water Quality.

(a) Salinity. No effect.

(b) Clarity. Effects of the proposed action on water clarity would be most likely to occur during construction. Excavation associated with the construction of gaps, cuts and access channels would reduce water clarity, as would the placement of material excavated during construction. However, any reduction in clarity caused by construction activities would be short duration and clarity would return to pre-construction levels following the revegetation of banks and placement areas.

(c) Color. With the establishment of hydrologic connectivity between water from impounded areas within the swamp on would be able to drain from into the ARDC. Because of dissolved tannins and lignins originating from the decomposition of organic matter, swamp water may have a darker color than the water in the ARDC. This color difference would be most noticeable in the immediate vicinity of the gaps in the ARDC bank. The colored water would not have any adverse effect on water quality. As mixing occurs in the ARDC, any noticeable color would be lost.

A similar occurrence of the introduction of colored swamp water may be seen during high flow conditions when water is introduced from the ARDC to swamps through gaps in the bank of the ARDC. Water flowing from swamps may be of a darker color than ambient water in Blind River.

(d) Water Chemistry and Dissolved Gasses. Materials excavated and dredged to provide features of the proposed action would contain variable concentrations of organic material. Decomposition of organic material within the placement sites may result in a local, temporary reduction in dissolved oxygen or release of ammonia. However, hydrologic exchange between

the swamps and the ARDC would reduce dissolved oxygen deficits and facilitate the transformation of ammonia into non-toxic nitrate. The introduction of swamp water into the ARDC may create low dissolved oxygen concentration near gaps in the banks, particularly during summer, but it is anticipated that any adverse effects would be localized.

(e) Temperature. No effect.

(f) Nutrients. An existing problem with the swamps along the ARDC is a lack of nutrients. One of the objectives of the proposed action is to allow waters in the ARDC to supply nutrients to the adjacent swamps. This would provide a slight decrease in the concentrations of nutrients in the ARDC.

(5) Changes to Environmental Quality and Value.

Construction activities may temporarily affect water quality by increasing turbidity/suspended solids in the swamps and the ARDC, but turbidity/suspended solid concentrations would return to preconstruction activities following completion of the project.

(6) Actions Taken to Minimize Impacts.

The primary adverse impacts on water circulation, fluctuation, and water quality are likely to be increased concentrations of turbidity/suspended solids in the swamps and the ARDC. Best management practices, such as silt fencing and hay bales would minimize impacts. Turbidity/suspended solid concentrations would return to preconstruction activities following completion of the project

C. Suspended Particulate/Turbidity Determinations.

(1) Alteration of Suspended Particulate Type and Concentration.

Material excavated from the ARDC banks and railroad grade and material dredged to construct conveyance channels is of similar physical and chemical quality to existing substrates within the swamps. Particulates suspended during project construction or by natural forces after project completion are not expected to differ in type from particulates currently within the project area. Construction operations are expected to temporarily increase the concentration of suspended particulates. Particulates suspended during project construction would dissipate after construction activities are complete.

(2) Particulate Plumes Associated with Discharge.

Temporary and localized particulate plumes may occur in the ARDC during construction activities but would quickly dissipate after construction is complete. The placement of excavated and dredged material within the swamp to create BLH "islands" that would provide wildlife refugia is expected to result in temporary occurrences of elevated turbidity. Turbidity levels would return to pre-construction levels following construction and revegetation of the sites.

(3) Changes to Environmental Quality and Value.

Particulate plumes resulting from any construction activity are not expected to persist after project completion. Particulates suspended by the deposition of excavated and dredged material at the placement during project construction or by natural forces after project completion are not expected to differ in type from particulates currently within the study area.

(4) Actions to Minimize Impacts.

Construction operations are expected to temporarily increase the concentration of suspended particulates. Particulates suspended during project construction would dissipate after construction activities are complete. Temporary increases in suspended particulates, which may form turbidity plumes in the ARDC and the swamp, may occur. This would be minimized by implementation of best management practices, such as silt fencing and hay bales, to prevent the transport of sediments within the construction and placement areas.

D. Contaminant Determinations.

Fill material is former swamp sediment that would be returned to the swamp floor. There are no indications that the material has contaminants. The nearest development is primarily residential, but the areas to be excavated are not in the immediate vicinity of development. A phase I environmental site assessment of the study revealed no potential sources of contamination at or near the construction areas.

