



Resource
Environmental
Solutions

108 Third Street
Baton Rouge, LA 70801
P 225.612.2584
F 225.612.2586

5020 Montrose Blvd., Suite 201
Houston, TX 77006
P 713.520.5400
F 713.520.5401

March 30, 2011

Department of the Army
Corps of Engineers
PO BOX 60267
7400 Leake Ave
New Orleans, Louisiana 70160
Attn: Brenda Archer

RE: Caney Creek Mitigation Bank Prospectus

Dear Ms. Archer:

On behalf of Coastal Louisiana Resource, LLC, Resource Environmental Solutions (RES) is pleased to present the Prospectus for Caney Creek Mitigation Bank to CEMVN and the Interagency Review Team (IRT) in accordance with 33 CFR Part 332.8(d)(2). Per the provisions of 33 CFR Part 332.8(d)(3), RES respectfully requests CEMVN and IRT review and comments in 30 days.

All comments received during the comment period for the Draft Prospectus have been addressed and incorporated into the Prospectus.

Thank you for your attention in this matter. Please do not hesitate to contact me at (225) 372-6107 or at bheard@resmitigation.com if you have any comments or questions.

Thank you,

Brighton Heard



PROSPECTUS

CANEY CREEK MITIGATION BANK EVANGELINE PARISH, LOUISIANA

Prepared for
U.S. Army Corps of Engineers
New Orleans District
New Orleans, Louisiana

Prepared and Submitted by

Coastal Louisiana Resource LLC
c/o Resource Environmental Solutions
108 Third Street
Baton Rouge, Louisiana 70801

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PROSPECTUS

Coastal Louisiana Resource, LLC Caney Creek Mitigation Bank Evangeline Parish, Louisiana

Coastal Louisiana Resource, LLC (CLR), submits this Prospectus to the U.S. Army Corps of Engineers-New Orleans District (CEMVN) and Interagency Review Team (IRT) to initiate evaluation of the proposed Caney Creek Mitigation Bank (CCMB) in accordance with 33 CFR 332.8(d)(2). The details pertaining to the use of this site as a mitigation bank will be specified in the subsequent mitigation banking instrument (MBI). CCMB consists of 509.8 acres located in Section 43, Township 4S, Range 2W, of Evangeline Parish, Louisiana (Figure 1).

The goal of CCMB is the cumulative re-establishment of 509.8 acres of bottomland hardwood (BLH) habitat, including 71.8 acres of upland buffer. The remaining 3.7 acres of non-mitigation features will comprise existing levees and access roads.

1.0 OBJECTIVE

1.1 Current Habitat Types and Land Use (Figure 1)

Habitat Type	Land Use	Acreage
NRCS designated Prior-converted Wetlands	Pasture/Crawfish Ponds	347.3
Forested Wetlands	Forested Wetlands	82.5
Forested Uplands	Forested Uplands	71.8
Other U.S. Waters	Natural Drains	4.5
Non-wetland	Levees and Roads	3.7
Total	---	509.8

1.2 Proposed Mitigation Bank Habitat Types (Figure 1)

Habitat Type	Acreage	Mitigation Type
BLH	347.3	Re-establishment
Forested Wetland Buffer	82.5	Buffer
Forested Upland Buffer	71.8	Buffer
Non-wetland/Roads	8.2	Non-mitigation
Total	509.8	---
Total Wetlands	501.6	---

1.3 Aquatic Functions to be Restored

CLR respectfully presents this Prospectus to establish the proposed 509.8-acre mitigation bank, to CEMVN. The proposed CCMB is located in Evangeline Parish, Louisiana (Figure 1).

The CCMB is approximately 509.8 acres and will provide 347.3 acres of re-established bottomland hardwoods forested wetland ecosystem, 82.5 acres of forested bottomland hardwood wetland buffer, and 71.8 acres of forested upland buffer (Appendix B).

The CCMB is located within the United States Geological Survey (USGS) Hydrologic Cataloging unit (HUC) 08080201, which includes a large area of Evangeline Parish, and Acadia Parish, as well as portions of Allen, Acadia, and Jefferson Davis Parishes, and is located within the Mermentau Headwaters watershed (Figure 1).

The removal and gapping of interior and exterior levees and removal of culverts will restore natural sheetflow across the property. Soil preparation and vegetative plantings will be used to restore natural vegetation across the property. Long-term maintenance will be provided to prevent colonization by noxious plants, erosion along interfaces of drainageways, and trespass vandalism. Vegetative plantings, as well as the restoration of the historic hydroperiod across the property, will create improved wildlife habitat, as well as benefiting water quality as described below in Section 1.4.

1.4 Water Quality

The CCMB is located between Bayou Nezpique and Caney Creek (Figure 1). Bayou Nezpique and Caney Creek flow through the Mermentau Headwaters watershed. The upper portion of the Mermentau watershed is forested, but the majority of the basin is in agricultural production, except for the marshes that extend from the southern reaches of the basin to the Gulf of Mexico. According to the Louisiana's Department of Environmental Quality (LDEQ) Watershed Implementation Plan for Bayou Nezpique, the types of water quality impairments that persist in the Mermentau River Basin include lead, nitrate/nitrite, total phosphorus, dissolved oxygen, sedimentation, siltation, total suspended solids (TSS), total dissolved solids (TDS), and turbidity. The suspected source of these pollutants is agricultural crop production, except for lead, which comes from unknown sources.

The proposed CCMB will accommodate the LDEQ Watershed Implementation Plan for Bayou Nezpique by reducing non-point source pollution within the watershed by removing agricultural crop production from the site and restoring bottomland hardwood and baldcypress communities to the agricultural areas. The CCMB will also reduce non-point source pollution by reducing nutrients and suspended solids from surface water runoff.

According to the LDEQ Watershed Implementation Plan for Bayou Nezpique, sheet flow within the basin has been altered to facilitate rice cultivation. Natural drains within the basin have been channelized, and rice levees have been constructed to retain surface water. The rice levees within the CCMB will be degraded to natural level to re-introduce natural sheet flow across the soil surface. The soils within the project area are hydric, which indicates historical periods of frequent soil saturation and/or inundation. The restoration of surface hydrology through the re-establishment of natural sheet flow will successfully restore the historic wetland functions and values.

