

# JOINT PUBLIC NOTICE

April 1, 2019

United States Army  
Corps of Engineers  
New Orleans District  
Regulatory Branch  
7400 Leake Ave.  
New Orleans, La. 70160-0267  
(504) 862-2595/ FAX (504) 862--2289  
Jacqueline.R.Farabee@usace.army.mil  
Project Manager  
Jacqueline Farabee  
Permit Application Number  
MVN-2016-00717 MR

State of Louisiana  
Department of Environmental Quality  
Post Office Box 4313  
Baton Rouge, La. 70821-4313  
Attn: Water Quality Certifications  
(225) 219-3225 FAX (225) 325-8250  
Elizabeth.Hill@la.gov  
Project Manager  
Elizabeth Hill  
WQC Application Number  
WQC # 190329-02

Interested parties are hereby notified that a permit application has been received by the New Orleans District of the U.S. Army Corps of Engineers pursuant to: [ ] Section 10 of the Rivers and Harbors Act of March 3, 1899 (30 Stat. 1151; 33 USC 403); and/or [ X ] Section 404 of the Clean Water Act (86 Stat. 816; 33 USC 1344).

Application has also been made to the Louisiana Department of Environmental Quality, for a Water Quality Certification (WQC) in accordance with statutory authority contained in Louisiana Revised Statutes of 1950, Title 30, Chapter 11, Part IV, Section 2074 A(3) and provisions of Section 401 of the Clean Water Act (P.L.95-17).

## **CROOKED BRANCH MITIGATION BANK IN EAST FELICIANA PARISH**

**NAME OF APPLICANT:** A.S.H. Mitigation LLC; Care of: Pangea Conservation & Compliance LLC; Attention: Leonard McCauley; P.O. Box 40345; Baton Rouge, Louisiana 70835.

**LOCATION OF WORK:** The 246.2 acre site is located approximately 11.5 miles northwest of Clinton Louisiana, on Perkins Road, in East Feliciana Parish as shown on attached drawings (Latitude: 30.991517° N, Longitude: -90.899159° W). The Project is located within the Lake Pontchartrain Basin, Hydrologic Unit 080070202.

**CHARACTER OF WORK:** Existing shallow farm drains will be filled or reshaped to create swales using material from adjacent spoil banks and fields. An appropriate assemblage of bottomland hardwood species will be established through plantings and natural recruitment on the site. All work is being done for the purpose of constructing a mitigation bank.

The comment period for the Department of the Army Permit and the Louisiana Department of Environmental Quality WQC will close **30 days** from the date of this joint public notice. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons thereof, are being solicited from anyone having interest in this permit and/or this WQC request and must be mailed so as to be received before or by the last day of the comment period. Letters concerning the Corps of Engineers permit application must reference the applicant's name and the Permit Application Number, and be mailed to the Corps of Engineers at the address above, **ATTENTION: REGULATORY BRANCH**. Similar letters concerning the

Water Quality Certification must reference the applicant's name and the WQC Application Number and be mailed to the Louisiana Department of Environmental Quality at the address above.

The application for this proposed project is on file with the Louisiana Department of Environmental Quality and may be examined during weekdays between 8:00 a.m. and 4:30 p.m. Copies may be obtained upon payment of costs of reproduction.

### **Corps of Engineers Permit Criteria**

The decision whether to issue a permit will be based on an evaluation of the probable impacts, including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, historic properties, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership and, in general, the needs and welfare of the people.

The U.S. Army Corps of Engineers is soliciting comments from the public, federal, state, and local agencies and officials, Indian Tribes, and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the U.S. Army Corps of Engineers to determine whether to make, modify, condition, or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

The New Orleans District is unaware of properties listed on the National Register of Historic Places near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, prehistorical, historical sites, or data. Issuance of this public notice solicits input from the State Archeologist and State Historic Preservation Officer regarding potential impacts to cultural resources. After receipt of comments from this public notice the Corps will evaluate potential impacts and consult with the State Historic Preservation Officer and Native American Tribes in accordance with Section 106 of the national Historic Preservation Act, as appropriate.

Our initial finding is that the proposed work would neither affect any species listed as endangered, nor affect any habitat designated as critical to the survival and recovery of any endangered species listed by the U.S. Department of Commerce,

Utilizing Standard Local Operating Procedure for Endangered Species in Louisiana (SLOPES), dated October 22, 2014, between the U.S. Army Corps of Engineers, New Orleans and U.S. Fish and Wildlife Service, Ecological Services Office, the Corps has determined that the proposed activity would have no effect on any species listed as endangered by the U.S. Department of the Interior.

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The applicant's proposal would result in the destruction or alteration of N/A acre(s) of EFH utilized by various life stages of red drum and penaeid shrimp. Our initial determination is that the proposed action would not have a substantial adverse impact on EFH or federally managed fisheries in the Gulf of Mexico. Our final determination relative to project impacts and the need for mitigation measures is subject to review by and coordination with the National Marine Fisheries Service.

If the proposed work involves deposits of dredged or fill material into navigable waters, the evaluation of the probable impacts will include the application of guidelines established by the Administrator of the Environmental Protection Agency. Also, a certification that the proposed activity will not violate applicable water quality standards will be required from the Department of Environmental Quality, before a permit is issued.

Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

You are requested to communicate the information contained in this notice to any other parties whom you deem likely to have interest in the matter.

for

Martin S. Mayer  
Chief, Regulatory Branch

Enclosure

**FINAL PROSPECTUS FOR THE PROPOSED  
CROOKED BRANCH MITIGATION BANK  
MVN-2017-00717**

**Bottomland Hardwood: Re-establishment, Rehabilitation, Enhancement, and  
Preservation**

**East Feliciana Parish, Louisiana**

**January 2019**

**Sponsored By:**

**A.S.H. Mitigation, LLC**

## Table of Contents

1.0	INTRODUCTION .....	1
1.1	Site Location .....	1
2.0	PROJECT GOALS AND OBJECTIVES .....	1
2.1	Aquatic Resource Type & Functions to be Restored/Preserved.....	1
2.2	Watershed Contributions .....	3
3.0	ECOLOGICAL SUITABILITY OF THE SITE.....	4
3.1	Land Use .....	4
3.2	Soils.....	4
3.3	Hydrology .....	4
3.4	Vegetation.....	5
3.5	General Need for the Project in this Area .....	5
3.6	Technical Feasibility.....	6
4.0	ESTABLISHMENT OF THE MITIGATION BANK .....	6
4.1	Site Restoration Plan .....	6
4.1.1	<i>Hydrologic Restoration</i> .....	6
4.1.2	<i>Vegetative Restoration</i> .....	6
4.2	Current Site Risks.....	8
4.3	Long-Term Sustainability of the Site .....	9
5.0	PROPOSED SERVICE AREA.....	9
6.0	OPERATION OF THE MITIGATION BANK.....	9
6.1	Project Representatives .....	9
6.2	Proposed Long-Term Ownership and Management Representatives .....	9
6.3	Site Protection .....	10
6.4	Long-Term Strategy .....	10
7.0	REFERENCES .....	10

## Table of Contents

### List of Tables

- Table 1: Current Habitat Types and Landuse  
Table 2: Proposed Mitigation Bank Habitat Types  
Table 3: Proposed Bottomland Hardwood Species Assemblage to be Planted

### List of Figures

- Figure 1 Site Vicinity Map  
Figure 2 Site Boundary  
Figure 3 Existing Conditions  
Figure 4 Mitigation Types  
Figure 5 Landuse  
Figure 6 Soils  
Figure 7 Existing Drainage  
Figure 7a-b Cross Sections  
Figure 8 Proposed Drainage  
Figure 9 Drainage Area  
Figure 10 LIDAR Elevations  
Figure 11 Bottomland Hardwood Service Area

### Attachments

- Attachment A: Jurisdictional Determination

# CROOKED BRANCH MITIGATION BANK FINAL PROSPECTUS

## 1.0 INTRODUCTION

A.S.H. Mitigation, LLC (Sponsor) submits this Prospectus to the U.S. Army Corps of Engineers - New Orleans District (CEMVN) and the Interagency Review Team (IRT) to initiate evaluation of the proposed Crooked Branch Mitigation Bank (CBMB) 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). CBMB consists of 246.2 acres currently used for agricultural and recreational purposes (Figures 1 and 2).

### 1.1 Site Location

The center point of the property is located at latitude 30.991517 N and longitude -90.899159 W (approximate center point) in East Feliciana Parish, Louisiana. This location includes portions of Sections 63 and 64, Township 1S, Range 3E near Woodland, Louisiana. The property is located in Hydrologic Unit Code (HUC) 08070202 (the Amite River / Lake Pontchartrain Basin Service Area).

Driving directions to the site are as follows:

The property is located approximately 11.5 miles northwest of Clinton, Louisiana. To reach the property from I-10 near Baton Rouge, take I-110 North; take exit 8A for Louisiana Highway 19 North toward Baker. Follow Louisiana Highway 19 North for 21.6 miles to Louisiana Highway 10 East. Turn right onto Louisiana Highway 10 East, and continue for 6.8 miles. Turn left onto Louisiana Highway 67 North, and continue for 10.3 miles. Turn right on to Perkins Road; continue for 1.2 miles; and the property will be on the left.

## 2.0 PROJECT GOALS AND OBJECTIVES

### 2.1 Aquatic Resource Type and Functions to be Restored/Preserved

This Bank will re-establish, rehabilitate, enhance, and preserve 246.2 acres of bottomland hardwood forest (BLH).

As defined by *The Natural Communities of Louisiana* published in 2009 by the Louisiana Department of Wildlife and Fisheries (LDWF) and the Louisiana Natural Heritage program (LNHP):

Bottomland Hardwood Forests are forested, alluvial wetlands occupying broad floodplain areas that flank large river systems. BLH forests may be called fluctuating water level ecosystems characterized and maintained by a natural hydrologic regime of alternating wet and dry periods. These forests support distinct assemblages of plants and animals

CROOKED BRANCH MITIGATION BANK  
FINAL PROSPECTUS

associated with particular landforms, soils, and hydrologic regimes. They are important natural communities for maintenance of water quality, providing a very productive habitat for a variety of fish and wildlife, and are important in regulation of flooding and stream recharge.