E. Aquatic Ecosystem and Organisms Determinations.

(1) Effects on Plankton.

Because of the presence of a forest canopy and floating vegetation (primarily salvinia and water hyacinth), a plankton community within the swamps is unlikely to be a significant resource. Therefore the placement of material excavated to construct gaps in the ARDC banks, railroad cuts, or conveyance channels would have little, if any, effect on plankton.

However, it is likely that a plankton community is present in the ARDC. The excavation of the banks to construct gaps is likely to create sufficient turbidity in the vicinity of construction to adversely affect plankton during project construction. Other project activities, such as loading and unloading equipment, construction of staging areas, etc., may temporarily increase turbidity within the ARDC and may adversely impact plankton during operations.

(2) Effects on Benthos.

Benthic organisms would be smothered by the discharge of dredged material at material placement sites, where increased elevations would eliminate benthic habitats. Benthic organisms from adjacent areas would colonize substrates within conveyance channels and open water areas within constructed gaps and cuts. With the establishment of hydrologic connectivity between the

swamps and the ARDC, benthic populations in areas that are permanently impounded would be replaced by population characteristic of seasonally flooded swamps.

(3) Effects on Nekton.

Some species of the nekton community in the ARDC may be temporarily displaced during construction operations. Construction of gaps, cuts, and conveyance channels would provide an array of foraging, breeding, spawning, and cover habitat for a variety of adult and juvenile fishes. Reestablishment of hydrologic connectivity would enable the utilization of numerous microenvironments by juvenile fishes.

(4) Effects on the Aquatic Food Web.

The aquatic food web would benefit from both short and long-term changes resulting from the proposed action, including additions in energy to basal elements of the food web, habitat preservation, and increased habitat complexity. Nutrients and detritus provided by the enhancement of degraded swamp habitats would be added to the existing food web. The proposed action would reestablish numerous microenvironments that would be utilized by invertebrates and juvenile fishes that serve as prey items for larger fauna.

(5) Effects on Threatened and Endangered Species.

The West Indian manatee, listed as endangered in Ascension Parish, is the only species likely to occur in the study area. The West Indian manatee is generally found in shallow, slow-moving rivers, estuaries, saltwater bays, canals and coastal areas. According to an inventory of manatee sightings compiled by the Louisiana Sea Grant Program, manatees have been sighted in the Amite River north of Bayou Manchac, upstream from Port Vincent and near the ARDC; the Blind River; and in Lakes Maurepas and Pontchartrain. Precautionary measures would be necessary to avoid harming these animals during construction activities.

(6) Effects on Other Wildlife.

Representatives of the Louisiana Department of Wildlife and Fisheries have recommended that project features include the placement of excavated material on the swamp floor to create BLH “islands” that would serve as refugia for such wildlife as white-tailed deer during periods of high water levels within the swamp. These refugia have been incorporated into the proposed action. Therefore, the proposed action is expected to benefit terrestrial wildlife of the study area.

The bald eagle, although delisted, remains protected under the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act. The bald eagle occurs in quiet coastal areas and along rivers or lakes near large tall trees. Eagles and eagle nests have been sighted in the western Maurepas Swamp, and at least one bald eagle nest is known to occur within the study area in the vicinity of NE-2. The conveyance channels were located to avoid potential impacts to the nest tree in accordance with the Bald and Golden Eagle Protection Act and the Migratory Bird Treaty Act.

(7) Actions to Minimize Impacts.

Adverse impacts on benthic organisms are unavoidable. However, the loss of benthic habitat by the placement of excavated/dredged material on the swamp floor would be compensated by the improvement in water quality in the swamp. Additional benthic habitat would be provided by the construction of conveyance channels.

The plankton community of the ARDC may be affected by increased concentrations of turbidity/suspended solids during construction. Best management practices, such as silt fencing and hay bales, would minimize impacts. Turbidity/suspended solid concentrations would return to preconstruction activities following completion of the project.

Avoidance of activities in an area within 660 feet of the bald eagle nest, particularly during the nesting season, is expected to minimize disturbances.

