

**FINAL PROSPECTUS**

**ASH SLOUGH HEADWATERS  
MITIGATION BANK  
EAST BATON ROUGE PARISH, LOUISIANA**

Prepared for

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

Submitted by

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Prepared by

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GEC Project No. 0027.0131001

### **Prepared for**

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

### **Submitted by**

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# FINAL PROSPECTUS

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**FINAL PROSPECTUS**  
**Brian Development**  
**Ash Slough Headwaters Mitigation Bank**  
**East Baton Rouge Parish, Louisiana**

Brian Development (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 Ash Slough Headwaters Mitigation Bank (ASHMB) 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). ASHMB consists of 385.93 acres located in Sections 51, 52, and 53, Township 5S, Range 1W of East Baton Rouge Parish, Louisiana (Figure 1).

The goal of ASHMB is the cumulative re-establishment, rehabilitation, and enhancement of 217.61 acres of bottomland hardwood habitat, with an additional 58.37 acres of hydric inclusions and 109.30 acres of non-hydric inclusions. The remaining 0.65 acres of non-mitigation features will consist of open water.

The ASHMB site is bisected by the boundary between the Bayou Sara – Thompson Creek watershed and the Amite River watershed. The site is currently in agricultural use as livestock pasture and hay production. The headwaters of Ash Slough are located at the northwestern corner of the site, with Ash Slough generally flowing through the property toward the southeast (to Cypress Bayou and thence to the Comite River). An unnamed historic drainageway passes through the southwest corner of the property and connects to Ash Slough near the center of the site. This unnamed drainageway connects Ash Slough to the Baton Rouge Harbor to the west (after crossing Scenic Highway). The Baton Rouge Harbor then drains to the Mississippi River (in the Bayou Sara – Thompson Creek watershed).

The Sponsor proposes to restore the hydrology of the site by (1) removal of agricultural swales constructed to improve drainage; and (2) ripping and tilling of non-elevated roadways to alleviate compaction (currently impedes subsurface flow) and to smooth the ground surface (currently impedes natural movement of sheet flow across the site). The Sponsor will also remove the site from agricultural use and reforest the site with an assemblage of species indicative of wetland forests in this area. The surrounding area consists mostly of agricultural and urban land uses, making the proposed bank a valuable asset to water quality and wildlife.

## 1.0 OBJECTIVES

### 1.1 Current Habitat Types and Land Use (Figure 2)

Habitat Type	Land Use	Acreage
Agricultural Wetlands	Agricultural	<b>23.39</b>
Forested Wetlands	Recreational	<b>77.86</b>
Agricultural Non-Wetlands	Agricultural	<b>174.73</b>
Forested Non-Wetlands	Recreational	<b>109.30</b>
Other U.S. Waters	Natural Drains / Drainage Canals	<b>0.65</b>
Total	---	<b>385.93</b>

### 1.2 Proposed Mitigation Bank Habitat Types (Figure 3)

Habitat Type	Acreage	Mitigation Type
Bottomland Hardwood Forest	<b>174.73</b>	Re-establishment I
Bottomland Hardwood Forest	<b>23.39</b>	Rehabilitation I
Bottomland Hardwood Forest	<b>19.49</b>	Enhancement I
Bottomland Hardwood Forest	<b>58.37</b>	Hydric inclusion
Bottomland Hardwood Forest	<b>109.30</b>	Non-hydric inclusion
Non-wetland	<b>0.65</b>	Non-mitigation (Open Water)
Total	<b>385.93</b>	---
Total Mitigation and Inclusions	<b>385.28</b>	---

### **1.3 Aquatic Functions to be Restored**

The site currently drains via agricultural drainage swales to Ash Slough. These drainage swales facilitate drainage and prevent longer retention times and sheetflows.

Additionally, several compacted road beds crossing the site are impeding subsurface flows and sheetflows across the natural gradient. These drainage swales and roads are currently impairing the sites hydrology.

The Sponsor proposes to alleviate these impairments by (1) removal of agricultural swales constructed to improve drainage; and (2) ripping and tilling of non-elevated roadways to alleviate compaction (currently impedes subsurface flow) and to smooth the ground surface (currently impedes natural movement of sheet flow across the site).

Vegetative plantings will be used to restore natural vegetation throughout 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 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 ASHMB project area is located in the drainage areas to both Sub-segment LA040103 (Comite River – from White Bayou to Amite River) and Sub-segment LA070502 (Thompson Creek – from Mississippi state line to Mississippi River) as designated by Louisiana Department of Environmental Quality (LDEQ). Stormwater runoff from the project area flows into Ash Slough, which bisects the property. Ash Slough drains towards the southeast to Cypress Bayou (approximately 1.0 mile downstream of the project area), which then drains to the Comite River (approximately 6.7 miles downstream of the project area).

Sub-segment LA040103 (Comite River – from White Bayou to Amite River) was identified in the final 2008 LDEQ 303(d) list as being impaired for the Primary Contact Recreation (PCR) use due to fecal coliform, with suspected sources of impairment listed as onsite treatment (septic) systems and sanitary sewer overflows (collection system failures). A Total Maximum Daily Load (TMDL) was completed for Sub-segment LA040103 for fecal coliforms on March 28, 2012.

Flow from Ash Slough can also flow into the unnamed drainageway at the intersection in the center of the site, and then flow to the Baton Rouge Harbor to the west (after crossing Scenic Highway). The Baton Rouge Harbor then drains to the Mississippi River (in the Thompson Creek watershed). Sub-segment LA070502 (Thompson Creek – from Mississippi State Line to Mississippi River) was not identified as being impaired for any of its designated uses in the final 2008 LDEQ 303(d) list.

The cessation of agricultural activities along with filling of agricultural drains and planting of trees for this project will aid in meeting the current and future TMDLs through the resulting water quality improvements due to increased filtration and plant uptake (i.e., nonpoint source pollution prevention).

## **2.0 Bank Establishment**

### **2.1 Management Summary**

#### **2.1.1 Hydrologic Restoration**

##### Agricultural Drains / Compacted Road Beds:

Currently, site drainage is facilitated by numerous agricultural drainage swales, causing the fields and forested areas to retain precipitation for shorter periods of time. Site hydrology is also isolated by compacted non-elevated road beds which prevent subsurface and sheet flow hydrology from moving across site in a natural manner. Removal of these impediments will restore the site hydrology to a more natural regime.

Drainage swales will be filled to approximate surrounding grade, and compacted road beds will be ripped and tilled to smooth the ground surface and alleviate compaction.

Figure 4 presents the location of agricultural drains and compacted non-elevated roads.

#### **2.1.2 Vegetative Restoration**

##### **2.1.2.1 Re-establishment and Rehabilitation Measures**

For those 198.12 acres of cleared wetland areas (cleared prior to 1970 and have remained cleared since that time) which are proposed for designation as re-establishment and rehabilitation, an appropriate combination of hard and soft mast producing bare-root and/or containerized 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 species assemblages historically common to surrounding wetland forest and bayous of the area. Reference sites were selected on which vegetative surveys were conducted to identify naturally occurring species assemblages common to this area. For verification, the identified reference site assemblages were cross-referenced with those

identified in East Baton Rouge Parish in the USDA/NRCS PLANTS online database. Reference sites were found to be consistent with bottomland hardwoods as described in *The Natural Communities of Louisiana* (Louisiana Natural Heritage Program, August 2009, available at: <http://www.wlf.louisiana.gov>). The proposed species list is presented in Table 1.

