



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

February 23, 2015

REPLY TO
ATTENTION OF:

Operations Division
Regulatory Branch
Project Manager
Brian W. Breaux
(504) 862-1938

SUBJECT: MVN-2015-00393-MB

PUBLIC NOTICE

Interested parties are hereby notified that an application has been received by the District engineer for a Department of the Army permit to authorize the following pursuant to (X) 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).

PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK **AMENDMENT ONE (PHASE II)** **IN POINTE COUPEE PARISH**

NAME OF APPLICANT: Delta Land Services, LLC, , 1090 Cinclare Drive, Port Allen, Louisiana 70767 ATTN: Mr. Daniel Bollich.

LOCATION OF WORK: The proposed project area is located in Section 101, Township 5 South, Range 10 East, approximately 3 miles south-southeasterly from New Roads, Louisiana, in Pointe Coupee Parish, as shown on the attached prospectus. (Lat. 30.654693, Long. -91.408778)

CHARACTER OF WORK: The proposed bank property totals approximately 386.4 acres of improved pasture lands managed for livestock production. The applicant/sponsor proposes to restore 374.0 acres of bottomland hardwood and 12.4 acres of cypress swamp ecosystem. Aspects of the proposed restoration plan excavating areas exceeding 28-feet NAVD and utilizing the excavated material as fill for grading drainage ditches to restore surface hydrology; appropriate vegetation will then be planted. Specific details of the proposed restoration plan can be found in the attached prospectus.

The comment period will close **30 days** from the date of this public notice advertisement. Written comments, including suggestions for modifications or objections to the proposed work, stating reasons therefore, are being solicited from anyone having interest in this permit request. Letters must reference the applicant's name and the subject number, be addressed and mailed to the above address, ATTENTION: REGULATORY BRANCH.

The decision whether to issue a permit will be based on an evaluation of the probable impact 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 that 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, consideration of property ownership and, in general, the needs and welfare of the people.

The 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 Corps of Engineers to determine whether to issue, 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 the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or 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.

No properties listed in the National Register of Historic Places are near the proposed work. The possibility exists that the proposed work may damage or destroy presently unknown archeological, scientific, pre-historical or historical sites or data. Copies of this notice are being sent to the State Archeologist and the State Historic Preservation Officer.

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

This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnus-Stevens Fishery Conservation and Management Act. The applicant's proposal would result in the alteration of N/A acres 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 and certification that the proposed activity will not violate applicable water quality standards will be required from the Louisiana Department of Environmental Quality, Office of Water Resources, 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.

The applicant has certified that the proposed activity described in the application complies with and will be conducted in a manner that is consistent with the Louisiana Coastal Resources Program. The Department of the Army permit will not be issued unless the applicant received approval or a waiver of the Coastal Use Permit by the Department of Natural Resources.

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.

Martin S. Mayer
Chief, Regulatory Branch

BANKING INSTRUMENT AMENDMENT ONE

PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK

**Bottomland Hardwood and Baldcypress Swamp
Re-establishment and Rehabilitation Project**

Pointe Coupee Parish, Louisiana

Sponsored By:

Delta Land Services, LLC

Prepared January 16, 2015

TABLE OF CONTENTS

I. PURPOSE OF MBI	1
II. LOCATION AND OWNERSHIP OF BANK PROPERTY (PROPERTY)	1
A. PROPERTY LOCATION	1
B. PROPERTY OWNERSHIP	1
C. PROPERTY LEGAL DEFINITION	1
D. RECORDED LIENS, ENCUMBRANCES, EASEMENTS, SERVITUDES OR RESTRICTIONS	3
III. RESPONSIBILITIES OF PARTIES	3
A. THE OWNER	3
B. THE SPONSOR	3
C. THE IRT	3
D. THE HOLDER OF CONSERVATION SERVITUDE (HOLDER)	3
E. LONG-TERM STEWARD (STEWARD)	3
IV. GOALS AND OBJECTIVES	3
V. PERFORMANCE STANDARDS	3
VI. MONITORING PLAN AND REPORTING PROTOCOLS	4
A. MONITORING	4
B. REPORTING PROTOCOLS	4
VII. CONTINGENCIES AND REMEDIAL ACTIONS	4
A. ADAPTIVE MANAGEMENT	4
B. NOTICE OF DEFICIENCY	4
C. CONDITIONS FOR SUSPENDING CREDIT SALES	4
D. CATASTROPHIC EVENTS INCLUDING NATURAL DISASTERS AND UNLAWFUL ACTS	4
E. FINANCIAL RESPONSIBILITIES	4
VIII. INSPECTION BY IRT AND HOLDER	4
IX. FINANCIAL PROTECTION	4
X. LONG-TERM PROTECTION AND MAINTENANCE	5
A. CONSERVATION SERVITUDE	5
B. LONG-TERM MAINTENANCE PLAN	5
XI. BANK USE	5
A. BANK SERVICE AREA	5
B. PROJECTS ELIGIBLE TO USE THE BANK	5
C. DETERMINATION OF BANK CREDITS	5
D. SCHEDULE OF CREDIT AVAILABILITY	6
E. CREDIT TRANSACTIONS	6
F. REQUIREMENTS FOR INITIAL CREDIT RELEASE	6
G. SUBSEQUENT CREDIT RELEASES	6
XII. MODIFICATION OF THIS MBI	7
A. MINOR MODIFICATION TO MBI	7
B. ADDENDA TO BANK	7
C. EXCLUSIONS OF APPROVED MITIGATION SITE	8
D. TERMINATION OF THIS MBI	9

E.	TERMINATION OF PARTICIPATION	9
XIII.	TRANSFER OF PROPERTY OR SPONSORSHIP	10
A.	TRANSFERS OF BANK PROPERTY	10
B.	TRANSFER OF SPONSORSHIP.....	10
XIV.	ESTABLISHMENT OF STEWARD.....	10
XV.	BANK LIFE.....	10
XVI.	OTHER PROVISIONS	10
A.	DISCLAIMER.....	10
B.	NON-REPORTING NATIONWIDE PERMIT	10
C.	DISPUTE RESOLUTION.....	10
D.	OVERALL PERFORMANCE	10
E.	SPECIFIC LANGUAGE OF MBI SHALL BE CONTROLLING.....	10
F.	NOTICE	10
G.	ENTIRE AGREEMENT	10
H.	INVALID PROVISIONS	10
I.	HEADINGS AND CAPTIONS	10
J.	COUNTERPARTS	10
K.	BINDING.....	10
L.	LIABILITY OF REGULATORY AGENCIES.....	10

Attachment A – Maps

Figure 1. Vicinity Map

Figure 2. Service Area Map

Attachment B – Title Report/Opinion

Attachment C – Mitigation Work Plan

Attachment D – Acceptance Letter

MITIGATION BANKING INSTRUMENT

PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK

The following represents the first amendment (Amendment One) to the Ponderosa Ranch of Pointe Coupee Mitigation Bank (Bank) of which the Mitigation Banking Instrument (MBI) was approved by the U.S. Army Corps of Engineers New Orleans District (CEMVN) on October 11, 2013. This amendment follows all provisions provided for in the MBI with the exception of those specifically provided for in the Mitigation Work Plan (MWP). This amendment is made and entered into by and among Delta Land Services LLC (Sponsor), the heirs of the Succession of John E. Jumonville, Sr. and Claude Coulon Jumonville (Owner) and the Interagency Review Team (IRT) composed of the CEMVN, Region VI of the U.S. Environmental Protection Agency (EPA), the U.S. Fish and Wildlife Service (FWS), and the Louisiana Department of Wildlife and Fisheries (LDWF). This MBI is a binding agreement among the parties and incorporates the detailed Mitigation Work Plan and any other attachments to the MBI as a part hereof.

I. Purpose of MBI

The Purpose of the MBI remains as defined in Section I of the October 11, 2013 MBI.

II. Location and Ownership of Bank Property (Property)

A. Property Location

The Property Location is described in Section I of the Mitigation Work Plan (MWP).

B. Property Ownership

The property owner (Owner) remains as defined in Section II.B of the October 11, 2013 MBI.

C. Property Legal Definition

A tract or parcel of land located in Section 101 Township 5 South, Range 10 East in Pointe Coupee Parish, Louisiana.

For a Point of Reference begin at a $\frac{3}{4}$ " iron pipe marking the apparent corner common to Section 101 Township 5 South, Range 10 East and section 104 and 106, Township 5 South, Range 10 East; thence South 17 degrees 17 minutes 17 seconds East a distance of 160.83 feet to a calculated point of beginning. (Northing of 785789.8444 and Easting of 3256354.0623 using State Plane, NAD83, LA South, US survey feet).

From the Point of Beginning run South 57 degrees 21 minutes 29 seconds East a distance of 540.73 feet to a calculated point; thence South 58 degrees 44 minutes 30 seconds East a distance of 144.70 feet to a calculated point; thence South 62 degrees 27 minutes 06 seconds East a distance of 214.90 feet to a calculated point; thence South 68 degrees 48

Ponderosa Ranch of Pointe Coupee Mitigation Bank
Mitigation Banking Instrument

minutes 05 seconds East a distance of 494.73 feet to a calculated point; thence South 67 degrees 46 minutes 02 seconds East a distance of 321.19 feet to a calculated point; thence South 65 degrees 45 minutes 05 seconds East a distance of 381.41 feet to a calculated point; thence South 50 degrees 25 minutes 16 seconds East a distance of 234.73 feet to a calculated point; thence South 80 degrees 06 minutes 13 seconds East a distance of 45.50 feet to a calculated point; thence South 71 degrees 04 minutes 42 seconds East a distance of 74.62 feet to a calculated point; thence South 79 degrees 33 minutes 03 seconds East a distance of 298.70 feet to a calculated point; thence South 74 degrees 44 minutes 34 seconds East a distance of 62.14 feet to a calculated point; thence South 48 degrees 49 minutes 40 seconds East a distance of 82.21 feet to a calculated point; thence South 64 degrees 30 minutes 09 seconds East a distance of 102.63 feet to a calculated point; thence South 67 degrees 58 minutes 35 seconds East a distance of 115.55 feet to a calculated point; thence South 71 degrees 10 minutes 45 seconds East a distance of 191.31 feet to a calculated point; thence South 67 degrees 15 minutes 26 seconds East a distance of 201.91 feet to a calculated point; thence South 65 degrees 42 minutes 55 seconds East a distance of 312.34 feet to a calculated point; thence South 68 degrees 50 minutes 39 seconds East a distance of 273.60 feet to a calculated point; thence South 72 degrees 10 minutes 35 seconds East a distance of 206.04 feet to a calculated point; thence South 73 degrees 18 minutes 15 seconds East a distance of 89.60 feet to a calculated point; thence South 14 degrees 36 minutes 59 seconds West a distance of 275.17 feet to a calculated point; thence South 13 degrees 21 minutes 34 seconds West a distance of 819.43 feet to a calculated point; thence South 59 degrees 03 minutes 05 seconds West a distance of 4241.82 feet to a calculated point; thence North 29 degrees 41 minutes 22 seconds West a distance of 20.27 feet to a calculated point; thence North 28 degrees 43 minutes 40 seconds West a distance of 1483.62 feet to a calculated point; thence North 49 degrees 19 minutes 10 seconds East a distance of 156.73 feet to a calculated point; thence North 26 degrees 02 minutes 40 seconds West a distance of 847.54 feet to a calculated point; thence North 66 degrees 05 minutes 04 seconds East a distance of 75.19 feet to a calculated point; thence North 29 degrees 56 minutes 49 seconds West a distance of 287.21 feet to a calculated point; thence North 66 degrees 53 minutes 49 seconds West a distance of 103.44 feet to a calculated point; thence North 31 degrees 50 minutes 38 seconds West a distance of 330.57 feet to a calculated point; thence South 69 degrees 03 minutes 26 seconds West a distance of 42.42 feet to a calculated point; thence South 63 degrees 50 minutes 51 seconds West a distance of 100.99 feet to a calculated point; thence North 28 degrees 34 minutes 06 seconds West a distance of 880.59 feet to a calculated point; thence North 28 degrees 35 minutes 32 seconds West a distance of 786.74 feet to a calculated point; thence North 02 degrees 40 minutes 30 seconds West a distance of 134.26 feet to a calculated point; thence North 88 degrees 20 minutes 23 seconds East a distance of 600.24 feet to a calculated point; thence North 00 degree 58 minutes 59 seconds West a distance of 626.56 feet to a calculated point; thence North 89 degrees 08 minutes 38 seconds East a distance of 324.43 feet to a calculated point; thence South 82 degrees 57 minutes 21 seconds East a distance of 247.75 feet to a calculated point; thence North 89 degrees 48 minutes 09 seconds East a distance of 200.77 feet to a calculated point; thence North 83 degrees 13 minutes 49 seconds East a distance of 268.03 feet to a calculated point; thence North 62 degrees 53 minutes 28 seconds East a distance of 296.45 feet to a calculated point; thence South 88 degrees 17 minutes 55

seconds East a distance of 284.59 feet to the Point of Beginning, consisting of 386.42 acres.

D. Recorded Liens, Encumbrances, Easements, Servitudes or Restrictions

Title to the Property has been documented by a title opinion (Attachment B) generated by the Law Offices of Jewell & Jewell on January 15, 2015 and will be updated two weeks prior to execution of the conservation servitude. Any exceptions to the real estate title not subordinated to the conservation servitude are listed below.

The Bank is free of any mortgages, liens and encumbrances except for four mortgages held in favor of Peoples Bank and Trust Company of Pointe Coupee. However, Peoples Bank and Trust Company will subordinate all four of the mortgages in favor of the conservation servitude described in Section X.A of this MBI. There are no zoning or existing ordinances in place affecting the Bank.

A mineral title opinion was rendered by the Law Offices and Jewell & Jewell to the Sponsor on January 22, 2013 regarding the existence of any mineral leases or mineral ownership. The Opinion states that minerals and mineral rights are owned by the following persons in undivided portions as follows: 1) Claude Coulon Jumonville (Owner) (1/4th), 2) Trustee of the Alexander E. Jumonville Spendthrift Trust (1/4th), 3) ETC Land & Holdings, LLC, 4) Leah Estes Theriot Miller (1/8th) and 5) Bryan Estes (1/8th). Claude Coulon Jumonville (Owner) owns 100% of the executive rights associated with the aforementioned minerals and mineral rights. The Sponsor conducted a review of the Louisiana Department of Natural Resources (LDNR) Strategic Online Natural Resources Information System (SONRIS) database for oil and gas activity. This review revealed the location of two wells within or in close proximity to the Bank but these wells were plugged and abandoned.

III. RESPONSIBILITIES OF PARTIES

The responsibilities of the parties are as described in Sections III. A through E of the October 11, 2013 MBI.

IV. GOALS AND OBJECTIVES

Goals, objectives and contributions to overall watershed/regional functions provided by the Bank Addendum are described in Section II of the MWP (Attachment C).

V. PERFORMANCE STANDARDS

Performance standards used to measure the success of the Bank are described in Section VIII of the MWP (Attachment C).

VI. MONITORING PLAN AND REPORTING PROTOCOLS

Monitoring and reporting remain as defined in Sections VI.A and VI.B of the October 11, 2013 MBI. Monitoring and Reporting requirements are established in Section IX and Section X of the MWP, respectively (Attachment C).

VII. CONTINGENCIES AND REMEDIAL ACTIONS

Contingencies and remedial actions remain as defined in Section VII.A through Section VII.E of the October 11, 2013 MBI. The Adaptive Management Plan is defined in Section XII of the MWP (Attachment C).

VIII. INSPECTION BY IRT AND HOLDER

Inspection provisions remain as defined in the October 11, 2013 MBI.

IX. FINANCIAL PROTECTION

A. The Sponsor agrees to provide Financial Assurances sufficient to ensure satisfactory completion for the work described in the Mitigation Work Plan and the Adaptive Management Plan. The Sponsor is establishing the Construction and Establishment (C&E) financial assurance to assure sufficient funds are available to perform work required to construct and maintain the Bank through successful attainment of long-term success criteria. An assessment of the initial and capital costs and ongoing management funds required to manage and monitor the Bank is included in the Mitigation Work Plan and provides an estimate of work and cost requirements for construction and establishment of the Bank through achievement of long-term success criteria. To fund this account, the Sponsor proposes to establish the Ponderosa Ranch of Pointe Coupee Mitigation Bank Construction and Establishment Fund by means of an escrow account in the amount of \$ 446,504.57. The Financial assurance shall be reduced as success criteria are achieved and the probability decreases that those funds would be needed according to the following schedule:

1. Upon verification by the IRT that the construction work has been completed, the CEMVN, acting on behalf of the IRT, shall advise the Sponsor that the C&E financial assurance may be reduced to \$132,705.33.
2. Upon verification by the IRT that the initial success criteria have been attained for all tracts, the CEMVN, acting on behalf of the IRT, shall advise the Sponsor that the C&E financial assurance may be reduced to \$72,347.79.
3. Upon verification by the IRT that the interim success criteria have been attained for all tracts, the CEMVN, acting on behalf of the IRT, shall advise the Sponsor that the C&E financial assurance may be reduced by \$22,537.95.
4. Upon verification by the IRT that the long-term success criteria have been attained for all tracts, the remaining C&E financial assurance shall be released to the Sponsor.

B. The Sponsor shall provide copies of annual status of the financial assurances to CEMVN upon request and/or in their monitoring reports.

C. The financial assurances shall guarantee payment to a third party, as determined appropriate by the CEMVN in consultation with the IRT, in the event that the Sponsor does not fulfill its obligations to perform, as specified in this MBI.

D. Payment to Sponsor, or if necessary, to a third party as identified by CEMVN, of a specified amount of the financial assurances shall be made upon written notification by CEMVN to the financial institution.

X. LONG-TERM PROTECTION AND MAINTENANCE

All provisions regarding the conservation servitude are defined in Section X.A of the October 11, 2013 MBI. The Long-Term Maintenance Plan is outlined in Section XIII of the MWP (Attachment C). The funding of long-term maintenance is described in Section XIV.B of the MWP (Attachment C).

XI. BANK USE

Provisions governing bank use remain as defined in the Section XI of the October 11, 2013 MBI unless otherwise specified below.

A. Bank Service Area

The Bank Service Area remains as defined in Section XI.A of the October 11, 2013 MBI.

B. Projects Eligible to Use the Bank

Provisions for project eligible to use the bank remain as defined in Section XI.B of the October 11, 2013 MBI.

C. Determination of Bank Credits

To determine the amount of acres required to offset a particular impact to wetlands, CEMVN will use either best professional judgment or a CEMVN approved assessment method to determine the number of credits per acre available at the bank and the number of credits lost as a result of an impact. The same assessment method will be used to calculate both credits available and credits lost.

Credit Determination is tied to the ecological restoration and/or enhancement outlined in the Mitigation Work Plan (Attachment C. Section XI).

D. Schedule of Credit Availability

Credit release is tied to achieving all the milestones within the success criteria at specific monitoring times as outlined in Section XI.B of the MWP (Attachment C).

E. Credit Transactions

Provisions for credit transactions remain as defined in Section XI.E of the October 11, 2013 MBI.

F. Requirements for Initial Credit Release

No credits will be released until the Sponsor has provided a signed statement stating that all of the following requirements have been met and has provided copies of the following executed documents, as appropriate:

1. Permits: Obtain all necessary permits or other authorizations needed to construct and maintain the Bank. This MBI does not fulfill or substitute for such authorization.

2. Holder Qualifications: Evidence that the entity proposed to hold the conservation servitude is a CEMVN approved Holder.

3. Conservation Servitude: A copy of the executed perpetual conservation servitude with a copy of this MBI as recorded in the Mortgage and Conveyances Records Office of the parish in which the Property is located.

4. Financial Assurance: Documentation establishing the C&E financial assurances stipulated in Section IX and the Long-Term Maintenance and Protection endowment described in Section X of this MBI.

5. Property Ownership: A title search that identifies all known encumbrances including mortgages, liens, rights-of-way, servitudes, easements, etc. and documentation that the conservation servitude is not subordinate to any other easement or major lien. Sponsor shall provide a copy of the recorded document evidencing that any mortgages encumbering the property have been subordinated to the conservation servitude.

6. Execution of MBI: MBI signed by the Owner, Sponsor and CEMVN District Commander or his representative and approval by all participant IRT agencies; and

7. Work Schedule: Submission of the timetable for implementing work identified in the permit, Mitigation Work Plan or elsewhere in this MBI.

G. Subsequent Credit Releases

The Sponsor shall provide to CEMVN and the IRT a monitoring report or information necessary to document successful attainment of required milestones before each credit release. CEMVN, with assistance from the IRT, will determine whether the information provided is

accurate and, in its opinion, whether those milestones were achieved. CEMVN will advise the Sponsor and the IRT in writing of its findings and the amount of credits that will be released.

XII. MODIFICATION OF THIS MBI

A. Minor Modification to MBI

1. This MBI is subject to written modification as mutually agreed to by the IRT and the Sponsor for such reasons as changes reflecting adaptive management of the Bank, credit assessment, changes in credit releases and credit release schedules. Changes to this MBI that the district engineer determines not to be significant will follow procedures in paragraph 332.8(g)(2) streamlined review process.

2. Should changes in this MBI be required by the IRT that are not acceptable to the Sponsor, the Sponsor may elect to end his participation and close the Bank. At that time, the IRT will:

- a. Revise the Bank's credit allotment based on the work completed at closure,
- b. Review the credits sold by the Bank, and then
- c. Determine whether the previously sold acreage is sufficient to balance mitigation needs or whether additional acreage is needed to be left in the Bank to balance the credits mitigated at the Bank.

3. The conservation servitude will remain in force on that portion of the Property remaining in the Bank and a sufficient buffer, as determined by the IRT, to protect the integrity of the Bank.

B. Addenda to Bank

1. The Sponsor may include additional acreage in the Bank as modifications to this MBI, following procedures in paragraph 332.8(g)(1) provided that (1) the additional acreage is located on the same parcel of land or on a parcel of land contiguous to the Bank and (2) the natural composition, structure, functions and processes performed by the restored/enhanced wetland community are the same as those outlined in this MBI. For the modification of this MBI, the amendment will contain the following:

- a. Detailed description of existing conditions of the Property identifying existing and prior land uses, vegetation, hydrology alterations and soils;
- b. A Mitigation Work Plan that details the proposed hydrologic and vegetative restoration/enhancement work that is necessary to produce the mitigation credits;
- c. Drawings depicting the site showing its location to other mitigation sites authorized by this MBI, different mitigation types, soils and hydrology; also drawings depicting the work

required; vicinity map, a plan view depicting the proposed work and typical cross-sections of that work;

- d. A Department of the Army issued wetland determination;
- e. A title opinion and survey clearly identifying any existing encumbrances on the Property;
- f. A draft conservation servitude;
- g. A draft of the mechanism to be used to secure the necessary Construction and Establishment financial assurance; and
- h. A draft of the mechanism to be used to establish the necessary Long-Term Maintenance and Protection account.

2. CEMVN will determine if the work identified in the Mitigation Work Plan requires a DA permit. A DA permit application is not a required with the prospectus, but the Sponsor may choose to submit an application at this time as obtaining any and all permits is a prerequisite to selling credits.

3. A public interest review will be required for each addendum. The prospectus, Mitigation Work Plan and drawings will be advertised by public notice for a minimum of thirty days to obtain public comments.

4. The IRT will evaluate each proposed property. The evaluation will typically require an inspection of the property and review of the prospectus and restoration plan. If warranted, the IRT will recommend modifications to the proposed restoration plan. By signing this MBI, the agencies are under no obligation to accept future addenda. Each addendum will be evaluated on its own merit.

5. A separate credit assessment will be conducted to determine habitat values of each addendum.

6. The mutually agreed upon Mitigation Work Plan will be signed by designated authorities for each IRT member and included as an amendment to this MBI and subject to all its requirements, conditions and terms.

C. Exclusions of Approved Mitigation Site

1. The Sponsor may elect to exclude a portion of the Property on which no credits have been sold from the Bank. However, notification and approval by the IRT must be obtained by the Sponsor prior to removal from the Bank.

2. Reduction in Bank size may adversely affect future releases of mitigation credits and financial assurances. Additionally, the IRT will re-evaluate the credit value per acre for the

portion of the site remaining in the Bank. Should the re-evaluation of credits determine that debits exceed the available credits produced by the acres remaining in the Bank, the IRT may require that a portion of the area to be excluded remain in the Bank to make up the credit difference caused by the reduction in Bank size.

3. After IRT has approved the exclusion, the Owner may, with approval from the Sponsor, Holder and the IRT, modify the conservation servitude to remove the servitude from that portion of the Property excluded.