F. Proposed Disposal Site Determinations.

Representatives of the State of Louisiana, Department of Wildlife and Fisheries have requested that material removed for the construction of gaps in the ARDC dredged material berms, cuts in the railroad grade, and conveyance channels be used to create BLH “islands” that could serve as resting areas and refugia for wildlife during periods when the swamp is flooded. These placement sites would be in proximity to the areas from which the material is removed, and the excavated/dredged material would be similar in nature to the substrate onto which it would be placed.

The placement areas would convert 5.0 acres of swamp habitat to bottomland hardwood forest habitat and upland habitat. However, the benefits of providing refugia for wildlife would outweigh the loss of wetlands, especially when the overall benefits of the proposed action would enhance the quality of 1,602 acres of forested wetlands.

G. Determination of Cumulative Effects on the Aquatic Ecosystem.

The proposed project would improve the quality of 1,602 acres of forested wetlands. Within these 1,633 acres, 438 acres of swamp vegetation would be replanted to restore the quality of degraded swamps. Wetland Value Assessments determined that 679 Average Annual Habitat Units (AAHUs) would be gained by the proposed action.

The proposed project would restore productive swamp habitat, while restoring hydrologic connectivity between the swamps and adjoining water bodies. Therefore, the incremental effect of the proposed action, when combined with past, present, and reasonably foreseeable future projects, would be of a beneficial nature, thereby lessening the overall cumulative impacts of projects and actions within the study area.

H. Determination of Secondary Effects on the Aquatic Ecosystem.

No secondary effects, other than the effects discussed in previous sections (some of which may be considered secondary), are expected.

III. FINDINGS OF COMPLIANCE OR NON-COMPLIANCE WITH THE RESTRICTIONS ON DISCHARGE

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

B. No practicable alternatives to the proposed discharges could be identified that would have less adverse impacts on the aquatic ecosystem.

C. Chemical constituents of the dredged material released during dredging and disposal operations are not expected to exceed LA Water Quality Standards.

D. The proposed action is compliant with the Endangered Species Act of 1973, as amended. The proposed action would not significantly affect endangered or threatened species or their critical habitats.

E. The proposed action is compliant with specified protection measures for marine sanctuaries designated by the Marine Protection, Research, and Sanctuaries Act of 1972. All disposal sites and effects are in inland waters. No effects would occur in ocean waters beyond the shoreline of the Gulf of Mexico.

F. Evaluation of Extent of Degradation of the Waters of the United States.

(1) Effects on Human Health and Welfare

(a) Municipal and Private Water Supplies. No effect on water supplies is expected.

(b) Recreational and Commercial Fisheries. No adverse effects on recreational and commercial fisheries are expected.

(c) Plankton. Plankton are expected to decrease in the immediate area of project construction operations due to increased turbidity. Adverse effects may linger for a period of time afterwards but would diminish as water clarity returns to preconstruction levels.

(d) Fish. No adverse effects on fish populations are expected.

(e) Wildlife. The proposed action would create BLH “islands” that would serve as refugia during periods of high water in the swamp. The effect of the proposed action would be beneficial.

(f) Special Aquatic Sites. No special aquatic sites would be adversely impacted.

(2) Effects on Life Stages of Aquatic Life and Other Wildlife Dependent on Aquatic Ecosystems.

The proposed action is expected to enhance and preserve degraded swamp habitats that provide an array of foraging, breeding, spawning, and cover habitat for a variety of adult and juvenile fishes, birds, mammals, and reptiles. The proposed action would restore numerous microenvironments that would be utilized as cover for juvenile fishes and invertebrates.

(3) Effects on Aquatic Ecosystem Diversity, Productivity and Stability.

The proposed action would enhance areas of degraded swamp, thereby enhancing and preserving diversity, productivity, and stability of the study area.

(4) Effects on Recreational, Aesthetic, and Economic Resources.

The proposed action would enhance areas of degraded swamp, thereby preserving areas that contribute to recreational, aesthetic, and economic benefits.

G. Appropriate and Practicable Steps Taken to Minimize Potential Adverse Impacts of the Discharge on the Aquatic Ecosystem.

Construction equipment that would be used in swamps would be amphibious, short-reach excavators, which would create a lower impact on the swamp substrate than other methods such as board roads and conventional construction equipment. Standard best management practices would be implemented to minimize the erosion of exposed soil and the introduction of suspended solids into swamps and the ARDC. Revegetation of disturbed areas and material placement areas is a component of the proposed action. Any impacts on the aquatic ecosystem are expected to be minor and of short term. The intent of the project is to restore and maintain a high quality aquatic ecosystem.