**Table 1. Proposed Species Assemblages to be Planted**

Scientific Name	Common Name (USDA)	Observed on Site	Recorded In EBR Parish (USDA)	Wetland Indicator Status Region 2 (USDA)	Percent Composition
<b>Bottomland Hardwood</b>					
<i>Quercus nigra</i> L.	Water oak	Yes	Yes	FAC	10%
<i>Quercus michauxii</i> Nutt.	Swamp Chestnut oak	Yes	Yes	FACW	10%
<i>Quercus pagoda</i> Raf.	Cherrybark oak	Yes	Yes	FAC+	10%
<i>Quercus texana</i> Buckley	Nuttall oak	Yes	Yes	OBL	10%
<i>Quercus phellos</i> L.	Willow oak	No	Yes	FACW-	10%
<i>Quercus laurifolia</i> Michx.	Laurel oak	No	Yes	FACW	5%
<i>Nyssa sylvatica</i> Marsh.	Black gum	No	Yes	FAC	5%
<i>Liquidambar styraciflua</i> L.	Sweet gum	Yes	Yes	FAC+	5%
<i>Ulmus rubra</i>	Slippery elm	Yes	Yes	FAC	5%
<i>Ulmus americana</i> L.	American elm	Yes	Yes	FACW	5%
<i>Acer rubrum</i> L. var. <i>drummondii</i> (Hook. & Arn. Ex Nutt.) Sarg.	Drummond's maple	Yes	Yes	OBL	5%
<i>Carya illinoensis</i> (Wengenh.) K. Koch	Pecan	Yes	Yes	FAC+	5%
<i>Taxodium distichum</i> (L.) Rich.	Bald Cypress	Yes	Yes	OBL	5%
<i>Fraxinus pennsylvanica</i> Marsh.	Green ash	Yes	Yes	FACW	5%
<i>Celtis laevigata</i>	Sugarberry	Yes	Yes	FACW	5%

Proposed spacing for plantings in those areas designated as re-establishment and rehabilitation will be 9'x 9' (for an initial density of 538 trees per acre) for bare-root stock. Initial / interim planting success rates for reestablishment and rehabilitation 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. Weedy vegetation within planted areas will be maintained by mowing and/or herbicidal application through Year 5 (prescribed burning will not be used). Escrow or bond

sum release rates and monitoring requirements will be consistent with other recently implemented CEMVN approved mitigation banks.

#### **2.1.2.2 Enhancement Measures**

For those 19.49 acres of forested wetlands proposed for designation as enhancement mitigation, restoration will include supplemental plantings (stocking rates will be as needed, based on habitat type and existing canopy, but not less than 203 trees per acre) and removal of invasive plant species and replacement with desirable plant species (bare-root stock).

#### **2.1.2.3 Hydric and Non-hydric Inclusions**

For those 167.67 acres of uplands proposed for designation as Hydric and Non-hydric inclusions, restoration will include removal of invasive plant species and replacement with desirable plant species (bare-root stock).

#### **2.1.2.4 Invasive Species Control**

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.

### **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**

ASHMB is bisected by Hydrologic Unit Codes (HUC) 08070201 and 08070202. ASHMB is proposed to primarily serve HUCs 08070201 and 08070202 areas, and to secondarily serve portions of the Lake Pontchartrain and Mississippi River Basins (Figure 5).

## **2.3 General Bank Need and Technical Feasibility**

ASHMB is proposed to provide compensatory mitigation for CEMVN approved projects within HUCs 08070201 and 08070202 (primary), encompassing approximately 689.52 and 1,861.30 square miles, respectively.

Due to hydrologic modification of the natural drainage patterns, Bank lands are currently hydrologically impaired. The Sponsor proposes to hydrologically restore, reconnect, and reforest Bank lands.

Adjacent land usage consists predominately of agricultural (33.8%), urban (33.3%), and forested (29%) uses (Figure 6).

According to the 2010 census, populations in East Baton Rouge, West Feliciana, Ascension, and Livingston parishes have increased by 6.6 percent, 3.1 percent, 38.6 percent, and 39.4 percent, respectively, since the 2000 census.

Additionally, it is anticipated that numerous pipelines will be constructed across these service areas in the near future, potentially creating a need for wetland mitigation.

## **2.4 Ownership and Long-Term Management Strategy**

ASHMB is currently owned by Osterberger/Reames-Baker Properties, ownership will be transferred to Sponsor prior to Mitigation Banking Instrument approval.

### **2.4.1 Sponsor/Operations Manager/Long-Term Management/ Long-Term Ownership**

Brian Development Company  
5800 One Perkins Place, Suite 6-A  
Baton Rouge, Louisiana 70808  
(225) 766-1443  
Sbrian@nrri.net  
POC: Sid Brian

#### **2.4.2 Landowner**

Osterberger/Reames-Baker Properties  
232B Little John Dr.  
Baton Rouge, Louisiana 70815  
POC: Holt B. Harrison

#### **2.4.3 Agent**

GEC, Inc. (GEC)  
8282 Goodwood Blvd.  
Baton Rouge, Louisiana 70806  
(225) 612-3000  
POC: Leonard McCauley

#### **2.4.4 Perpetual Site Protection Mechanism**

ASHMB 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 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**

Brian Development Company has more than 20 years of experience in land management, forestry, and agriculture. Additionally, Brian Development will also consult with GEC, Inc., who has established and assists in management of over 5,000 acres of mitigation banks and has experience in planning and implementing habitat restoration and conservation projects.

### **3.0 ECOLOGICAL AND SITE SUITABILITY**

#### **3.1 Summary of Current Site Conditions**

##### **3.1.1 Current and Previous Land Uses**

The site is currently used for agricultural activities (i.e., livestock pasture and hay production).

ASHMB lands were historically wetland forests, which were cleared for silvicultural and agricultural use prior to 1970. This is confirmed by aerial photography maintained by CEMVN.

### **3.1.2 Current Vegetation**

Vegetation within forested areas consists of sweet gum (*Liquidambar styraciflua*), red maple (*Acer rubrum*), cherrybark oak (*Quercus pagoda*), American elm (*Ulmus americana*), honey locust (*Gleditsia triacanthos*), pecan (*Carya illinoensis*), sugarberry (*Celtis laevigata*), and Chinese tallow (*Triadica sebifera*).

Vegetation within cleared agricultural areas consists of bahiagrass (*Paspalum notatum*), field paspalum (*Paspalum laeve*), leathery rush (*Juncus coriaceous*), annual fimbry (*Fimbristylis annua*), and common rush (*Juncus effusus*).

### **3.1.3 Current Hydrology**

Currently, drainage of pastures and forested areas are facilitated by agricultural drainage swales. Additionally, within the pasture areas, compacted elevated and non-elevated road beds restrict subsurface and sheet flows, hydrologically isolating portions of the site. Wetland hydrology on-site is driven by direct precipitation. Current drainage patterns are depicted on Figure 4.

### **3.1.4 Current Soils**

The East Baton Rouge Parish Soil Survey maps the sites soils as Calhoun and Cascilla silt loams (CEA and CcA), Frost silt loam (FoA and FrA), Oprairie silt (OpA and OpB), and Deerford-Verdum complex (DaA). Frost silt loam (FoA and FrA) and Calhoun and Cascilla silt loams (CEA and CcA) are designated as “all hydric” by NRCS. Oprairie silt (OpA and OpB) and Deerford-Verdum complex (DaA) are listed as “partially hydric” by NRCS. Field investigations and a wetland delineation conducted in 2011 and 2012 confirmed these soil types, along with hydric indicators. These field investigations were conducted by qualified wetland scientists and a wetland soil scientist (Michael J. Vepraskas member of the National Technical Committee for Hydric Soils) and accompanied by CEMVN personnel. Figure 7 presents the current soils within the project area. Additionally, a wetland hydrology study (IAW: ERDC TN-WRAP-00-02) has been conducted on this site for approximately two years. The data gathered during this study is consistent with the prevalence of hydric soils observed during field investigations.

### **3.1.5 Property Encumbrances**

ASHMB is currently owned by Osterberger/Reames-Baker Properties and is free of encumbrances.

### **3.1.6 Zoning and Adjacent Property Development**

ASHMB is unincorporated and absent of zoning regulations. Adjacent properties are within incorporated land and are zoned as residential, institutional, and industrial. Adjacent land use is predominately agricultural, residential, and commercial.