D. Termination of This MBI

Should the IRT determine that the Sponsor is in material default of any provision of this MBI, the IRT, acting through the CEMVN may notify the Sponsor that the sale or transfer of any Credits will be suspended until the appropriate deficiencies have been remedied. Upon notice of such suspension, the Sponsor agrees to immediately cease all sales or transfers of Mitigation Credits until the IRT informs the Sponsor that sales or transfers may be resumed. Should the Sponsor remain in default, the IRT, acting through CEMVN, may terminate the MBI and any subsequent Bank operations. Upon termination, the Sponsor agrees to perform and fulfill all obligations under this MBI relating to Credits that were sold or transferred prior to termination.

If circumstances warrant, such as misrepresentation, misapplication, misappropriation, improper management, non-disclosure of pertinent information or non-compliance with the terms of this MBI by the Sponsor, CEMVN and other members may void their recognition of the Bank as well as terminate their future participation in this MBI. Any executed and recorded conservation servitude pertaining to wetlands restored pursuant to mitigation contracts and this MBI will remain in full force and effect, and as waters of the United States, any subsequent discharges would require Section 404 authorization. Upon termination of this MBI, the conservation servitude shall remain on those lands for which credits were sold for the use as compensatory mitigation for adverse impacts associated with DA permits. In addition, a buffer sufficient to protect the integrity of the Bank as determined by the IRT, shall be established and protected by the conservation servitude. The revised conservation servitude shall be recorded in the Mortgage and Conveyance Office of the parish where the land is located with the holder acting as the long-term manager. All funds in the escrow account, if any, will be forfeited to the Holder or to a long-term Steward or other appropriate CEMVN designee who agrees to assume the maintenance and monitoring of the restored habitat in accordance with this MBI. Additionally, intentional misrepresentation, misappropriation, non-disclosure of pertinent information, non-compliance with the terms of this MBI, or any other intentional illegal act may be prosecuted to the fullest extent of the law.

E. Termination of Participation

Any IRT members may terminate their participation upon written notification to all signatory parties without invalidating this MBI. Participation of the IRT member seeking termination will end 30 days after written notification. Termination by one member of the IRT of its involvement in this MBI shall not terminate or affect the relationship between the remaining members of the IRT, toward each other or the Sponsor or Owner, under this MBI.

Remaining Credits authorized under the authority of the withdrawing agency will no longer be available for transfer. Nothing in this Section is intended or shall be construed to limit the legal or equitable remedies (including specific performance and injunctive relief) available to the IRT members in the event of a threatened or actual breach of this MBI.

XIII. TRANSFER OF PROPERTY OR SPONSORSHIP

Transfer of Property or Sponsorship remains as defined in Section XIII of the October 11, 2013 MBI.

XIV. ESTABLISHMENT OF STEWARD

Establishment of Steward provisions remain as defined Section XIV of the October 11, 2013 MBI.

XV. BANK LIFE

Provisions for Bank Life remain as defined in Section XV of the October 11, 2013 MBI.

XVI. OTHER PROVISIONS

All other provisions remain as defined in Section XVI A through L of the October 11, 2013 MBI.

Ponderosa Ranch of Pointe Coupee Mitigation Bank
Mitigation Banking Instrument

CLAUDE COULON JUMONVILLE
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK

DATE

Ponderosa Ranch of Pointe Coupee Mitigation Bank
Mitigation Banking Instrument

GEORGE GUERIN

DATE

PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK

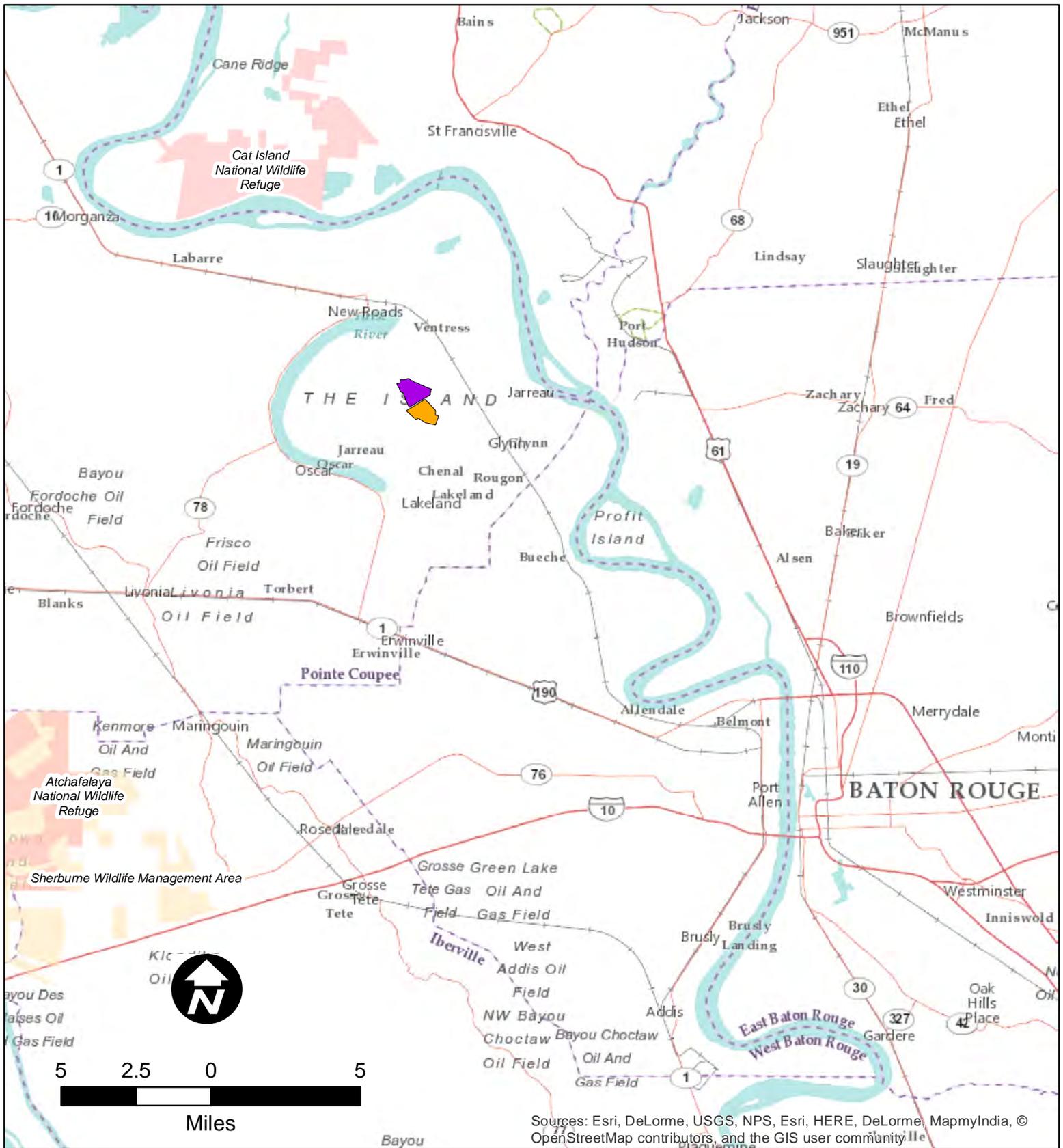
Ponderosa Ranch of Pointe Coupee Mitigation Bank
Mitigation Banking Instrument

MARTIN S. MAYER
CHIEF, REGULATORY BRANCH

DATE

ATTACHMENT A

Maps



Legend

- Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One (386.4 Acres)
- Ponderosa Ranch of Pointe Coupee Mitigation Bank (323.8 Acres)
- National Wildlife Refuges
- State Lands

Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One

VICINITY MAP

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

Approved : DEB

Date : 12/06/2014

Map : F01_Vicinity_5mi.mxd



FIGURE 1



Legend

- Primary Service Area (Lower Grand River Watershed: 08070300)
- Secondary Service Area (West Central LA Coastal Watershed: 08090302)



Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One

SERVICE AREA MAP

Pointe Coupee Parish, LA

Created : LJW/ArcView
Approved : DEB
Date : 12/05/2014
Map No. : F02_ServiceArea.mxd



FIGURE 2

ATTACHMENT B

Title Report/Opinion

LAW OFFICES OF
JEWELL & JEWELL
P.O. BOX 156
143 EAST MAIN STREET, SUITE 3
NEW ROADS, LOUISIANA 70760

J.P. JEWELL, JR. (1910-2007)
JOHN WAYNE JEWELL
STEPHEN P. JEWELL

TELEPHONE (225) 638-3311
FAX (225) 638-8319

January 15, 2015

Delta Land Services, L.L.C.
1090 Cinclare Drive
Port Allen, Louisiana 70767

Re: Title Opinion; Jumonville Property - 386.42 Acres

Gentlemen:

As requested, I have examined an abstract of the indices to the conveyance and mortgage records of the Parish of Pointe Coupee, State of Louisiana, for the period commencing on December 10, 1947 and ending on July 6, 2011, prepared by Beta Land Services, L.L.C., and I also personally examined the indices to said conveyance and mortgage records for the period commencing on July 6, 2011 and ending on January 15, 2015, all pertaining to the following described property, to-wit:

A certain tract or parcel of land, situated in Section 101, Township 5 South, Range 10 East, in Pointe Coupee Parish, Louisiana, which tract or parcel of land contains **386.42 acres** and is more particularly shown and depicted on a plat of survey made by Charles R. St. Romain, R.P.L.S., dated June 28, 2011, and revised January 13, 2015, which plat of survey is made a part hereof by reference for greater certainty of description. Said tract or parcel of land is more particularly described according to said plat of survey as follows:

For a Point of Reference begin at a ¾" iron pipe marking the apparent corner common to Section 101 Township 5 South, Range 10 East and section 104 and 106, Township 5 South, Range 10 East; thence South 17 degrees 17 minutes 17 seconds East a distance of 160.83 feet to a calculated point of beginning. (Northing of 785789.8444 and Easting of 3256354.0623 using State Plane, NAD83, LA South, US survey feet).

From the Point of Beginning run South 57 degrees 21 minutes 29 seconds East a distance of 540.73 feet to a calculated point; thence South 58 degrees 44 minutes 30 seconds East a distance of 144.70 feet to a calculated point; thence South 62 degrees 27 minutes 06 seconds East a distance of 214.90 feet to a calculated point; thence South 68 degrees 48 minutes 05 seconds East a distance of 494.73 feet to a calculated point; thence South 67 degrees 46 minutes 02 seconds East a distance

of 321.19 feet to a calculated point; thence South 65 degrees 45 minutes 05 seconds East a distance of 381.41 feet to a calculated point; thence South 50 degrees 25 minutes 16 seconds East a distance of 234.73 feet to a calculated point; thence South 80 degrees 06 minutes 13 seconds East a distance of 45.50 feet to a calculated point; thence South 71 degrees 04 minutes 42 seconds East a distance of 74.62 feet to a calculated point; thence South 79 degrees 33 minutes 03 seconds East a distance of 298.70 feet to a calculated point; thence South 74 degrees 44 minutes 34 seconds East a distance of 62.14 feet to a calculated point; thence South 48 degrees 49 minutes 40 seconds East a distance of 82.21 feet to a calculated point; thence South 64 degrees 30 minutes 09 seconds East a distance of 102.63 feet to a calculated point; thence South 67 degrees 58 minutes 35 seconds East a distance of 115.55 feet to a calculated point; thence South 71 degrees 10 minutes 45 seconds East a distance of 191.31 feet to a calculated point; thence South 67 degrees 15 minutes 26 seconds East a distance of 201.91 feet to a calculated point; thence South 65 degrees 42 minutes 55 seconds East a distance of 312.34 feet to a calculated point; thence South 68 degrees 50 minutes 39 seconds East a distance of 273.60 feet to a calculated point; thence South 72 degrees 10 minutes 35 seconds East a distance of 206.04 feet to a calculated point; thence South 73 degrees 18 minutes 15 seconds East a distance of 89.60 feet to a calculated point; thence South 14 degrees 36 minutes 59 seconds West a distance of 275.17 feet to a calculated point; thence South 13 degrees 21 minutes 34 seconds West a distance of 819.43 feet to a calculated point; thence South 59 degrees 03 minutes 05 seconds West a distance of 4241.82 feet to a calculated point; thence North 29 degrees 41 minutes 22 seconds West a distance of 20.27 feet to a calculated point; thence North 28 degrees 43 minutes 40 seconds West a distance of 1483.62 feet to a calculated point; thence North 49 degrees 19 minutes 10 seconds East a distance of 156.73 feet to a calculated point; thence North 26 degrees 02 minutes 40 seconds West a distance of 847.54 feet to a calculated point; thence North 66 degrees 05 minutes 04 seconds East a distance of 75.19 feet to a calculated point; thence North 29 degrees 56 minutes 49 seconds West a distance of 287.21 feet to a calculated point; thence North 66 degrees 53 minutes 49 seconds West a distance of 103.44 feet to a calculated point; thence North 31 degrees 50 minutes 38 seconds West a distance of 330.57 feet to a calculated point; thence South 69 degrees 03 minutes 26 seconds West a distance of 42.42 feet to a calculated point; thence South 63 degrees 50 minutes 51 seconds West a distance of 100.99 feet to a calculated point; thence North 28 degrees 34 minutes 06 seconds West a distance of 880.59 feet to a calculated point; thence North 28 degrees 35 minutes 32 seconds West a distance of 786.74 feet to a calculated point; thence North 02 degrees 40 minutes 30 seconds West a distance of 134.26 feet to a calculated point; thence North 88 degrees 20 minutes 23 seconds East a distance of 600.24 feet to a calculated point; thence North 00 degree 58 minutes 59 seconds West a distance of 626.56 feet to a calculated point; thence North 89 degrees 08 minutes 38 seconds East a distance of 324.43 feet to a calculated point; thence South 82 degrees 57 minutes 21 seconds East a distance of 247.75 feet to a

calculated point; thence North 89 degrees 48 minutes 09 seconds East a distance of 200.77 feet to a calculated point; thence North 83 degrees 13 minutes 49 seconds East a distance of 268.03 feet to a calculated point; thence North 62 degrees 53 minutes 28 seconds East a distance of 296.45 feet to a calculated point; thence South 88 degrees 17 minutes 55 seconds East a distance of 284.59 feet to the Point of Beginning, consisting of 386.42 acres.

Based on the aforementioned abstract to the indices to said records during said time period, and my update of same through January 15, 2015, it is my opinion that as of said date a good, valid and merchantable title to the hereinabove described property was vested in fee simple in:

CLAUDE COULON JUMONVILLE;

free from mortgages, liens, encumbrances or defects, except:

1. A multiple indebtedness mortgage by Succession of John E. Jumonville, Sr. and Claude Coulon Jumonville, dated February 20, 2003, securing an indebtedness to Peoples Bank and Trust Company of Pointe Coupee, up to a maximum amount of \$50,000,000.00. Said mortgage is filed and recorded under Entry No. 207 of Mortgage Book 324, records of Pointe Coupee Parish, Louisiana. Said mortgage was reinscribed by instrument filed and recorded on December 14, 2012 under Entry No. 096 of Mortgage Book 480, records of said parish.

2. A multiple indebtedness mortgage by Claude Coulon Jumonville, dated February 25, 2004, securing an indebtedness to Peoples Bank and Trust Company of Pointe Coupee, up to a maximum amount of \$50,000,000.00. Said mortgage is filed and recorded under Entry No. 146 of Mortgage Book 347, records of Pointe Coupee Parish, Louisiana. Said mortgage was reinscribed by instrument filed and recorded on December 10, 2013 under Entry No. 122 of Mortgage Book 497, records of said parish.

3. A multiple indebtedness mortgage by Claude Coulon Jumonville, dated December 22, 2005, securing an indebtedness to Peoples Bank and Trust Company of Pointe Coupee, up to a maximum amount of \$50,000,000.00. Said mortgage is filed and recorded under Entry No. 182 of Mortgage Book 378, records of Pointe Coupee Parish, Louisiana.

4. A multiple indebtedness mortgage by Claude Coulon Jumonville, dated October 9, 2012, securing an indebtedness to Peoples Bank and Trust Company of Pointe Coupee, up to a maximum amount of \$50,000,000.00. Said mortgage is filed and recorded under Entry No. 087 of Mortgage Book 477, records of Pointe Coupee Parish, Louisiana.

No opinion is rendered by the undersigned as to the ownership of any oil, gas or other minerals or mineral rights in, on, under or otherwise affecting the hereinabove described property; nor as to any other oil, gas or mineral servitudes, leases or other matters pertaining to said property.

This opinion does not protect you from or against: (1) Any encumbrances, encroachments, boundary line disputes or other matters which may be reflected by an accurate current survey of the subject property; (2) Rights or claims of parties in possession of the subject property not shown by the public records; (3) Any lien, or right to a lien, for services, labor or materials heretofore or hereafter furnished, imposed by law and not shown by the public records; (4) The exercise of governmental zoning authority; (5) The exercise of inheritance rights of illegitimate children; (6) The results or consequences of any fraudulent statements or acts, or acts of forgery, in any way related to ownership of or title to the subject property; (7) Any claim which may be asserted by the State of Louisiana or any other governmental authority to any part of the subject property as being part of the bottom, bed and/or bank of a navigable body of water; (8) The results which may be occasioned by the involuntary or voluntary filing of a petition for bankruptcy by any current, former or future owner of the subject property; or (9) Any other matter which is not shown by the public records.

Should you have any questions or comments about this matter, please give me a call.

With kindest regards, I remain,

Yours truly,



Stephen P. Jewell

ATTACHMENT C

Mitigation Work Plan

ATTACHMENT C: MITIGATION WORK PLAN
 FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
 PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

Contents

I. Bank Property Location 3

II. Objective 3

 A. *Aquatic Resource Type and Functions to be Restored/Enhanced/Preserved*..... 3

 B. *Watershed Contributions*..... 4

III. Site Selection 6

IV. Site Protection Instrument..... 7

V. Baseline Information 7

 A. *Land Use*..... 8

 B. *Soils* 9

 C. *Hydrology*..... 9

 D. *Vegetation*..... 11

VI. Description of Work..... 12

 A. *Soils/Hydrologic Work Plan* 12

 B. *Vegetation* 12

VII. Maintenance Plan 13

VIII. Performance Standards 14

 A. *Initial Success Criteria*..... 14

 B. *Interim Success Criteria* 14

 C. *Long-Term Success Criteria* 15

IX. Monitoring Requirements..... 15

 A. *Permanent circular monitoring stations* 16

 B. *Transects* 16

 C. *Soil Profile*..... 17

 D. *Floristic Survey*..... 17

 E. *Photographs*..... 17

 F. *Qualitative Analysis* 18

 G. *Hydrologic Conditions*..... 18

 H. *Ledgers*..... 18

X. Monitoring Reports..... 18

 A. *As-Built Report*..... 18

 B. *Initial Success Criteria Report* 19

 C. *Interim Success Criteria Report* 20

 D. *Long Term Success Criteria Report*..... 22

XI. Bank Credits 23

 A. *Credit Determination* 23

 B. *Schedule of Credit Availability*..... 24

XII. Adaptive management plan 24

XIII. Long Term Protection and Maintenance 25

XIV. Funding 25

 A. *Construction and Establishment (C&E) Funds*..... 25

 B. *Long Term Maintenance/Management Funds*..... 26

XV. Other Information..... 27

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

Attachment MWP-A-Tables and Figures
Attachment MWP-B-Cost Analysis Report

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

I. Bank Property Location

The center point of the Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One (PRPCMB1 or Bank) is located at latitude 91.408778° North and longitude 30.654693° in Pointe Coupee Parish, Louisiana (Figure 1). The PRPCMB1 is located in the Lower Grand Watershed as identified by the U.S. Geological Survey (USGS) Hydrologic Unit Code (HUC) 08080101 (Figure 2).

Driving directions to the site are as follows:

From the intersection of US Highway 190 and LA Highway 413 (Bayou Poydras Road) in Erwinville, Louisiana, proceed north on LA Highway 413 for 4.8 miles. Turn left onto Highway 416 and travel 0.2 miles. Turn right on Highway 413 and proceed north for 0.5 miles. Turn left on Highway 414 and travel approximately 1.6 miles to Oilfield Road and take a right onto Oil Field Road (private road). At this point there is a locked gate so arrangements must be made with DLS or the Owner prior to further access. From the gate travel approximately 2.4 miles. The PRPCMB1 is on the northeast side of the unimproved road.

II. Objective

A. Aquatic Resource Type and Functions to be Restored/Enhanced/Preserved

This Bank will re-establish¹ 361.9 acres of bottomland hardwood forest (BLH) and 6.6 acres of baldcypress (*Taxodium distichum*) swamp (Swamp) and will rehabilitate² 12.1 acres of BLH and 5.8 acres of Swamp.

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), BLH 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 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. Baldcypress swamps are forested, alluvial swamps growing on intermittently exposed soils. The soils are inundated or saturated by surface water or groundwater on a nearly permanent basis throughout the growing season except during periods of extreme drought. Bayous commonly intersect these

¹ Re-establishment is defined in 33 CFR 332.2 as the manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Re-establishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

² Rehabilitation is defined in 33 CFR 332.2 as the manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

wetlands. There is a low floristic diversity. Baldcypress is the dominant overstory species³. Many aquatic food webs depend on the input of allochthonous material in the form of leaf litter or other organic debris that the wetland forest provides. Net primary productivity of swamp forests seems to be increased by periodic flooding or increased water flow and decreased by slow water movement or stagnation.

B. Watershed Contributions

1. Watershed Need

The PRPCMB1 is located within the 29,555-square mile Mississippi Delta Cotton and Feed Grains Region Land Resource Region (LRR O) of the 38,865-square mile Southern Mississippi River Alluvium Major Land Resource Area (MLRA 131A), the Mississippi Alluvial Plain Level 3 Ecoregion and Southern Holocene Meander Belts Level 4 Ecoregion (Natural Resources Conservation Service [NRCS] 2006, Omernik 1987, Environmental Protection Agency [EPA] 2003). The PRPCMB1 is also located in 838,000-acre Atchafalaya Trace State Heritage Area as designated by the Louisiana Legislature (R.S. 24:1221-1225). The region was designated as a National Heritage Area by the National Park Service (NPS) in 2006 due to its concentration of significant natural, scenic, cultural, historic and recreational resources (Atchafalaya National Heritage Area 2012).

The PRPCMB1 is in the upper reach of the Barataria-Terrebonne estuary complex (Figure 3). The Barataria-Terrebonne National Estuary Program (BTNEP) was established in 1990 by the State of Louisiana and the EPA for the purpose of preserving, protecting and restoring this estuary complex.

The PRPCMB1 is located between the present channel of the Mississippi River and False River, an oxbow lake which was once the main course of the Mississippi River. This area is locally known as the Island. The entirety of this land area drains into False River and is located in the USGS eight-digit HUC 08070300 (Lower Grand Watershed). The Lower Grand watershed is the focus of the Upper Terrebonne Basin (UTB) Water Quality Improvement Project, whose goals are to protect water resources and improve quality of impaired waters within the watershed for fish and wildlife, drinking water, and aesthetics. One of the goals of this initiative is to complete the False River Ecosystem Restoration (FRER) Study and Project authorized by Section 206 of the 1996 Water Resources Development Act (WRDA). According to the premise for this study, False River has undergone a decline in water quality as a result of several land use changes over the past 50 years. Large amounts of forestland within the watershed was converted to cropland and other agricultural uses followed by the construction of over 50 miles of drainage ditches from adjacent pastureland. This

³ The above-referenced and all subsequent scientific plant nomenclature are derived from Lichvar et. al. (2014).

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

resulted in siltation, nutrient loading, and pollutants entering the False River from adjacent agricultural lands (Earth Consulting Group 2007, Earth Consulting Group et al. 2009; Chustz 2012). Of particular concern are the high levels of sediment deposition into False River (Jones 2012, LDNR 2012 and Thibaut 2012).

2. Watershed Benefits

Restoration⁴ of forested habitat on the Island through programs such as mitigation banking have been recognized as beneficial components to achieve the goals of the FRAER Project (Chustz 2012; False River Watershed Council 2013). LDNR and LDWF (2012²) purported that the establishment of the Bank would further address the sedimentation issues associated with runoff from agricultural lands. Elimination of the artificial drains within the Bank described in Section VI of this Mitigation Work Plan (MWP) is consistent with the mid-term goal of the FRAER Project. This goal calls for action to reduce siltation and turbidity in False River through hydromodification of the drainage network (LDNR and LDWF 2012²). The restoration and protection of forested wetlands within the Bank will provide additional wetland functions and values that are currently not realized. Improved water quality will be achieved by ceasing hay/livestock production, re-establishing natural drainage patterns, and afforestation. The increase in water quality will result from removing the cattle and eliminating the agricultural practices utilized for producing grazing forage and hay. Agricultural practices such as seasonal tilling for mechanical vegetation control and the application of herbicides, pesticides and fertilizers will no longer be necessary and will reduce potential, non-point source pollution (e.g., soil erosion and chemical runoff).