2.0 BANK ESTABLISHMENT

2.1 Management Summary

2.1.1 Hydrologic Restoration

All small interior levees will be mechanically degraded to approximate historic natural grade. One interior levee running along a central drainageway will be left in place and gapped with 10 foot gaps every 300 feet. All perimeter levees, besides the southern boundary levee, will be mechanically degraded to the surrounding surface elevation. The perimeter levee along the southernmost boundary will remain in place so as not to adversely impact agricultural activities on adjacent property. Figure 2 presents the location of culverts, levee to be gapped, levees to be removed, and levees to remain in place. Figures 4 and 5 present cross-section locations and profiles.

There are two existing drainageway's within the CCMB. The central drainageway currently traverses the property from southwest to northeast in the lowest elevation found on the property. The other drainageway is considerably smaller and located southwest of the central drainageway. The western levee associated with the central drainageway will be gapped to restore natural sheet flow. The eastern levee along this drainageway is much smaller in size and will be mechanically degraded to the surrounding surface elevation.

Levee material excavated during restoration will be placed in adjacent ditches where possible or spread over fields so as not to alter topography in a significant manner.

All culverts will be removed, with the exception of one culvert which will remain in place at the southern end of the western drainageway in the southern portion of the property (Figure 2). This culvert is on a historic drain, and is the only feasible location for necessary access to the property. The culvert will be inspected and maintained under the long-term maintenance fund, which will include replacement cost on a 10 year cycle.

2.1.2 Vegetative Restoration

For those 347.3 acres proposed for designation as re-establishment, an appropriate combination of hard and soft mast producing bare-root stock will be planted. Two species assemblages will be selected and planted based on elevation. Specific breakdown of each assemblage to be planted will be representative of a species assemblage historically common to bottomland hardwoods of the area. These species assemblages are identified in *The Natural Communities of Louisiana* and will be identified with the location of these plantings in the MBI. Proposed planting spacing in areas designated as re-establishment will be 9'x 9' for an initial density of 538 trees per acre. Planting densities, planting success rates, escrow or bond sum release rates, and monitoring requirements will be consistent with other recently implemented CEMVN approved mitigation banks.

Soils in the fields within the project area will be mechanically prepared for vegetative plantings. Deep-ripping will be used to alleviate soil compaction and encourage air and water pore space for root growth. After planting is complete, and when appropriate weather allows, all remaining levee degradation and gapping will be completed.

2.1.2.1 Buffer measures

For those 155.1 acres of forested areas proposed for designation as buffers, restoration will include removal of invasive plant species and replacement with desirable plant species (bare-root stock). Although the buffers are divided into wetland and non-wetland buffers, hydric soils exist across the entire site. When all impediments to natural sheet flow are removed, eventually the non-wetland forested areas will most likely revert back to historic wetland status.

2.1.2.2 Invasive species control

Invasive plant species such as Chinese tallow tree (*Triadica sebifera*) growing near the planted area will be removed by shredding and/or herbicidal treatment immediately after initial planting. The percent cover of invasive plants will be monitored during long-term and short-term success monitoring and appropriate action taken if needed.

2.1.3 Monitoring

At a minimum, monitoring reports shall be completed in the spring (when new growth makes identification practicable) of Years 1, 3, 5, 10, 15, and prior to and following the first thinning operation. Reports will be submitted by December 31 of each monitoring year.

2.2 Proposed Service Area

2.2.1 Primary/Secondary service area

CCMB is located in the Mermentau Headwaters Hydrologic Unit Code (HUC) 08080201. CCMB is proposed to primarily serve HUC 08080201 and secondarily serve HUC 08080202 (Figure 1).

2.3 General Bank Need and Technical Feasibility

CCMB is proposed to provide compensatory mitigation for CEMVN approved projects within HUC 08080201 (Primary) and the HUC 080802 (Secondary). Currently only one mitigation bank that provides BLH mitigation exists within HUC 08080201.

In addition to providing mitigation for continued population growth, CCMB will provide mitigation for the continuation of oil and gas exploration and production which have occurred historically in the proposed primary and secondary service areas. Additionally, with recent announcements regarding the development of the Haynesville Shale formation in northwest Louisiana, it is anticipated that numerous pipelines will be constructed across the service areas in the near future as natural gas from northwest Louisiana is brought to markets along the I-10 corridor.

2.4 Future Ownership and Long Term Management Strategy

2.4.1 Sponsor/operations manager/long-term management

Coastal Louisiana Resource, LLC
c/o Resource Environmental Solutions, LLC
108 Third Street
Baton Rouge, Louisiana 70801

(225) 612-2583
bheard@resmitigation.com
POC: Brighton Heard

2.4.2 Landowner/long-term ownership

Dr. Patrick Savoy
142 Hospital Drive
Oakdale, Louisiana 70143

2.4.3 Agent

Resource Environmental Solutions, LLC
108 Third Street
Baton Rouge, Louisiana 70801
(225) 612-2583
bheard@resmitigation.com
POC: Brighton Heard

2.4.4 Perpetual site protection mechanism

CCMB will be protected in perpetuity by conservation servitude pursuant to Louisiana Revised Statute 9:1271 *et seq.* The servitude will be held by a conservation-oriented 501(c)(3) organization to be determined. The servitude will inure and run with the property title.

The servitude will prohibit activities, such as clear cutting, fill discharges, cattle grazing, or other commercial surface development that would diminish the quality or quantity of restored wetlands.

2.4.5 Sponsor qualifications

CLR is managed by Resource Environmental Solutions, LLC (RES) which will be the entity responsible for bank land management and office operations. RES has 30 years of combined experience in wetlands banking, permitting, and land management with 14 ongoing mitigation banking sites approved or in preparation in Louisiana. RES has a profile at www.resourceenvironmentalsolutions.com.

3.0 ECOLOGICAL AND SITE SUITABILITY

3.1 Summary of Current Site Conditions

3.1.1 Current and previous land uses

CCMB lands are currently in agricultural use as pasture and crawfish ponds. Historical photographs show that the majority of this tract was cleared prior to 1950. Since that time, the property has been used for either cattle grazing or rice and crawfish production (Figure 2).