### **3.1.7 Jurisdictional Determination**

The jurisdictional determination from CEMVN, dated January 22, 2013 is included in Appendix B.

## **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 General Watershed Characteristics**

#### **3.2.2.1 Water Sources and Losses**

The sources of water include direct precipitation, runoff from adjacent properties, and backwater flooding. The average annual precipitation in the vicinity of the project area is approximately 54.6 inches. July is the wettest month of the year with an average precipitation of 6.3 inches, and October is the driest month of the year with an average precipitation of 2.5 inches. Average annual runoff ranges from 12 to 20 inches in this region.

#### **3.2.2.2 Hydroperiod**

Hydric soils indicate that the site is inundated for at least 14 consecutive days per year. This site is comprised primarily of soils with seasonal high water tables between 0.0 feet and

1.5 feet below the surface during the months of December through April.

A wetland hydrology study (IAW: ERDC TN-WRAP-00-02) has been conducted on this site for approximately two years. The data gathered during this study shows a seasonal high water table between 0-12 inches of the soil surface persisting for 3-4 months of the year.

### **3.2.2.3 Drainage Area**

The drainage area has been estimated based on topographic maps and HUC areas. The drainage area is bound on the north by Baker Canal, on the east by Louisiana Highway 19, on the south by Rafe Meyer Road and Thomas Road, and on the west by Louisiana Highway 61 (Figure 8).

## **4.0 CONCLUSION**

In summary, the ASHMB has the potential to re-establish, rehabilitate, and enhance 217.61 acres of forested wetlands. The restoration of ASHMB will provide water quality improvements to the surrounding watersheds and provide valuable habitat for resident and migratory species. Without restoration and protection these headwaters will be lost or severely impacted by development. These lands will be protected and maintained by a conservation servitude and a long-term protection and maintenance fund. Proposed credit determinations are included in Appendix C.

## **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, Iberville Parish, Louisiana, Retrieved December 2010.  
[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, Web Soil Survey, Ascension Parish, Louisiana, Retrieved December 2010.  
[http://soils.usda.gov/survey/online\\_surveys/louisiana/index.html](http://soils.usda.gov/survey/online_surveys/louisiana/index.html)

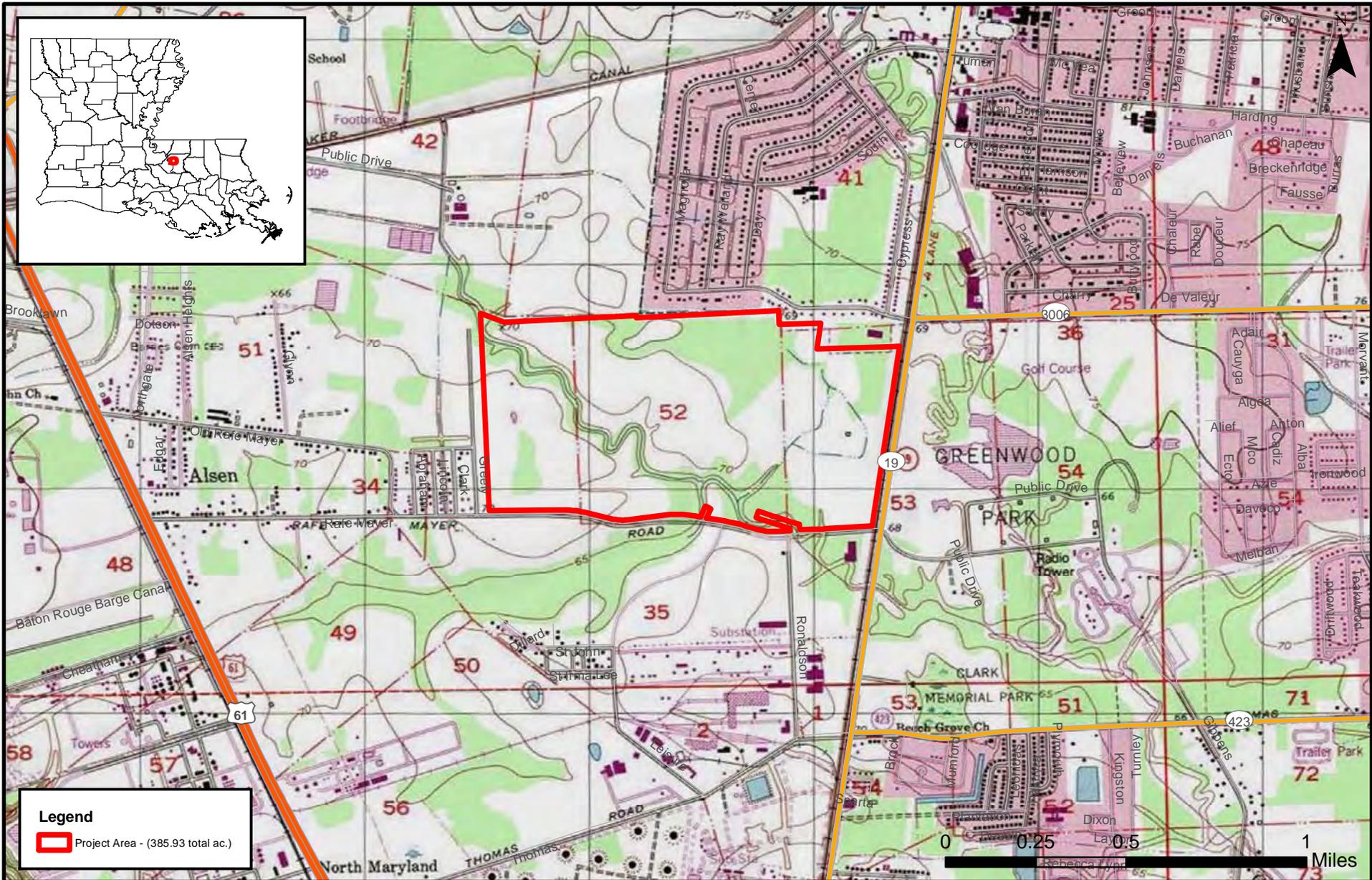
United States Department of Agriculture – Natural Resources Conservation Service, PLANTS Database – USDA PLANTS, Retrieved June 2009.  
<http://plants.usda.gov/>

Louisiana Department of Environmental Quality 303(d) Impaired Waterbodies List, 2008.