Table 1: Current Habitat Types and Landuse (see Figure 3)

<b>Habitat Type</b>	<b>Landuse</b>	<b>Acreage</b>
Agricultural	Cattle Pasture	<b>179.6</b>
Agricultural Wetlands	Cattle Pasture	<b>24.1</b>
Forested Uplands	Recreational / Silviculture	<b>10.8</b>
Forested Wetlands	Recreational / Silviculture	<b>31.3</b>
Other U.S. Waters	Pond	<b>0.4</b>
Total	---	<b>246.2</b>

Table 2: Proposed Mitigation Bank Habitat Types (see Figure 4)

<b>Habitat Type</b>	<b>Acreage</b>	<b>Mitigation Type</b>
Bottomland Hardwood Forest	<b>173.5</b>	Re-establishment
Bottomland Hardwood Forest	<b>24.1</b>	Rehabilitation
Bottomland Hardwood Forest	<b>31.3</b>	Enhancement
Bottomland Hardwood Forest	<b>6.1</b>	Restored Upland Inclusion
Bottomland Hardwood Forest	<b>10.8</b>	Preserved Upland Inclusion
Other U.S. Waters (Pond)	<b>0.4</b>	Non-mitigation
Total	<b>246.2</b>	---
Total Mitigation and Inclusions	<b>245.8</b>	---

This project will re-establish, rehabilitate, enhance, and preserve bottomland hardwood habitat wetland communities so that they become species rich/diverse, sustainable wetland ecosystems. This shall be accomplished through removal of the site from agricultural use and



# CROOKED BRANCH MITIGATION BANK FINAL PROSPECTUS

reforesting agricultural fields in order to restore a natural assemblage of species, which will create additional wildlife habitat throughout.

## **2.2 Watershed Contributions**

### **2.2.1 Watershed Need**

The CBMB is proposed to provide compensatory mitigation for CEMVN approved projects within the Lake Pontchartrain Basin Service Area, which encompasses approximately 8,500 square miles. In recent years, this watershed to be serviced by the CBMB has seen very high demand for wetland mitigation credits.

### **2.2.2 Watershed Benefits**

The CBMB project area is located in the drainage area to Subsegment LA040301 (Amite River – from the Mississippi State Line to Louisiana Highway 37) as designated by Louisiana Department of Environmental Quality (LDEQ). The northwestern portion of the project area flows into Dunn Creek as it traverses this corner of the project, which then flows northeast Beaver Creek. The remainder of the site flows into ditches/unnamed drainageways which flow southeast for approximately ½-mile off-site before draining into Beaver Creek. Beaver Creek flows into the Amite River approximately 1.6 miles downstream of the CBMB site.

In the 2016 final LDEQ 303(d) list, the LDEQ-designated uses of Secondary Contact Recreation (SCR), Fish and Wildlife Propagation (FWP), and Outstanding Natural Resource Water (ONR) for Subsegment LA040301 was identified as impaired due to high mercury in fish tissue (from atmospheric deposition and unknown sources), high turbidity (from sand and gravel mining), and high fecal coliform concentrations (from septic systems and other decentralized sanitary wastewater treatment systems). Previous 303(d) lists also listed Subsegment LA020101 as being impaired due to low dissolved oxygen (DO) and total suspended solids (TSS); however, these impairments are no longer on the most recent 303(d) because more recent data shows attainment of water quality standards for DO and TSS. In 2012, EPA published a Total Maximum Daily Load (TMDL) for the previous impairment for TSS for Subsegment LA040301.

The cessation of agricultural activities, along with restoration of native habitats, will aid in meeting existing and future TMDLs (and otherwise eliminating water quality impairments) through the resulting water quality improvements due to increased filtration and plant uptake (i.e., nonpoint source pollution prevention).

In addition to improvement in water quality due to reduction in non-point source pollution, CBMB will improve plant and wildlife habitat and provide increased wetland function over that which is currently performed by the bank given its current condition.

CROOKED BRANCH MITIGATION BANK  
FINAL PROSPECTUS

### **3.0 ECOLOGICAL SUITABILITY OF THE SITE**

This section contains both the historical and current ecological and physical information about the Bank Site.

#### **3.1 Land Use**

##### *3.1.1 Historical Land Use*

The area was cleared of forest and herbaceous wetlands and converted to agricultural use prior to the 1950's. The property has remained in agricultural use since.

##### *3.1.2 Current Land Use*

The property is currently used primarily for agricultural purposes. The forested portion of the property is used for recreational purposes (see Figure 3).

#### **3.2 Soils**

The current East Feliciana Parish Soil Survey maps the soils located on the site as Ouachita, Ochlockonee, and Guyton (OG). A soil map for the CBMB is provided as Figure 6.

- OG: Ouachita, Ochlockonee, and Guyton soils are frequently flooded, poorly drained, clay soils, with 0 to 3 percent slopes. These soils are common to floodplains.

A wetland delineation conducted in 2016 confirmed that these soils are present on site as depicted within the Parish Soil Surveys, do present hydric indicators, and are hydric soils as identified by the Natural Resources Conservation Service.

#### **3.3 Hydrology**

##### *3.3.1 Historical Hydrology and Drainage Patterns*

CBMB is located within the Amite River Watershed / Lake Pontchartrain Basin Service Area and is currently utilized for agricultural and recreational activities.

Historical drainage patterns are believed to have been similar to those shown on Figure 8 as proposed (post-restoration) drainage patterns. Historical water sources to the Bank included direct precipitation and backwater flooding from adjacent bayous.

A Jurisdictional Determination (MVN-2016-00717) for CBMB is included in Attachment A.

# CROOKED BRANCH MITIGATION BANK FINAL PROSPECTUS

## **3.3.2 Existing Hydrology and Drainage Patterns**

Natural hydrology has been altered by ditches which were constructed and/or straightened/improved to improve site conditions for agriculture. The hydrology on-site is currently driven primarily by direct precipitation and secondarily by backwater flooding. Current and proposed drainage patterns are depicted on Figures 7 and 8. The drainage area associated with the property is depicted in Figure 9, and elevations are depicted on Figure 10.

## **3.4 Vegetation**

### **3.4.1 Historical Plant Community**

Species assemblages historically present on this site are assumed to have been similar to existing native habitats on site. These habitats are similar to those defined by *The Natural Communities of Louisiana* published in 2009 by the Louisiana Department of Wildlife and Fisheries (LDWF) and the Louisiana Natural Heritage program (LNHP). (See descriptions of habitat types in Section 2.1 of this Prospectus).

### **3.4.2 Existing Plant Community**

Existing plant communities within the agricultural fields have been altered due to agricultural use. The vegetation found in the fields consists of Bermuda grass (*Cynodon dactylon*) and bahia grass (*Paspalum notatum*), with vegetation in un-forested drainage ditches consisting of rice cut grass (*Leersia oryzoides*). The forested areas within the site boundary are heavily impacted by cattle grazing. The mature trees within the forested areas are indicative of a Bottomland Hardwood Forest in this area.

Bottomland Hardwood Forest species that are present on site include: water oak (*Quercus nigra*), willow oak (*Quercus phellos*), Texas red oak (*Quercus texana*), and cherrybark oak (*Quercus pagoda*).

## **3.5 General Need for the Project in this Area**

The CBMB is proposed to provide compensatory mitigation for CEMVN approved projects within the Lake Pontchartrain Basin Service Area, which encompasses approximately 8,500 square miles. In recent years, this watershed to be serviced by the CBMB has seen very high demand for wetland mitigation credits.

The restoration of this site will provide 246.2 acres of much needed natural habitat. The site will be converted to a more natural ecosystem, while also improving the water quality in the receiving waters downstream of this site.

# CROOKED BRANCH MITIGATION BANK FINAL PROSPECTUS

## 3.6 Technical Feasibility

The CBMB has the potential to re-establish, rehabilitate, enhance, and preserve 246.2 acres of bottomland hardwood forest (BLH). The site is underlain by hydric soils, according to the NRCS soil survey and verified via field investigations. Reference sites (on-site and adjacent to the site) were used to determine the species assemblages which historically existed at the project site. These lands will be protected by a conservation servitude and maintained by a long-term maintenance and protection fund.

## 4.0 ESTABLISHMENT OF THE MITIGATION BANK

### 4.1 Site Restoration Plan

#### 4.1.1 Hydrologic Restoration

##### Drainage Ditches:

Currently, sheetflow and receding floodwater is routed to drainage ditches which have been constructed or straightened/improved, thereby circumventing portions of the site. These drainage ditches will be filled or swaled to approximate historic conditions. Removal (or swaling) of these features will contribute to the ability of precipitation and floodwaters to flow across the site in a more natural regime. Figure 7 depicts the locations of cross-sections, and Figures 7a-7b present typical cross-sections which depict pre-and post-restoration ground elevations at locations of drainage ditches to be removed or swaled.

Drainage ditches to be swaled will be reshaped and allowed to revegetate. These swales will allow runoff from the adjacent lands to the south to enter the bank, providing an additional source of hydrology and improving the water quality of the receiving waters to the north and east.

#### 4.1.2 Vegetative Restoration

##### 4.1.2.1 BLH Re-establishment, Rehabilitation, & Restored Upland Inclusion Measures

For those 203.7 acres proposed for designation as re-establishment, rehabilitation, and restored upland inclusion, including those areas cleared for agricultural purposes (cleared prior to 1950 and having remained cleared since that time), an appropriate combination of hard and soft mast producing bare-root stock will be planted. Species assemblages will be selected and planted based on landscape position. Proposed species assemblages to be planted will be representative of a species assemblage historically common to surrounding wetland forest and bayous of the area. These species assemblages are identified in *The Natural Communities of Louisiana* (Louisiana Natural Heritage Program, August 2009, available at: <http://www.wlf.louisiana.gov>). A proposed species list is presented in Table 3.