IV. EVALUATION RESPONSIBILITY

Evaluation Prepared By:

Renée L. Sanders, Coastal Resources Scientist III,
Office of Coastal Protection and Restoration Authority, Plan Development Section,
P.O. Box 44027, Capital Station, Baton Rouge, LA 70804-4027

Jonathan E. Puls, P.E., GEC, Project Manager Environmental Sciences & Engineering, 9357
Interline Avenue, Baton Rouge, LA 70809

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 ARDC Modification Ecosystem Restoration Project, which incorporates sites for dredging and excavation and the placement of fill, complies with the requirement 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

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

PUBLIC NOTICE

LOUISIANA COASTAL AREA - ECOSYSTEM RESTORATION PROJECT AMITE RIVER DIVERSION CANAL MODIFICATION PROJECT, LIVINGSTON AND ASCENSION PARISHES, 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 Livingston and Ascension Parishes, Louisiana. The study area is bounded to the north by the old channel of the Amite River, Old River, and Bayou Chene Blanc; to the east by the Blind River; to the south by the Petite Amite River and the New River Canal; and to the west by the Saveiro Canal, Ascension Parish flood protection levees, and the Laurel Ridge Canal.

Project Description. The USACE proposes to dredge openings in the existing Amite River Diversion Canal (ARDC) spoil banks, construct bifurcated conveyance channels, and establish vegetative plantings in the study area. Without action, approximately 18,204 acres of impounded swamp habitat would continue converting from a freshwater swamp to fragmented freshwater marsh and open water habitats. Dredged material (5.0 acres) from the bank openings and the conveyance channel would be sidecast on both sides of the proposed channel. Gaps will be left in the disposal berms so sheet flow is not reduced. *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 Amite River Diversion Canal Modification Project, Livingston and Ascension Parishes, 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.

Joan M. Exnicios
Chief, Environmental Planning
and Compliance Branch

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

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

Features of the proposed action (**Figure 1**) include:

- Three dredged material bank openings and three bifurcated conveyance channels in the north bank of the ARDC in NE-2 with the westernmost channel in the north bank of the ARDC also extending through the railroad grade into NE-1 to add connectivity between NE-1, NE-2, and the ARDC.
- Dredged material (5.0 acres) from the bank openings and the conveyance channel would be sidecast on both sides of the proposed channel. Gaps will be left in the disposal berms so sheet flow is not reduced.
- One cut would be created in the railroad grade approximately 0.9 miles north of the ARDC to improve sheet flow.
- Vegetative plantings of bottomland hardwood/freshwater swamp tree species on 5.0 acres of dredged material berms.
- Vegetative plantings of freshwater swamp tree species within 438 acres of the swamp floor.

Three natural low areas or relict channels have been identified as potential bank opening and conveyance channel sites. Openings would enable impounded water to be drained from the swamp and provide hydrologic connectivity between the swamp and the ARDC. Additionally, the placement of a cut in the railroad grade would provide further hydrologic connectivity between NE-1 and NE-2. Openings would promote the introduction of freshwater, sediments, and nutrients into the swamp and allow the oxidation of sediments and removal of toxic metabolites. This alternative is anticipated to improve the degraded swamp and decrease the transition to marsh and ultimately, open water. This alternative represents the minimum effort that would meet the goals and objectives of the project. Alternative 33 would benefit approximately 1,602 acres of existing freshwater swamp, recreate 144 acres of freshwater swamp from freshwater marsh, and create 5.0 acres of upland habitat from dredged material placement.

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

The purpose of this project is to construct cuts in the dredged material banks on the north side of the Amite River Diversion Canal to promote the exchange of water between the Diversion Canal and the swamps. This action would allow periodic drying of the swamps, thereby enabling regeneration of trees. The action would enable the introduction of nutrients from the Amite River Diversion Canal into the swamps, thereby promoting healthy growth of plants. Excavated and dredged material will be used to create elevated areas that would provide refuges for wildlife during periods of high water in the swamp.

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 Amite River Diversion Canal along the banks created a hydrologic barrier that has isolated the swamps north and south of the Amite River Diversion Canal. 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 excavated and dredged is former swamp floor sediment. This material is primarily alluvial silt and clay that was deposited by annual flooding of the Mississippi and Amite Rivers along with varying amounts of organic matter. It is anticipated that it would be necessary to remove stumps that are encountered during the dredging of the gaps. The amount of material is estimated to be 95,447 cubic yards.