# Appendix A

## FIGURES

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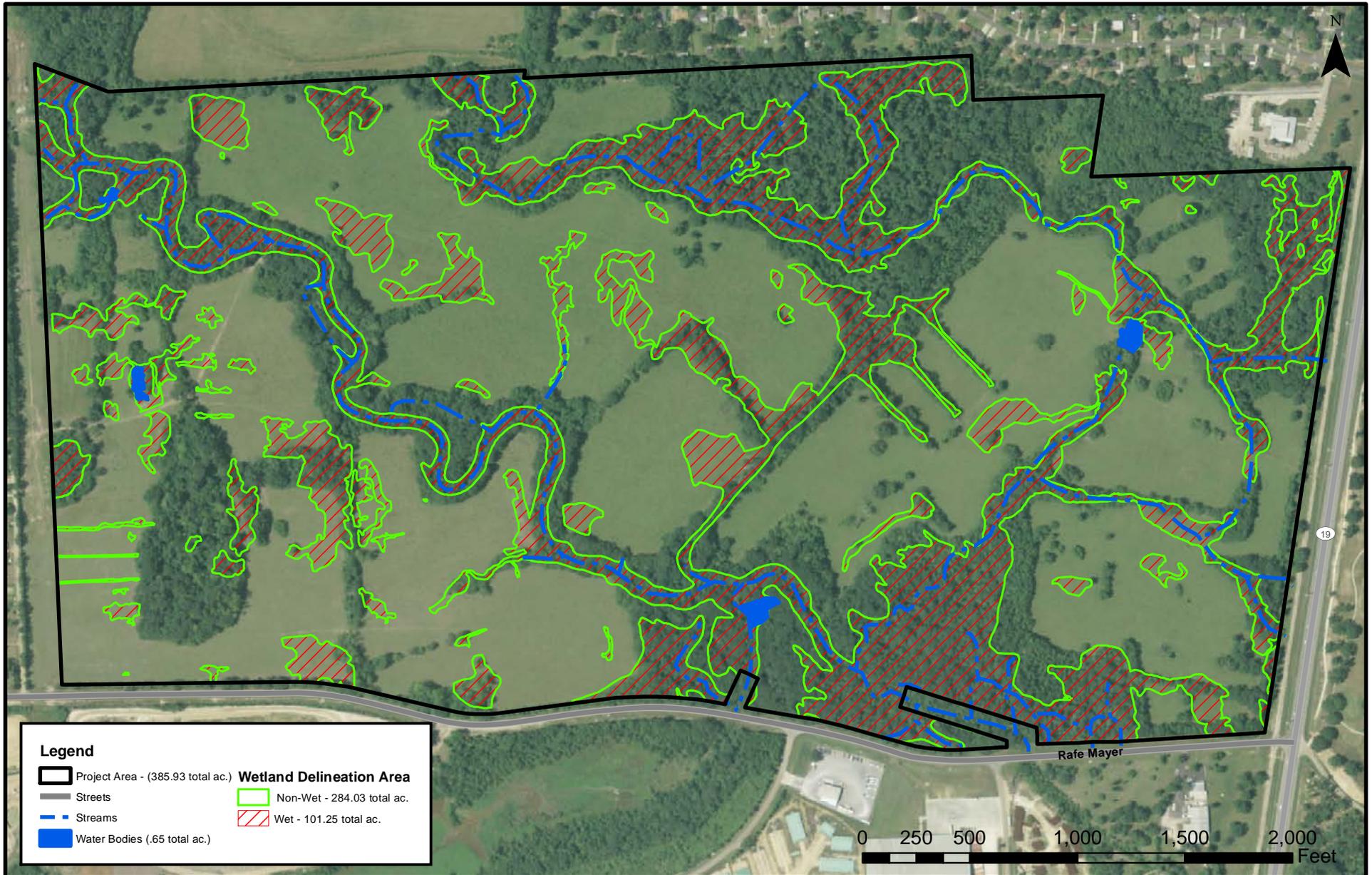


### Site Boundary

Ash Slough Headwaters Mitigation Bank  
 Brian Development  
 East Baton Rouge



Figure: 1  
 Date: January 2013  
 Scale: 1:24,000  
 Source: GEC/USGS  
 Map ID: 270131001000-3051

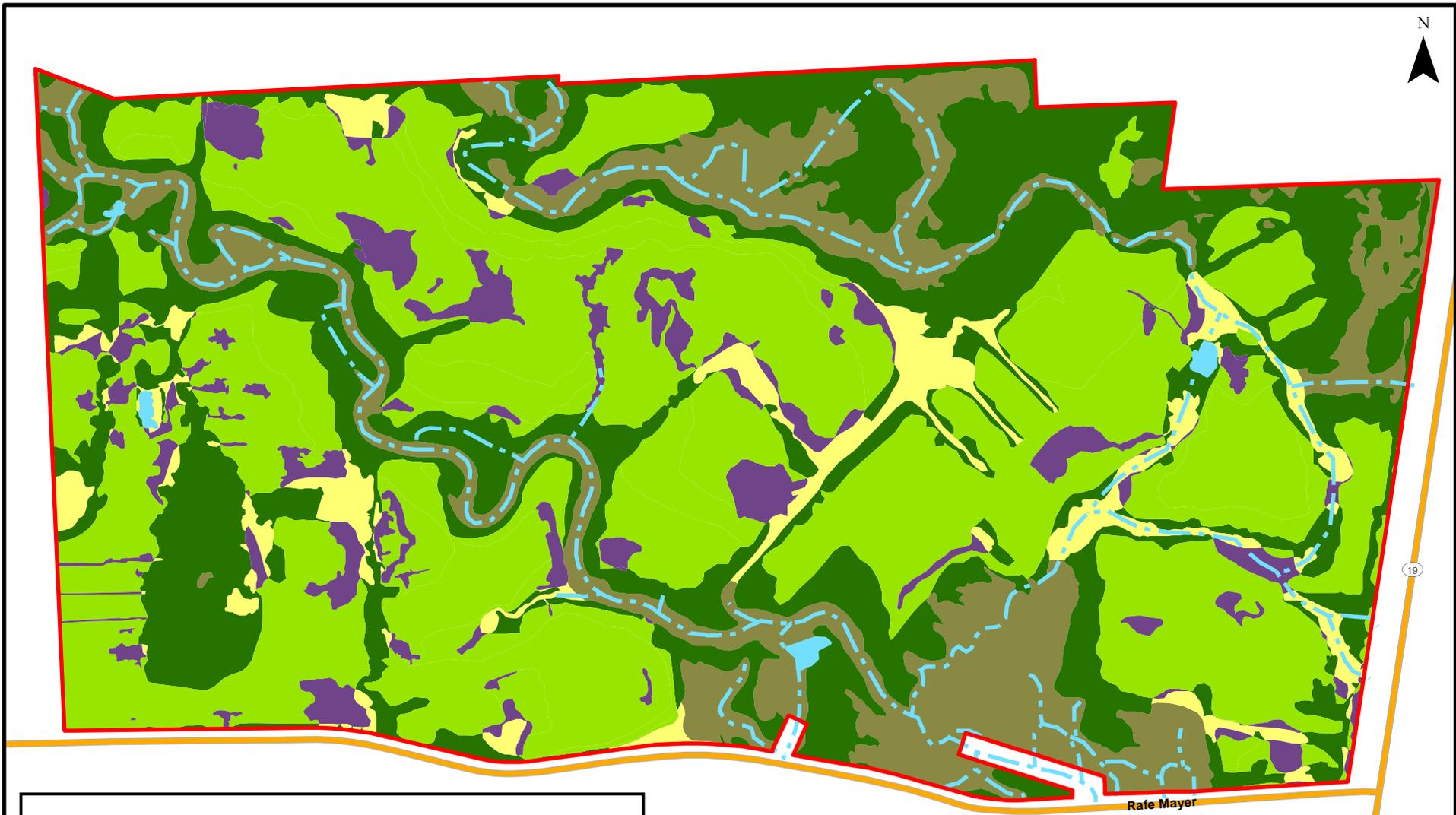


## Jurisdictional Wetlands

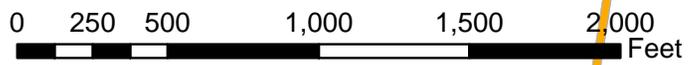
Ash Slough Headwaters Mitigation Bank  
 Brian Development  
 East Baton Rouge



Figure: 2  
 Date: January 2013  
 Scale: 1:7,600  
 Source: GEC/NAIP  
 Map ID: 270131001000-3051