3.1.2 Current vegetation

The project area currently consists primarily of agricultural fields and mixed pine/hardwood forest habitat. The agricultural fields are present throughout the project area. Typical dominant vegetation in the agricultural fields includes yellow nutsedge (*Cyperus*

esculentus), grassleaf rush (*Juncus marginatus*), maidencane (*Panicum hemitomon*), floating primrose (*Ludwigia pelopides*), coffeeweed (*Sesbania drummondii*), and dog-fennel (*Eupatorium capillifolium*).

The mixed pine/hardwood forest is present primarily in the northern portion of the project area and in small fence rows and overgrown canal levees throughout the project area. The typical dominant vegetation in the mixed pine/hardwood forest includes water oak, willow oak (*Quercus phellos*), American elm, sweetgum, loblolly pine, Chinese tallow (*Triadica sebiferum*) common buttonbush (*Cephalanthus occidentalis*), spike rush (*Eleocharis obtusa*), blackberry (*Rubus betulifolius*), lizard's tail (*Saururus cernuus*), and poison ivy (*Toxicodendron radicans*).

3.1.3 Current hydrology

CCMB lands are currently hydrologically isolated due to perimeter drainage ditches which route sheet-flow from surrounding lands around the property and into various drainage ditches which facilitate water movement away from the property. The interior of the property is impounded due to numerous crawfish pond levees (Figure 2).

The site hydrology has been altered to facilitate flooding and draining associated with rice and crawfish production. Water from within the project area drains via sheet flow into various culverts and levee breaks into man-made rice field irrigation canals. These canals drain to the south into Bayou Nezpique, through the Mermentau River, through Lake Arthur, and into Grand Lake and eventually into the Gulf of Mexico.

3.1.4 Current soils

The CCMB is underlain with Basile-Wrightsville complex, frequently flooded (Bw) and Wrightsville-Vidrine complex (Wv) soils (NRCS 2010) (Figure 2). Both of the aforementioned soils are classified as hydric by the NRCS.

The Bw soils are poorly drained, nearly level soils on long, narrow flood plains at low elevations (SCS 1974). The Wv soils are level and nearly level soils, poorly and somewhat poorly drained soils adjacent to major streams (SCS 1974).

The agricultural fields within the CCMB have been under cultivation for many years and as a result, a plow pan has likely formed. Disking and ripping completed during site preparation will effectively eliminate the plow pan.

3.1.5 Property encumbrances

The CCMB property is free of any encumbrances.

3.1.6 Zoning and adjacent property development

CCMB and adjacent property is within unincorporated land and is absent of zoning regulations. CCMB is connected to and surrounded by natural and man-made tributaries and forested wetland areas that create buffers to anthropogenic affects from land use alterations.

3.1.7 Preliminary jurisdictional determination

The preliminary jurisdictional determination from CEMVN, dated 09/11/10, is included.

3.2 Water rights and hydrological influences

3.2.1 Water rights

Louisiana Civil Code, Article 490, treats water resources under the theory of absolute ownership and rule of capture, provided capture does not result in harm to neighbors.

3.2.2 Structural hydrological management

Culvert and levee openings will be passively maintained unless hydrologic monitoring reports reveal a need for maintenance, at which time appropriate action will be taken with IRT approval.

3.2.3 General watershed characteristics

3.2.3.1 Water sources and losses

The sole source of water to the CCMB in its current state is direct precipitation, because of the hydrologically isolated nature of the site due to interior and exterior levees. The average annual precipitation in the vicinity of the project area is approximately 58 inches. July is the wettest month of the year with an average precipitation of 6.8 inches, and October is the driest month of the year with an average precipitation of 3.1 inches. Average annual runoff ranges from 12 to 20 inches in this region. Evaporation exceeds rainfall seven months of the year in this region.

3.2.4.2 Hydroperiod

Hydric soils indicate that the site is inundated for at least 14 consecutive days per year. This site is mostly comprised of Wrightsville-Vidrine soils, which, in this area, typically have a seasonal high water table between the surface and two feet below the surface during the months of December and April.

3.2.4.3 Drainage area

Currently, the project site is surrounded by perimeter levees; therefore, hydrologic inputs from the historic drainage area only enter the site through the two large drainage ways that traverse the site. Levees along these drainageways prevent these flows from spreading overbank as they did historically. The drainage area will remain the same post-project; however the project will allow surface flow which is currently rerouted to flow directly into drainageways, as well as allowing flow in the two major drainageways to spread overbank and temporarily inundate the site as it did historically. This drainage area has been estimated based on topographic maps and HUC areas is and presented in Figure 1.

4.0 CONCLUSION

In summary, the CCMB has the potential to re-establish, enhance, and protect 509.8 acres of forested wetlands. These lands will be protected and maintained by conservation servitude.

5.0 REFERENCES

Code of Federal Regulations, Title 33, Parts 325 and 332 and Title 40, Part 230, as published on pages 19594-19704 in the Federal Register dated 10 April 2008.

United States Department of Agriculture – Natural Resources Conservation Service, Web Soil Survey, St. Martin Parish, Louisiana, Retrieved June 2009.
<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>

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<http://plants.usda.gov/>

Louisiana Department of Environmental Quality (2010) *Nonpoint Source Management Plan* [website]. Louisiana Department of Environmental Quality. Accessed December 21, 2010.
Available [URL: http://nonpoint.deq.louisiana.gov/wqa/NPSManagementPlan.htm](http://nonpoint.deq.louisiana.gov/wqa/NPSManagementPlan.htm)

The Natural Communities of Louisiana (Louisiana Natural Heritage Program, August 2009).
Available URL: http://www.wlf.louisiana.gov/sites/default/files/pdf/page_wildlife/6776-Rare%20Natural%20Communities/LA_NAT_COM.pdf

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Louisiana Department of Environmental Quality 303(d) Impaired Waterbodies List, 2006.

Soil Conservation Service (1974) *Soil Survey of Evangeline Parish, Louisiana*. U.S. Department of Agriculture Soil Conservation Service. August 1974.