Approximately 438 acres would be planted with vegetation. Swamp vegetation, primary baldcypress seedlings with accompanying nutria protection would be planted on the swamp floor. Bottomland hardwood vegetation would be planted on material placement sites.

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

Elevated placement areas would total approximately 5.0 acres and would be planted with bottomland hardwood forest species.

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 Water body (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		

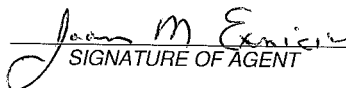
To the best of my knowledge the proposed activity described in my permit application complies with and will be conducted in a manner that is consistent with the LA Coastal Management Program.

* 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

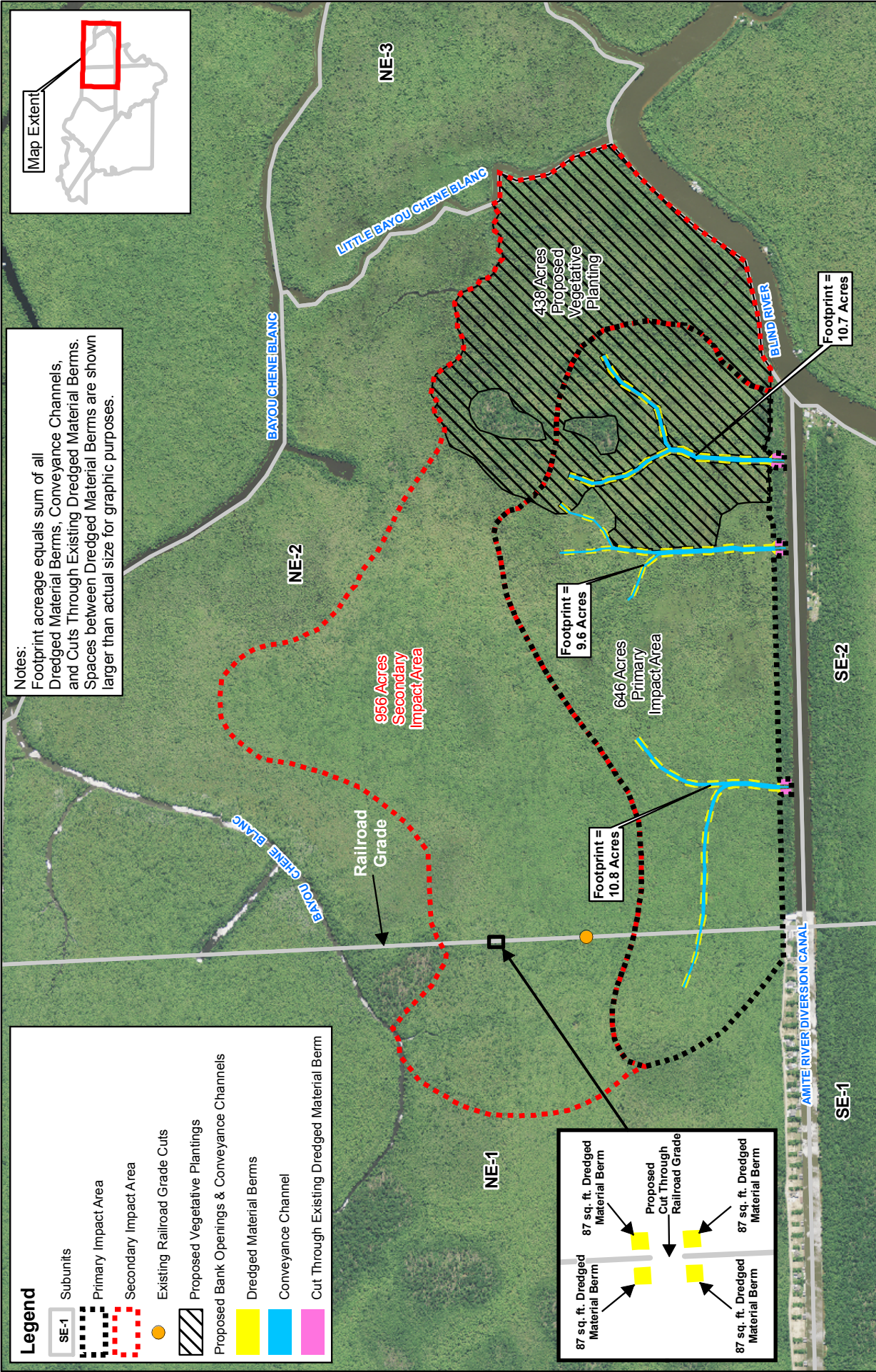
Sept 27 2010
DATE


SIGNATURE OF AGENT

Sept 27, 2010
DATE

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 of 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.