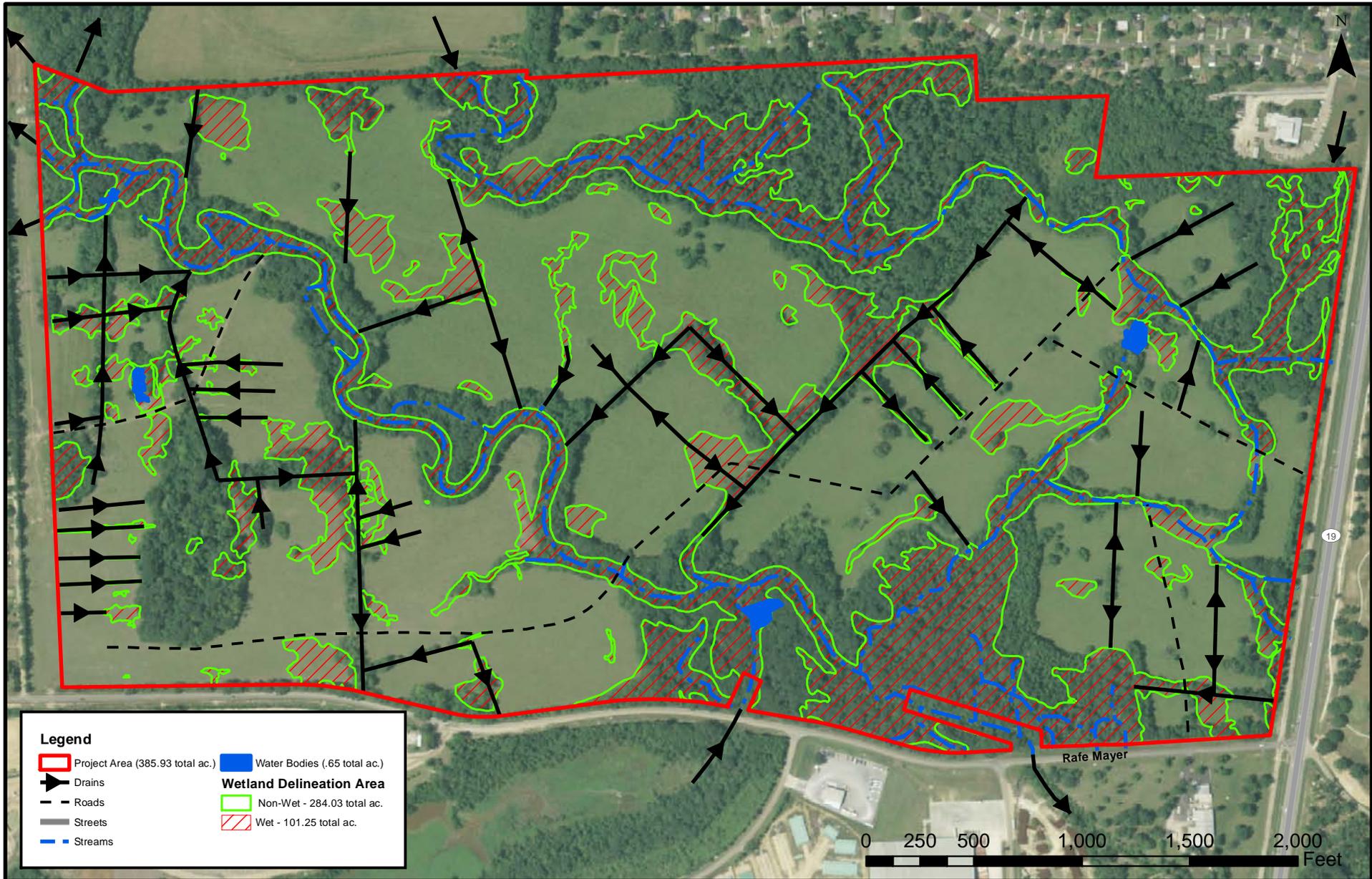


Legend		
<span style="border: 2px solid red; padding: 2px;"> </span> Project Area (385.93 ac.)	<span style="background-color: yellow; border: 1px solid black; padding: 2px;"> </span> Enhancement (19.49 ac.)	<span style="background-color: #90EE90; border: 1px solid black; padding: 2px;"> </span> Reestablishment (174.73 ac.)
<span style="border-bottom: 1px dashed blue; width: 20px; display: inline-block;"></span> Streams	<span style="background-color: purple; border: 1px solid black; padding: 2px;"> </span> Rehabilitation (23.39 ac.)	<span style="background-color: #008000; border: 1px solid black; padding: 2px;"> </span> Non-Hydric Inclusion (109.30 ac.)
<span style="background-color: lightblue; border: 1px solid black; padding: 2px;"> </span> Water Bodies (.65 ac.)	<span style="background-color: #808080; border: 1px solid black; padding: 2px;"> </span> Hydric Inclusion (58.37 ac.)	



**Proposed Restoration Types**  
 Ash Slough Headwaters Mitigation Bank  
 Brian Development  
 East Baton Rouge

Figure: 3
Date: February 2013
Scale: 1:7,600
Source: GEC
Map ID: 270131001000-3051

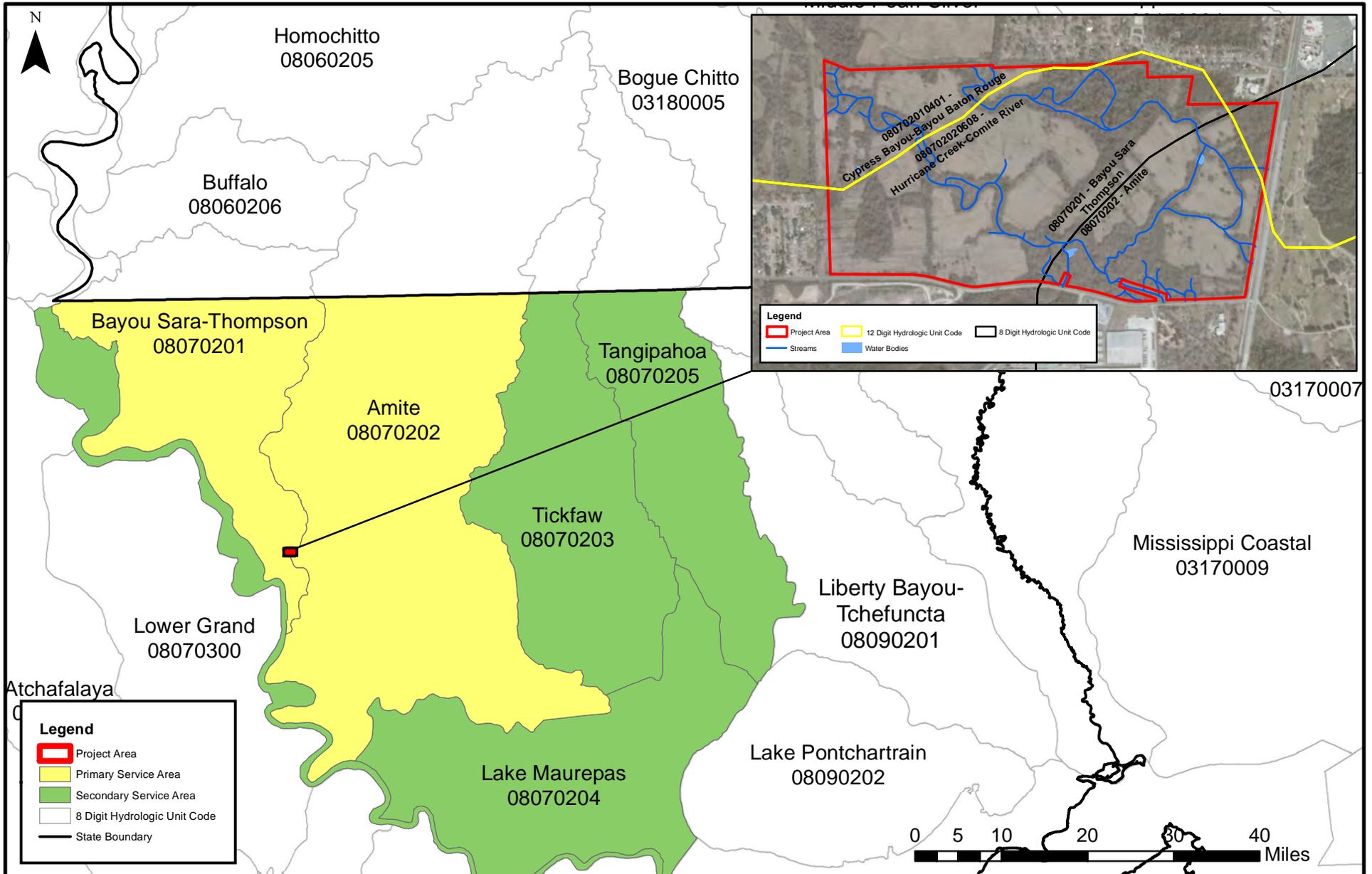


**Legend**

Project Area (385.93 total ac.)	Water Bodies (.65 total ac.)
Drains	<b>Wetland Delineation Area</b>
Roads	Non-Wet - 284.03 total ac.
Streets	Wet - 101.25 total ac.
Streams	