## CROOKED BRANCH MITIGATION BANK FINAL PROSPECTUS

Proposed planting spacing in areas designated as re-establishment will be 9' x 9' (for an initial density of 538 trees per acre) for bare-root stock. Initial / interim planting success rates for re-establishment areas will be a minimum of 250 trees per acre for bare-root stock. Long-term success for all replanted areas will be 80% canopy coverage. Escrow or bond sum release rates and monitoring requirements will be consistent with other recently implemented CEMVN approved mitigation banks.

### **4.1.2.2      *BLH Enhancement Measures***

Those 31.3 acres proposed for designation as enhancement are currently vegetated with a mix of desirable trees and invasive species (including Chinese tallowtree). The desirable trees within this area have been adversely impacted by the constant cattle grazing. The Sponsor proposes to remove invasive species and replant this area. A proposed species list is presented in Table 3.

Proposed planting spacing in areas designated as enhancement will be 9' x 9' (for an initial density of 538 trees per acre) for bare-root stock. Initial / interim success rates for enhancement areas will be a minimum of 50 trees per acre for bare-root stock (understanding that this area is currently forested and this restoration is intended to replace invasive species).

### **4.1.2.3      *BLH Preservation Measures***

Those 10.8 acres of the Bank which are designated as upland preservation currently exist as a functioning BLH forest. These 10.8 acres will be protected from silviculture activities through a perpetual conservation servitude, adding to the contiguous protected ecosystem.

### **4.1.2.4      *Invasive Species Control (Preservation)***

Invasive plant species such as Chinese tallowtree (*Triadica sebiferum*) will be removed by cutting or herbicidal treatment during initial planting. The percent cover of invasive plants will be monitored during long-term and short-term success monitoring, and appropriate action will be taken if needed.

### **4.1.2.5      *Monitoring***

Monitoring and reporting activities (to be detailed in the MBI) will be commensurate with other recently approved mitigation banks and current MBI templates.

CROOKED BRANCH MITIGATION BANK  
FINAL PROSPECTUS

Table 3. Proposed BLH Species Assemblage to be Planted

Scientific Name	Common Name (USDA)	Observed In Reference Site <sup>(1)</sup>	Recorded In East Feliciana Parish (USDA)	Wetland Indicator Status Region 2 (USDA)	Percent Composition (%)
<b>Bottomland Hardwood</b>					
<i>Quercus nigra</i>	Water oak	Yes	Yes	FAC	12%
<i>Quercus phellos</i>	Willow oak	Yes	Yes	FACW	12%
<i>Quercus texana Buckley</i>	Nuttall oak	Yes	Yes	FACW	12%
<i>Quercus pagoda</i>	Cherrybark oak	Yes	Yes	FACW	12%
<i>Quercus laurifolia</i>	Laurel oak	Yes	Yes	FACW	12%
<i>Ulmus americana L.</i>	American elm	Yes	Yes	FAC	10%
<i>Liquidambar styraciflua</i>	Sweetgum	Yes	Yes	FAC	10%
<i>Nyssa biflora</i>	Swamp tupelo	Yes	Yes	OBL	7.5%
<i>Taxodium distichum</i>	Baldcypress	Yes	Yes	OBL	7.5%
<i>Acer rubrum L. var. drummondii (Hook. &amp; Arn. Ex Nutt.) Sarg.</i>	Drummond's maple	Yes	Yes	OBL	5%

(1) Existing reference site of a natural (healthy) bottomland hardwood community was selected on which vegetative surveys were conducted.

#### 4.2 Current Site Risks

While there is no immediate threat of conversion to a more intensive landuse for the 246.2 acre site currently used for agriculture, continued use of this site for agricultural purposes would further degrade the water quality of the receiving water bodies and would provide limited benefit to wildlife habitat.

CBMB is free of liens and encumbrances, with the exception of an existing oil and gas lease, which, if exercised, would limit surface impacts to an area outside of the proposed bank boundary. CBMB and adjacent properties are within unincorporated land and are absent of zoning regulations.

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.

CROOKED BRANCH MITIGATION BANK  
FINAL PROSPECTUS

**4.3 Long-Term Sustainability of the Site**

CBMB will be self-sustaining, requiring minimal maintenance after the final success criteria are met. No structures are proposed or would be necessary to assure hydrologic or vegetative restoration.

**5.0 PROPOSED SERVICE AREA**

CBMB is located in Hydrologic Unit Code (HUC) 08070202 (the Amite River Watershed). CBMB will provide BLH mitigation credits primarily to the Lake Pontchartrain Basin Service Area (Figure 11). This proposed service area is consistent with the LRAM and other CEMVN approved mitigation banks within this region.

**6.0 OPERATION OF THE MITIGATION BANK**

**6.1 Project Representatives**

Sponsor / Long-Term Manager:

A.S.H. Mitigation, LLC  
POC: Beau Brian  
5800 One Perkins Place Ste 6A  
Baton Rouge, LA 70808

Agent:

Pangaea Conservation & Compliance, LLC  
P.O. Box 40345  
Baton Rouge, LA 70835

Landowner:

POC: Judy Noonan  
606 Hwy 1042  
Greensburg, LA 70441

**Qualifications of the Sponsor**

Crooked Branch Mitigation Bank staff members have managed 500+ acres of mitigation land within the New Orleans District since 2013.

**6.2 Proposed Long-Term Ownership and Management Representatives**

The long-term owner of the bank is proposed to be A.S.H. Mitigation, LLC, and the long-term management of the bank is proposed to be conducted by A.S.H. Mitigation, LLC.

A long-term maintenance and protection escrow account will provide funding for long-term boundary maintenance and site protection, into perpetuity. These long-term maintenance and site protection activities will be conducted by the Sponsor. The conservation servitude will protect the site from any activities that would diminish the

## CROOKED BRANCH MITIGATION BANK FINAL PROSPECTUS

quality of restored wetlands on the site. No structures are proposed or would be necessary to assure hydrologic or vegetative restoration.

### **6.3 Site Protection**

CBMB will be protected in perpetuity by a conservation servitude pursuant to Louisiana Revised Statute 9:1271 et seq. The servitude will be held by a conservation-oriented 501(c)(3) organization. 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.

### **6.4 Long-Term Strategy**

A long-term maintenance and protection escrow account will provide funding for long-term boundary maintenance and site protection, into perpetuity. These long-term maintenance and site protection activities will be conducted by the Sponsor. The conservation servitude will protect the site from any activities that would diminish the quality of restored wetlands on the site. No structures are proposed or would be necessary to assure hydrologic or vegetative restoration.

## **7.0 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.

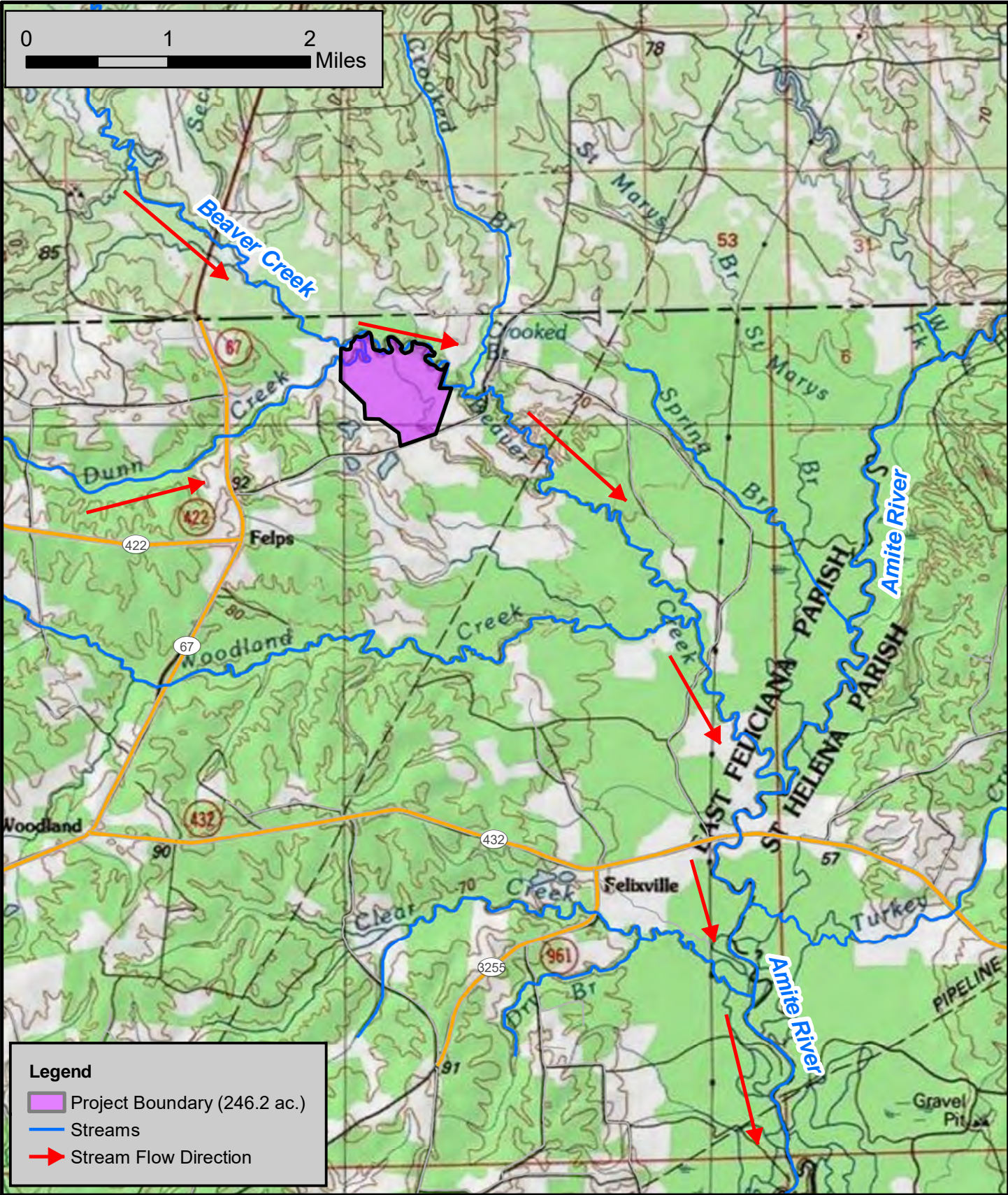
United States Department of Agriculture – Natural Resources Conservation Service, Web Soil Survey, Louisiana, Retrieved 2018.  
[http://soils.usda.gov/survey/online\\_surveys/louisiana/index.html](http://soils.usda.gov/survey/online_surveys/louisiana/index.html)

United States Department of Agriculture – Natural Resources Conservation Service, PLANTS Database – USDA PLANTS, Retrieved 2018.  
<http://plants.usda.gov/>

Louisiana Department of Environmental Quality 303(d) Impaired Waterbodies List, 2016.