The long-term goals of the FRAER Project are to develop and implement a watershed management strategy, establish best management practices (BMPs), develop a watershed conservation plan and investigate the acquisition of conservation easements (LDNR and LDWF 2012²). A House Concurrent Resolution (No. 123) was presented to the Louisiana Legislature during the 2012 session to establish the False River Watershed Council to implement a comprehensive watershed conservation plan for the False River Watershed (Thibaut 2012). The long-term protection of the Bank with a perpetual conservation servitude, as described in Section X.A of this MBI and Section IV of this MWP, is consistent with the long-term strategies of acquiring conservation easements identified by LDNR and LDWF (2012²).

BTNEP in conjunction with local stakeholders developed the Comprehensive Conservation and Management Plan (CCMP) which outlined 12 goals to accomplish its objective to preserve, protect and restore the Barataria-

⁴ Restoration is defined in 33 CFR 332.2 as the *manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: re-establishment and rehabilitation.*

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

Terrebonne estuary complex. The restoration of the PRPCMB1 is in solidarity with three of the goals set forth in the BTNEP CCMP which are 1) preservation and restoration of wetlands, 2) support for diverse, natural biological communities; 3) to develop and meet water quality standards which protect estuary resources; and 4) to work in conjunction with natural processes (Moore and Rivers 1996).

III. Site Selection

The PRPCMB1 is ecological suitable for providing the desired resource functions described in Section II per the requirements of 33 CFR § 332.3 (c). Soils, hydrologic conditions and elevations are suitable to provide for the restoration of bottomland hardwood and swamp wetland habitat as described in Section II.A. This project will provide additional wetland and ecological functions not currently realized under the existing conditions and land use (e.g. flood storage, reduced run-off, Nearctic-Neotropical bird habitat, threatened and endangered species habitat and habitat for other aquatic fauna). Localized and downstream water quality will improve by retiring the land from agricultural use (i.e., hay/livestock production) and increasing surface water retention time. The surrounding land use and cover within one mile of the PRPCMB1 perimeter is hay/pasture (39%), woody wetlands (31%), cultivated crops (17%), Ponderosa Ranch of Pointe Coupee Mitigation Bank and Permittee-Responsible Mitigation Areas conservation servitudes (13%), scrub-shrub (1%), emergent herbaceous wetlands (<1%) and development (<1%) (Figure 4). These land uses are compatible with the intended habitat to be restored at the PRPCMB1.

The restoration and afforestation of the Bank near larger, extant tracts of bottomland hardwoods will provide benefit to various species of wildlife such as Nearctic-Neotropical migrant birds and threatened species such as the Louisiana black bear (*Ursus americanus luteolus*) (Natural Resources Conservation Service [NRCS] 2005). Approximately 107 bird species, excluding wading birds, nest regularly within the MAV with 70 species utilizing bottomland hardwoods as primary habitat (Twedt et al 1999¹). The Partners in Flight (PIF) Bird Conservation Plan (BCP) for the MAV recommends increasing the interior area of forested fragments to increase habitat for forest-dwelling (silvicolous) bird species (Twedt et al. 1999¹). Twedt and Loesch (1999²) list fourteen forest breeding species as species of high concern. Three of these species are highest priority species for conservation. These are Swainson's warbler (*Limnothlypis swainsonii*), Cerulean warbler (*Dendroica creulea*) and swallow-tailed kites (*Elanoides forficatus*). The planting of densely-spaced seedlings and the management of such species to provide a diversity of structure in areas within largely forested landscapes is an identified strategy to encourage the recruitment of breeding populations of scrub-dwelling (thamnic) and silvicolous bird species (Twedt et al. 1999¹; Twedt et al. 2010). The macrohabitat and microhabitat of the Bank (i.e. ridges and swales; meander scrolls, ridge top depressions) are important to bird conservation because of the high priority forest breeding bird species of importance that are dependent on forested wetlands but vary in microhabitat requirements. The ridge habitats are vital to the three highest

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

priority breeding bird species while the swales are important in providing habitat for migratory waterfowl, wading birds and shorebirds thus integrating all facets of the PIFBCP for the MAV (Twedt et al 1999¹). Promotion of reforestation efforts and the protection of habitat with conservation easements is a documented strategy for bird conservation on private lands in the Barataria and Terrebonne basins (Wiedenfield et al. 1996). Using the spatial analysis model developed by Twedt et al. (2006), the Bank is in a high priority area for the restoration of bird habitat (Figure 5).

The Bank is located in an area designated as a primary conservation zone for the Louisiana black bear (Figure 5). The Bank is located approximately six miles east of extant bottomland hardwoods that are designated as critical habitat by the United States Fish and Wildlife Service (USFWS) for this species⁵. The afforestation of existing agricultural lands within the Bank will provide for larger contiguous forested habitat located near extant forests within the critical habitat area. This would potentially provide for the establishment of a larger forested corridor and potential habitat for bears which may disperse from other forested areas. Corridor conservation and restoration is identified as a strategy to facilitate wildlife and plant migration in response to transitions anticipated with predicted climate change (National Fish, Wildlife and Plants Climate Adaptation Strategy Management Team [Strategy] 2012). In addition to the importance to migratory bird species and the Louisiana black bear, the MMNS (2005) purports that old-growth bottomland hardwood forests are critical habitat for 11 of the 18 species of bats known to the Southeast. Southern myotis (*Myotis austroriparius*) and Rafinesque's big-eared bat (*Corynorhinus rafinesquii*) prefer large, hollow trees in mature bottomland hardwood and swamp habitats, respectively (LMVJV 2007; Taylor 2006). The unique topography of the Bank offers the opportunity to provide habitat with a diversity of hydrological regimes which are critical to the life cycles of many species of reptiles and amphibians. The large size of the Bank in proximity to a larger, extant forested tract also coincides with the large home ranges that most of these species require (Dundee and Rossman 1989; LMVJV 2007).

IV. Site Protection Instrument

A conservation servitude will be utilized as the site protection instrument as described in Section X of the Mitigation Bank Instrument (MBI).

V. Baseline Information

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

⁵ Federal Register Vol. 74, No. 45 titled *Endangered and Threatened Wildlife and Plants; Designation of Critical Habitat of the Louisiana Black Bear (Ursus americanus luteolus)* promulgated as a Final Rule by the US Fish and Wildlife Service on March 10, 2009

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

A. Land Use

1. Historical Land Use

The PRPCMB1 is located within the approximately 24 million-acre lower Mississippi Alluvial Valley (MAV). Prior to European settlement and colonization, the MAV consisted of mostly contiguous bottomland hardwoods and swamps. Today, approximately 20% of the original forested acreage remains in fragmented blocks which, on average, total 158 acres in size (Twedt et al 1999¹). Much of the deforestation stemmed from the need to convert these lands to agricultural uses. The rate of deforestation increased in the 20th Century due to major flood control projects (i.e. major levee construction), advancements in land clearing technology and spikes in the price of agricultural commodities such as soybeans during the 1960s and 1970s (Lower Mississippi River Joint Venture [LMRJV] 2007). The Coastal Wetlands Planning, Protection, and Restoration Act Task Force (CWPPRA 1993) estimates that the historic wetland loss within the Barataria-Terrebonne estuary complex from 1932 to 1990 was 446,971 acres with 45% being in the Terrebonne Basin.

The property was historically a bottomland hardwood and baldcypress wetland forest typical of those associated with ridge and swale formation within the alluvial plain of the lower Mississippi River. Prior to its conversion to agricultural uses, the PRPCMB was located in an area known as “Grand Swamp”. A review of historic aerial photography (Figures 6 through 14) reveals that the PRPCMB1 was a functional wetland forest as recently as 1952. By 1966, the PRPCMB1 was cleared for agricultural production. Significant changes in land use occurred in the early 1970’s when a drainage canal associated with the Gross Tete Watershed Management Project (M-1 Canal) was excavated on the Island by the United States Soil Conservation Service (SCS) (LDNR and LDWF 2012¹). The M-1 Canal traversed the Island and smaller artificial drains were constructed within the Bank and on surrounding property for the purpose of draining the site into the M-1 Canal. These smaller drains were constructed in the bottoms of naturally occurring swales in order to move water into the M-1 Canal via culverts installed within the spoil depositional area of the M-1 Canal. By 1983, approximately 72% of the Island was cleared and in crop production. Since that time, much of the cultivated cropland was replaced by pasture (LDNR and LDWF 2012¹).

3. Current Land Use

Currently, the PRPCMB1 is managed for livestock production. The land use is improved pasture with scattered individual trees occurring throughout the PRPCMB1.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

B. Soils

The soils within the PRPCMB1 and the overall 2,131-acre Jumonville property in which it is located is mapped as Dundee-Alligator complex (De), undulating (NRCS 2014¹, Figure 15). The De map unit is listed as partially hydric (NRCS²). The Alligator component of this map unit is listed as hydric and the Dundee component is listed as nonhydric. The Alligator soils are estimated to comprise 40% of this map unit while Dundee soils are estimated to comprise 50% of this map unit. The remaining 10% are associated soil types such as Commerce, Sharkey and Tunica soils (SCS 1982, NRCS 2014¹). The Alligator soil series was established in 1950 in Quitman County, Mississippi and was updated in 1986. The Dundee soil was established in 1949 in Tunica County, Mississippi and was updated in 2004. The Alligator soils are described as being ponded in depressional areas for brief to very long duration. Dundee soils are described having an apparent water table at 18 inches to 42 inches in undrained conditions and 42 inches to 72 inches when under drainage (NRCS 2014³).

The Sponsor conducted field verifications for hydric soils at six (6) locations within the Bank site for the purpose of obtaining the wetland determination described in Section IV of this MWP. The soil descriptions recorded at these locations showed that the soils were hydric in accordance with the AGCP Regional Supplement (USACE 2010).

C. Hydrology

1. Historical Hydrology and Drainage Patterns

The proposed PRPCMB1 possesses a unique, ridge and swale topography shaped by the historical meandering of the Mississippi River (Figures 16 and 17) (Hodges 1998). Leopold et al (1964) identified these fluvial geomorphological features as *meander scrolls*. Meander scrolls form from the meandering course of a river within a floodplain when point bars are reworked into low ridges and troughs (i.e. swales or chutes). The swales are distinctly wetter than ridges but ridges differ distinctly from natural levees in that the soils trend from coarse-textured soils below to fine-textured soils above (Lindo and Richardson 2001). In areas subject to high precipitation such as Pointe Coupee Parish, these swales typically do not have well defined natural drainage outlets and exist as depressional wetlands (Collins and Kuehl 2001; Schumacher et al. 1998). The property was historically a bottomland hardwood and baldcypress wetland forest typical of those associated with ridge and swale formation within the alluvial plain of the lower Mississippi River.

2. Existing Hydrology and Drainage Patterns

Hydrology on the PRPCMB1 is primarily from a combination of rainfall and water table levels associated with high water events on the nearby Mississippi River. Cumulative annual precipitation is 62.13 inches per year with the highest rainfall occurring in the

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

months of December, January, April and July and the lowest rainfall occurring in October⁶. Nearby river gage data show the Mississippi River's average stage was 27.3 feet NAVD since March 2009⁷ with a high of 53.32 feet (May 18, 2011) and a low of 6.27 feet (December 8, 2012). Although the PRPCMB1 no longer receives surface flows from the Mississippi River due to the mainline levee, it is likely that the river levels and discharges affect the subsurface hydrology of the PRPCMB1 through hydrostatic pressure. At high flows, water can move through underlying coarser-textured sediments which may elevate the subsurface water tables and provide a hydrological connection in riparian floodplain systems (Ritter 1986; Cabezas et al [2011]). This is especially common on fine-textured features located in close proximity to coarse-textured features such as point bars and natural levees (Gee 2012). These events are known to this area as evidenced by the numerous artesian wells that have been installed at the base of the protected side of the western mainline levee along LA Hwy 415. These wells are to prevent saturation of the soils beneath the levee which are associated with these subsurface flows.

The unique topography and meander scroll features found on the PRPCMB1 can influence site hydrology. The ridges in this system are typically convergent in nature and tend to accumulate water and infiltration within the swale features which maximizes ground water recharge. The result is typically higher water tables with hydric zones extending further upslope especially in areas subject to high precipitation (Schoeneberger et al. 1998; Richardson et al. 2001). Jenkinson et al (2002) noted water table patterns in an undulating site with randomly arranged swales in a forested till plain site in western central Indiana which had seasonal high water tables. The wetter and more poorly drained sites were located at higher elevations and better drained sites at low elevations. Jenkinson et al (2002) theorized that the wetter sites had dense, impervious layers which perched water and caused it to move laterally toward the hill slopes. At that point subsurface water moved down the slope and discharged as a hill side seep and accumulated in the low positioned swales. Brinson et al. 1995 quantify meander scroll macrotopography as having the highest functional value (1.0) within the riverine Hydrogeomorphic Model (HGM) for its ability to detain long-term surface water for long durations. This result is replenished soil moisture, sediment and nutrient removal, habitat for pool-dependent species, and vegetation composition maintenance.

During the conversion from a forested wetland to agricultural uses, hydrologic modifications such as ditching, culverts and channelization of natural swales were implemented for efficiently moving water off the site and into the M-1 Canal. These ditches and drains remain in place to move water off-site to limit the horizontal, vertical and temporal extent of ponding and saturation of the site. These on-site ditches and drains carry water into the M-1 Discharge Canal (Figure 18). The Canal carries these

⁶ Based on Port Allen, Louisiana average rainfall data obtained from the Louisiana State University Southern Regional Climate Center and SCS (1982) data from Old River Control Structure.

⁷ River levels from a US Army Corps of Engineers gage mounted on intake platform at Tembec Pulp and Paper mill at river mile 260.3 approximately 5 miles south of St. Francisville, Louisiana.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

waters to Discharge Bayou and eventually into False River. The thalweg of the M-1 Canal at this location is approximately 10 feet below the average natural elevation of the PRPCMB1 at its deepest part and is approximately 60 feet in width between the tops of bank (Figure 19). The Canal has a left descending bank slope of 2.4:1 and has a cross-sectional area of approximately 395.7 square feet⁸.

D. Vegetation

1. Historical Plant Community

Historically, the site was forested and dominated by species similar to extant forested areas that are adjacent to the Bank. The adjacent forested reference area is dominated by facultative (FAC) and FACW species on the ridges; FAC, FACW and OBL species in transitional areas; and FACW and OBL species in the swales⁹. The ridges consist of tree species such as water oak (*Quercus nigra*), sugarberry (*Celtis laevigata*), American elm (*Ulmus americana*), deciduous holly (*Ilex decidua*) and box elder (*Acer negundo*)¹⁰. The swales are dominated by baldcypress, green ash (*Fraxinus pennsylvanica*), Nuttall oak (*Quercus texana*), Drummond red maple (*Acer rubrum* var. *drummondii*) and planer tree (*Planera aquatica*). Transitional areas are dominated by sweetgum (*Liquidambar styraciflua*), sugarberry, green ash and persimmon (*Diospyros virginiana*). The area is mapped as a Dundee-Alligator complex (NRCS 2014¹, SCS 1982). The NRCS (2014²) describes the Alligator soils in wooded conditions as being in bottomland hardwoods or swamps with species such as baldcypress, ash (*Fraxinus* spp.), tupelo gum (*Nyssa biflora*), Drummond red maple, oaks (*Quercus* spp.), hickories (*Carya* spp.), sweetgum and eastern cottonwood (*Populus deltoides*). The Dundee soils under wooded conditions are bottomland hardwoods dominated by cherrybark oak (*Quercus pagoda*), eastern cottonwood, sweetgum and water oak.

2. Existing Plant Community

Existing vegetation within the pasture areas on-site is typical of managed pastureland and is managed for and dominated primarily by bermudagrass (*Cynodon dactylon*), a facultative upland (FACU) species (Figure 20). Other species occurring within the pasture are spinyfruit buttercup (*Ranunculus muricatus*), southern dewberry (*Rubus trivialis*), Carolina geranium (*Geranium carolinianum*), and curly dock (*Rumex crispus*). Vegetation in existing wetland areas was comprised of species such as smartweed (*Polygonum punctatum*) and common spike-rush (*Eleocharis smallii*). Many of the artificial drains were colonized by giant cutgrass (*Zizaniopsis miliacea*) and common rush (*Juncus effusus*) and in some areas the banks of these drains are lined with tree

⁸ The dimensions were measured by DLS biologists on March 23, 2012.

⁹ The indicators utilized from data points collected are from USFWS (1988) as the data was collected prior to June 1, 2012. All plant indicators utilized after June 1, 2012 will be in accordance with the 2014 National Wetland Plant List (Lichvar et. al. 2014) in accordance with the final notice *Publication of the Final National Wetland Plant List* published in the Federal Register on May 9, 2012 (Vol. 77 No. 90).

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

species dominated by black willow (*Salix nigra*) and Chinese tallowtree (*Triadica sebifera*).

VI. Description of Work

This Bank will provide 374.0 acres of BLH and 12.4 acres of Swamp to compensate for unavoidable wetland impacts for the Lower Grand Watershed area (Figure 2). In order to accomplish this task, the Sponsor shall complete the following soils/hydrologic and habitat work.

A. Soils/Hydrologic Work Plan

To restore wetland hydrology on the PRPCMB1, approximately 41,740 linear feet of drainage ditches designed to carry surface water off site will be swaled with approximately 148,000 cubic yards of *in situ* earthen fill material to restore natural swale conditions. Areas that range from 28 feet to above 29 feet NAVD will be excavated to below 28 feet NAVD by removing approximately 18 inches of material. Approximately 6 inches of topsoil from these excavated areas will be stockpiled on-site and returned to the excavated areas. Approximately 12 inches of the excavated material will be used as earthen fill material to swale the existing agriculture drains within the PRPCMB1.

The nine culverts allowing the drainage of these ditches into the M-1 Canal will be removed and backfilled (Figures 21 through 35).

B. Vegetation

The proposed Bank involves the cessation of livestock operations, restoration of surface hydrology, afforestation, and implementing effective short and long-term management strategies. The implementation of the Bank will restore 386.4 acres of BLH and Swamp habitat as described by LNH (2009) and Lester et al. (2005) (Figure 36 and Table 1). Areas below 24 feet NAVD will be restored as baldcypress swamp. Areas between 24 and 25 feet NAVD will be restored as an overcup-water hickory (Type 1) bottomland hardwood described by LNH (2009). Areas between 25 and 28 feet NAVD and the excavated areas below 28 feet NAVD will both be restored as a hackberry-American elm-green ash (Type 2) and sweetgum-water oak (Type 3) bottomland hardwoods.

All livestock will be removed from the Bank prior to site preparation activities in late summer and early fall. Fencing within the interior of Bank will be removed and new fencing will be constructed between the boundary of the Bank and adjacent pasture where livestock grazing will continue as a land use. This fence will consist of four strand barbed-wire fencing with the top strand approximately 54 inches above ground level. Site preparation activities within existing pasture areas will be accomplished by preparing the site as needed through herbicide treatments, cultivation, and ripping the soil at equidistant intervals to a depth of approximately 18 inches (Allen et al. 2001). Site preparation efforts

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

will consist of herbicide treatment and subsequent removal of invasive and noxious tree species through mechanized clearing, cutting, shredding or combination thereof.

Afforestation activities will include the planting of native BLH and Swamp species during the first planting season (December 15, 2015 through March 15, 2016) following site preparation. BLH species will be planted on approximate 9-foot centers for a rate of 538 stems per acre (spa) while Swamp species will be planted at a spacing of no more than 12 feet for a minimum rate of 302 spa (Table 2). The species selected will be site-appropriate in terms of habitat design, soil-moisture regime, and species richness and is based upon literature review (LNH 2009, Lester et al. 2005, Burns and Honkala 1990). Ten or more species may be represented in the planting assemblage to insure adequate species richness (Twedt and Best 2004). The distribution of stems will create a mosaic of hard and soft mast species that will provide seasonally available forages for a wide range of indigenous wildlife including the Louisiana black bear (Barrow et al. 2005). The availability of soft mast species is important during the summer and hard mast is critical in the fall and early winter for the build-up of fat reserves in black bears preparing for denning (Black Bear Conservation Committee [BBCC] 2005).

Hard mast species should account for at least 50 to 70% of all BLH plantings with the remaining percentage accounted for by soft mast tree species. The exact species and quantities for planting will be determined by the availability of such species from commercial nurseries providing localized ecotype seedlings. Seedlings will be mixed upon planting so that areas are not comprised of a single species (Twedt and Best 2004).

VII. Maintenance Plan

The Sponsor will use all prudent efforts, physical, chemical, or mechanical, to eliminate existing undesirable/exotic vegetation present such as Chinese tallow on the site during site preparation activities. The Sponsor will continue to monitor the site through annual inspections to document

1. the effectiveness of control efforts and
2. record the extent and degree of invasive species present
3. record the extent and degree of any herbivory damage
4. record the condition and functionality of any hydrological structures

Following such monitoring, invasive species, weed and herbivore control will be implemented as necessary and hydrological structures will be replaced if determined necessary. The Sponsor will maintain boundary lines by mowing.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

VIII. Performance Standards

In order for the Bank to be considered acceptable for mitigating wetland impacts associated with DA permits, the Property will be restored in accordance with the MWP such that it meets wetland criteria as described in the 1987 Corps of Engineers Wetland Delineation Manual (the 1987 Manual) as well as the November 2010 Regional Supplement for the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0. Performance standards (success criteria) used to measure the success of the Bank are provided below.

A. Initial Success Criteria

1. Hydrology: Ground surface elevations must be conducive to establishment and support of hydrophytic vegetation, and re-establishment and maintenance of hydric soil characteristics. To that end, all alterations of the natural topography (ditching, spoil banks, land leveling, bedding, fire breaks, etc) that have affected the duration and extent of surface water have been removed or otherwise rendered ineffective in accordance with this MWP.

2. Vegetation: A minimum of 250 planted seedlings per acre must survive through the end of the second spring following the planting (i.e., Year 1). Those surviving seedlings must be representative both in species composition and percentage identified in this MWP. This criterion will apply to initial plantings, as well as, any subsequent replanting that may be needed to meet this requirement.

B. Interim Success Criteria

1. Hydrology: By Year 3 (two years following attainment of the one-year survivorship criteria) site hydrology will be restored such that the Bank meets the wetland criterion as described in the 1987 Manual as well as the November 2010 Regional Supplement to the Corps of Engineers wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0. Data demonstrating that wetland hydrology has been re-established is to be collected by the Sponsor and submitted to CEMVN in the monitoring report for the interim success criteria

2. Vegetation and Vegetative Plantings: a. For a given planting, a minimum of 250 seedlings/sapling spa must be present (with a 70: 30 or 50: 50 hard mast to soft mast ratio in BLH) at the end of the fourth year (i.e. Year 5) following successful attainment of the one-year survivorship criteria. Trees established through natural recruitment may be included in this tally; however, no less than 125 hard mast-producing spa must be present in BLH areas while no less than 125 baldcypress spa must be present in Swamp areas. Surviving hard mast seedlings must be representative of the species composition and percentage identified in this MWP. Exotic/invasive species may not be included in this tally.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

b. By Year 5 (four years following successful attainment of the one-year survivorship criteria) the Bank and the perimeter will be virtually free (approximately 5% or less on an acre-by-acre basis) of exotic/invasive vegetative species.

c. Developing plant community must exhibit characteristics and diversity indicative of a viable native forested wetland community commensurate with stand age and site conditions by Year 5. Achievement of wetland vegetation dominance is defined as a vegetation community where more than 50% of all dominant species are facultative (FAC) or wetter, excluding FAC- plants, using “routine delineation methods” as described in the 1987 Manual as well as the November 2010 Regional Supplement to the Corps of Engineers wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0.

C. Long-Term Success Criteria

1. Forest canopy coverage exceeds eighty percent of forested land mass as measured by an approved method. Forest canopy species abundance and composition is consistent with the restoration goals identified in the restoration plan and credit assessment methodologies. The long term species composition should fall within the range of 50:50 to 40:60 soft mast to hard mast ratio.

2. When forest canopy coverage exceeds eighty percent, the Bank will be essentially void of exotic/invasive vegetation (all seed-producing trees removed from Bank and perimeter and less than 3% of the understory on an acre per acre basis). An active treatment program will continue as part of the long-term maintenance program.

3. If thinning to maintain or enhance the ecological value of the Bank is determined necessary by the IRT at this time, the Sponsor/Steward will develop a thinning plan in coordination with the IRT. Thinning operations shall be performed by the Sponsor/Steward per the requirements of the thinning plan.

4. The Sponsor will provide documentation that the “Long-Term Maintenance and Protection” escrow account is fully funded.