Notes:
 Footprint acreage equals sum of all Dredged Material Berms, Conveyance Channels, and Cuts Through Existing Dredged Material Berms. Spaces between Dredged Material Berms are shown larger than actual size for graphic purposes.

Legend

- SE-1 Subunits
- Primary Impact Area
- Secondary Impact Area
- Existing Railroad Grade Cuts
- Proposed Vegetative Plantings
- Proposed Bank Openings & Conveyance Channels
- Dredged Material Berms
- Conveyance Channel
- Cut Through Existing Dredged Material Berm

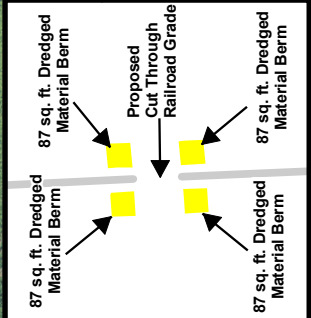
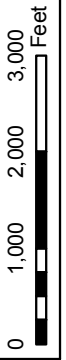


	Figure: 1
	Date: December 2009
	Scale: 1:24,000
	Source: USGS/GEC
	Map ID: 27850108-1868

ALTERNATIVE 33
 Amite River Diversion Canal Modification
 Ascension and Livingston Parishes, Louisiana

Image: 2009 Livingston Parish USDA-FSA-A-PFO NAIP MrSID Mosaic





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 Amite River Diversion Canal Modification, Louisiana, project is enclosed for your review and comment.

The 2004 Louisiana Coastal Area (LCA) Report identified critical projects, multiple programmatic authorizations, and ten additional required feasibility studies for the LCA. When the Water Resources Development Act of 2007 was passed, it included authorization under Title VII, for the LCA Program 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 being completed under a separate feasibility effort due to a need for additional alternatives analysis and increasing uncertainties resulting from the Deepwater Horizon oil spill off the Louisiana coast. Consequently, only four of the Draft EIS and a Summary Document (Volume I) are available for public review at this time:

Amite River Diversion Canal Modification EIS (Volume II)
Convey Atchafalaya River Water 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 are Volumes I and II. A copy of the other draft EIS are available upon request.

The USACE proposes to dredge openings in the existing Amite River Diversion Canal (ARDC) spoil banks, construct bifurcated conveyance channels, and establish vegetative plantings in the study area. Without action, approximately 18,204 acres of impounded swamp habitat would continue converting from a freshwater swamp to fragmented freshwater marsh and open water habitats. Excluding the No-Action Alternative, the final array of alternatives included seven options. Alternative 33 was chosen as the Tentatively Selected Plan (TSP). The TSP, at a total estimated construction cost of \$7,770,000, would restore approximately 1,602 acres of swamp habitat, create 679 Average Annual Habitat Units (AAHUs), 5.0 acres of bottomland hardwood habitat, establish hydrologic connectivity, promote the germination and survival of the seedlings of bald cypress and other trees, and improve biological productivity.

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,

A handwritten signature in black ink, appearing to read "Joan M. Exnicios". The signature is fluid and cursive, with a prominent initial "J" and "E".

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

Enclosures

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

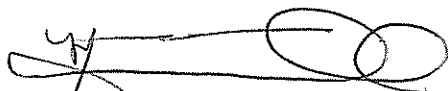
RE: Water Quality Certification (WQC 100824-02/AI 171484/CER 20100002)
Louisiana Coastal Area- Amite River Diversion Canal Modification
Ascension & Livingston Parishes

Dear Ms. Stiles:

The Louisiana Department of Environmental Quality (the Department) has reviewed your application to improve hydrology along the Amite River Diversion Canal, in the vicinity of Head of Island, 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

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