# FIGURES



### SITE VICINITY MAP

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 1  
 Date: December 2018  
 Scale: 1:60,000



**Legend**  
Project Boundary (246.2 ac.)

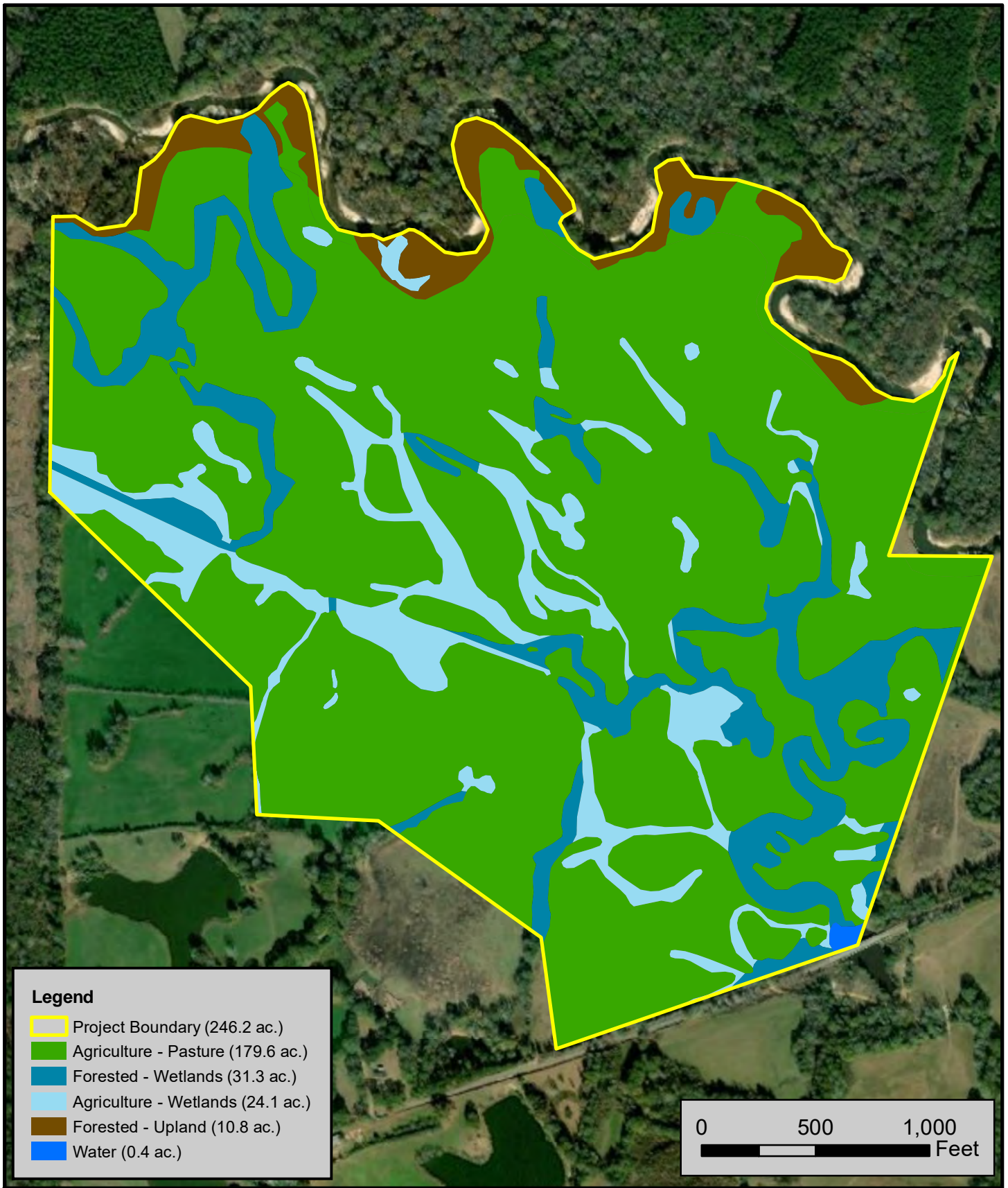


**SITE BOUNDARY**

Crooked Branch Mitigation Bank  
East Feliciana Parish, Louisiana  
S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 2  
Date: December 2018  
Scale: 1:7,000



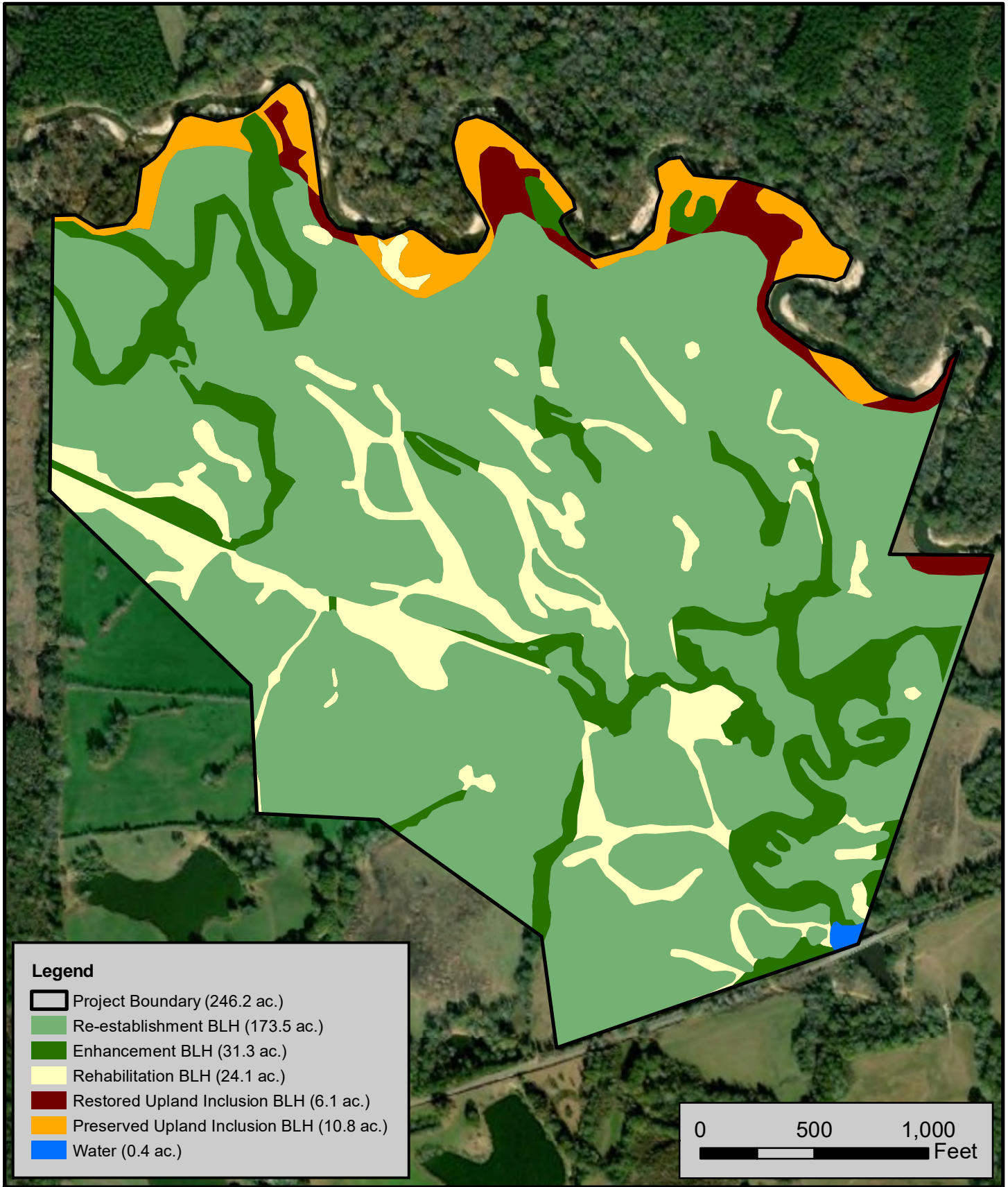
**EXISTING CONDITIONS**

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 3  
 Date: December 2018  
 Scale: 1:7,000





**Legend**

- Project Boundary (246.2 ac.)
- Re-establishment BLH (173.5 ac.)
- Enhancement BLH (31.3 ac.)
- Rehabilitation BLH (24.1 ac.)
- Restored Upland Inclusion BLH (6.1 ac.)
- Preserved Upland Inclusion BLH (10.8 ac.)
- Water (0.4 ac.)