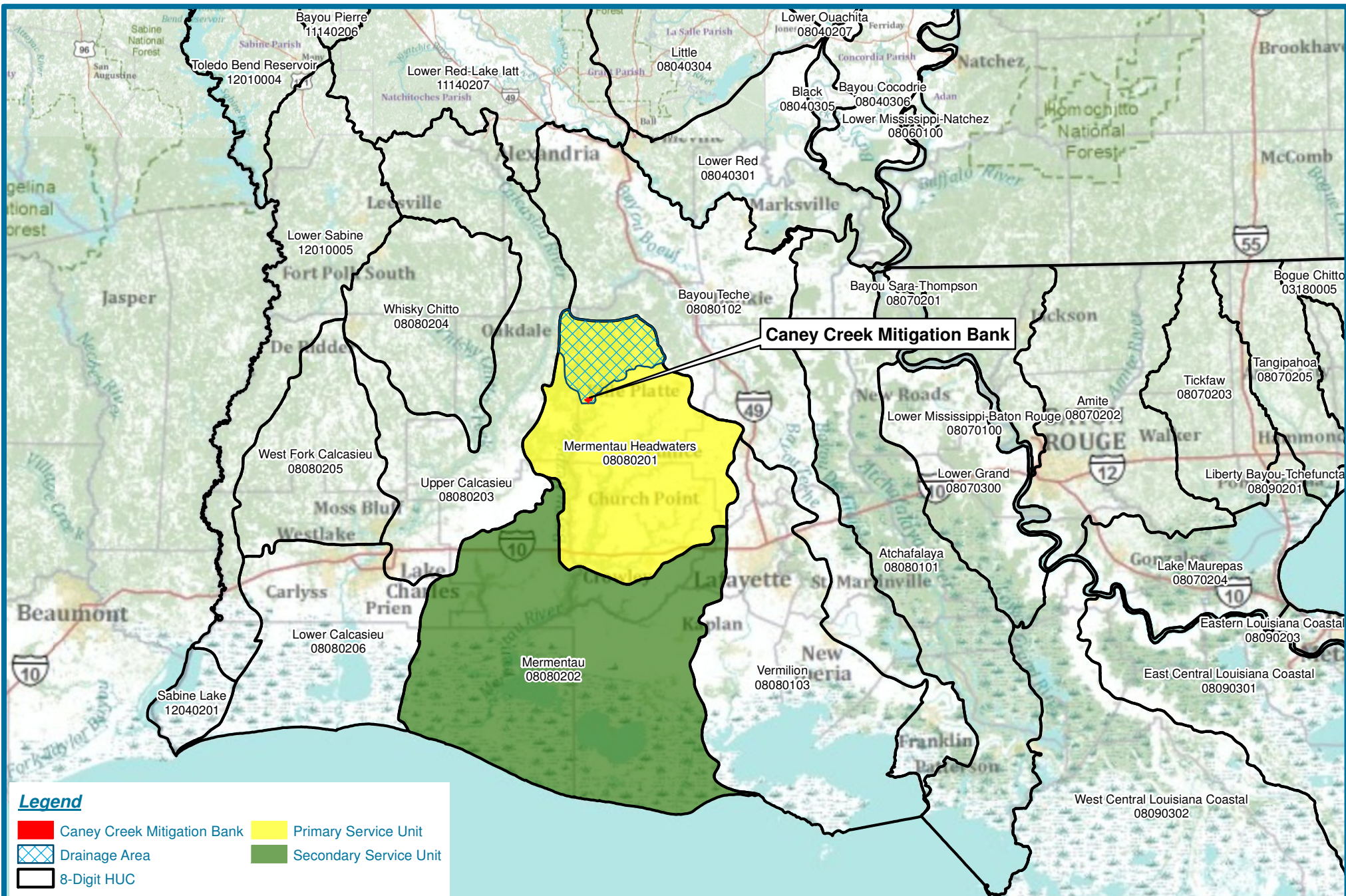


FIGURE 1

SERVICE AREA & DRAINAGE AREA MAP

CANEY CREEK MITIGATION BANK