IX. Monitoring Requirements

The Sponsor agrees to perform all work necessary to monitor the Bank to demonstrate compliance with the success criteria established in this MWP. The Sponsor will monitor the Bank in the spring of each monitoring year using the guidelines in Section VIII of this MWP.

Surveys of permanent monitoring stations will occur in the following time frame:

1. Immediately following planting of the Bank to establish baseline information.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

2. In Year 1, 3, 5 and after achieving interim success criteria, monitoring will occur every 3 years until an average canopy coverage of 80% is established.

3. If thinning is required after successfully achieving the long-term success criteria, the site will be surveyed prior to and following the first thinning operation following plantings.

If monitoring for any given year determines that the Bank is not progressing as expected, monitoring will continue on an annual basis until the Bank successfully meets or exceeds established milestones. After achieving the interim success criteria, monitoring will occur every 3 years until average canopy coverage of 80% is obtained. If thinning is required after successfully achieving the long-term success criteria, the site will be surveyed prior to and following the first thinning operation following plantings.

The survey of the permanent monitoring stations will collect data to evaluate the survival rate of planted vegetation; number, species and growth rates (average heights and diameter). In addition to planted seedlings, surveys will include the number by species of volunteering trees, shrubs and woody vines. Surveys will also collect information regarding colonizing plant species, the wetland plant status (scaled from obligate (OBL) to upland (UPL) of each and the number by species of exotic/noxious specimens.

A. Permanent circular monitoring stations

Immediately following initial planting of the Bank, the Sponsor will randomly establish a permanent circular monitoring station for every 20 acres on the Bank. Each station will have a minimum area of 1/20th acre (radius=26 feet). Stations will be identified with a permanent marker (e.g., an 8-foot PVC pipe anchored with a metal T post at plot center) and GPS coordinates will be recorded for each station. A map will be provided to CEMVN (See Reporting Protocols below) that depicts the location of the monitoring stations as well as a coordinating list containing the coordinates for each station. All individual planted seedlings/saplings falling within each monitoring station will be marked with a numbered tag that uniquely identifies each seedling. A document providing seedling information shall be presented (to CEMVN) for each monitoring station and this document shall not only list the specific tag number for each seedling within the monitoring station, but also the species (by scientific and common name), height, diameter, wetland rating, hard mast or soft mast categorization, and general condition of each stem.

To establish baseline information this data will be obtained immediately following the initial planting of the Bank site or phase of the Bank.

B. Transects

The Sponsor shall establish transects along planted rows to be used to determine overall survivorship of planted seedlings. Transects shall make up approximately 3% of

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

the total number of rows and arranged so that a representative sample of the entire track is obtained. The beginning and ending points of each transect shall be marked with a permanent marker (e.g., an 8-foot PVC pipe anchored with a metal T post) and GPS coordinates shall be recorded for these points.

To establish baseline information transects will be surveyed to determine the number by species of planted seedlings within 60 days of planting. Transects will be surveyed until successful attainment of the interim success criteria. Initial and interim transect surveys shall record the species present, the number of living seedlings for each species, the wetland indicator status of each species, the mast type of each species and describe the general condition of the seedlings. Any failed areas of plantings should be noted along with an explanation for the failure.

C. Soil Profile

The Sponsor will collect data on the hydrologic conditions of the Bank as necessary. Sufficient data shall be provided to accurately demonstrate variations in soil conditions. Information to demonstrate hydric properties within the soil shall be provided as a description of the upper 12 inches of the soil profile. Such data will be presented as points with GPS coordinates for each point, a hydric indication for each point, and an explanation to support the information for each point. This information shall also be provided on a referenced map included as an attachment.

The Sponsor will be required to submit a Corps issued JD (at year 3) to show that the Property meets the wetland criterion as described in the 1987 Manual as well as the Regional Supplement of the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2.0.

D. Floristic Survey

To document the attainment of the long-term success criteria the Sponsor will complete a comprehensive floristic survey for the Bank as part of the monitoring requirements.

A floristic survey should be comprehensive over the entire site, and should be conducted using systematic field techniques. This survey should provide a list of plants and communities existing on the site. If adverse conditions such as disease, drought, predation, or herbivory, etc. exist and have impacted the plantings then this information and these conditions need to be discussed in the report.

E. Photographs

Digital images shall be taken from ground level at each monitoring station and from elevated positions throughout the Bank to document overall conditions. These

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

ground level images should provide a North, South, East and West image for each station.

F. Qualitative Analysis

The Sponsor shall evaluate the entire extent of the Bank (or phase of the Bank that this report represents) and provided observations concerning overall seeding survivorship, colonization of the Bank by volunteer plant species, wildlife utilization and any other information that is pertinent to achievement of initial success criteria.

G. Hydrologic Conditions

A description of the condition of any applicable hydrology altering features (culverts, ditches, plugs, etc.) and a general discussion of hydrologic conditions at monitoring stations shall be provided.

H. Ledgers

The Sponsor will utilize the Regulatory In-Lieu Fee and Bank Information Tracking System (RIBITS) as a ledger to show all transactions. The Sponsor will input the following information: transaction date, permittee name, credits/acres sold and DA permit number. No other reporting measures are required.

X. Monitoring Reports

Independent of the As-built report the Sponsor will submit monitoring reports documenting monitoring efforts at the Bank to the CEMVN by July 31st of the year monitoring occurs. Besides monitoring results for that monitoring year, reports will include a financial assurance report documenting withdrawals and deposits. The monitoring reports will follow the guidelines listed below:

The monitoring report will include data sufficient for comparison to the performance standards found in Section VIII. of this Work Plan. The Sponsor shall also include, in these reports, a discussion of all activities which took place at the Bank.

A. As-Built Report

An as-built report will be submitted to CEMVN within 60 days following completion of all work required to restore or enhance special aquatic sites. The as-built report will describe in detail the work performed and provide a list of species planted, the number of each species, the hard or soft mast categorization, and the wetland rating. No deviation from the MWP may occur without prior approval from the IRT. The as-built report will include a discussion of the coordination with IRT members, a description of and reasons for any approved deviation. The as-built report shall provide:

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

- a. A survey showing finished grades and plantings with written documentation, plan view and cross sectional drawings of all construction and establishment work implemented on the bank.
- b. Survey data collected from the permanent monitoring stations and the transects. This survey data should include the number and species of the seedlings planted, timing of all work events, and maps showing the location (including latitude/longitude) of all monitoring stations as described in this Work Plan.
- c. Detailed descriptions of site preparation, planting procedures, etc.

B. Initial Success Criteria Report

The Sponsor shall monitor the Bank in the spring (March 15-May 31) of its second growing season following initial planting of the Bank. The Sponsor will provide an Initial Success Criteria Report by July 31st of that year.

The Sponsor shall provide details in accordance with this MWP, on any maintenance/management work conducted on the Bank after submission of the As-Built Report. The Sponsor shall provide a brief description of any anticipated maintenance/management work to be conducted prior to attainment of interim success criteria.

1. Vegetation

a. Permanent Circular Plot Data

The Sponsor shall provide plot data in tabular form on all planted seedlings falling within each permanent circular monitoring plot as described and as established in accordance with Section IX. of this MWP. A description of the general condition of the seedlings, including the number and species of surviving seedlings in each monitoring station, the tag number and a discussion of likely causes of mortality for the non-survivors shall be provided. A number (by species) of exotic/invasive species, including, a description of the generalized degree of distribution and whether they are seed bearing trees or seedlings will also be provided.

b. Transect Data

The Sponsor shall provide data in tabular form for the total number of planted seedlings as described in Section IX.B of this MWP. A description of the general condition of the seedlings and the discussion of likely causes of mortality, if appropriate shall also be provided. Exotic/invasive species should be noted along with information on the generalized amount of each and whether they are seed bearing trees or seedlings.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

2. Hydrologic Data

The Sponsor shall provide a description of the condition of any applicable hydrology altering features (culverts, ditches, plugs, etc.) and a general discussion of hydrologic conditions at monitoring stations.

3. Photographs

The Sponsor must submit digital photographs in accordance with Section IX.E. of this MWP.

4. Qualitative Analysis

The Sponsor must provide a qualitative analysis of the site as described in IX.F. of this MWP.

5. Funding

The Sponsor shall provide CEMVN with copies of the most recent financial account statements for both the financial assurance accounts and the Long-term Maintenance and Protection Fund. If any escrowed funds were used, the Sponsor will include a narrative describing that use, the justification for that use and supporting documentation (e.g. receipts). The Sponsor shall also provide any justification for any requested release from financial assurance accounts.

C. Interim Success Criteria Report

The Sponsor shall monitor the Bank in the spring (March 15-May 31) of its third growing season following attainment of the one-year survivorship criteria for the Bank. The Sponsor will provide an Interim Success Criteria Report by July 31st of that year.

1. Vegetation

Note: For a given planting, a minimum of 250 seedlings/saplings per acre must be present at the end of the fourth year (i.e. Year 5) following successful attainment of the one-year survivorship criteria. Trees established through natural recruitment may be included in this tally; however, no less than 125 hard mast-producing seedlings per acre must be present. Surviving hard mast seedlings must be representative of the species composition and percentage identified in this MWP. Exotic/invasive species may not be included in this tally.

a. Permanent Circular Plot Data

The Sponsor shall provide plot data in tabular form on all planted seedlings falling within each permanent circular monitoring plot as described and as established in

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

accordance with Section IX. of this MWP. A description of the general condition of the seedlings, including the number and species of surviving seedlings in each monitoring station, the tag number and a discussion of likely causes of mortality for the non-survivors shall be provided. A number (by species) of exotic/invasive species, including, a description of the generalized degree of distribution and whether they are seed bearing trees or seedlings will also be provided.

b. Transect Data

The Sponsor shall provide data in tabular form for the total number of planted seedlings as described in IX.B of this MWP. A description of the general condition of the seedlings and the discussion of likely causes of mortality, if appropriate shall also be provided. Exotic/invasive species should be noted along with information on the generalized amount of each and whether they are seed bearing trees or seedlings.

2. Hydrologic Data

By Year 3, two years following attainment of the one-year survivorship criteria, the Sponsor **must provide a Corps of Engineers issued wetland determination to prove that site hydrology has been restored** such that the Property meets the wetland criterion as described in the 1987 Manual as well as the November 2010 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2. The Sponsor shall submit a wetland delineation report and a request for a jurisdictional determination to CEMVN.

3. Photographs

The Sponsor must submit digital photographs in accordance with section IX.E. of this MWP.

4. Qualitative Analysis

The Sponsor must provide a qualitative analysis of the site as described in IX.F. of this MWP. The Sponsor shall provide details on any maintenance/management work conduction on the Bank after submission of the Initial Success Criteria Report. The Sponsor shall provide a brief description of any anticipated maintenance/management work to be conducted prior to attainment of long-term success criteria. Note: By year 5, four years following successful attainment of the one-year survivorship criteria, the developing community must exhibit characteristics and diversity indicative of a viable native forested wetland community commensurate with stand age and site conditions; the Bank and the perimeter will be virtually free (approximately 5% or less on an acre-by-acre basis) of exotic/invasive vegetation.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

5. Funding

The Sponsor shall provide CEMVN with copies of the most recent financial account statements for both the financial assurance accounts and the Long-term Maintenance and Protection Fund. If any escrowed funds were used, the Sponsor will include a narrative describing that use, the justification for that use and supporting documentation (e.g. receipts). The Sponsor shall also provide any justification for any requested release from financial assurance accounts.

D. Long Term Success Criteria Report

1. Vegetation

Note: For a given planting, a minimum of 250 seedlings/saplings per acre must be present at the end of the fourth year (i.e. Year 5) following successful attainment of the one-year survivorship criteria. Trees established through natural recruitment may be included in this tally; however, no less than 125 hard mast-producing seedlings per acre must be present. Surviving hard mast seedlings must be representative of the species composition and percentage identified in this MWP. Exotic/invasive species may not be included in this tally.

a. Permanent Circular Plot Data

The Sponsor shall provide plot data in tabular form on all planted seedlings falling within each permanent circular monitoring plot as described and as established in accordance with Section IX. of this MWP. A description of the general condition of the seedlings, including the number and species of surviving seedlings in each monitoring station, the tag number and a discussion of likely causes of mortality for the non-survivors shall be provided. A number (by species) of exotic/invasive species, including, a description of the generalized degree of distribution and whether they are seed bearing trees or seedlings will also be provided.

b. Transect Data

The Sponsor shall provide data in tabular form for the total number of planted seedlings as described in IX.B of this MWP. A description of the general condition of the seedlings and the discussion of likely causes of mortality, if appropriate shall also be provided. Exotic/invasive species should be noted along with information on the generalized amount of each and whether they are seed bearing trees or seedlings.

2. Hydrologic Data

Note: By Year 3, two years following attainment of the one-year survivorship criteria, the Sponsor **must provide a Corps of Engineers issued wetland determination to prove that site hydrology has been restored** such that the

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

Property meets the wetland criterion as described in the 1987 Manual as well as the November 2010 Regional Supplement to the Corps of Engineers wetland Delineation Manual: Atlantic and Gulf Coastal Plain Region Version 2. The Sponsor shall submit a wetland delineation report and a request for a jurisdictional determination to CEMVN.

Provide supporting documentation that the hydrology achieved at year three still exists on the site.

3. Photographs

The Sponsor must submit digital photographs in accordance with section IX.E. of this MWP.

4. Qualitative Analysis

The Sponsor must provide a qualitative analysis of the site as described in IX.F. of this MWP. The Sponsor shall provide details on any maintenance/management work conduction on the Bank after submission of the Initial Success Criteria Report. The Sponsor shall provide a brief description of any anticipated maintenance/management work to be conducted prior to attainment of long-term success criteria. Note: By year 5, four years following successful attainment of the one-year survivorship criteria, the developing community must exhibit characteristics and diversity indicative of a viable native forested wetland community commensurate with stand age and site conditions; the Bank and the perimeter will be virtually free (approximately 3% or less on an acre-by-acre basis) of exotic/invasive vegetation.

5. Funding

The Sponsor shall provide CEMVN with copies of the most recent financial account statements for both the financial assurance accounts and the Long-term Maintenance and Protection Fund. If any escrowed funds were used, the Sponsor will include a narrative describing that use, the justification for that use and supporting documentation (e.g. receipts). The Sponsor shall also provide any justification for any requested release from financial assurance accounts.

XI. Bank Credits

A. Credit Determination

To determine the amount of acres required to offset a particular impact to wetlands, CEMVN will use either best professional judgment or a CEMVN approved assessment method to determine the number of credits per acre available at the bank and the number of credits lost as a result of an impact. The same assessment method will be used to calculate both credits available and credits lost.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

B. Schedule of Credit Availability

Upon submittal of all appropriate documentation by the Sponsor, and subsequent approval by CEMVN in consultation with the IRT, CEMVN will release credits for use by the Sponsor according to the following schedule:

1. Thirty percent (30%) of total anticipated project credits will be available for debiting upon confirmation that all items in Section XI. F (1-7) of the MBI have been completed.
2. An additional twenty percent (20%) of total anticipated credits will be available for debiting upon providing documentation that the vegetative plantings have been conducted and completion of the work necessary to restore site topography and wetland hydrology of the Bank as outlined in Section VI. of this Work Plan.
3. An additional twenty percent (20%) of the total anticipated credits would be released upon successfully completing the initial success criteria (Section VIII. A.)
4. An additional twenty percent (20%) of the total anticipated credits would be released upon successfully completing the interim success criteria (Section VIII B.).
5. The remaining ten percent (10%) of the total anticipated credits would be released once the long-term success criteria (Section VIII. C.) are met.

XII. Adaptive management plan

An adaptive management strategy, contingency, and remedial responsibilities shall be in place, and will be implemented in the event monitoring reveals that certain success criteria have not been met. In the event of a deficiency, the Sponsor shall provide a notice to the CEMVN. This notice shall include an explanation for the deficiency, and will outline specific practices and measures that will guide decisions for revising compensatory mitigation plans if needed.

A. Seedling Survivorship

1. If performance standards are not met as specified in Section VIII of this MWP the Sponsor shall take appropriate actions, as recommended by the CEMVN, to address the causes of mortality and shall replace seedlings of the appropriate species during the following planting season. Replanting, monitoring and reporting, as previously described, shall occur as needed to achieve and document the required survival rate.
2. If the performance standard is not met after three unsuccessful attempts, the CEMVN will convene a meeting with the Sponsor to decide if replanting should continue. Should the CEMVN determine that achieving the required survival rate would not be likely; the Sponsor shall be required to provide replacement mitigation for the

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

increment of value that did not accrue within the unsuccessful areas within one year of this decision.

B. Contingencies for Hydrology

If wetland hydrology is not documented by Year 5, the Sponsor shall document in the monitoring report those areas where attention is needed. The CEMVN may require the Sponsor to conduct adaptive management measures in order to obtain adequate hydrology. With approval of the CEMVN, the Sponsor would establish a means of increasing the amount of available water to the site.

XIII. Long Term Protection and Maintenance

To ensure long-term sustainability of the resource, the Sponsor shall burden the property with a perpetual conservation servitude as described in Section X of this MBI.

XIV. Funding

Section IX. A of this MBI provides specific details about the funding for the Construction and Establishment (C & E) Activities for the Bank.

A. Construction and Establishment (C&E) Funds

1. Estimate of C & E Funds Required

The amount required for a third-party to construct and manage the Bank as specified in this MWP through the first 15 years is estimated at \$579,209.90. The construction cost (Year 0) is estimated at \$446,504.57 and the establishment costs over the first 15 years (Years 1-15) are estimated at \$132,705.33. Attachment MWP-B is an estimate of work and costs requirements for constructing and establishment of the Bank.

2. C&E Funding Mechanism

To fund this account the Sponsor proposes to establish the Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One Construction and Establishment Fund by means of an escrow account.

3. C & E Release Schedule

The Financial assurances shall be reduced as success criteria are achieved and the probability decreases that those funds would be needed according to the following schedule:

1. Upon verification that all hydrologic modifications, construction, and planting as describe in this MWP (Attachment C of the MBI) have been completed to the

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

satisfaction of CEMVN, in consultation with the IRT, CEMVN shall advise the Sponsor and the financial institution that the C & E financial assurance may be reduced to \$132,705.33 (\$579,209.90 – \$446,504.57).

2. Upon verification by CEMVN, in consultation with the IRT, that the initial success criteria have been attained for all tracts to the satisfaction of CEMVN, in consultation with the IRT, CEMVN shall advise the Sponsor and the financial institution that the C & E financial that assurance may be reduced to \$72,347.79 (\$132,705.33 - \$55,226.91).

3. Upon verification by CEMVN, in consultation with the IRT, that the interim success criteria have been attained for all tracts to the satisfaction of CEMVN, in consultation with the IRT, CEMVN shall advise the Sponsor and the financial institution that the C&E financial assurance may be reduced to \$22,537.95 (\$72,347.79 - \$49,809.84).

4. Upon verification by CEMVN, in consultation with the IRT, that the long-term success criteria have been attained for all tracts to the satisfaction of CEMVN, in consultation with the IRT, CEMVN shall notify the Sponsor and the financial institution that the remaining C&E financial assurance may be released to the Sponsor.

B. Long Term Maintenance/Management Funds

1. Long-term Management Needs

Long-term management activities will include, but is not limited to, boundary maintenance approximately every 10 years, annual property tax payment, annual monitoring/inspections.

2. Annual Cost Estimates for Long-Term Needs

The cost of long-term management is \$81,377.80 from year 16 to year 50. This amounts to \$130,643.94 when adjusted for inflation every five years. Attachment B contains a description of the necessary work and an itemization of costs to perform the work for long term management and protection of the Bank.

3. Long-Term Maintenance and Protection Funding Mechanism

To ensure that sufficient funds are available to provide for the perpetual maintenance and protection of the Bank, the Sponsor is establishing the “Long-Term Maintenance and Protection” escrow account. This account will be administered by a federally-insured depository that is “well capitalized” or “adequately capitalized” as defined in Section 38 of the Federal Deposit Insurance Act. The account will be incrementally funded by deposit a minimum of \$347.99 into the account per credit /acre sold at the time of credit sale. The deposit value per credit/acre must reflect, at a minimum, the total fund value divided by no more than 90% of anticipated credits. Once the account is fully funded (\$94,124.28), no incremental fund per credit sale is required.

ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

The account shall be fully funded by the time 70% of the total number of credits are sold or upon successful achievement of the Long-term Success Criteria, whichever occurs first. If the Long-term Success Criteria are met prior to fully funding the escrow account then the Sponsor must deposit into the escrow account the difference between the amount determined to be full funding and the account balance difference between the amount determined to be full funding and the account balance. Documentation that the account is fully funded is a pre-requisite for release of the remaining credits following attainment of the Long-term Success Criteria as identified in this MWP. Accrued interest in excess of the value of the fully funded account may only be used for the administration, operation, maintenance and/or other purposes that directly benefit the Bank. The principal shall not be used and shall remain as part of the Bank's assets to ensure that sufficient funds are available should perpetual maintenance responsibilities be assumed by a third party. The Sponsor or Long-term Steward may withdraw the accumulated interest only with written approval from CEMVN and only to be used to maintain the Bank. The Sponsor shall provide copies of depository account statements to CEMVN upon request and in their monitoring reports.

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ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

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ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

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ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
PONDEROSA RANCH OF POINTE COUPEE MITIGATION BANK AMENDMENT ONE

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ATTACHMENT C: MITIGATION WORK PLAN
FOR BOTTOMLAND HARDWOOD AND BALDCYPRESS SWAMP HABITAT
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ATTACHMENT MWP-A

Tables and Figures

Table 1. Baseline Condition and Proposed Mitigation Habitat and Type at Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One, Pointe Coupee Parish, Louisiana.

Baseline Condition	Proposed Mitigation Habitat and Type¹	Acres
Wetland Pasture	Baldcypress Swamp Rehabilitation (<24 feet NAVD)	5.8
Nonwetland Pasture	Baldcypress Swamp Re-establishment (<24 feet NAVD)	6.6
Wetland Pasture	Type 1 Bottomland Hardwood Rehabilitation (24-25 feet NAVD)	8.1
Nonwetland Pasture	Type 1 Bottomland Hardwood Re-establishment (24-25 feet NAVD)	52.7
Wetland Pasture	Type 2 and 3 Bottomland Hardwood Rehabilitation (25-28 feet NAVD)	4.0
Nonwetland Pasture	Type 2 and 3 Bottomland Hardwood Re-establishment (25-28 feet NAVD)	309.2
	<i>Subtotal: Baldcypress Swamp Restoration</i>	<i>12.4</i>
	<i>Subtotal: Bottomland Hardwood Restoration</i>	<i>374.0</i>
	Total Mitigation Credit Acreage	386.4
	Total Conservation Servitude Acreage	386.4

Table 2. Average Rainfall Records (Inches) and 2014 Rainfall Records for Pointe Coupee Parish, Louisiana.

Month	Average ¹	2014 ²	Deviation
January	5.84	1.57	4.27
February	4.80	8.95	-4.15
March	5.18	4.03	1.15
April	5.87	3.11	2.76
May	5.42	11.2	-5.78
June	4.26	6.54	-2.28
July	5.69	3.08	2.61
August	5.05	5.66	-0.61
September	5.22	5.57	-0.35
October	3.78	1.57	2.21
November	4.90	3.15	1.75
December	6.16	4.67	1.49
<i>Total</i>	<i>62.17</i>	<i>59.1</i>	--

¹ Rainfall records from New Roads, Louisiana data obtained from the Louisiana State University Southern Regional Climate Center and SCS (1982) data from Old River Control Structure.

² January to October 2014 Rainfall records from New Roads, Louisiana data obtained from the Louisiana State University Southern Regional Climate Center.

Table 3. Conceptual Species Planting Composition at Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One, Pointe Coupee Parish, Louisiana.