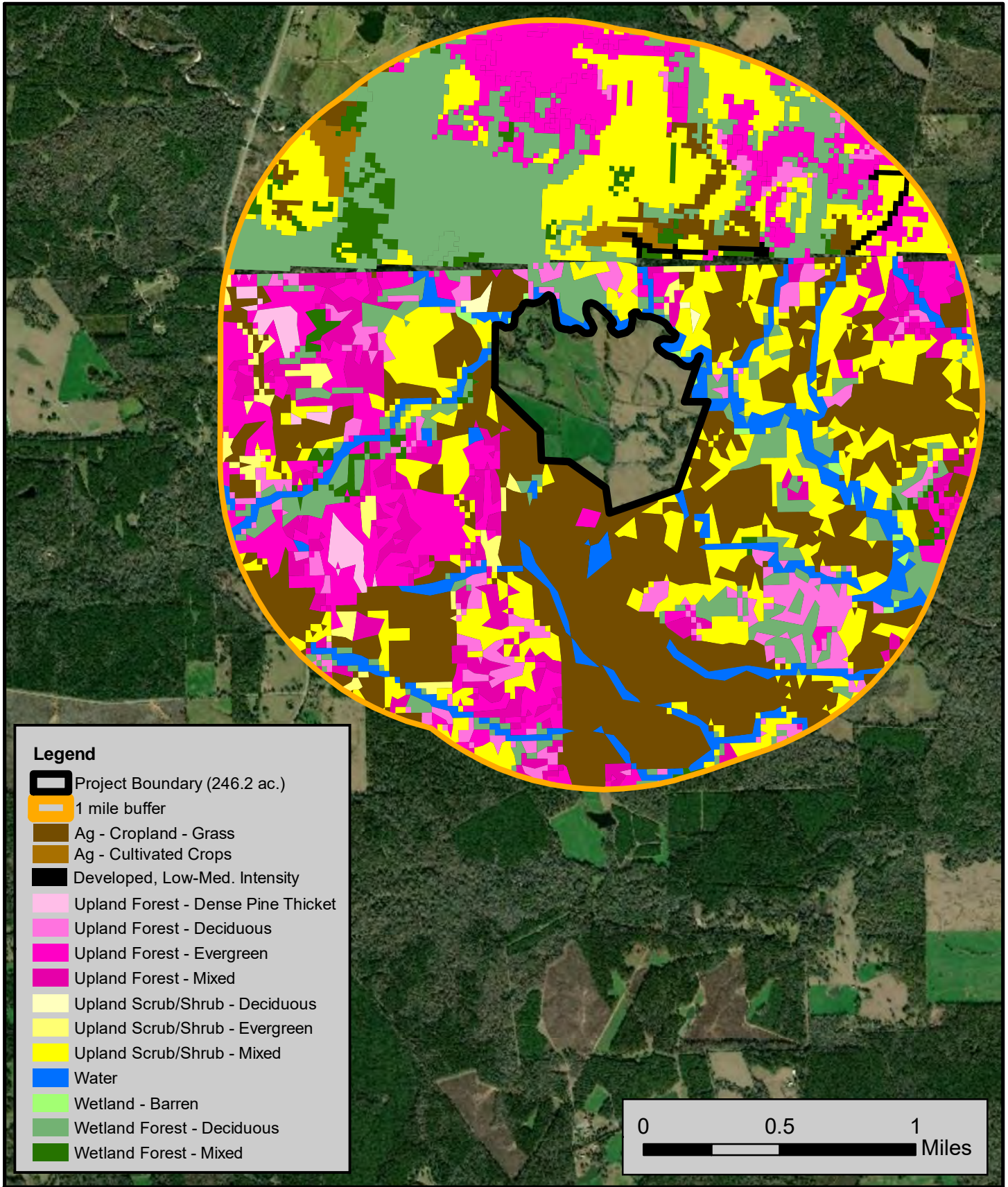
**MITIGATION TYPES**

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 4  
 Date: December 2018  
 Scale: 1:7,000





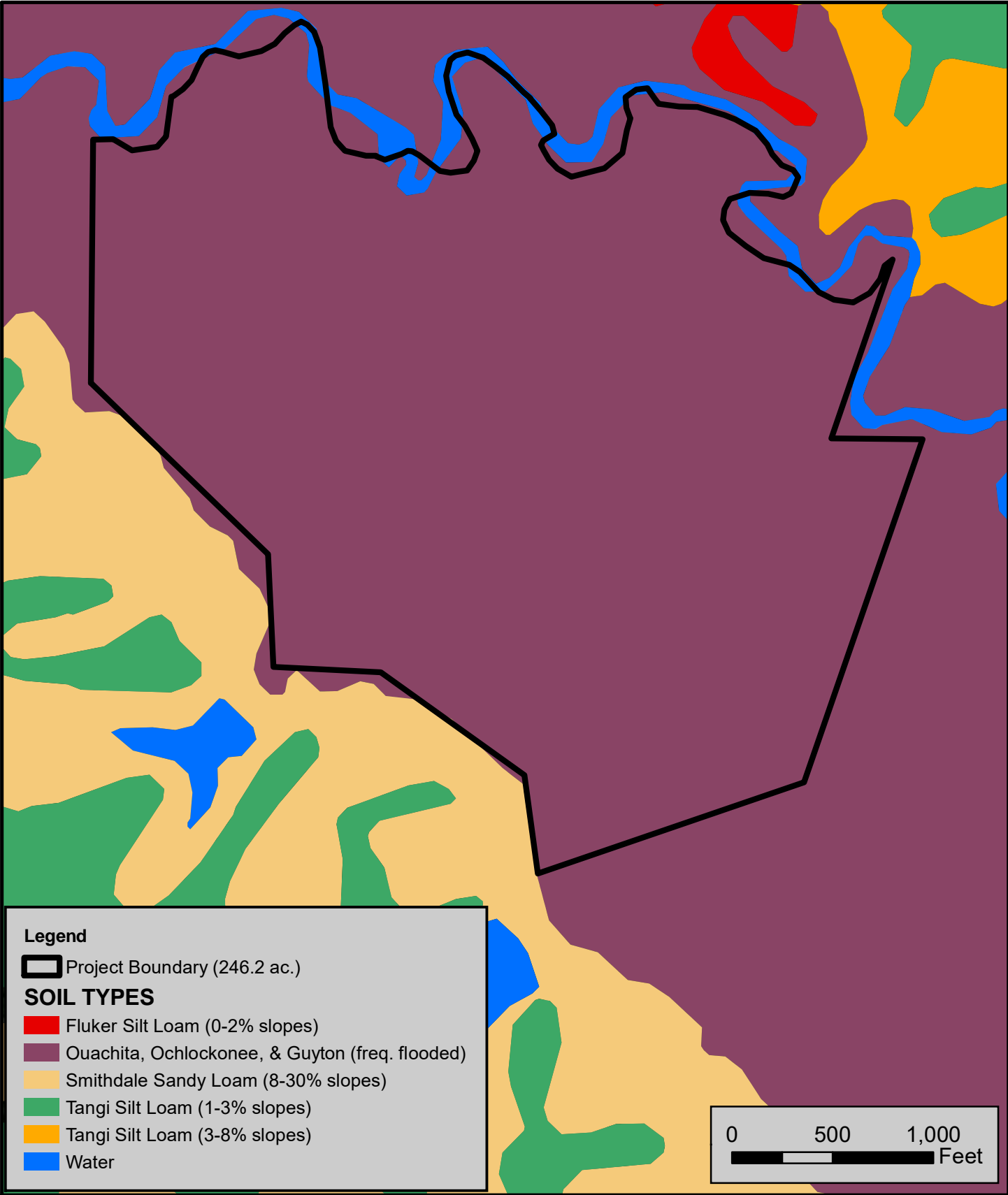
**LANDUSE/LAND COVER WITHIN 1-MILE BUFFER**

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 5  
 Date: December 2018  
 Scale: 1:31,000



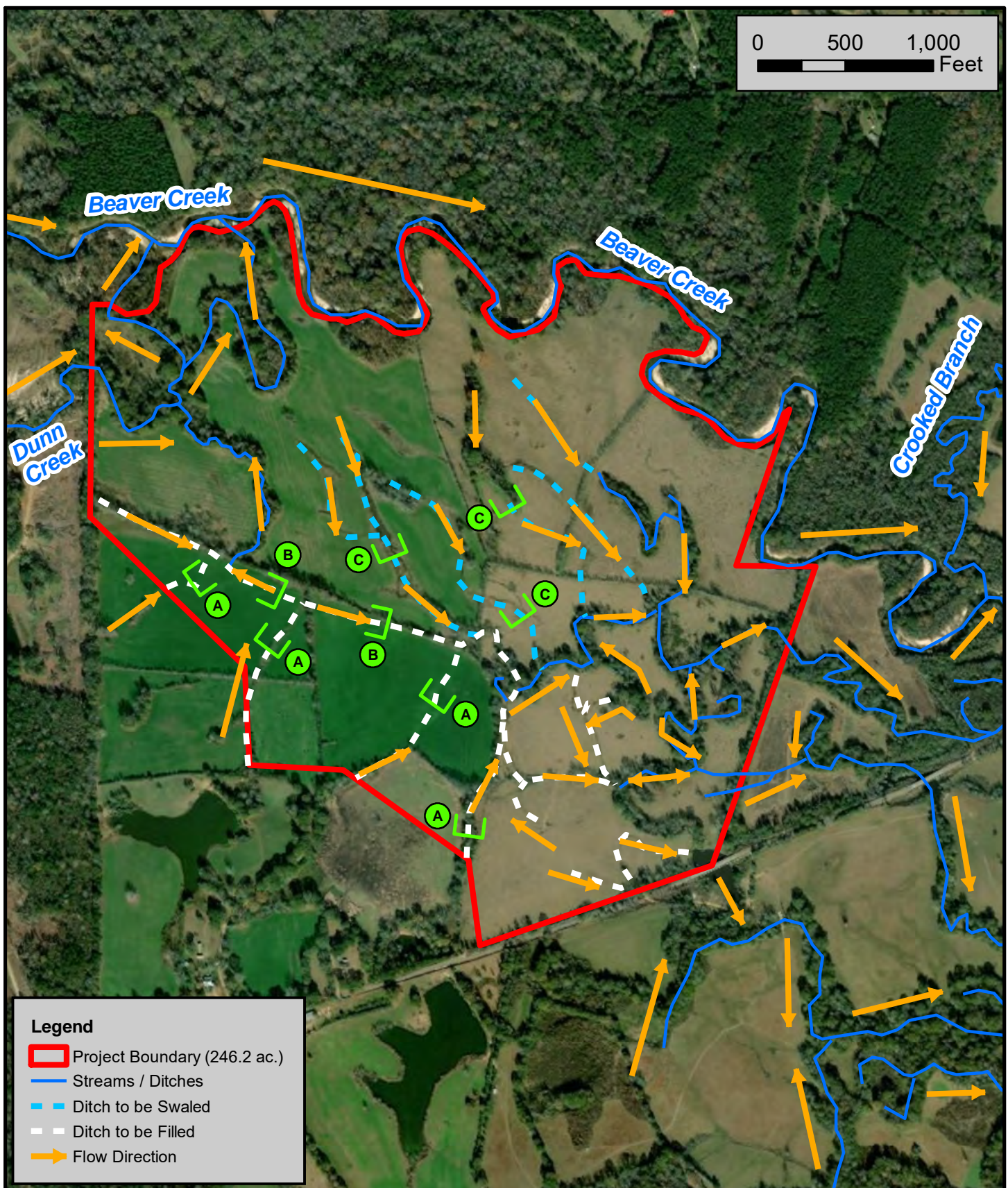


**SOILS MAP**

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 6  
 Date: December 2018  
 Scale: 1:8,000