EVANGELINE PARISH, LOUISIANA



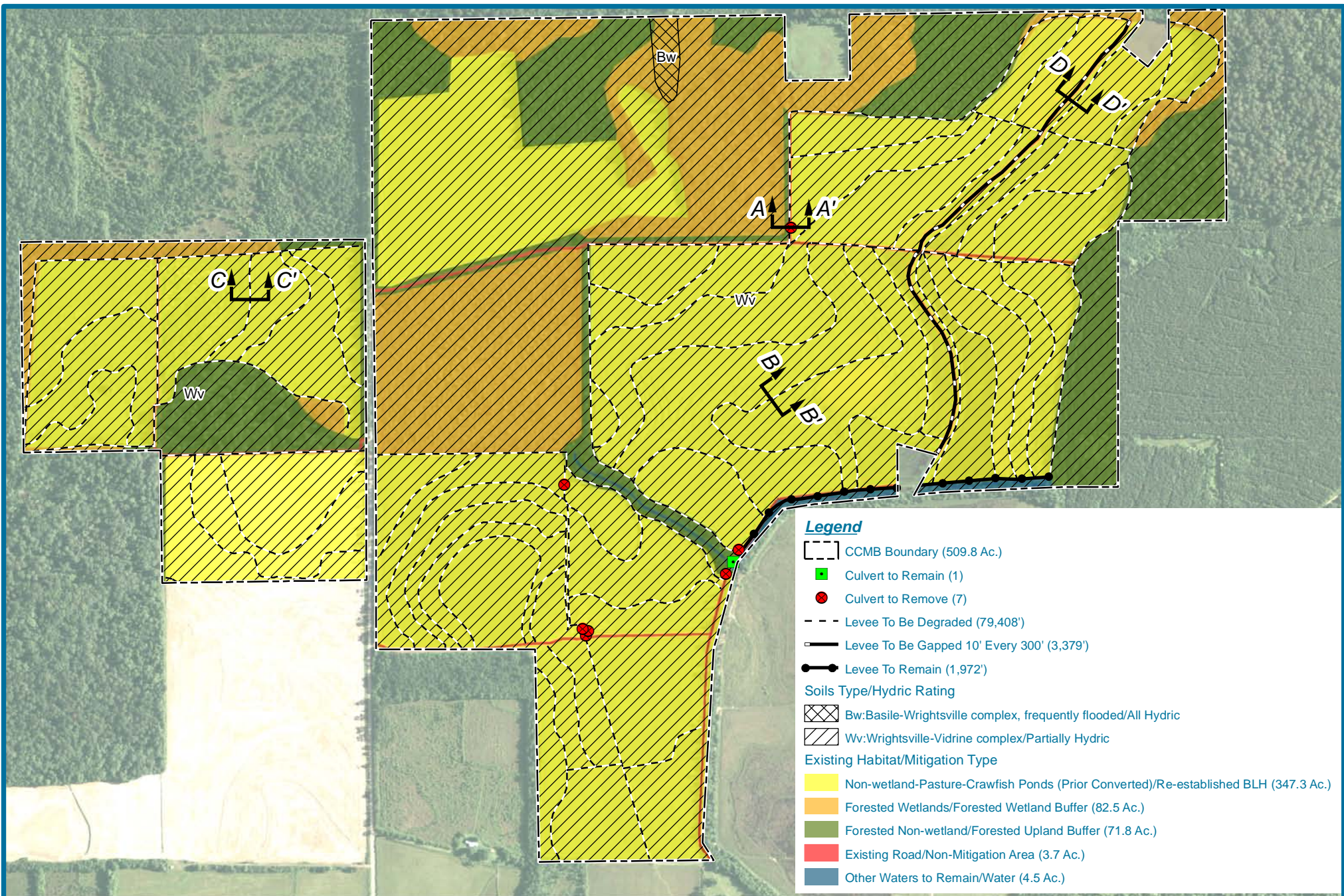
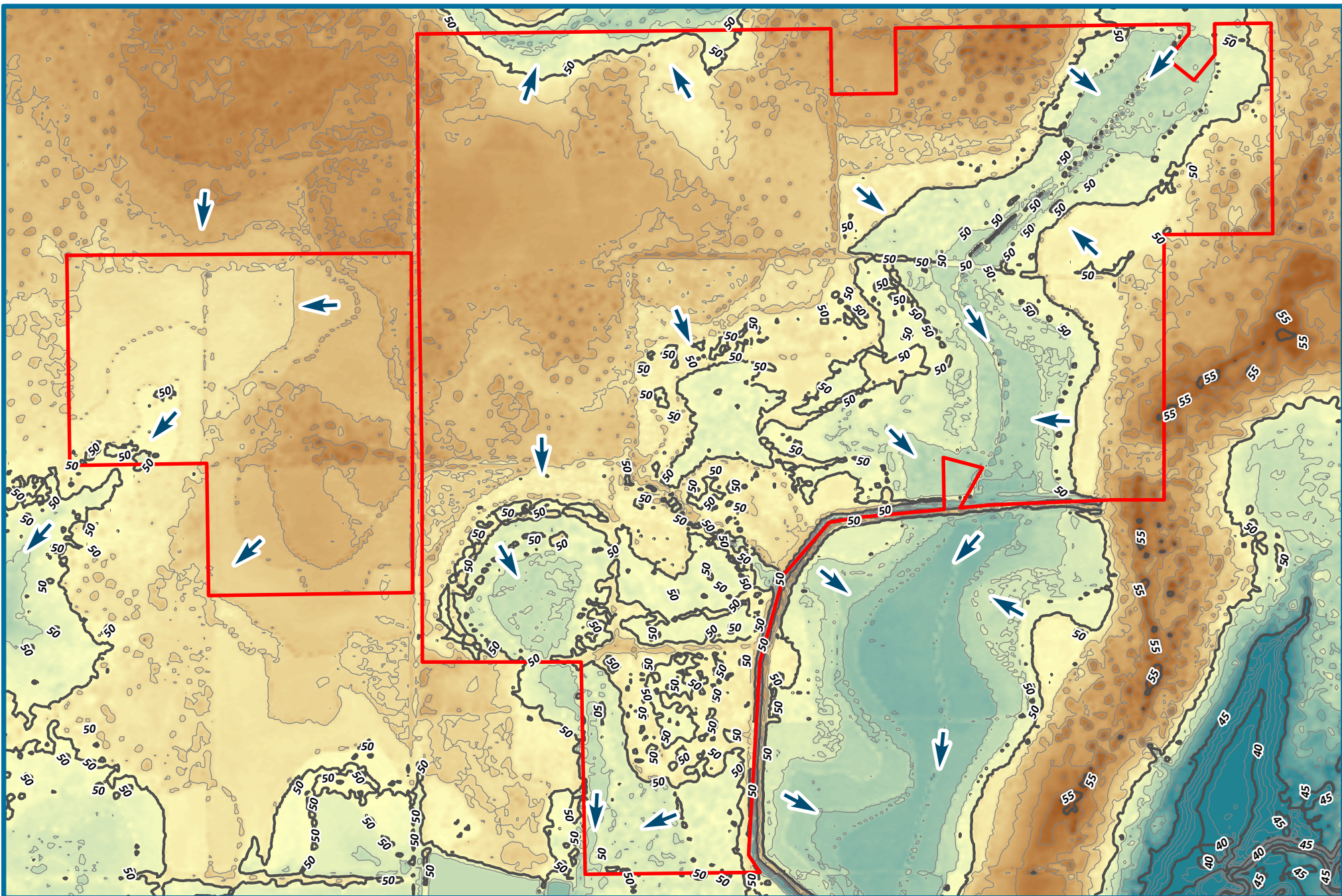