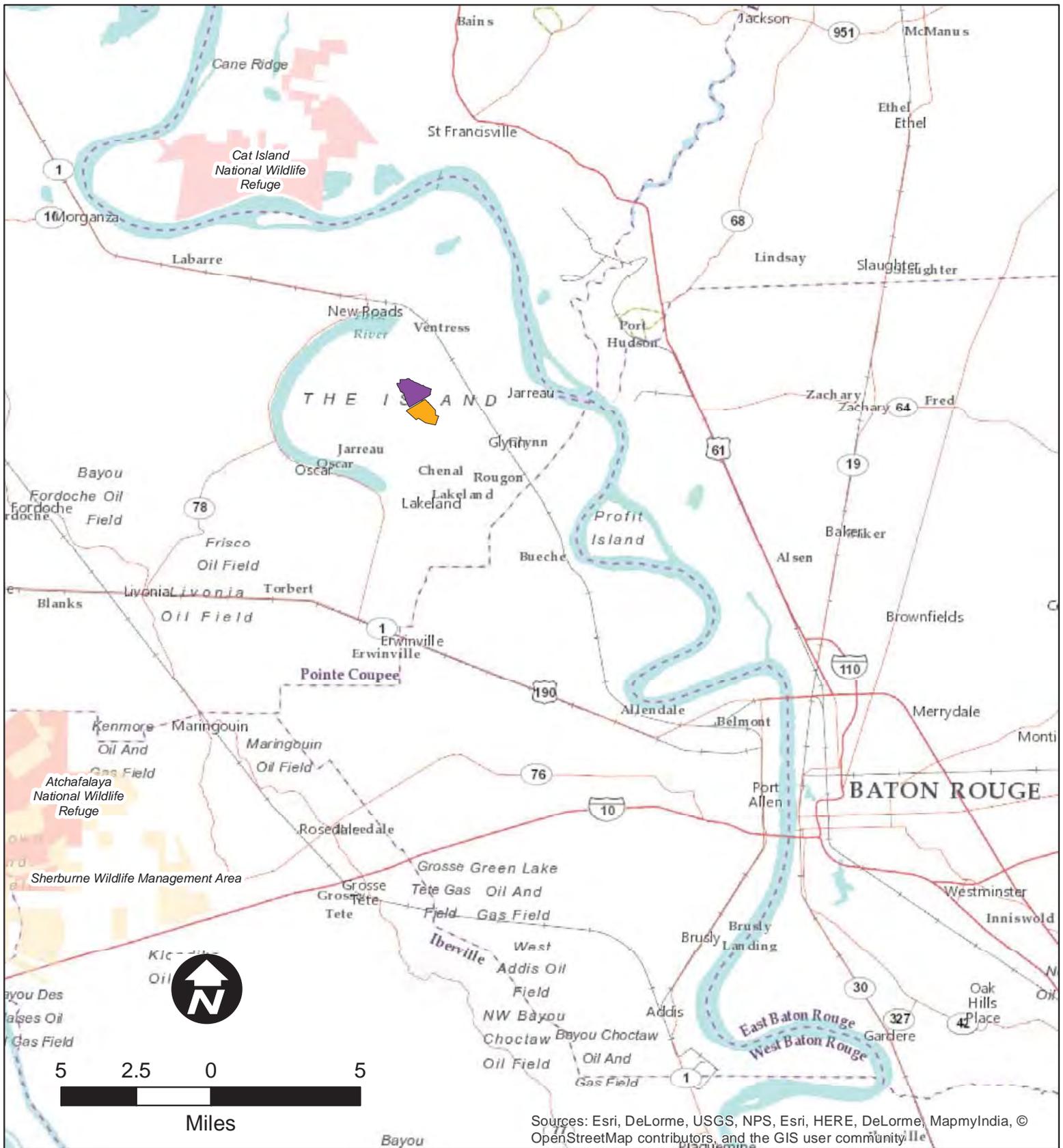
Swamp Species			
Common Name	Scientific Name	Indicator Status¹	Composition²
baldcypress	<i>Taxodium distichum</i>	OBL	50-80%
swamp tupelo	<i>Nyssa biflora</i>	OBL	10-20%
buttonbush	<i>Cephalanthus occidentalis</i>	OBL	<10%
red maple	<i>Acer rubrum</i>	OBL	<10%
Mayhaw	<i>Crataegus opaca</i>	OBL	<10%
Carolina ash	<i>Fraxinus caroliniana</i>	OBL	<10%
pumpkin ash	<i>Fraxinus profunda</i>	OBL	<10%
overcup oak	<i>Quercus lyrata</i>	OBL	<10%
Nuttall oak	<i>Quercus texana</i>	FACW	<5%
Type 1 Bottomland Hardwood Hard Mast Species (approximately 40 to 70%)			
Common Name	Scientific Name	Indicator Status²	Composition
overcup oak	<i>Quercus lyrata</i>	OBL	10-30%
Nuttall oak	<i>Quercus texana</i>	FACW	10-30%
willow oak	<i>Quercus phellos</i>	FACW	10-30%
Delta post oak	<i>Quercus similis</i>	FACW	10-30%
water hickory	<i>Carya aquatica</i>	OBL	10-30%
Type 1 Bottomland Hardwood Soft Mast Species (approximately 30 to 60%)			
Common Name	Scientific Name	Indicator Status	Composition
red maple	<i>Acer rubrum</i>	OBL	<10%
buttonbush	<i>Cephalanthus occidentalis</i>	OBL	<10%
mayhaw	<i>Crataegus opaca</i>	OBL	<10%
green ash	<i>Fraxinus pennsylvanica</i>	FACW	<10%
baldcypress	<i>Taxodium distichum</i>	OBL	50-80%
Type 2 and 3 Bottomland Hardwood Hard Mast Species (approximately 40-70%)³			
Common Name	Scientific Name	Indicator Status	Composition
cow oak	<i>Quercus michauxii</i>	FACW	10-30%
cherrybark oak	<i>Quercus pagoda</i>	FACW	10-30%
willow oak	<i>Quercus phellos</i>	FACW	10-30%
Nuttall oak	<i>Quercus texana</i>	FACW	10-30%
water oak	<i>Quercus nigra</i>	FAC	5-20%
delta post oak	<i>Quercus similis</i>	FACW	5-20%
sweet pecan	<i>Carya illinoensis</i>	FACU ⁴	0-5%
Type 2 and 3 Bottomland Hardwood Soft Mast Species (approximately 30-60%)³			
Common Name	Scientific Name	Indicator Status	Composition
sugarberry	<i>Celtis laevigata</i>	FACW	<10%
common persimmon	<i>Diospyros virginiana</i>	FAC	<10%
green ash	<i>Fraxinus pennsylvanica</i>	FACW	<10%
sweetgum	<i>Liquidambar styraciflua</i>	FAC	<10%
American sycamore	<i>Platanus occidentalis</i>	FACW	<10%
American elm	<i>Ulmus americana</i>	FAC	<10%
red mulberry	<i>Morus rubra</i>	FACU ⁴	<5%

¹ Indicator status from 2012 National Wetland Plant List

² Exact species and quantities to be determined by seedling availability from commercial sources

³ The composition does not include eastern cottonwood (*Populus deltoides*), a FAC species, which will constitute 50% of the total planting as part of the integrated planting method.

⁴ Upland species which are native to the site and will provide habitat value



Sources: Esri, DeLorme, USGS, NPS, Esri, HERE, DeLorme, MapmyIndia, © OpenStreetMap contributors, and the GIS user community

Legend

- Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One (386.4 Acres)
- Ponderosa Ranch of Pointe Coupee Mitigation Bank (323.8 Acres)
- National Wildlife Refuges
- State Lands

Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One

VICINITY MAP

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10	
Approved : DEB	
Date : 12/06/2014	
Map : F01_Vicinity_5mi.mxd	
FIGURE 1	



Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Legend

- Primary Service Area (Lower Grand River Watershed: 08070300)
- Secondary Service Area (West Central LA Coastal Watershed: 08090302)



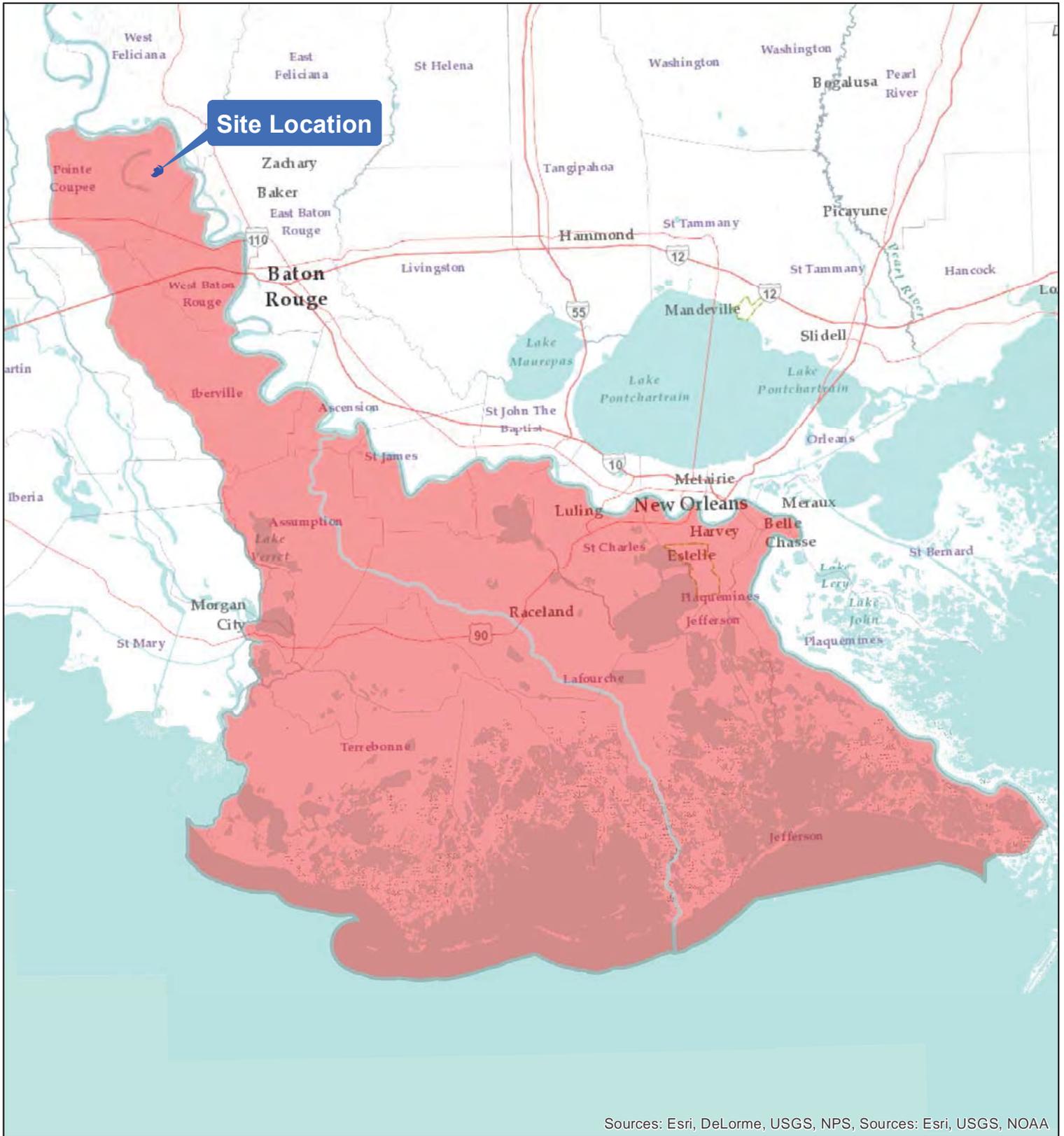
Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One

SERVICE AREA MAP

Pointe Coupee Parish, LA

Created : LJW/ArcView	
Approved : DEB	
Date : 12/05/2014	
Map No. : F02_ServiceArea.mxd	

FIGURE 2



Sources: Esri, DeLorme, USGS, NPS, Sources: Esri, USGS, NOAA

Legend

 Barataria-Terrebonne Basins



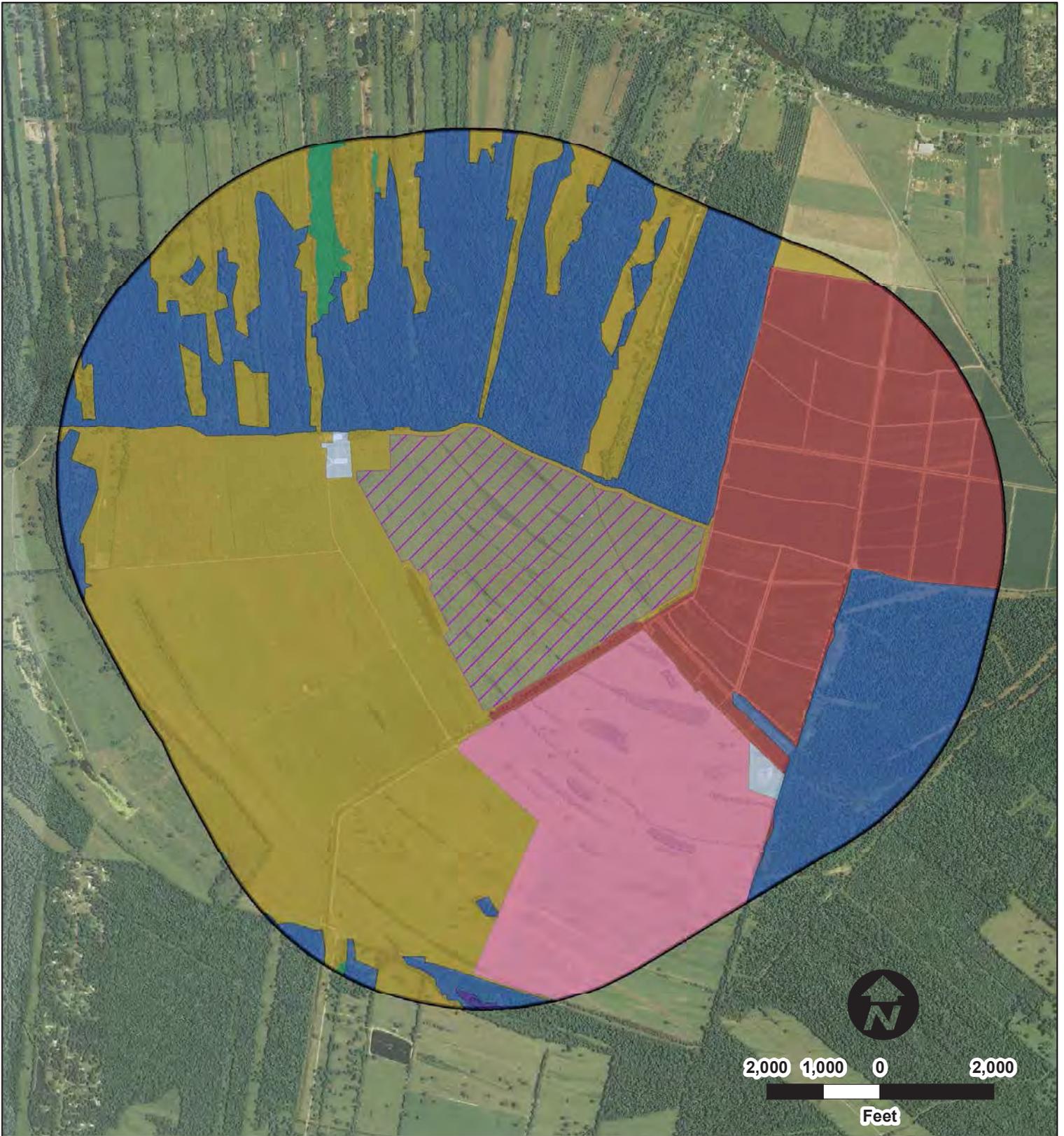
Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One

BARATARIA-TERREBONNE COMPLEX

Pointe Coupee Parish, LA

Created : LJW/ArcView	
Approved : DEB	
Date : 12/06/2014	
Map No. : F02_BTNEP.mxd	

FIGURE 3



Legend

- | | |
|---|--|
|  Project Area (386.4 Acres) |  Conservation Area (13%) |
|  Hay/Pasture (39%) |  Shrub/Scrub (1%) |
|  Woody Wetlands (31%) |  Developed (<1%) |
|  Cultivated Crops (17%) |  Emergent Herbaceous Wetlands (<1%) |

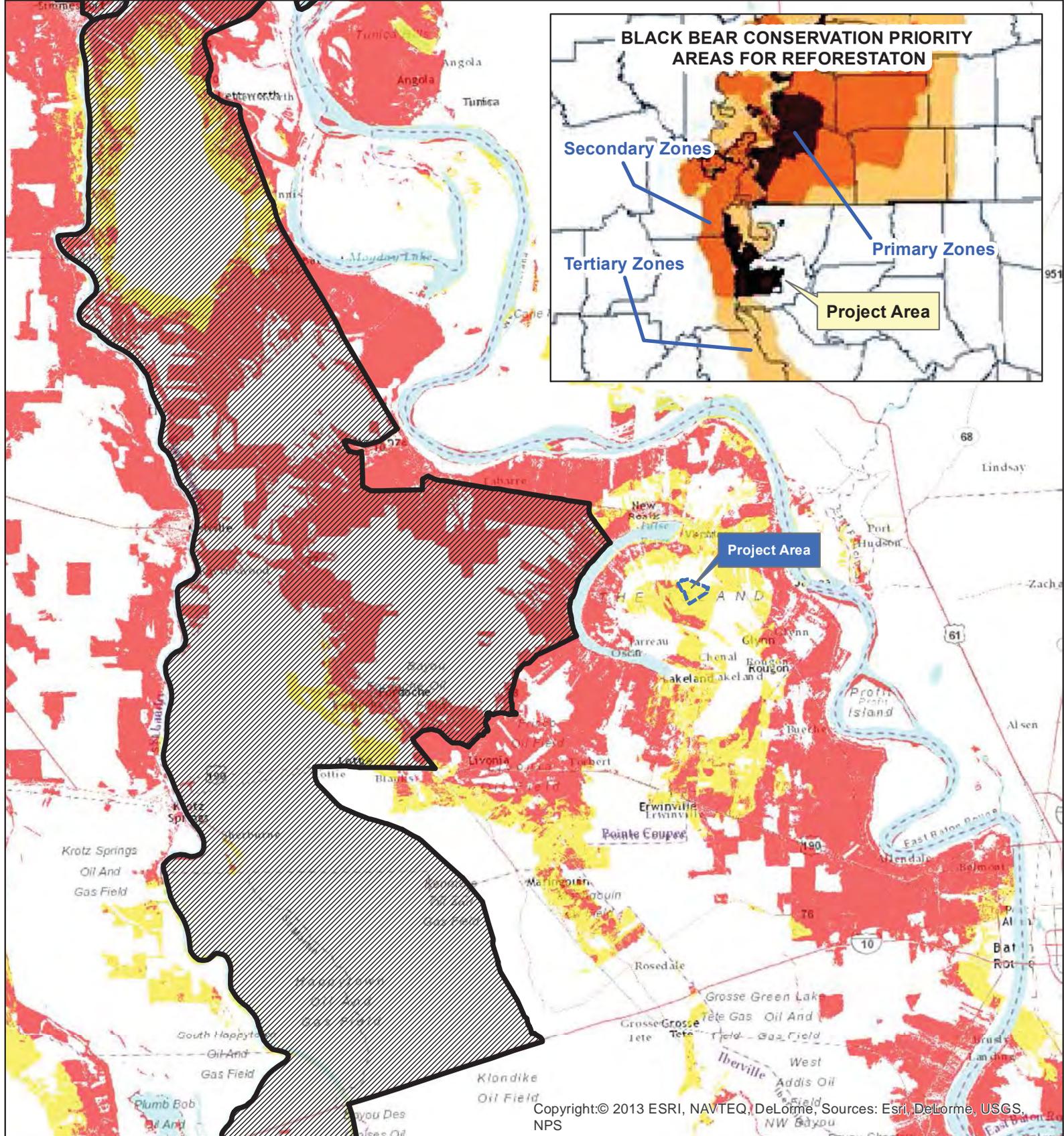
*Based on National Land Cover Dataset

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
SURROUNDING LAND USE WITHIN
ONE-MILE RADIUS**

Pointe Coupee Parish, LA

Created : LJW/ArcView	
Approved : DEB	
Date : 12/16/2014	
Map No. : F04_LandUse.mxd	

FIGURE 4



Copyright:© 2013 ESRI, NAVTEQ, DeLorme, Sources: Esri, DeLorme, USGS, NPS

Legend

-  Louisiana Black Bear Critical Habitat
- Forest Bird Priority Restoration**
-  <80% Priority Restoration
-  80-90% Priority Restoration
-  >90% Priority Restoration





Miles

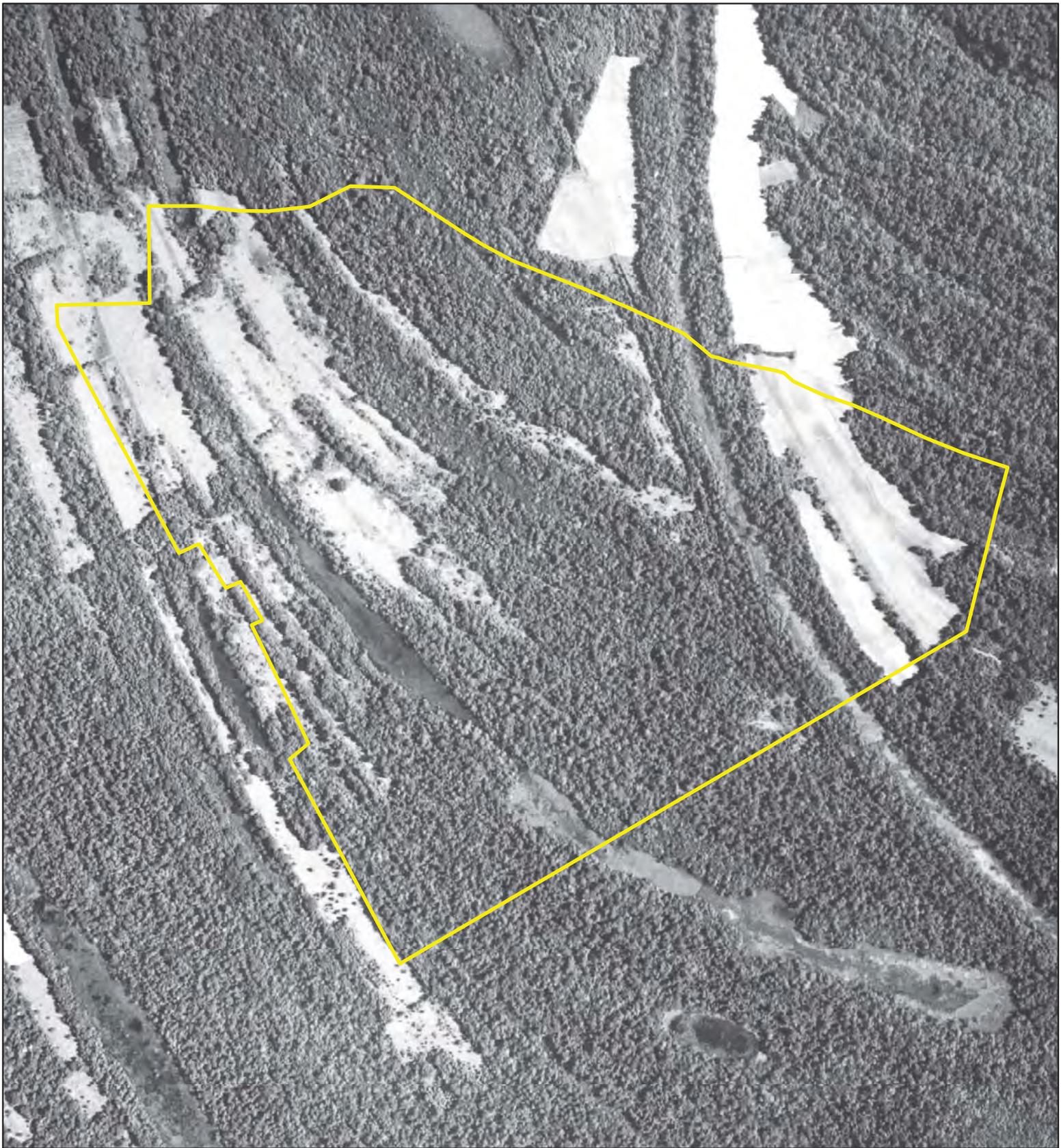
**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

**FOREST BIRD AND LOUISIANA BLACK BEAR
PRIORITY RESTORATION AREAS**

Pointe Coupee Parish, LA

Created : LJW/ArcView	
Approved : DEB	
Date : 12/06/2014	
Map No. : F5_BlackBear.mxd	

FIGURE 5



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
1941 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