**Legend**

- Project Boundary (246.2 ac.)
- Streams / Ditches
- Ditch to be Swaled
- Ditch to be Filled
- ➔ Flow Direction



**EXISTING DRAINAGE**

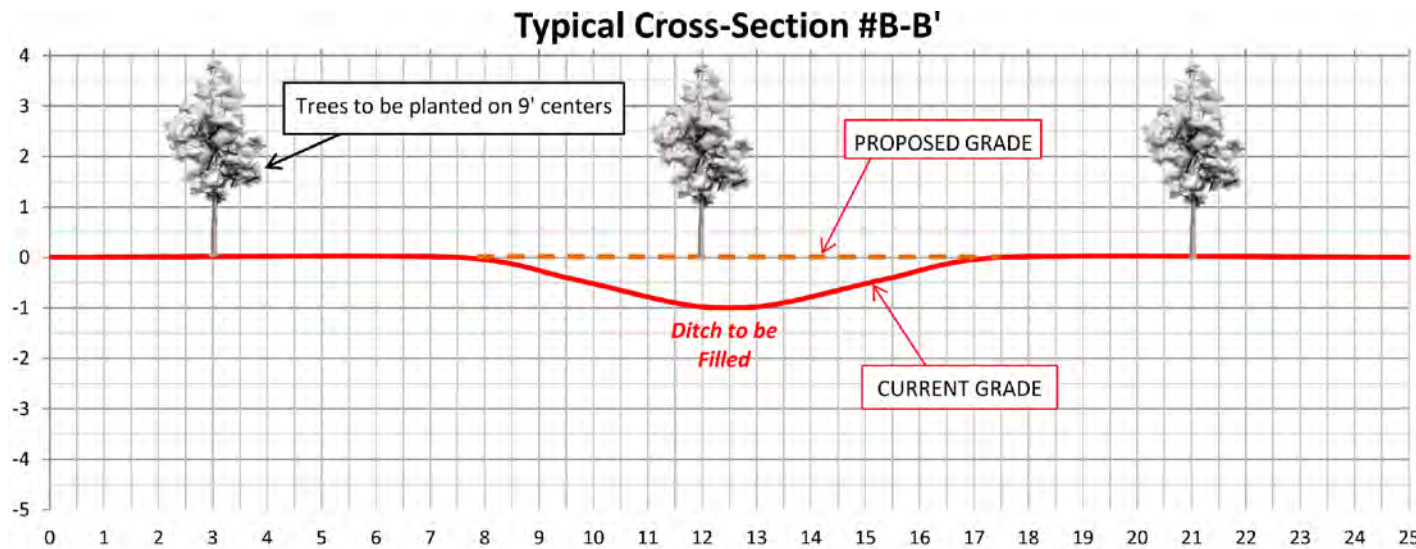
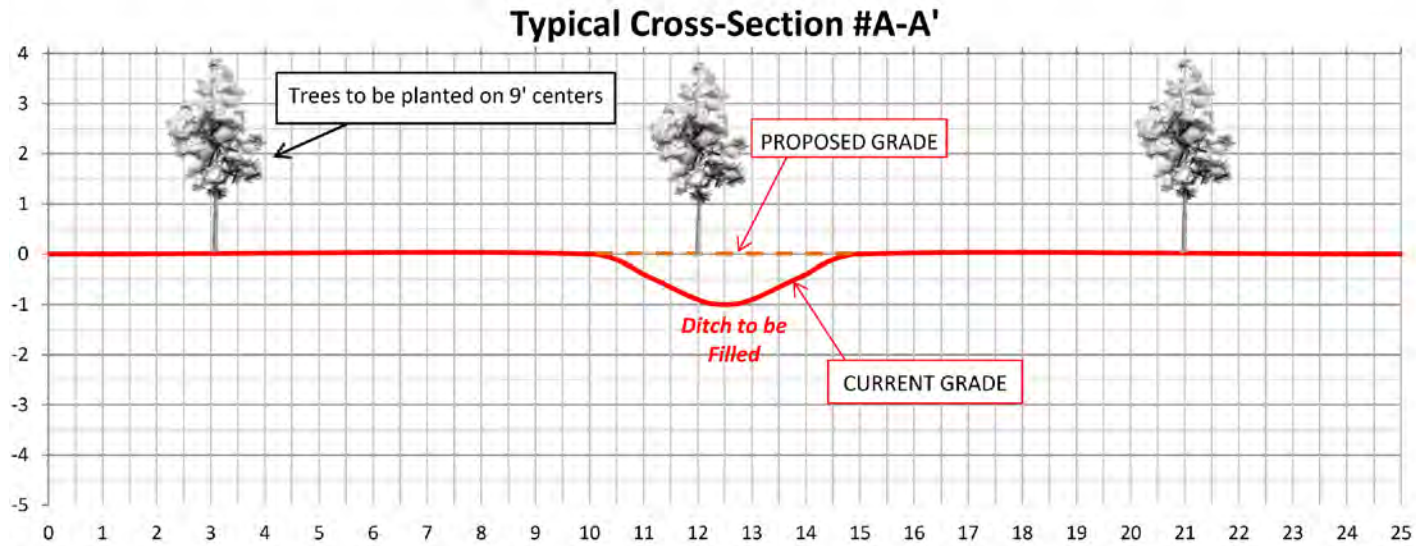
Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 7  
 Date: December 2018  
 Scale: 1:9,100



**Note:**  
 Elevations are in linear ft (y-axis).  
 Distances shown are in linear ft (x-axis).



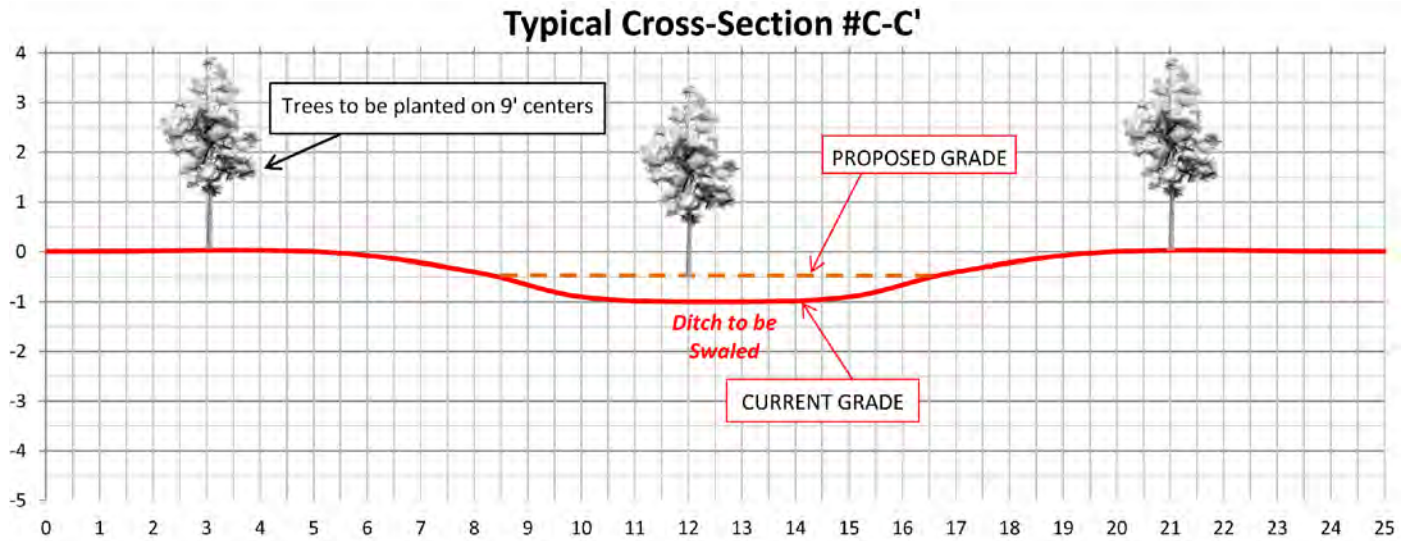
## TYPICAL CROSS-SECTIONS A-A' & B-B'

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 7a  
 Date: December 2018  
 Scale: N/A

Note:  
Elevations are in linear ft (y-axis).  
Distances shown are in linear ft (x-axis).