FIGURE 2
PROPOSED HYDROLOGIC RESTORATION PLAN,
SOILS, EXISTING HABITAT, MITIGATION TYPE,
AND CROSS-SECTION LOCATION MAP

CANEY CREEK MITIGATION BANK
EVANGELINE PARISH, LOUISIANA





Legend

➔ Existing Drainage Direction

Contour, FT NAVD

LIDAR Value
High : 55
Low : 45

— Five FT. Contour

— One FT. Contour

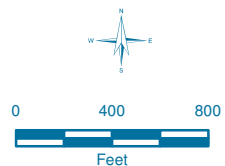
FIGURE 3

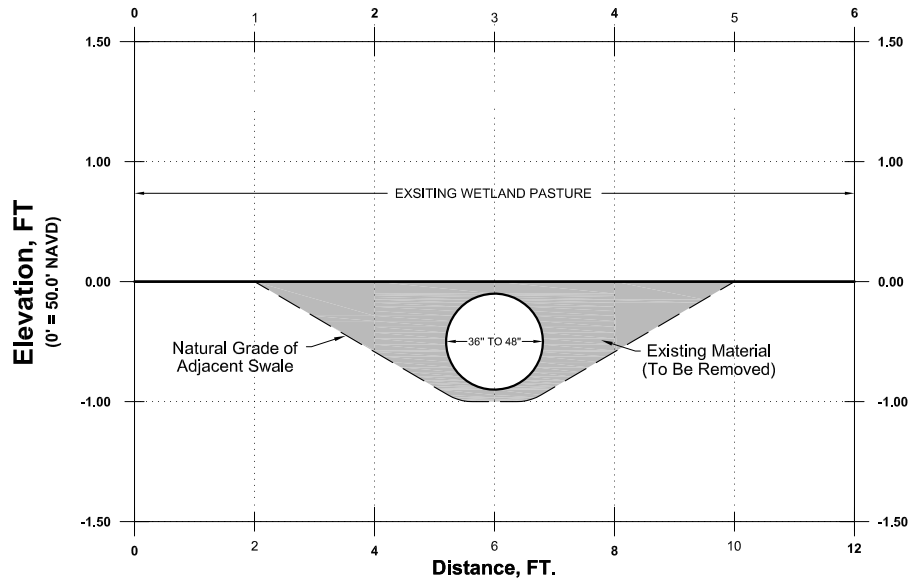
CURRENT HYDROLOGY MAP

CANEY CREEK MITIGATION BANK
EVANGELINE PARISH, LOUISIANA

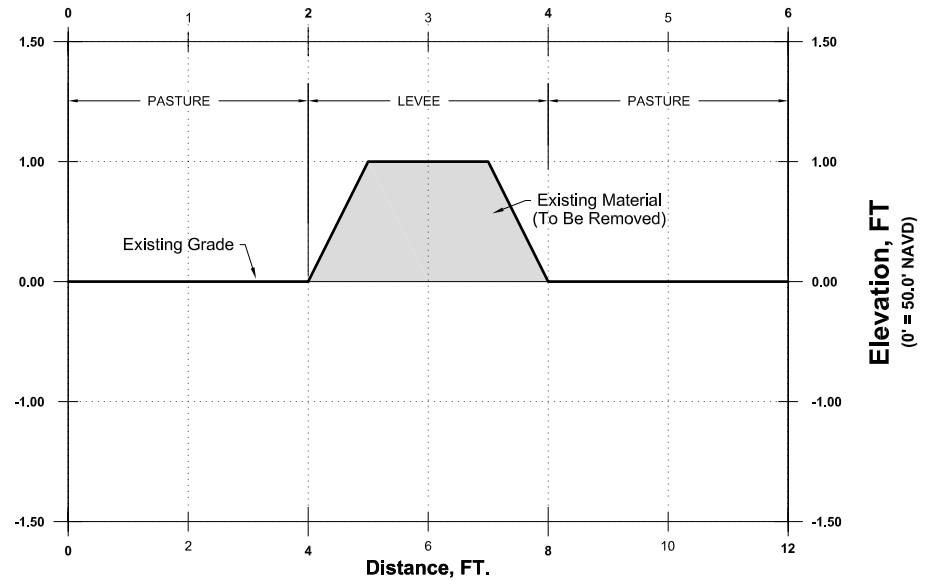


PROJECT LOCATION

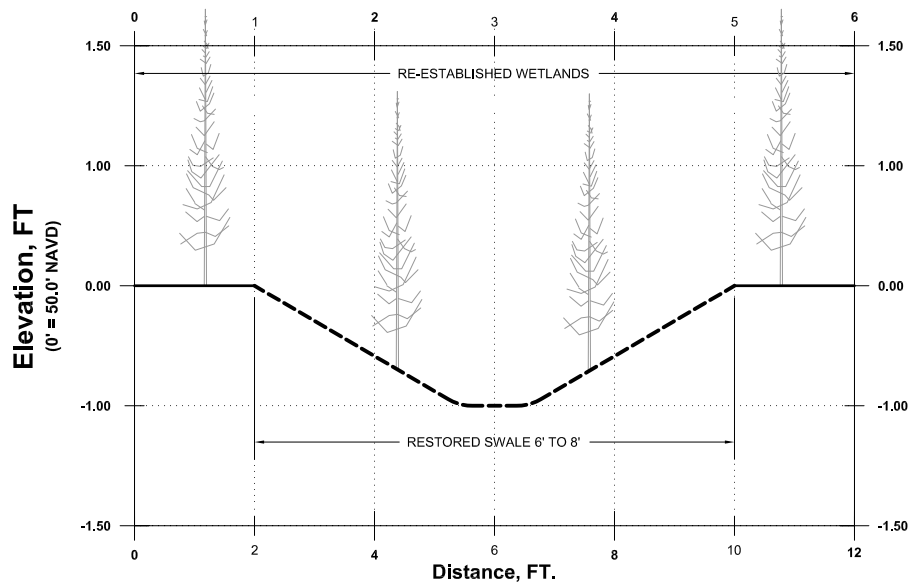




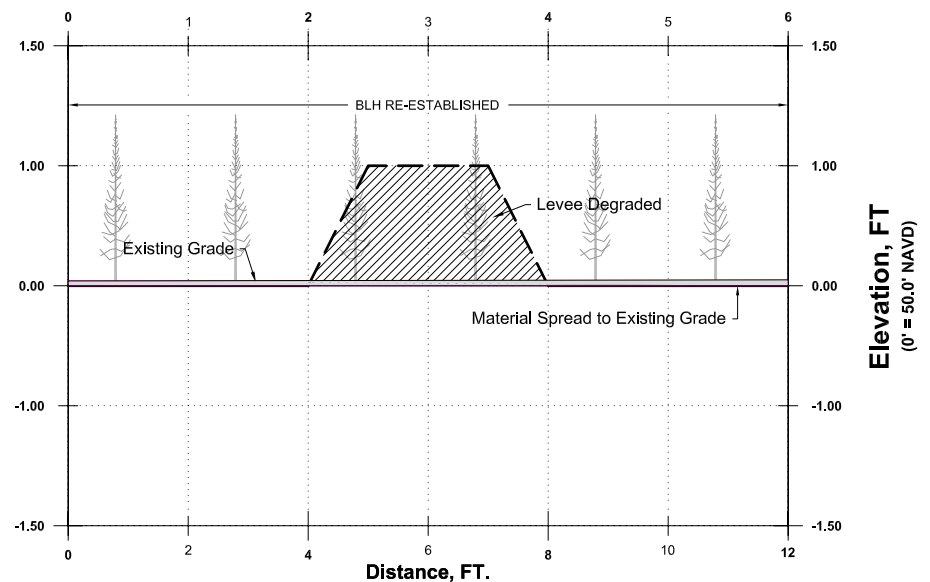
TYPICAL CROSS-SECTION A-A' TYPICAL CULVERT