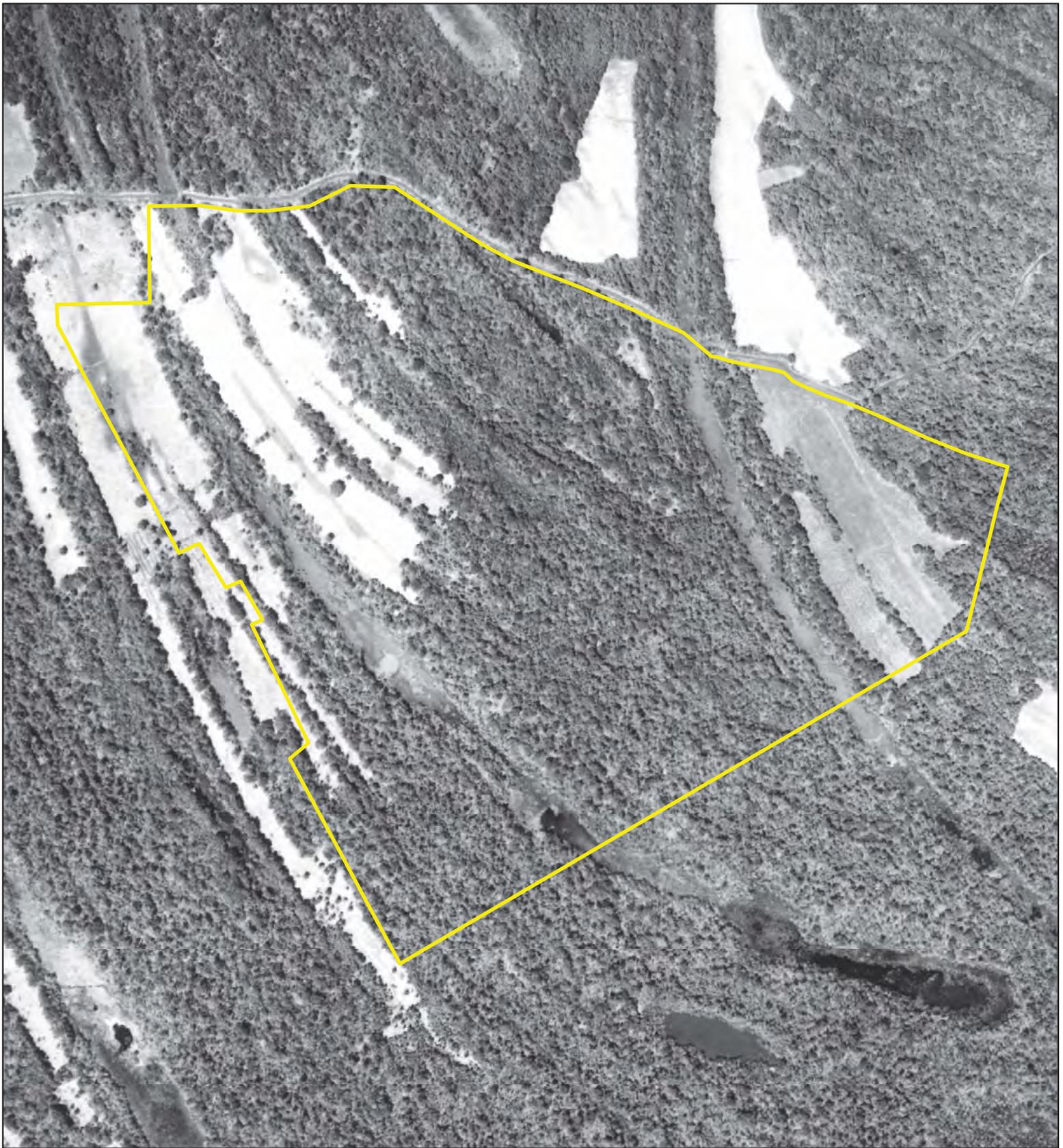
Approved : DEB

Date : 12/05/2014

Map : F06_1941 Aerial.mxd



FIGURE 6



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
1952 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

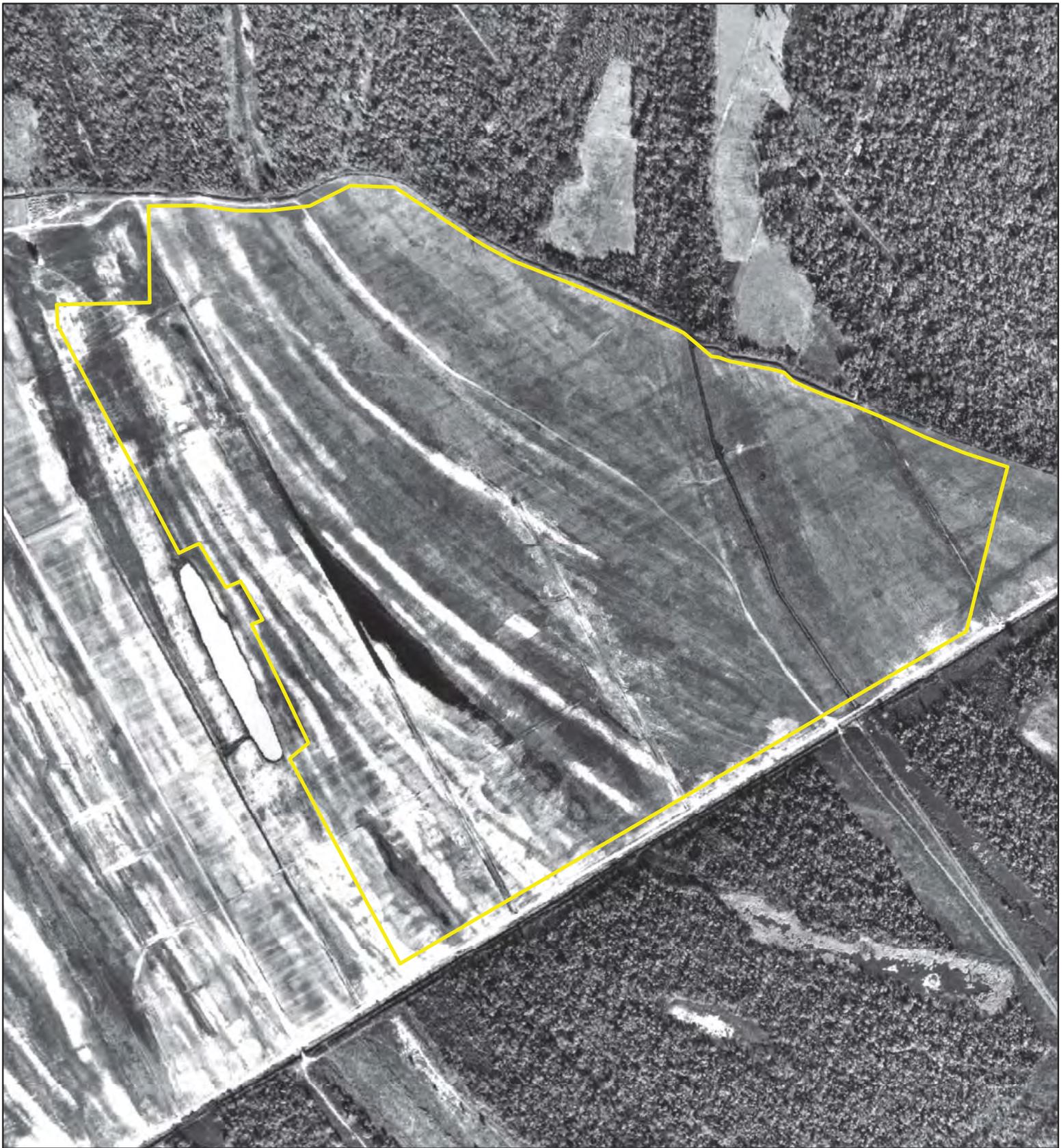
Approved : DEB

Date : 12/05/2014

Map : F07_1952 Aerial.mxd



FIGURE 7



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
1966 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

Approved : DEB

Date : 12/05/2014

Map : F08_1966 Aerial.mxd



FIGURE 8



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
1972 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

Approved : DEB

Date : 12/19/2014

Map : F09_1972 Aerial.mxd



FIGURE 9



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
1983 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

Approved : DEB

Date : 12/05/2014

Map : F10_1983 Aerial.mxd



FIGURE 10



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
1998 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

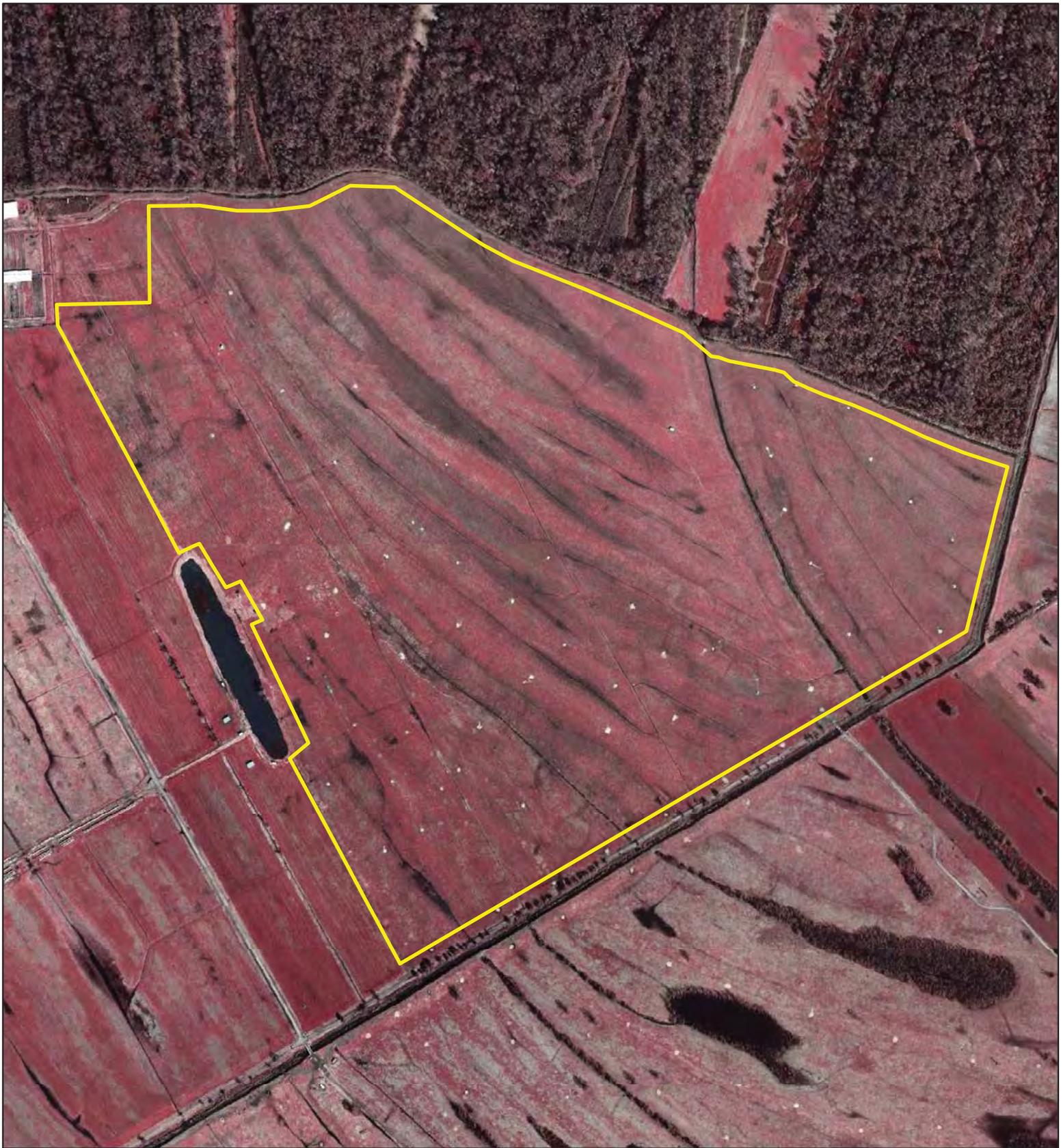
Approved : DEB

Date : 12/05/2014

Map : F11_1998 Aerial.mxd



FIGURE 11



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
2004 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

Approved : DEB

Date : 12/05/2014

Map : F12_2004 Aerial.mxd



FIGURE 12



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
2010 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

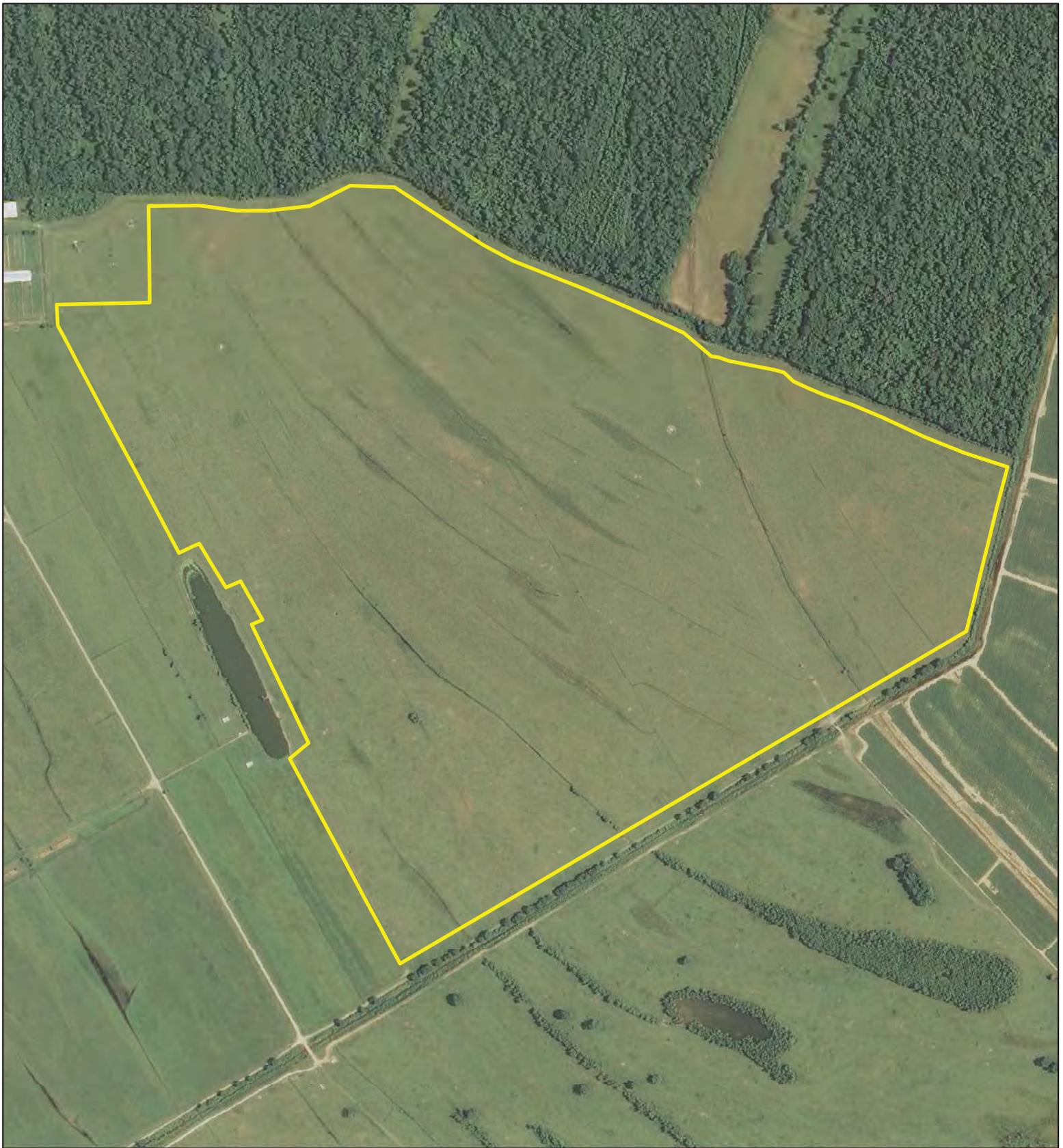
Approved : DEB

Date : 12/05/2014

Map : F13_2010 Aerial.mxd



FIGURE 13



Legend

 Project Area (386.4 Acres)



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
2013 AERIAL PHOTOGRAPH**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

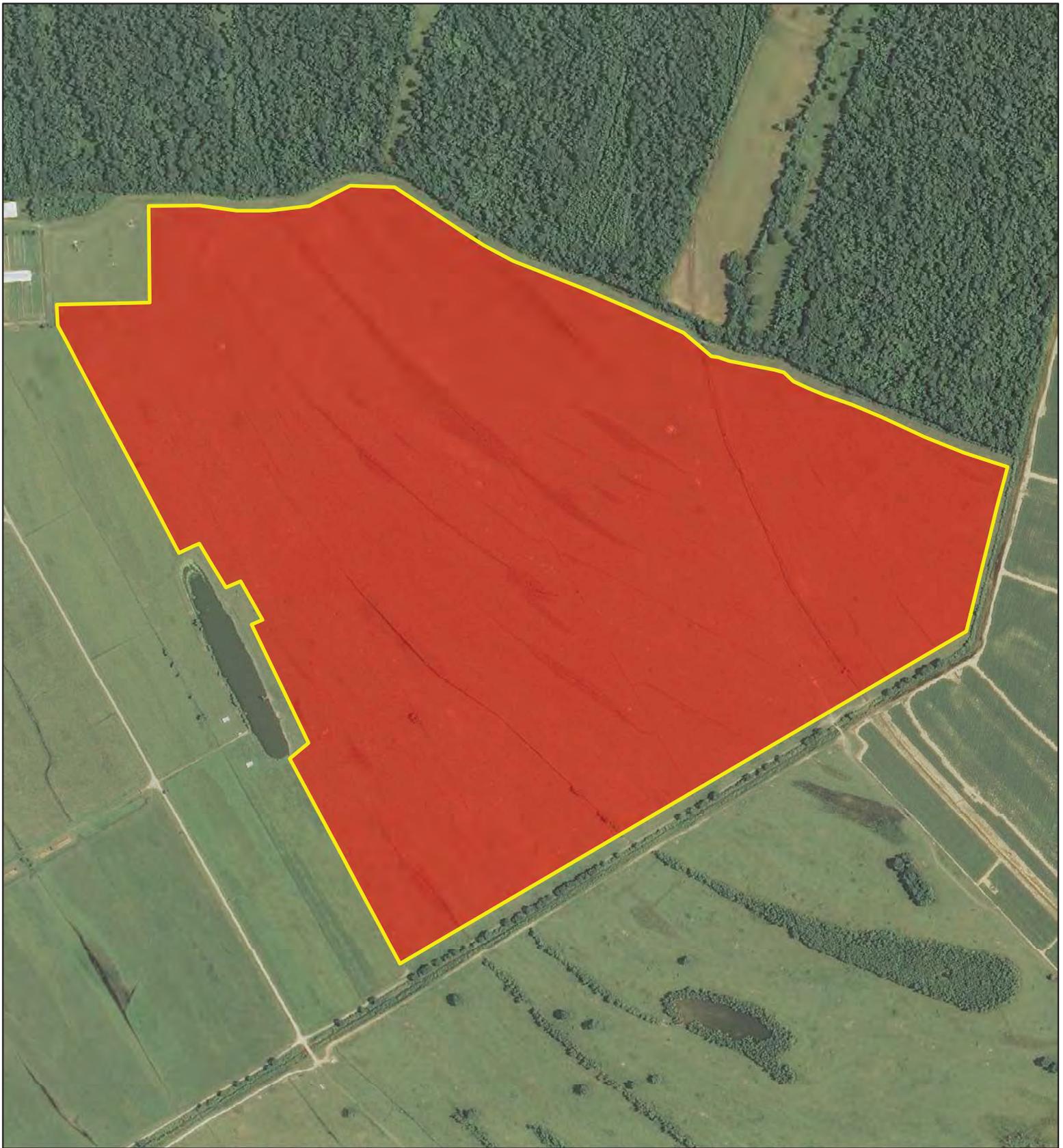
Approved : DEB

Date : 12/05/2014

Map : F14_2013 Aerial.mxd



FIGURE 14



Legend

-  Project Area (386.4 Acres)
-  Dundee-Alligator complex, undulating



1,000 500 0 1,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

NRCS SOILS MAP

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

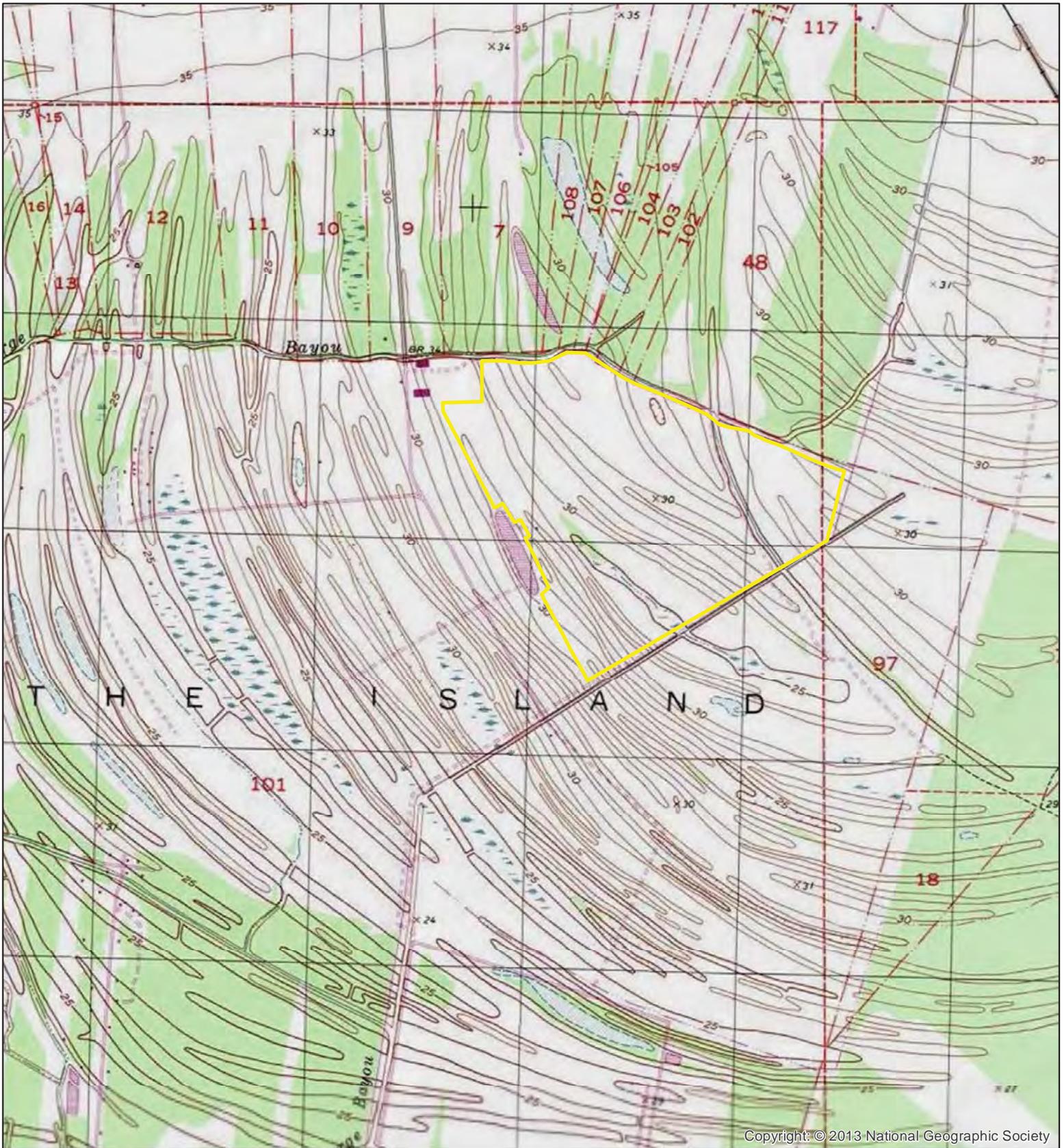
Approved : DEB

Date : 12/05/2014

Map : F15_NRCS Soils.mxd



FIGURE 15



Copyright: © 2013 National Geographic Society

Legend

 Project Area (386.4 Acres)



2,000 1,000 0 2,000



Feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
USGS 7.5-Minute Quadrangle**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