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

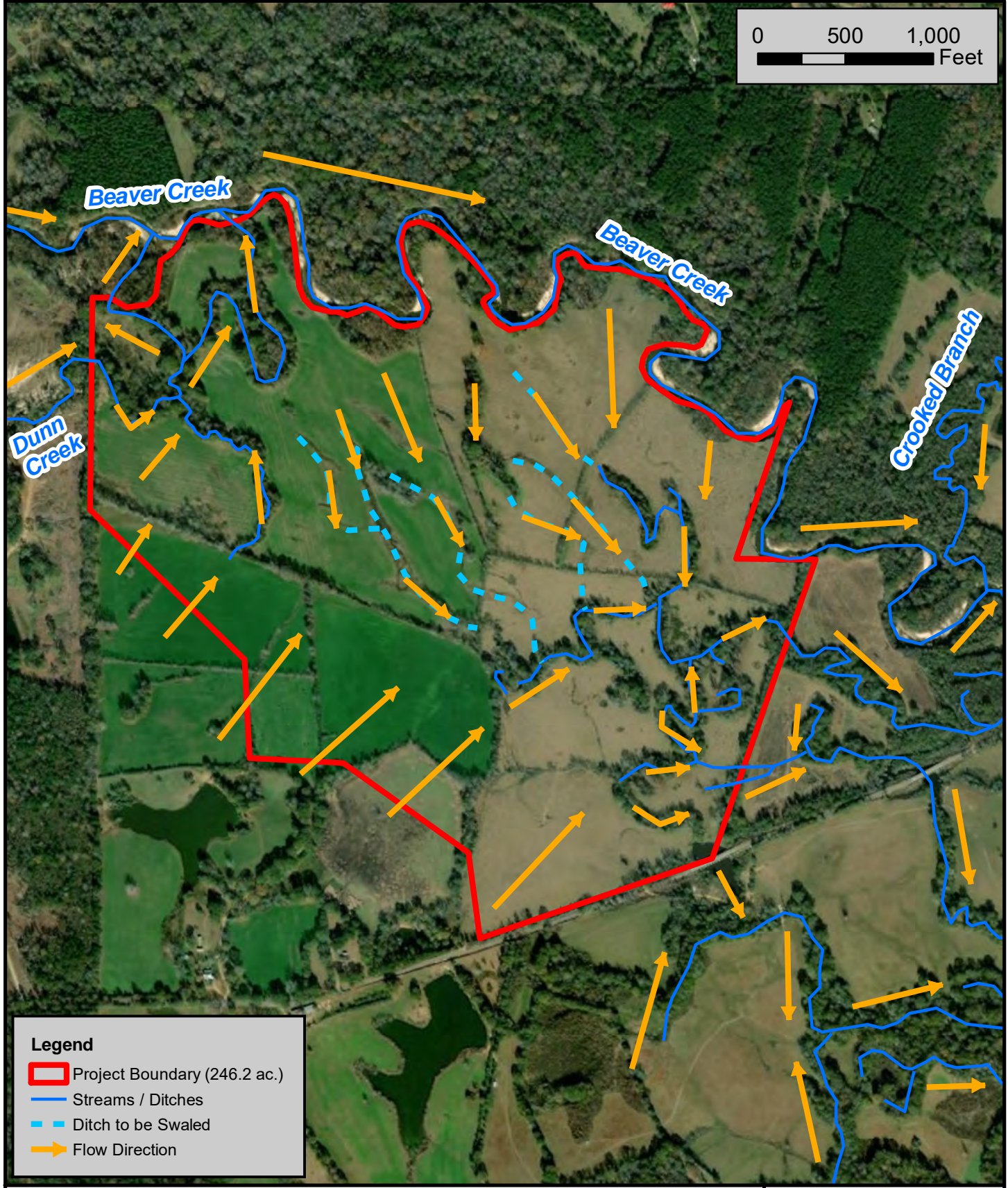
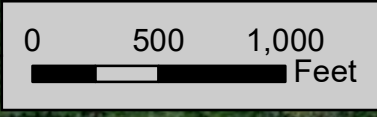
Crooked Branch Mitigation Bank  
East Feliciana Parish, Louisiana  
S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 7b

Date: December 2018

Scale: N/A



**Legend**

- Project Boundary (246.2 ac.)
- Streams / Ditches
- Ditch to be Swaled
- Flow Direction

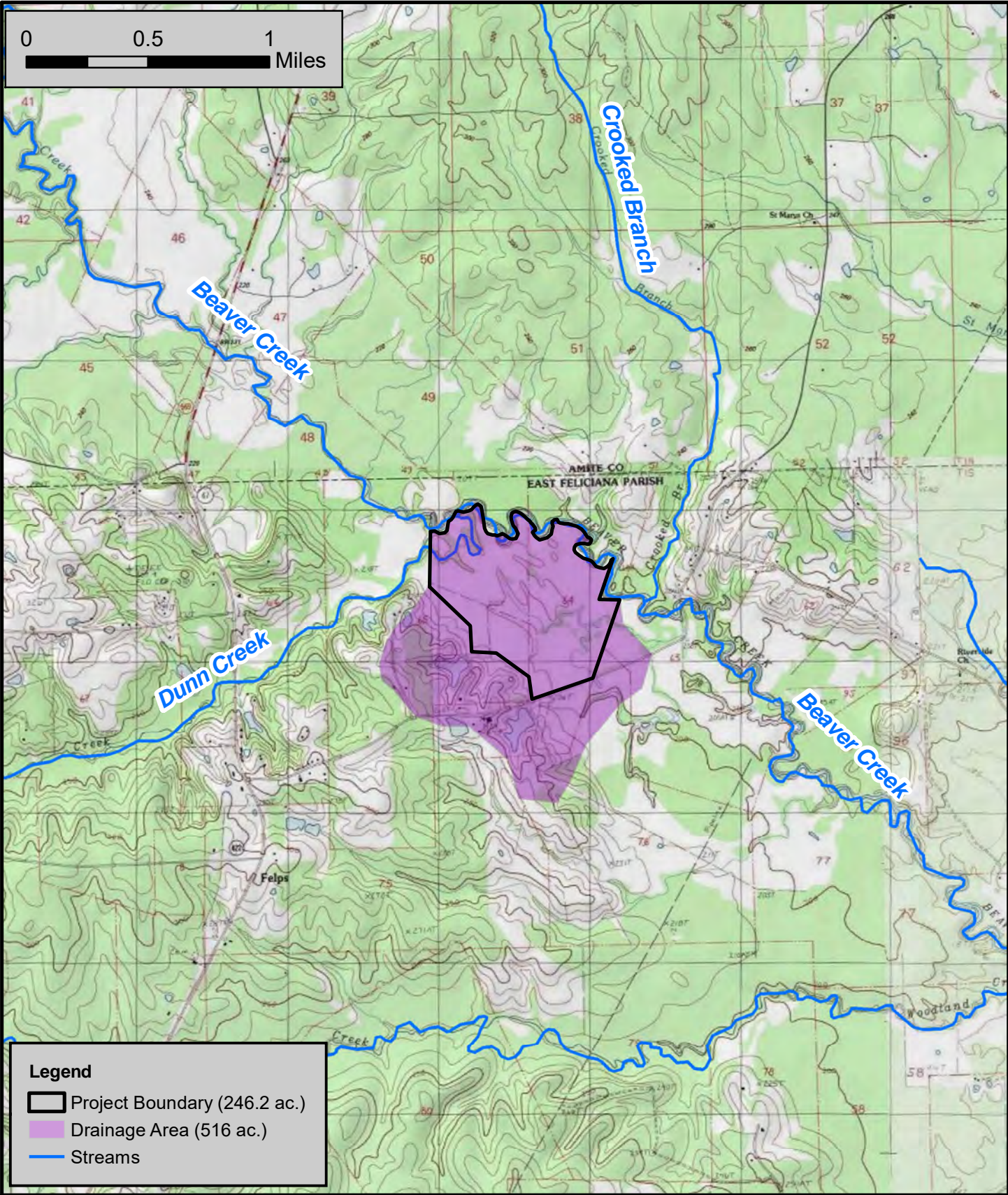


### PROPOSED DRAINAGE

Crooked Branch Mitigation Bank  
East Feliciana Parish, Louisiana  
S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W






Figure: 8  
Date: December 2018  
Scale: 1:9,100



0 0.5 1 Miles

**Legend**

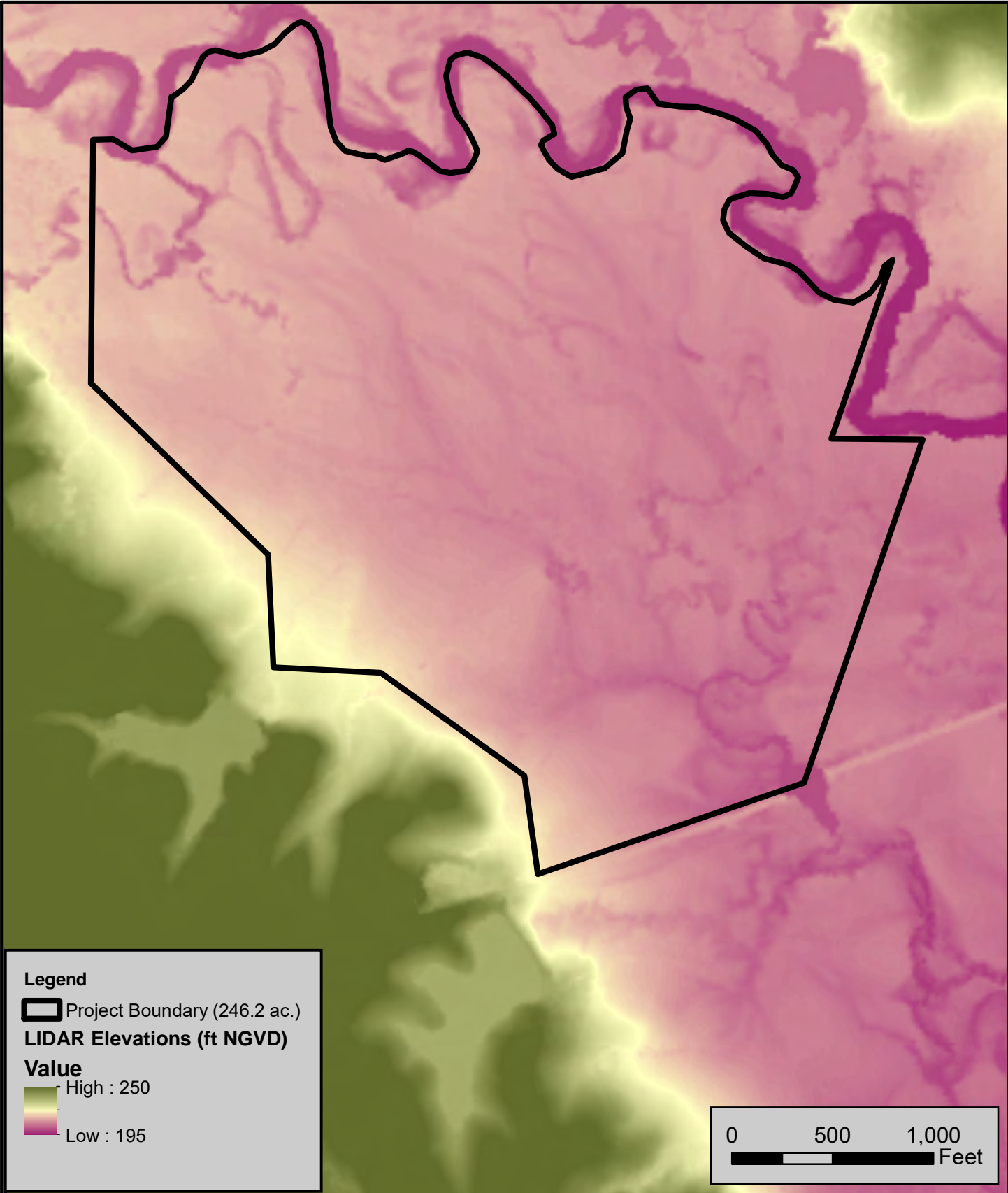
-  Project Boundary (246.2 ac.)
-  Drainage Area (516 ac.)
-  Streams