TYPICAL CROSS-SECTION B-B' INTERIOR LEVEE



TYPICAL CROSS-SECTION A-A' PROPOSED CULVERT REMOVAL/SWALE RESTORATION

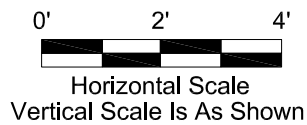


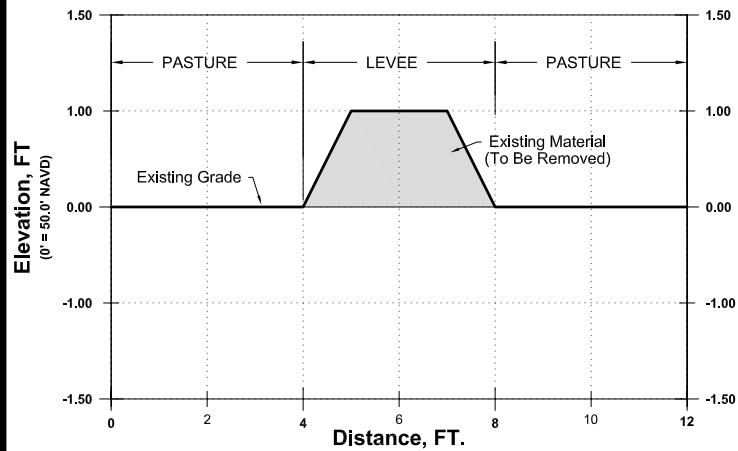
TYPICAL CROSS-SECTION B-B' PROPOSED INTERIOR LEVEE DEGRADED

FIGURE 4

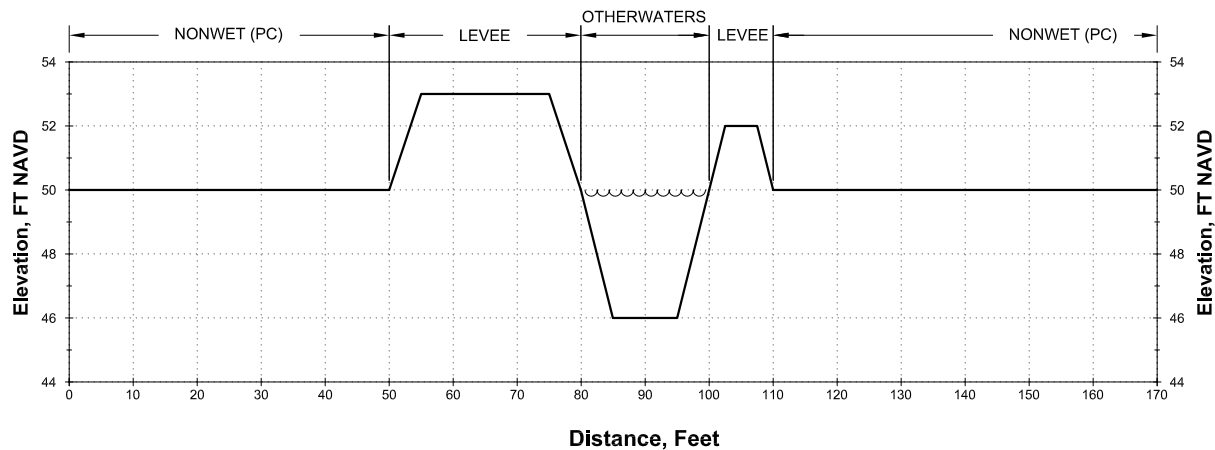
TYPICAL CROSS-SECTIONS A-A' & B-B'

**CANEY CREEK MITIGATION BANK
EVANGELINE PARISH, LOUISIANA**

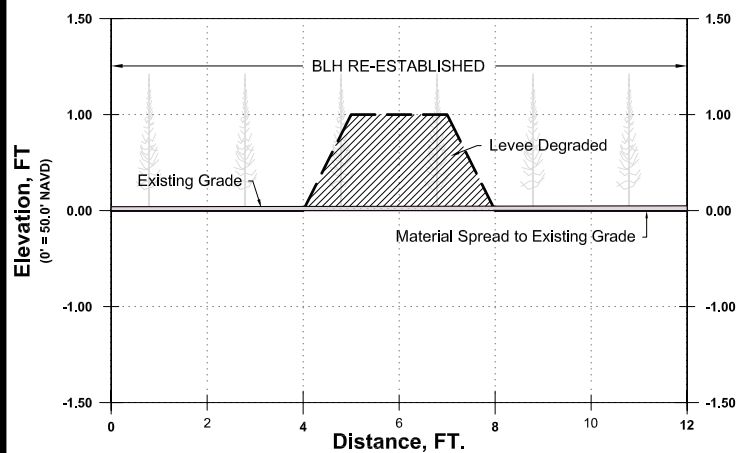




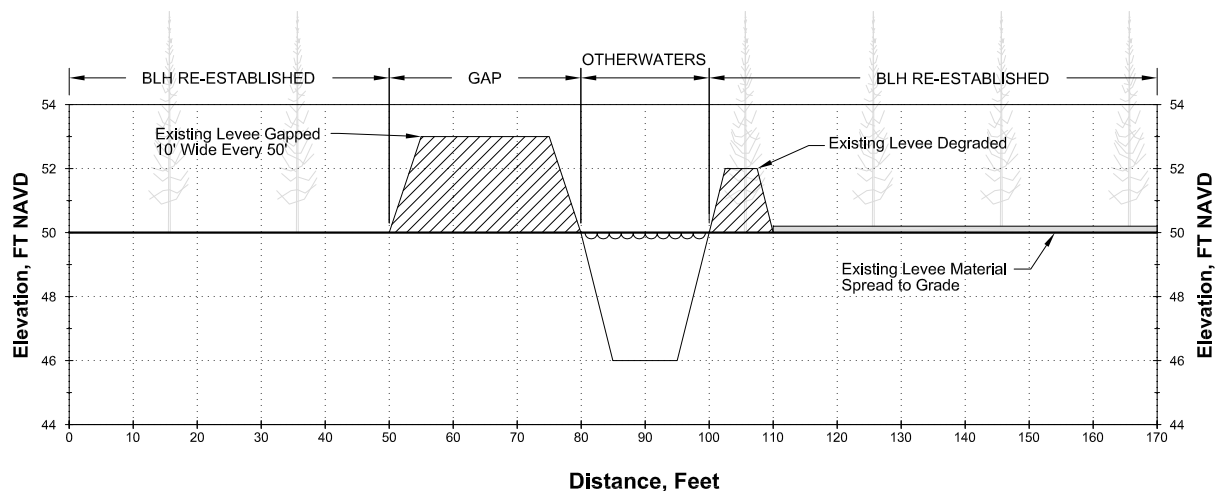
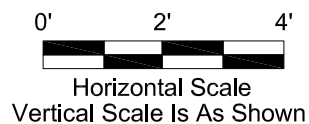
TYPICAL CROSS-SECTION C-C' INTERIOR LEVEE