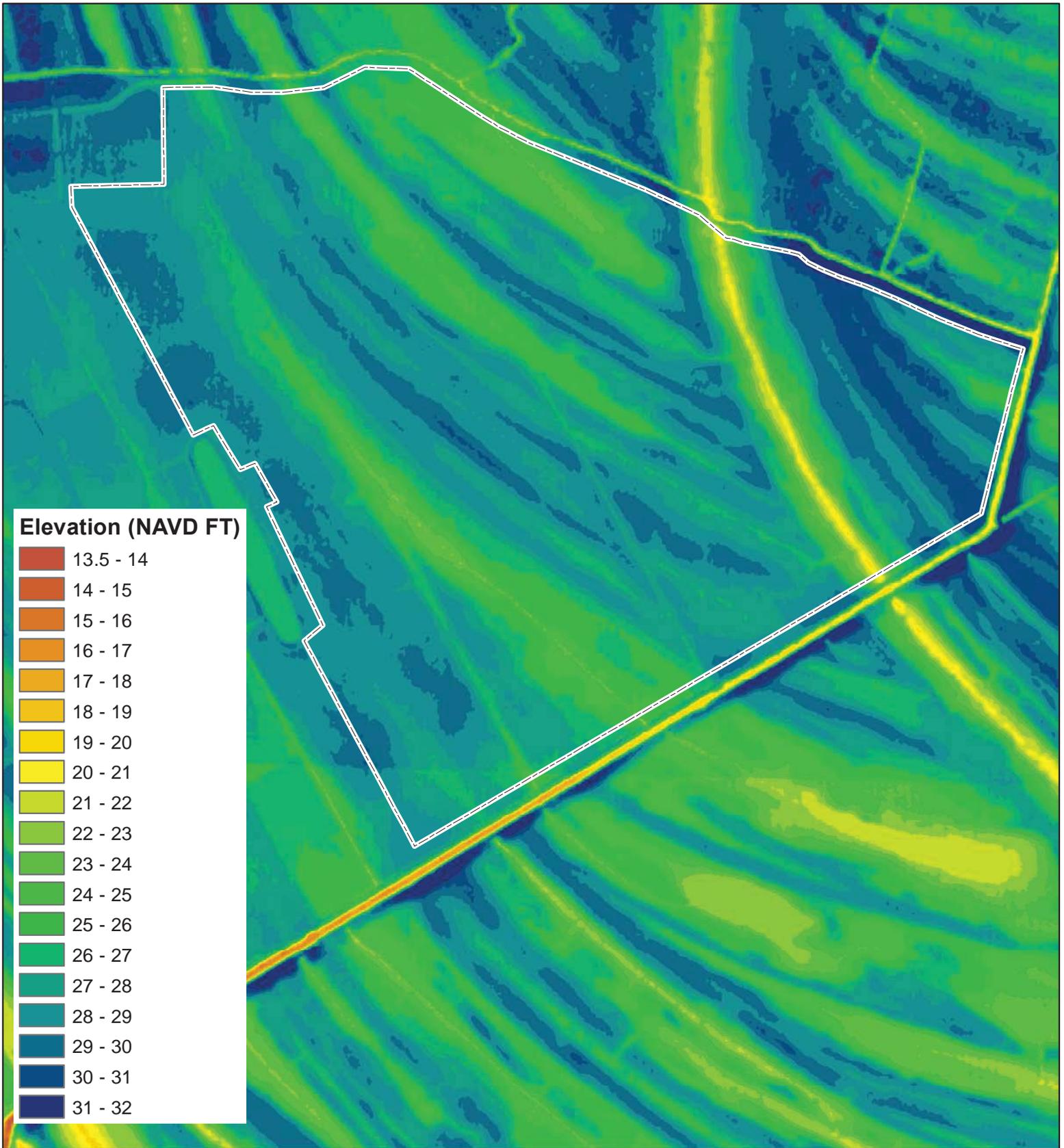
Approved : DEB

Date : 12/04/2014

Map : F16_USGS Quad.mxd



FIGURE 16

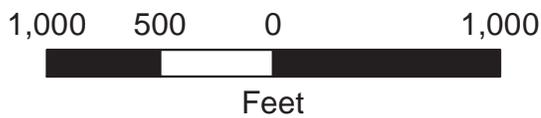


Elevation (NAVD FT)

- 13.5 - 14
- 14 - 15
- 15 - 16
- 16 - 17
- 17 - 18
- 18 - 19
- 19 - 20
- 20 - 21
- 21 - 22
- 22 - 23
- 23 - 24
- 24 - 25
- 25 - 26
- 26 - 27
- 27 - 28
- 28 - 29
- 29 - 30
- 30 - 31
- 31 - 32

Legend

 Project Area (386.4 Acres)



**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
LIDAR Digital Elevation Model**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

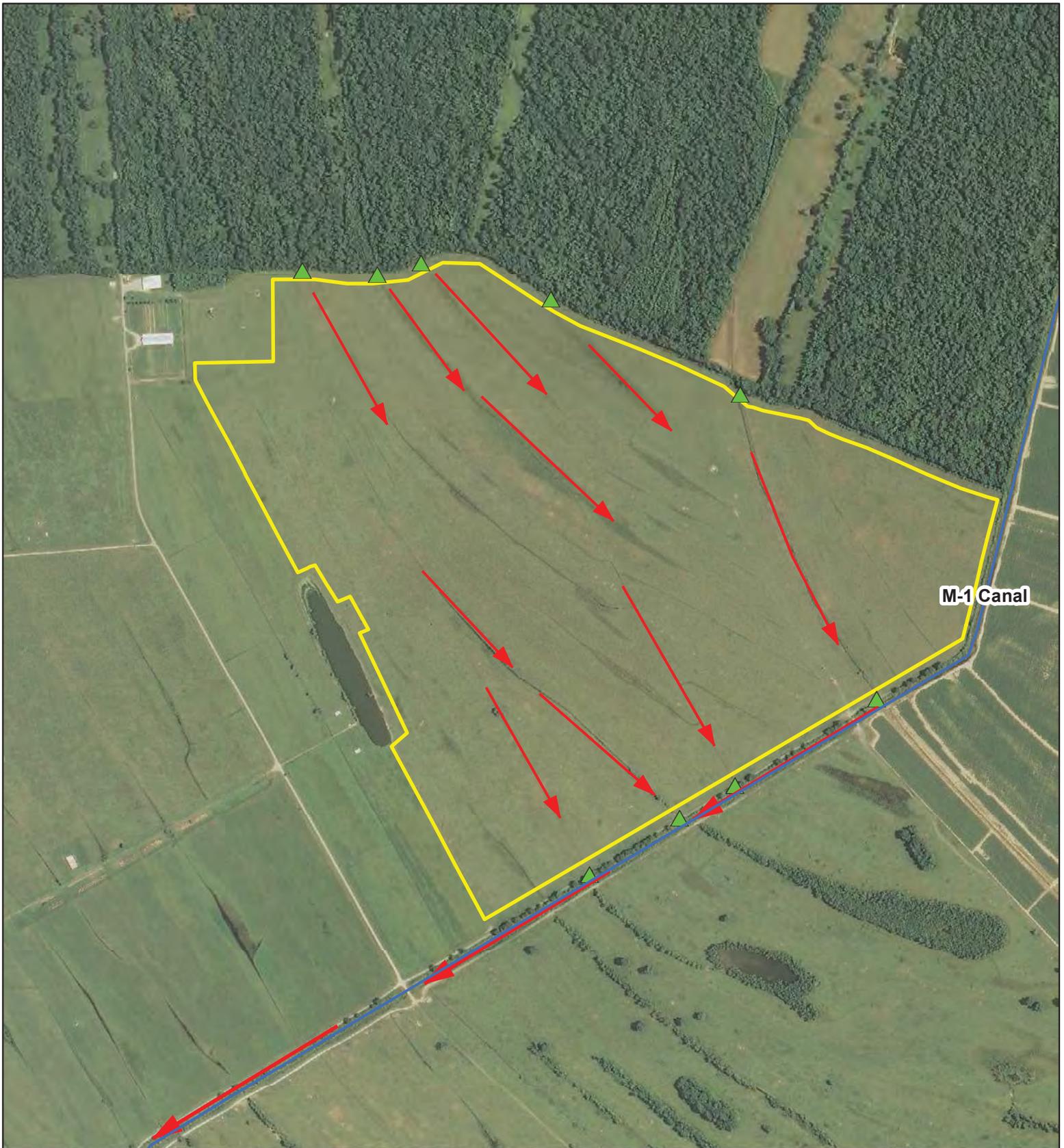
Approved : DEB

Date : 08/28/2014

Map : F17_LIDAR DEM.mxd



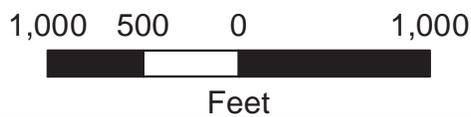
FIGURE 17



M-1 Canal

Legend

-  Project Area (386.4 Acres)
-  Flow Direction
-  Existing Culvert



**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
EXISTING DRAINAGE PATTERNS**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

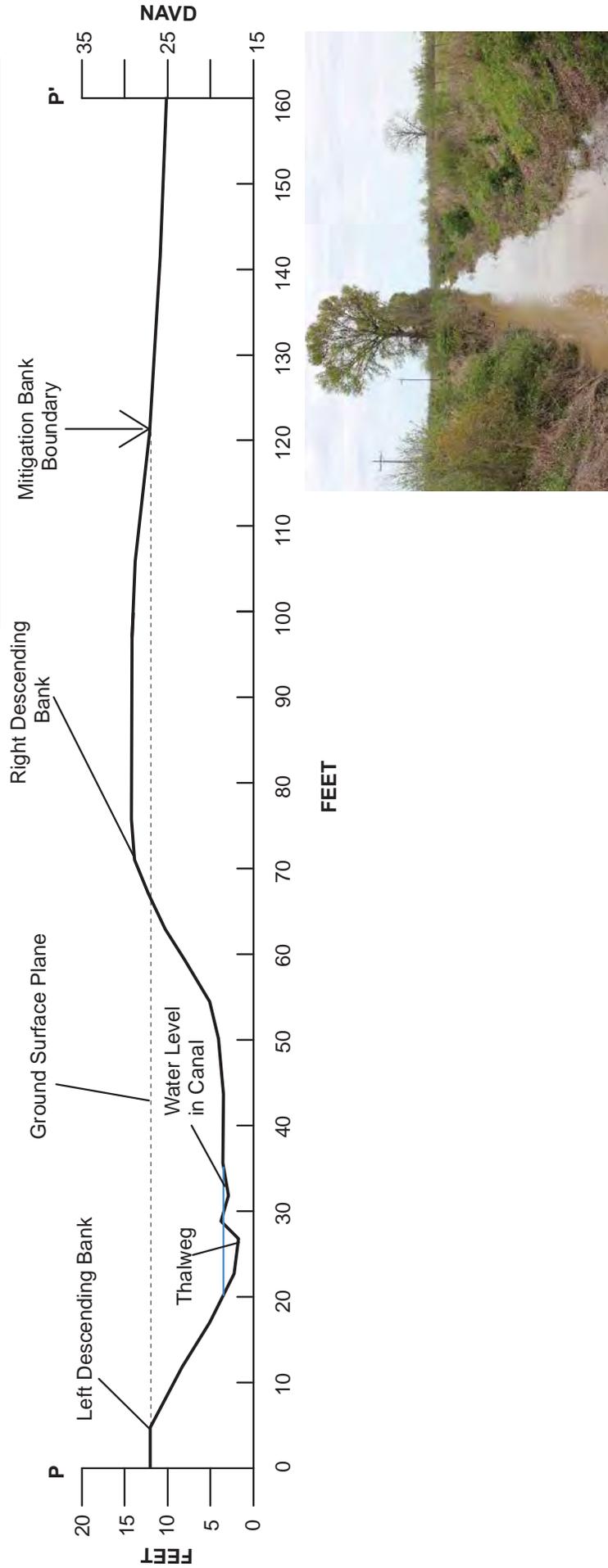
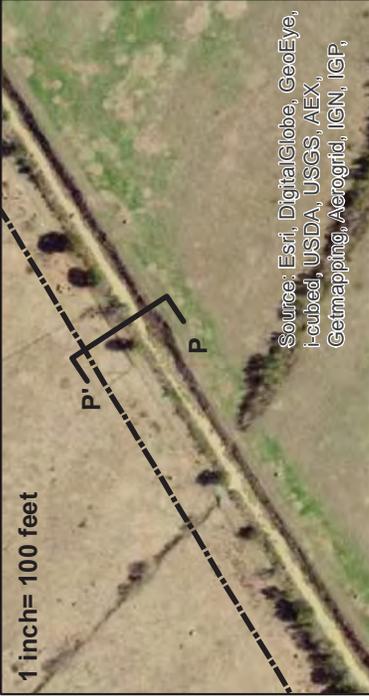
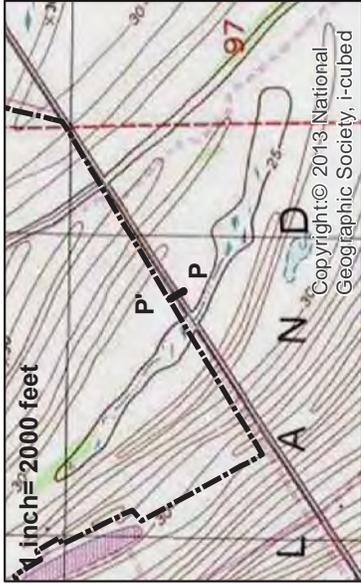
Approved : DEB

Date : 12/04/2014

Map : F18_Existing Drainage.mxd



FIGURE 18



Existing Cross-Section On March 23, 2012

Notes:

1. Depth from Ground Surface Plane to Ditch Thalweg= 10.2 feet
2. Depth from Ground Surface Plane to Water Level in Discharge Canal= 8.4 feet
3. Top Bank to Top Bank Width=66 feet
4. Ditch Bottom at Thalweg= 16.7 feet NAVD
5. Ground Surface Plane= 26.9 feet NAVD
6. Right Descending Bank Slope= 1.8:1 (54%)
7. Left Descending Bank Slope= 2.4:1 (42%)
8. Cross Sectional Area Below Ground Surface Plane= 395.7 square feet

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

DIMENSIONS OF M-1 CANAL

Pointe Coupee Parish, LA

Created : TSC/ArcView

Approved : DEB

Date : 12/12/2014

Map No. : F19_M1Canal.mxd

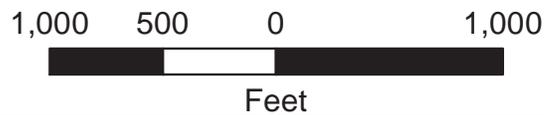


FIGURE 19



Legend

-  Project Area (386.4 Acres)
-  Improved Pasture



**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One
EXISTING PLANT COMMUNITY**

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

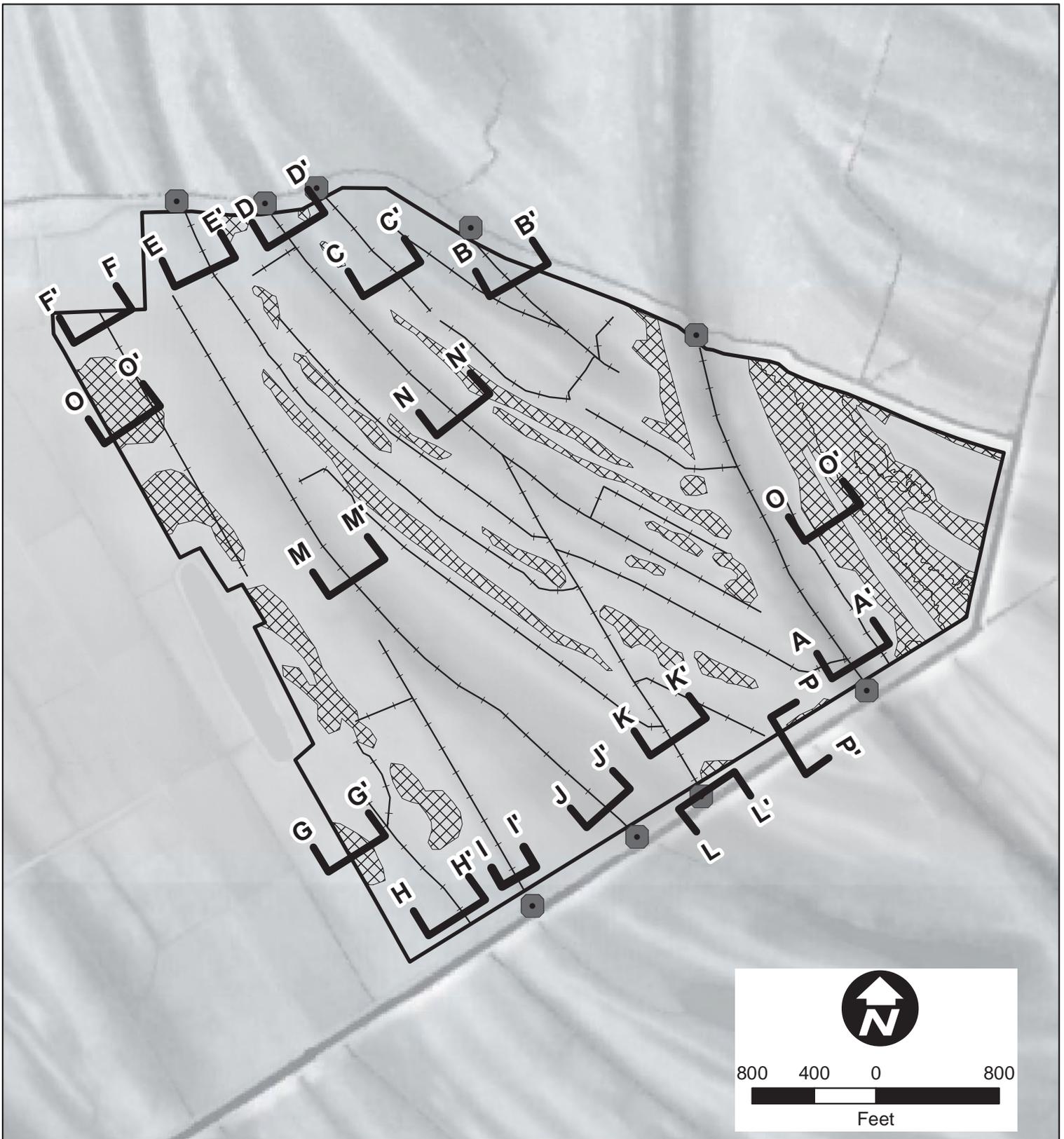
Approved : DEB

Date : 12/19/2014

Map : F20_Plant Community.mxd



FIGURE 20



Legend

-  Project Area (386.4 ac)
-  Areas to be Excavated (See Cross Section O-O' for typical excavation)
-  Culverts to be Removed (See Cross Section L-K for typical culvert removal and backfilling)

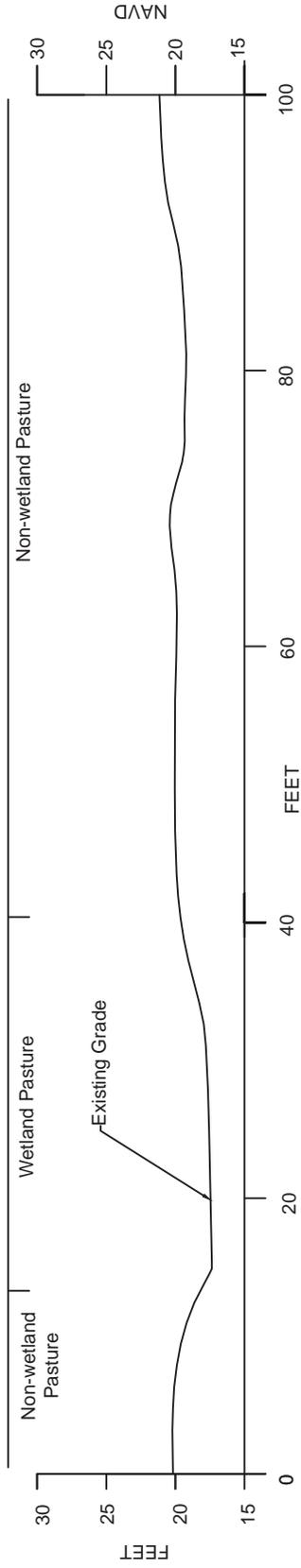
Notes:
 All culverts are to be removed and backfilled.

**Ponderosa Ranch of Pointe Coupee
 Mitigation Bank Amendment One
 PRE AND POST RESTORATION
 PLAN VIEW
 Pointe Coupee Parish, LA**

Created : TSC/ArcView	
Approved : LJW	
Date : 12/18/2014	
Map No. : F21_ExistingPlanView.mxd	
FIGURE 21	

A

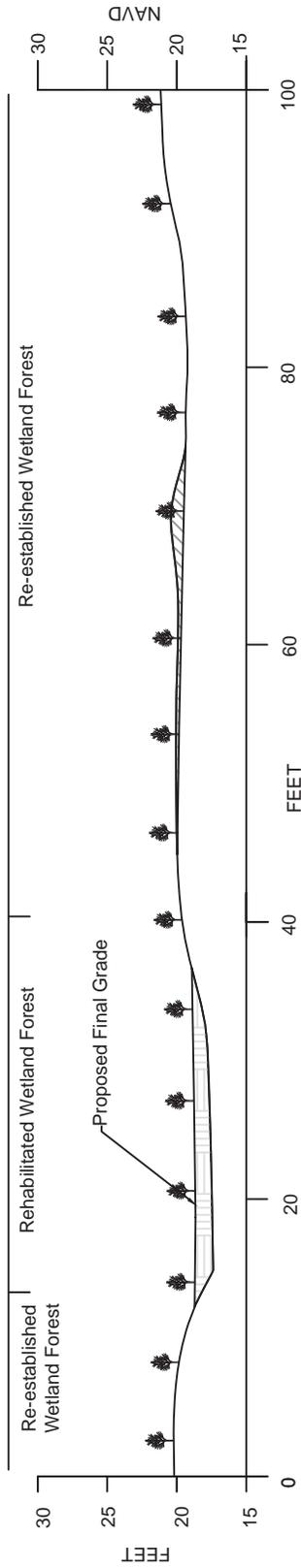
Existing Cross-Section A



A'

A

Proposed Cross-Section A



A'

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

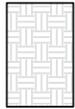
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/15/2014
Dwg. No.:	addendum1_sections.dwg



Figure 22

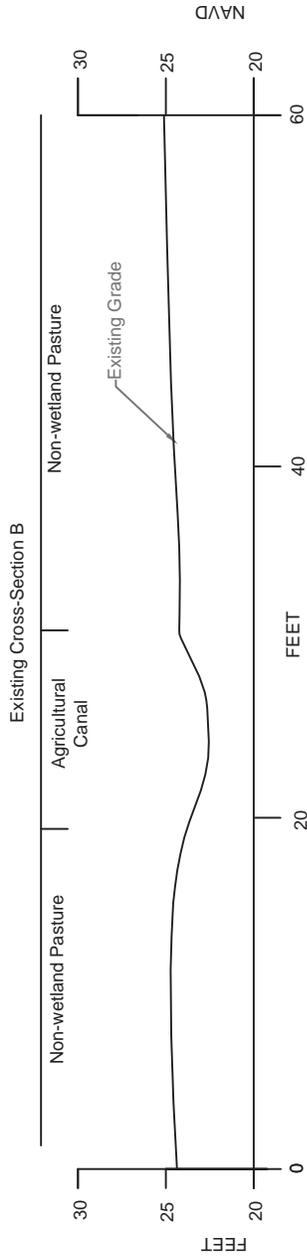


Proposed Excavation

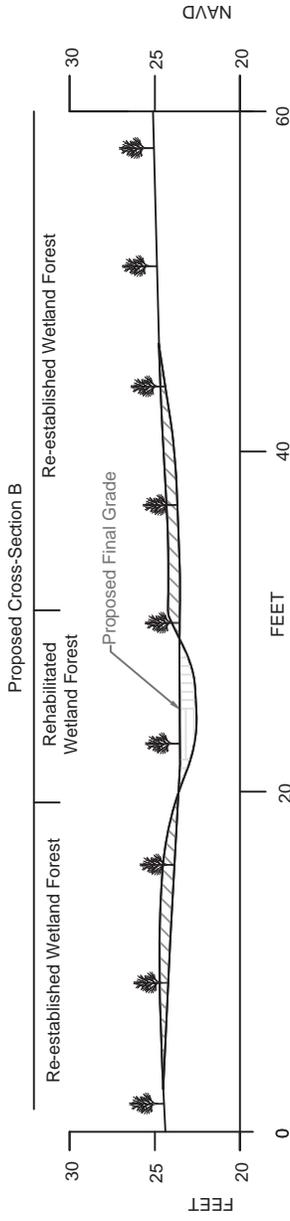


Proposed Earthen Fill

B'



B'



B

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

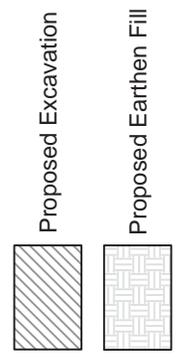
EXISTING CONDITION WITH PROPOSED SWALE

Pointe Coupee Parish, Louisiana

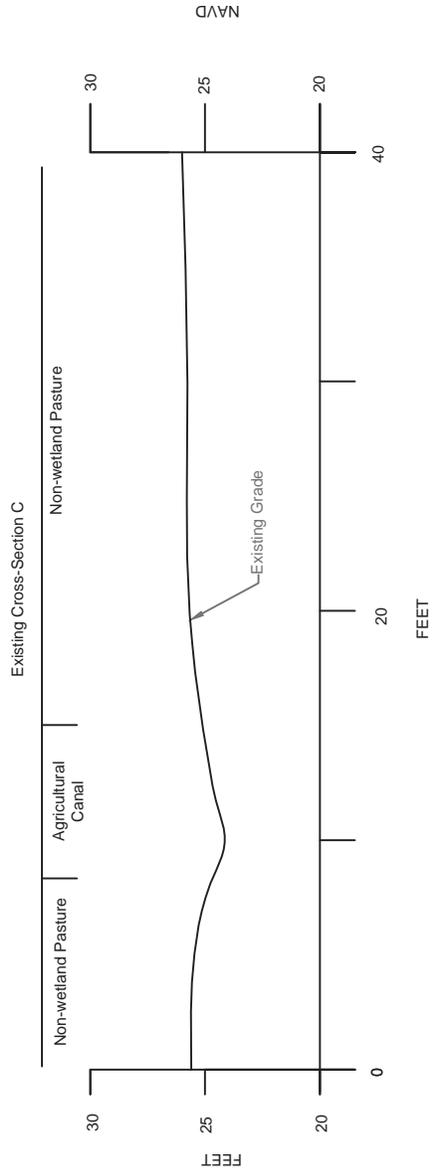
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/15/2014
Dwg. No.:	addendum1_sections.dwg