**Existing Drainage**  
 Ash Slough Headwaters Mitigation Bank  
 Brian Development  
 East Baton Rouge

Figure: 4
Date: February 2013
Scale: 1:7,600
Source: GEC/NAIP
Map ID: 270131001000-3051

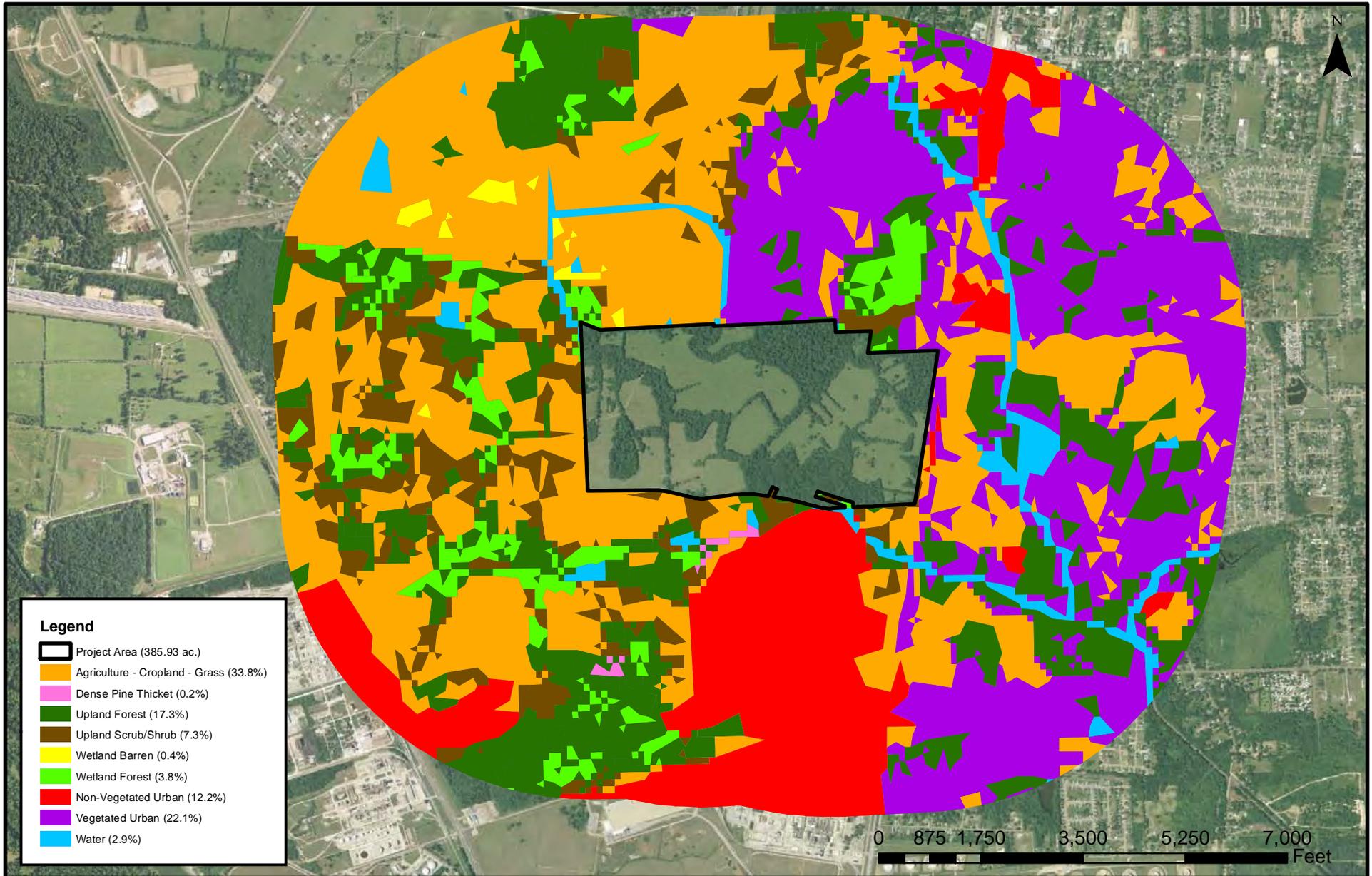


### Service Area

Ash Slough Headwaters Mitigation Bank  
 Brian Development  
 East Baton Rouge



Figure: 5  
 Date: April 2013  
 Scale: 1:1,000,000  
 Source: GEC/USGS  
 Map ID: 270131001000-3051