CROSS-SECTION D-D' EXISTING CONDITIONS



TYPICAL CROSS-SECTION C-C' PROPOSED INTERIOR LEVEE DEGRADED



CROSS-SECTION D-D' PROPOSED LEVEE GAP/LEVEE DEGRADED

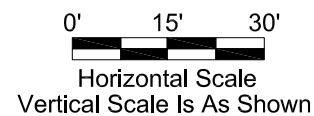
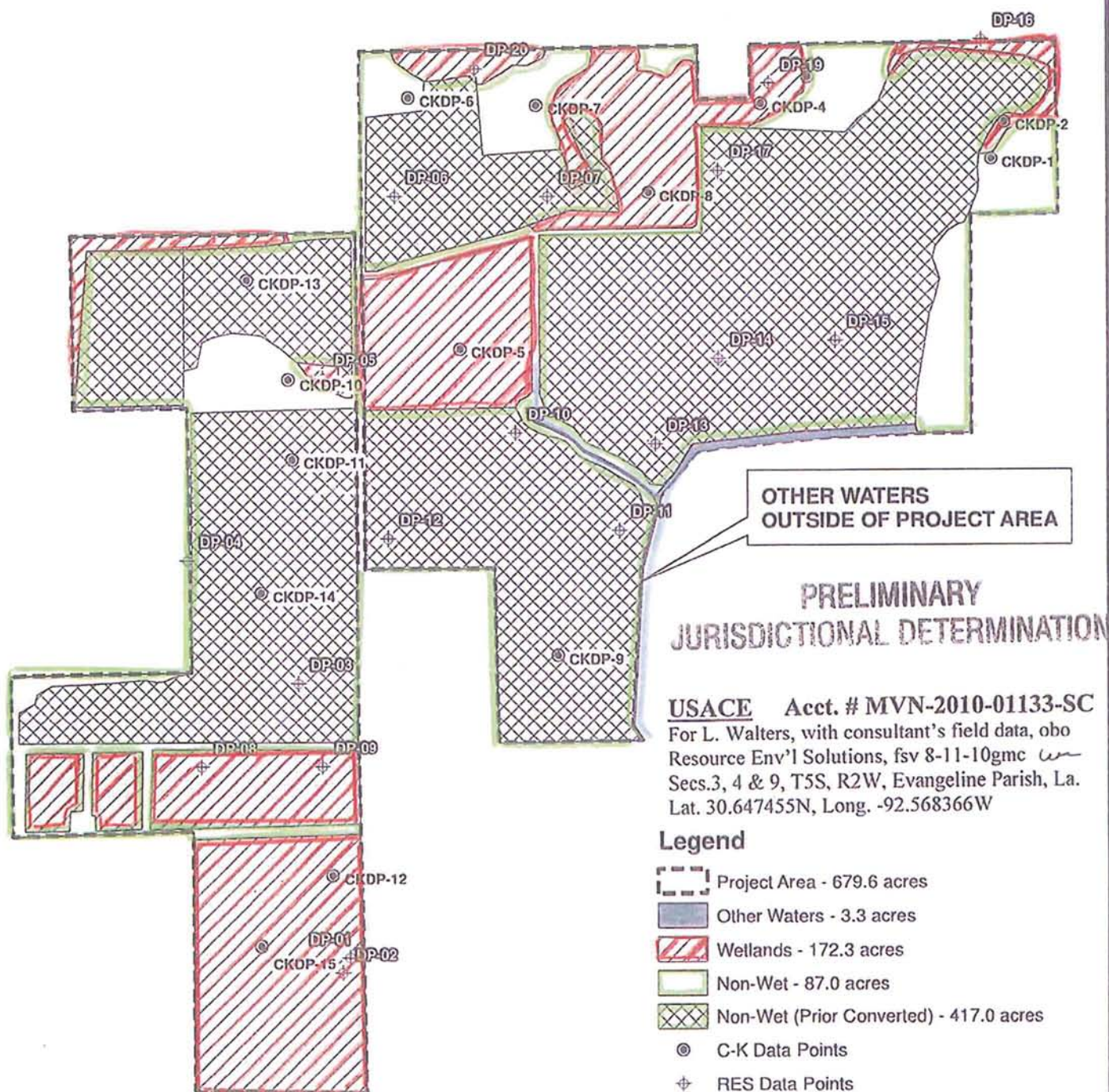


FIGURE 5

TYPICAL CROSS-SECTIONS C-C' & D-D'

**CANEY CREEK MITIGATION BANK
EVANGELINE PARISH, LOUISIANA**





Note: Straight boundary lines occur along roads and agricultural levees.



EVANGELINE
PARISH



Reference

USGS 7.5 MINUTE QUADRANGLE, BOND, LA.

RESOURCE ENVIRONMENTAL SOLUTIONS, LLC
 BATON ROUGE, LOUISIANA

CANEY CREEK WETLANDS MITIGATION PROJECT

WETLANDS MAP

EVANGELINE PARISH

CK
ASSOCIATES, LLC
 ENVIRONMENTAL & ENGINEERING
 CONSULTANTS

Drawn:	CAL/AM9.2
Checked:	LJW
Approved:	TEW
Date:	5/5/10
Dwg. No.:	A5777E-02

FIGURE 2