**DRAINAGE AREA**

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 9  
 Date: December 2018  
 Scale: 1:35,000

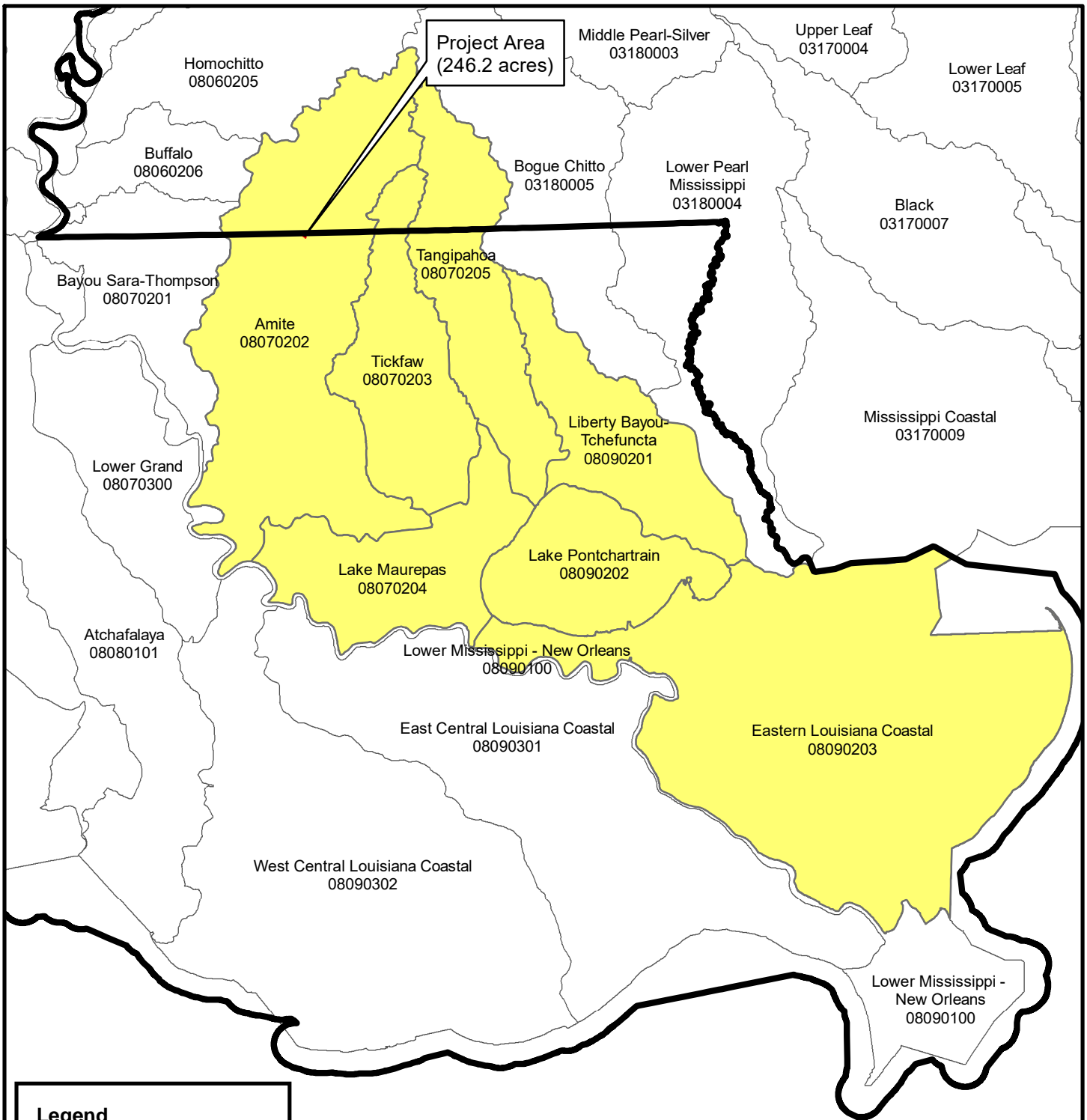


**LIDAR ELEVATIONS**

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W

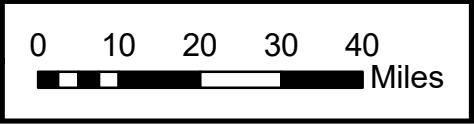


Figure: 10  
 Date: December 2018  
 Scale: 1:8,000



**Legend**

- State Boundary
- Project Area - CBMB
- Service Area
- 8 Digit Hydrologic Unit Code



**SERVICE AREA**

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: 11  
 Date: December 2018  
 Scale: 1:1,500,000

# **ATTACHMENT A**

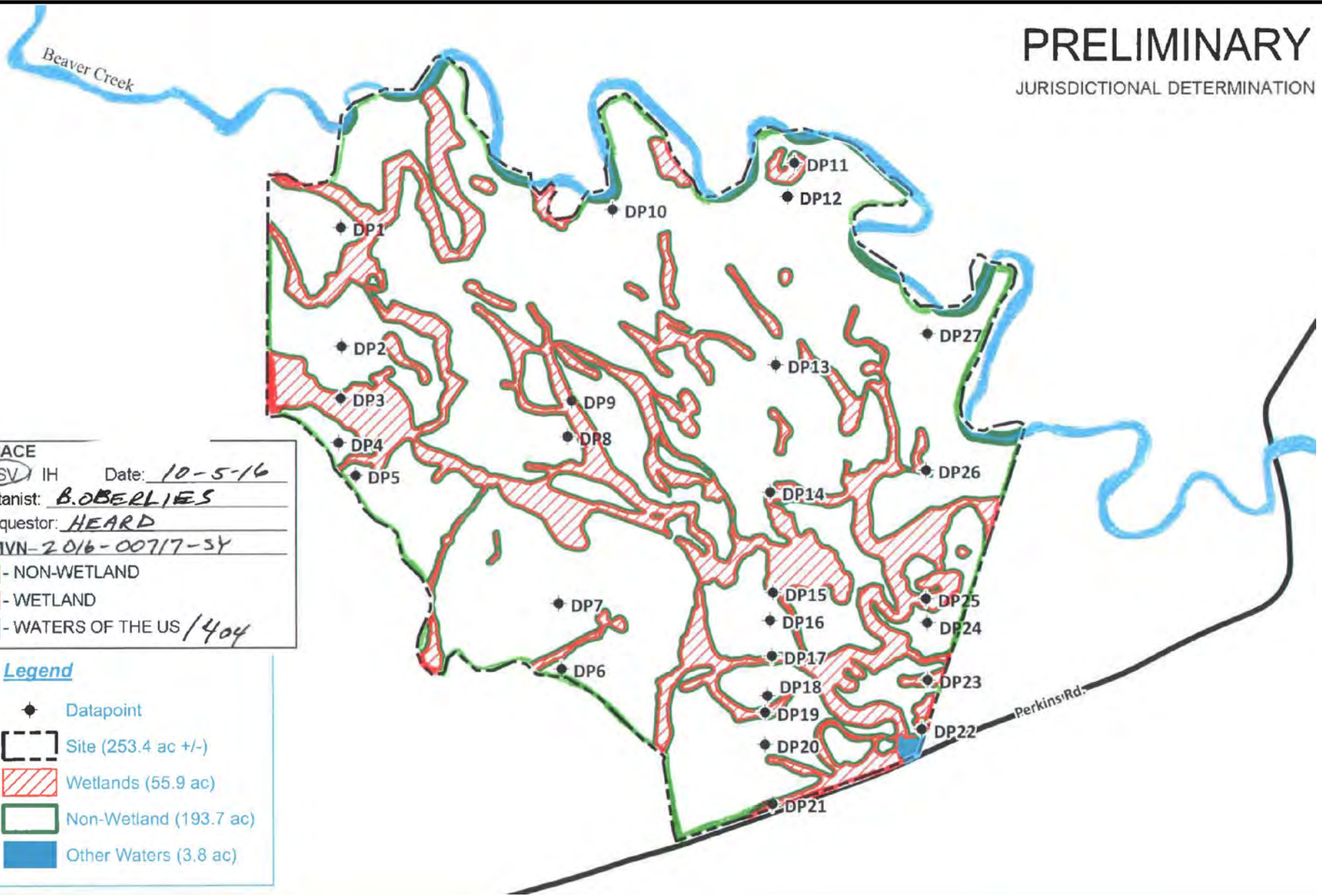
**PRELIMINARY**  
 JURISDICTIONAL DETERMINATION

USACE  
 (FSV) IH Date: 10-5-16  
 Botanist: B. OBERLIES  
 Requestor: HEARD  
 # MVN-2016-00717-34

- NON-WETLAND
- WETLAND
- WATERS OF THE US / 404

Legend

- ◆ Datapoint
- Site (253.4 ac +/-)
- Wetlands (55.9 ac)
- Non-Wetland (193.7 ac)
- Other Waters (3.8 ac)



**WETLANDS FROM JD**

Crooked Branch Mitigation Bank  
 East Feliciana Parish, Louisiana  
 S63 & S64 / T1S,R3E, 30.991517°N, -90.899159°W



Figure: A  
 Date: January 2019  
 Scale: N/A