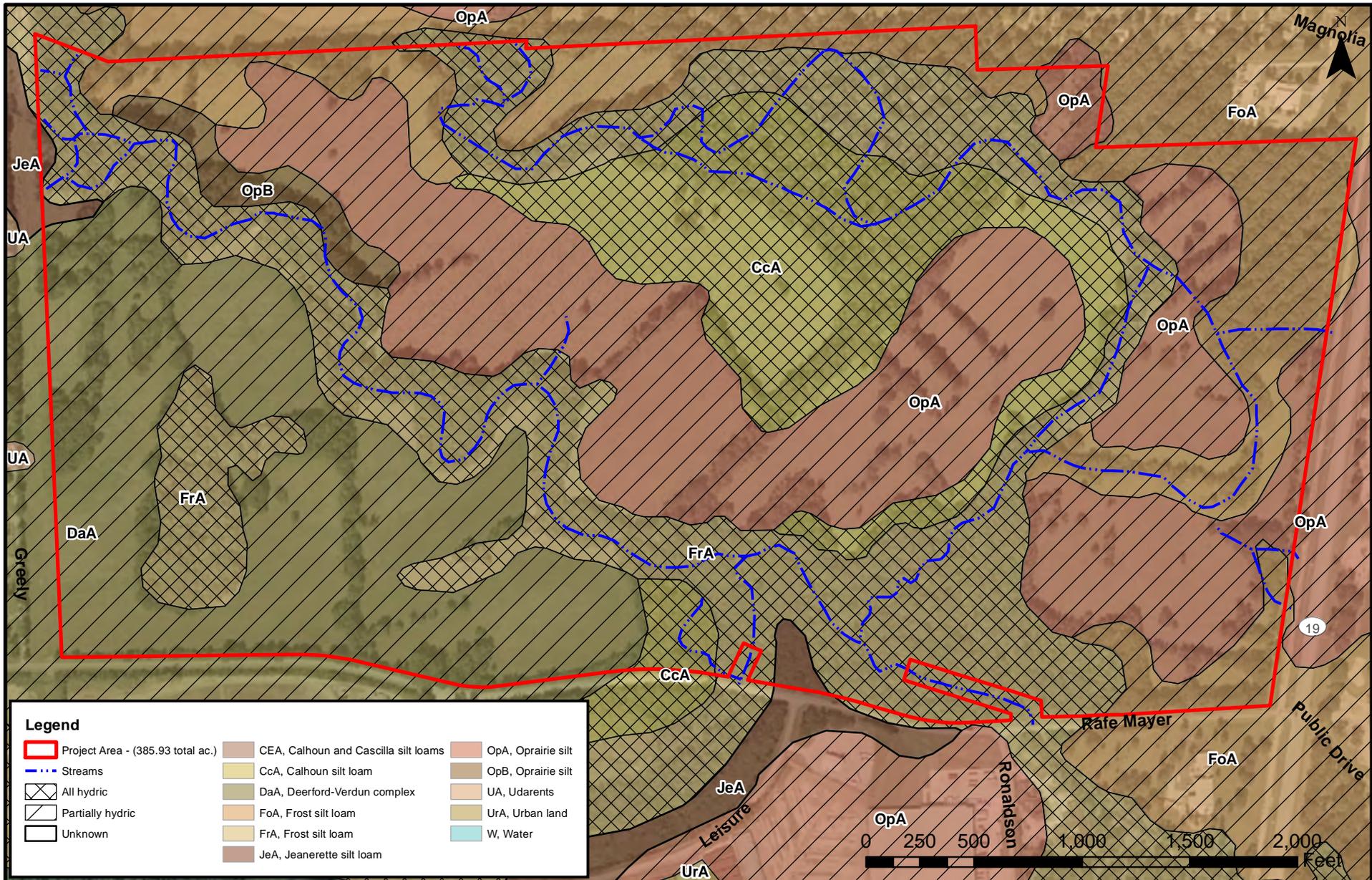


### Land Use

Ash Slough Headwaters Mitigation Bank  
 Brian Development  
 East Baton Rouge



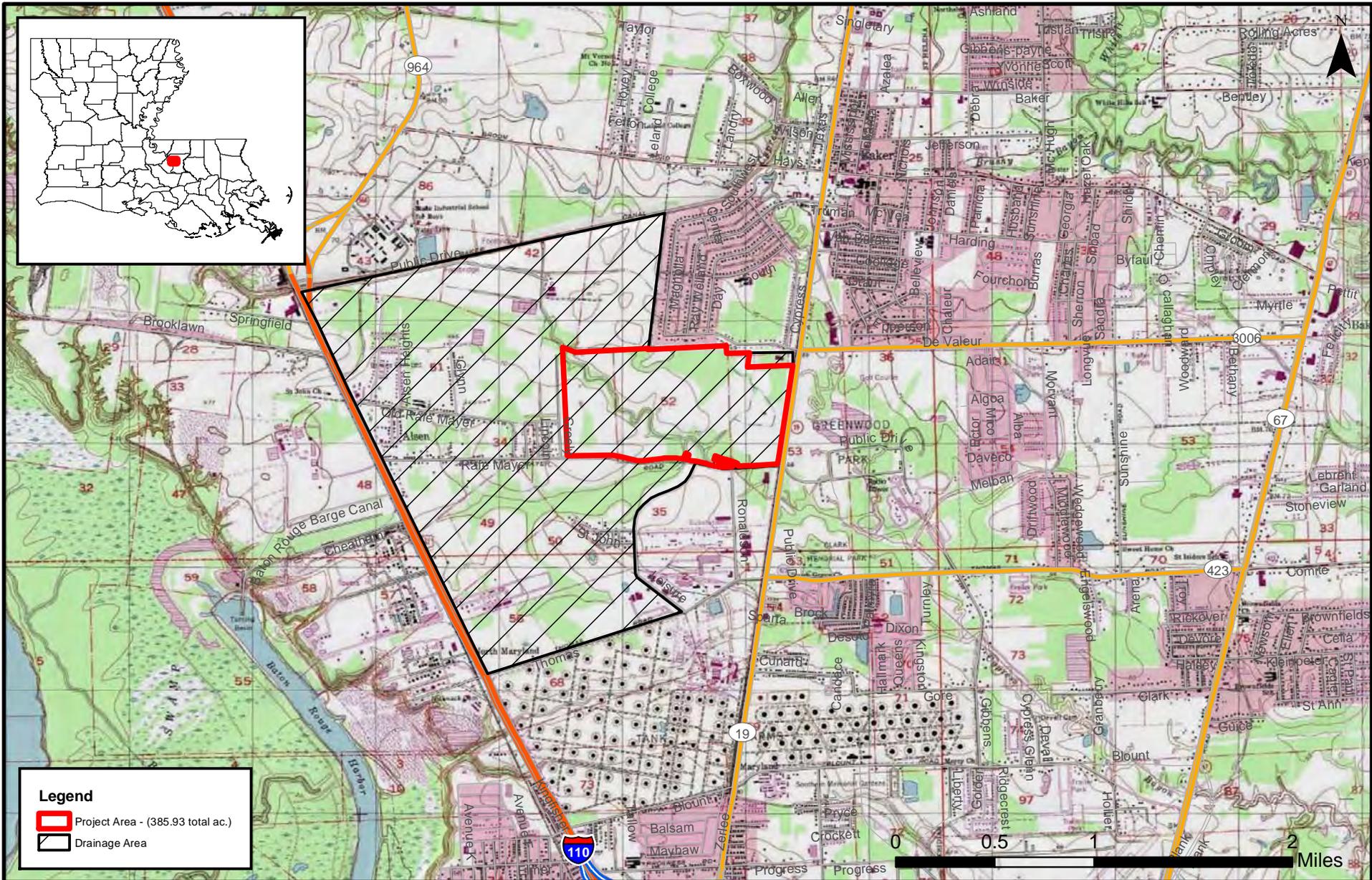
Figure: 6
Date: January 2013
Scale: 1:28,000
Source: GEC/GAP/NAIP
Map ID: 270131001000-3051



**NRCS Soils Map**  
 Ash Slough Headwaters Mitigation Bank  
 Brian Development  
 East Baton Rouge



Figure: 7  
 Date: April 2013  
 Scale: 1:7,600  
 Source: GEC/NRCS/ESRI  
 Map ID: 270131001000-3051



### Drainage Area

Ash Slough Headwaters Mitigation Bank  
 Brian Development  
 East Baton Rouge



Figure: 8
Date: February 2013
Scale: 1:43,700
Source: GEC/USGS
Map ID: 270131001000-3051

# Appendix B

## JURISDICTIONAL DETERMINATION

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

REPLY TO  
ATTENTION OF

FEB 22 2013

Operations Division  
Surveillance and Enforcement Section

Mr. Leonard McCauley  
G.E.C. Inc.  
9357 Interline Avenue  
Baton Rouge, Louisiana 70809

Dear Mr. McCauley:

Reference is made to your request, on behalf of Brian Development, for a U.S. Army Corps of Engineers' (Corps) jurisdictional determination on property located in Sections 51, 52, 53, and 41, Township 5 South, Range 1 West, East Baton Rouge Parish, Louisiana (enclosed map). Specifically, this property is identified as 385.93-acre tract on and north of Rafe Mayer Road and on and west of LA 19.

A field inspection of the property was conducted on January 22, 2012. Based on the results of this investigation and the information provided with your request, we have determined that part of the property is wetland and may be subject to Corps' jurisdiction. The approximate limits of the wetland are designated in red on the map. A Department of the Army (DA) permit under Section 404 of the Clean Water Act will be required prior to the deposition or redistribution of dredged or fill material into wetlands that are waters of the United States. Additionally, a Department of the Army permit under Section 404 of the Clean Water Act will be required if you propose to deposit dredged or fill material into other waters subject to Corps' jurisdiction. Other waters that may be subject to Corps' jurisdiction are indicated in blue on the map.

You and your client are advised that this preliminary jurisdictional determination is valid for a period of 5 years from the date of this letter unless new information warrants revision prior to the expiration date or the District Commander has identified, after public notice and comment, that specific geographic areas with rapidly changing environmental conditions merit re-verification on a more frequent basis.

Should there be any questions concerning these matters, please contact Mr. Michael Windham at (504) 862-1235 and reference our Account No. MVN-2011-00201-1-SK. If you have specific questions regarding the permit process or permit applications, please contact our Central Evaluation Section at (504) 862-2577. The New Orleans District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please complete the survey on our web site at <http://per2.nwp.usace.army.mil/survey.html>.

Sincerely,

*William R. Hethery*  
for Martin S. Mayer  
Chief, Regulatory Branch

Enclosures

**PRELIMINARY**  
JURISDICTIONAL DETERMINATION

**Wetland Delineation B&W Reproducible**

Brian Development, LLC  
East Baton Rouge

- Legend**
- Project Area - (385.93 total ac.)
  - Streets
  - Streams
  - Water Bodies (.95 total ac.)
  - Wetland Delineation Area**
  - Non-Wet - 284.03 total ac.
  - Wet - 101.25 total ac.

**USACE**

(FSV) / IH Date: 1/22/13

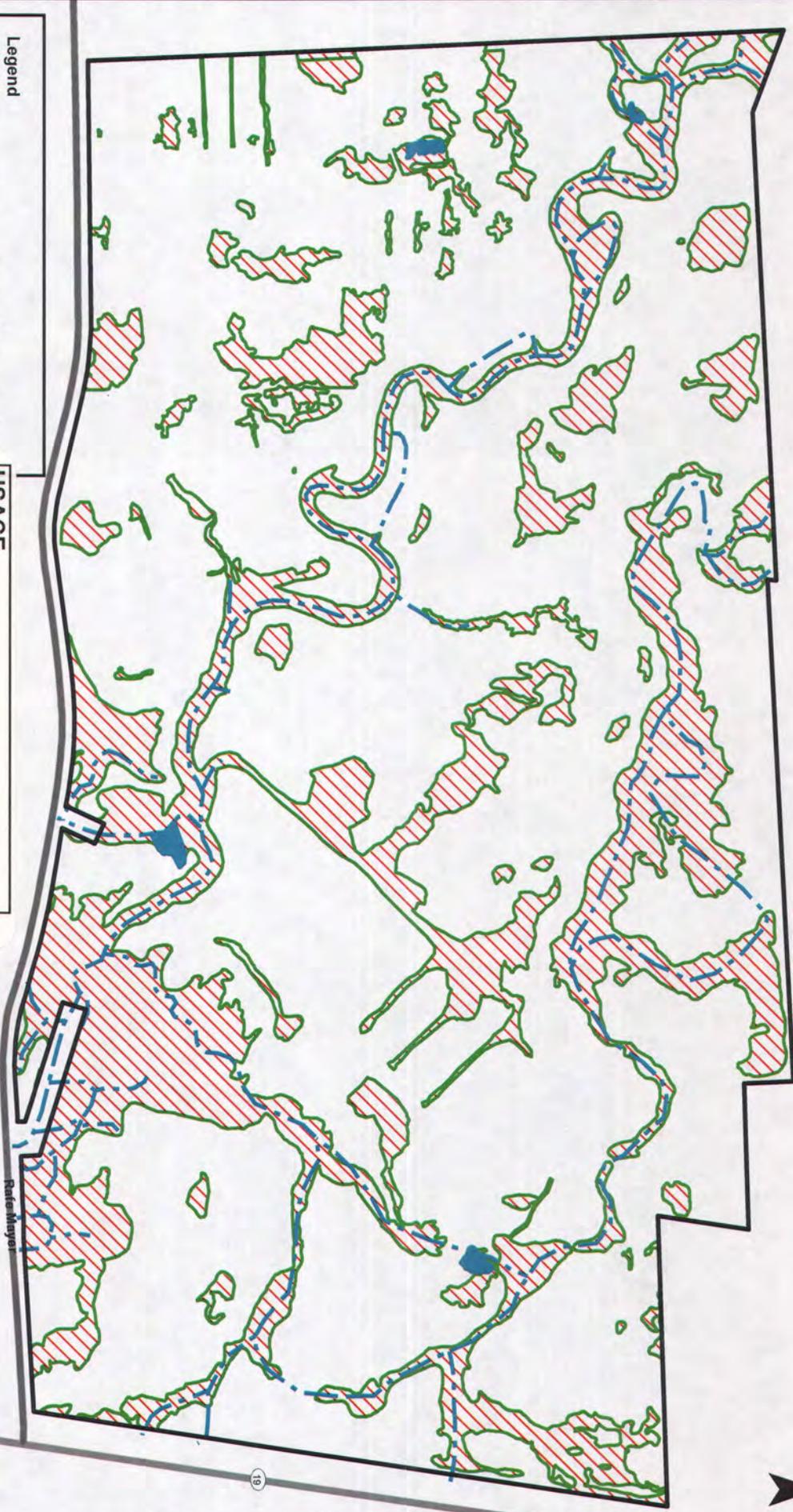
Botanist: *WINDHAM*

Requestor: *McCaulley*

# MVN- 2011-00201-1-5K



Figure: 4  
Date: January 2013  
Scale: 1:7,600  
Source: GEC  
Map ID: 270131001000-3051



# Appendix C

## MCM CREDIT DETERMINATION

**Table 2B: Proposed Restoration/Enhancement Mitigation Worksheet**

Mitigation Project Name: Ash Slough Headwaters Mitigation Bank

**Mitigation Project Size (Acres) Include Wetlands,**

**Non-wetlands and Buffer Areas:** 385.9

**Mitigation Project HUC:** 08070202

**Mitigation Project Basin:** Lake Pontchartrain/Breton Sound/Chandeleur Sound

**Impacted HUC:** (HUC)

**Mitigation Project in the same basin as the impact:** Yes

**Proximity Factor:** 1.0

		Area 1	Area 2	Area 3	Area 4	Area 5
Net Improvement	Mitigation Type	Re-establishment I	Rehabilitation I	Enhancement I	(Select an Option)	(Select an Option)
	Maintenance/ Management Requirement	Self-Sustaining	Self-Sustaining	Self-Sustaining	(Select an Option)	(Select an Option)
	Control	Conservation Servitude	Conservation Servitu	Conservation Servitu	(Select an Option)	(Select an Option)
	Temporal Lag	Over 20	Over 20	10 to 20	(Select an Option)	(Select an Option)
	Credit Schedule	Schedule 1	Schedule 1	Schedule 1	(Select an Option)	(Select an Option)
	Kind	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
	Location	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)	(Select an Option)
Negative Influences on the mitigation site	Commercial/Residential Development	Moderate	Moderate	Moderate	No Impact	No Impact
	Oil & gas activities	No Impact	No Impact	No Impact	No Impact	No Impact
	Size	Category 2	Category 2	Category 2	Category 1	Category 1
	Corridors	Moderate	Moderate	Moderate	No Impact	No Impact

**Table 2B: Proposed Restoration/Enhancement Mitigation Worksheet**

Mitigation Project Name:

Ash Slough Headwaters Mitigation Bank

Factors	Area 1	Area 2	Area 3	Area 4	Area 5
Net Improvement					
Mitigation Type * Maintenance/ Management Requirement	4.0	3.0	2.3	0.0	0.0
Control	0.4	0.4	0.4	0.0	0.0
Temporal Lag	-0.3	-0.3	-0.2	0.0	0.0
Credit Schedule	0.4	0.4	0.4	0.0	0.0
Kind	0.0	0.0	0.0	0.0	0.0
Location	0.0	0.0	0.0	0.0	0.0
<b>Subtotal</b>	<b>4.5</b>	<b>3.5</b>	<b>2.9</b>	<b>0.0</b>	<b>0.0</b>
Negative Influences on the mitigation site					
Commercial/Residential Development	-0.3	-0.3	-0.3	0.0	0.0
Oil & gas activities	0.0	0.0	0.0	0.0	0.0
Size	-0.3	-0.3	-0.3	0.0	0.0
Utility Corridors	-0.3	-0.3	-0.3	0.0	0.0
<b>Sum of negative impacts</b>	<b>-0.8</b>	<b>-0.8</b>	<b>-0.8</b>	<b>0.0</b>	<b>0.0</b>
Sum of m Factors	3.8	2.8	2.2	0.0	0.0
Size of Area (Acres)	174.7	23.4	19.5	0.0	0.0
M × A =	655.2	64.3	41.9	0.0	0.0
Acres required for Permittee-responsible Mitigation project using required credits calculated in Adverse impact Worksheet.	0.0	0.0	0.0	0.0	0.0
Total Restoration/Enhancement Credits = $\sum (M \times A) =$					761.5
Total Available including buffers					837.6
Average Credit Per Acre =					3.8

	Buffers	Non-hydric inclusions	Hydric Inclusions
Credits per acre (M)	0.2	0.4	0.6
Size in Acres (A)		109.3	58.4
M × A =	0.0	43.7	35.1
Credits added to bank =			76.1