Figure 23

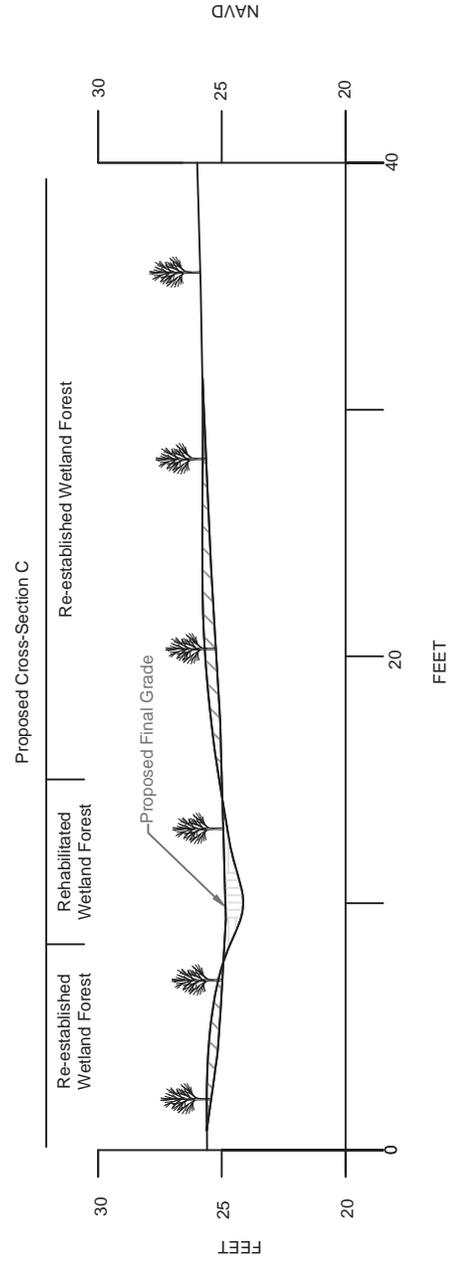


C'



C

C'



C

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

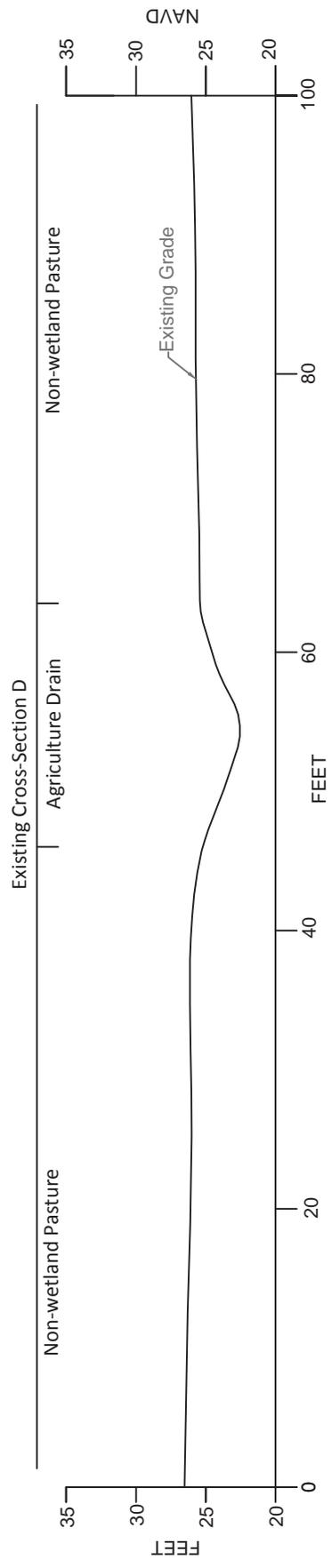
Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/19/2014
Dwg. No.:	addendum1_xsections.dwg



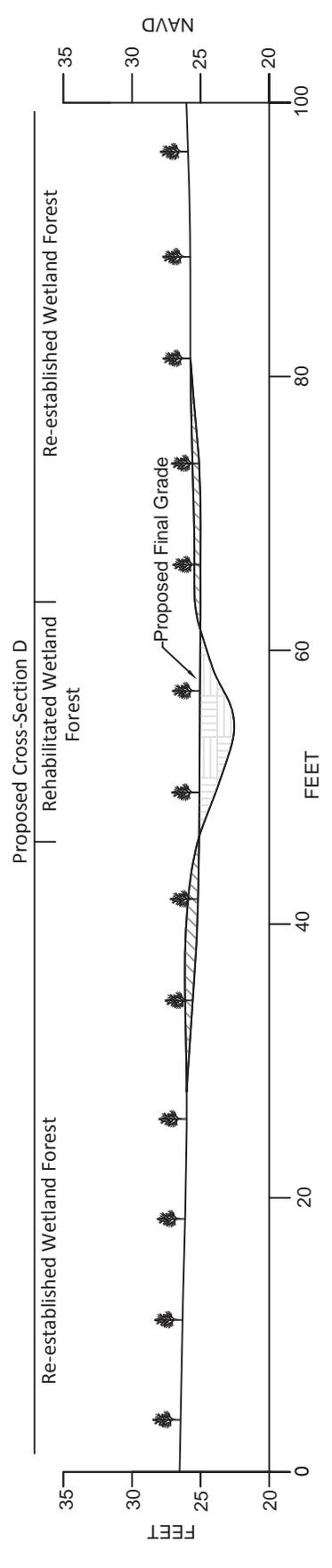
Figure 24



D'



D'



D

D

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

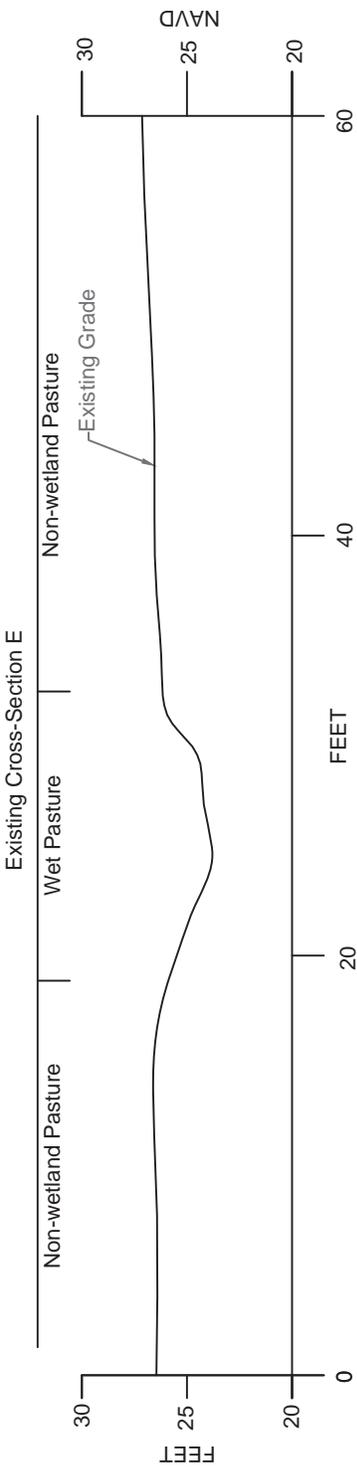
Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/19/2014
Dwg. No.:	addendum1_xsections.dwg



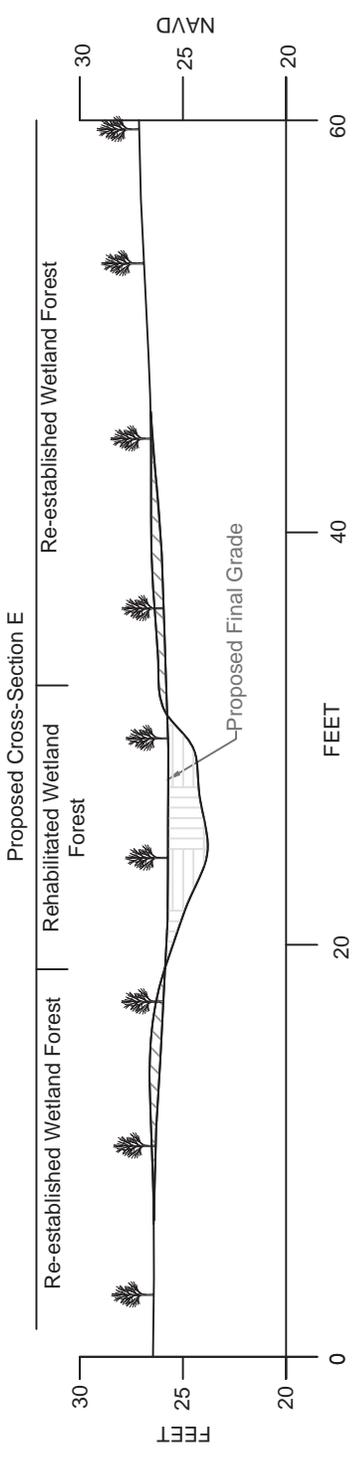
Figure 25



E'



E'



E

E

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

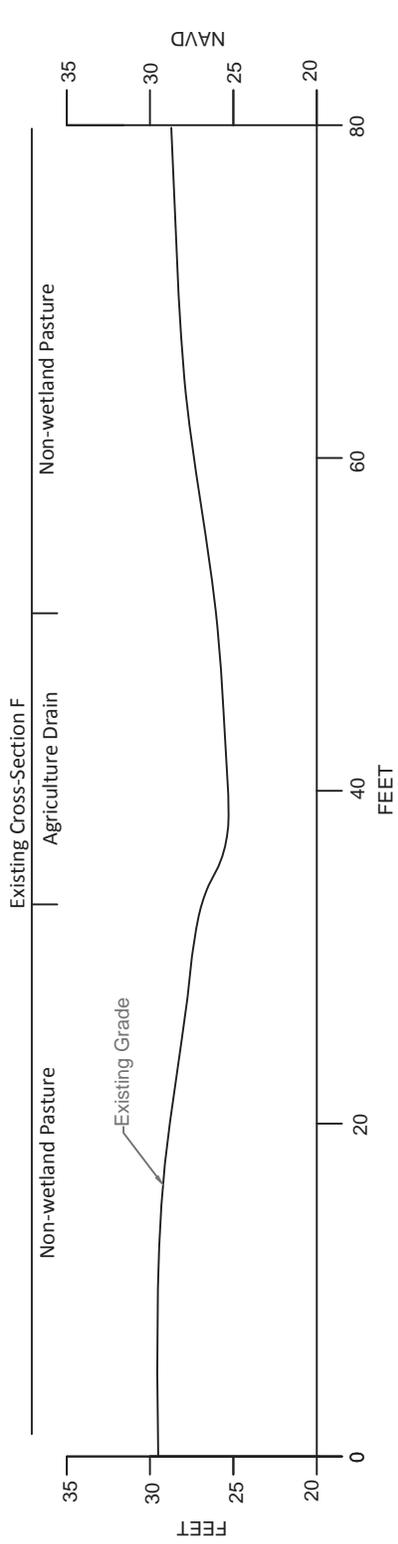
Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/19/2014
Dwg. No.:	addendum1_xsections.dwg



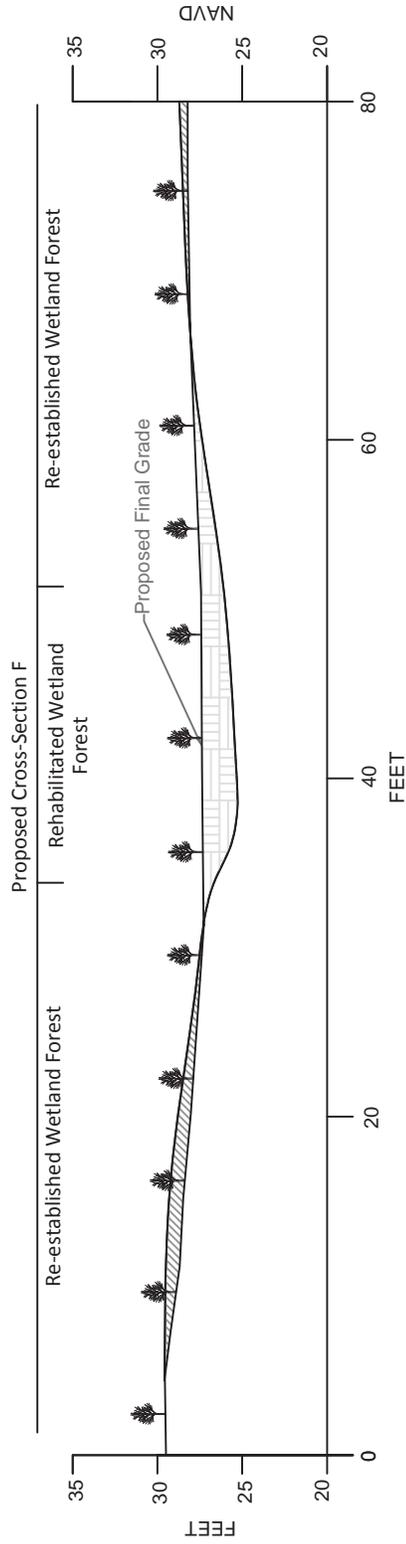
Figure 26



F'



F'



F

Existing Cross-Section F

F

Proposed Cross-Section F

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/19/2014
Dwg. No.:	addendum1_xsections.dwg



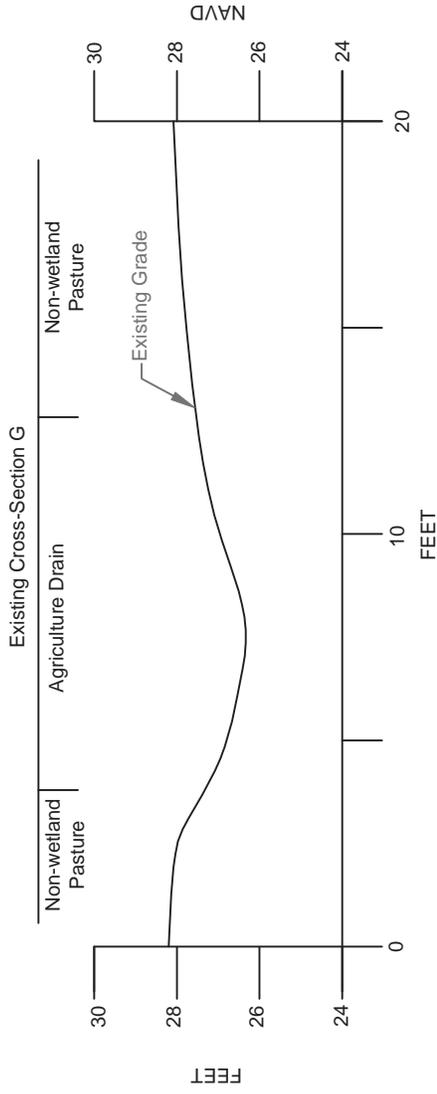
Figure 27

Proposed Excavation

Proposed Earthen Fill

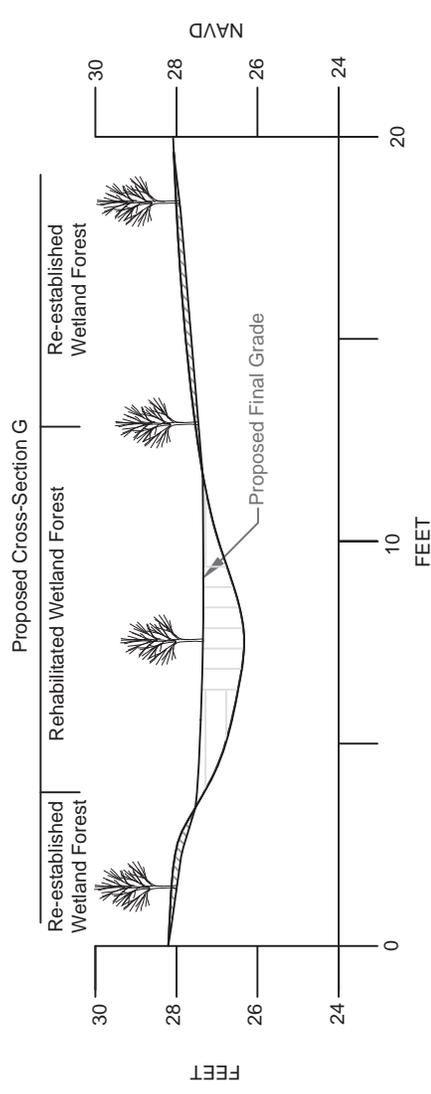
G

G'



G

G'



**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

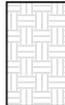
Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/19/2014
Dwg. No.:	addendum1_xsections.dwg
Figure 28	



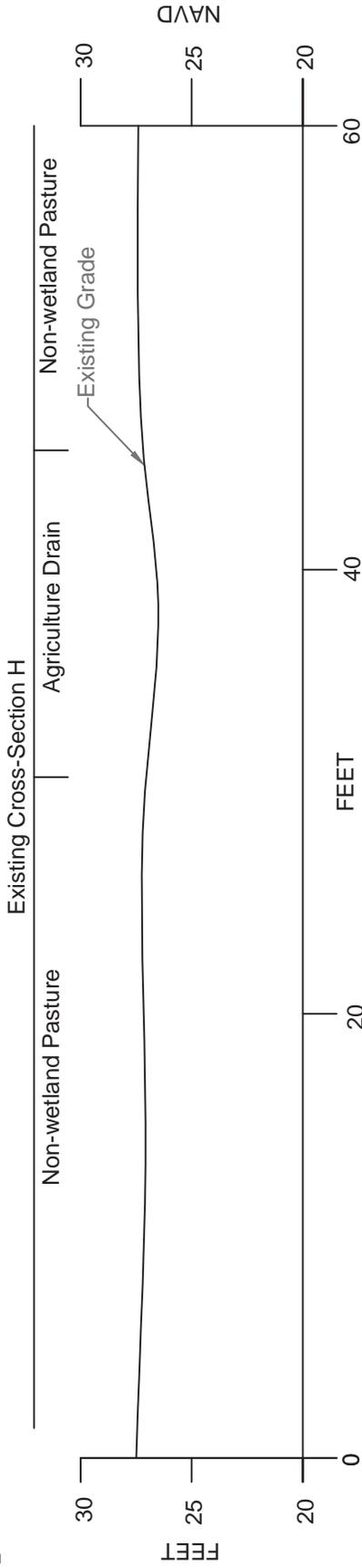
Proposed Excavation



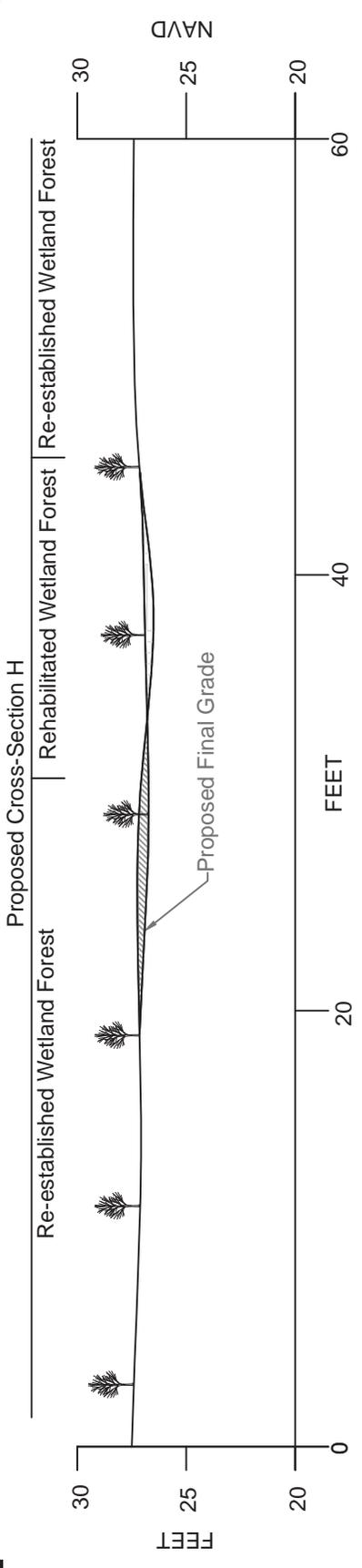
Proposed Earthen Fill



H'



H'



**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/19/2014
Dwg. No.:	addendum1_xsections.dwg

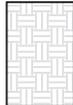


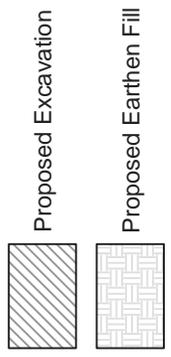
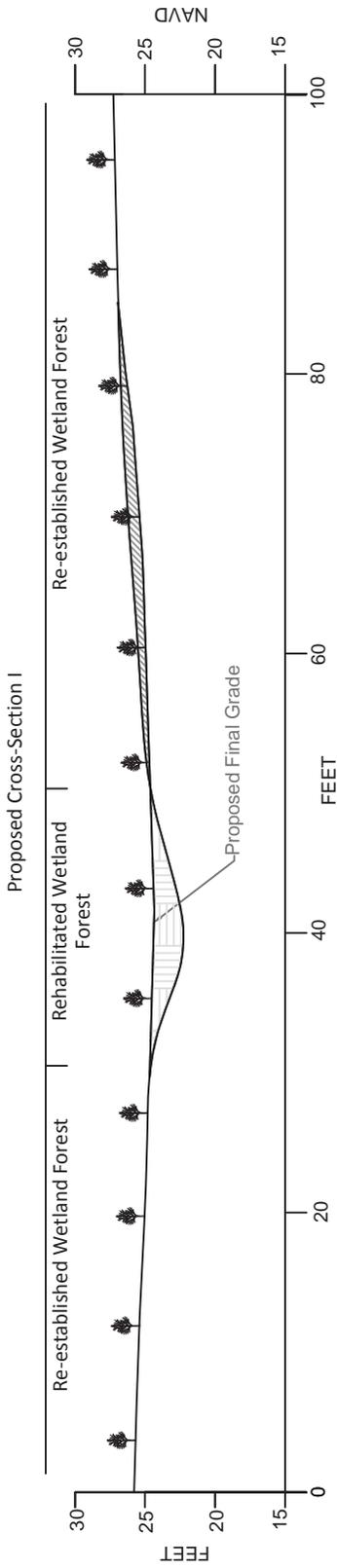
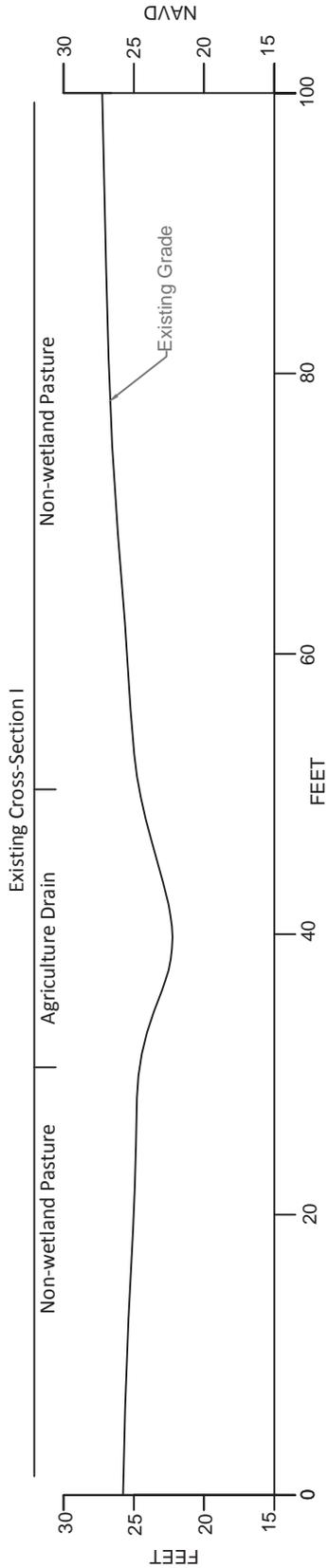
Figure 29

Proposed Excavation



Proposed Earthen Fill





**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

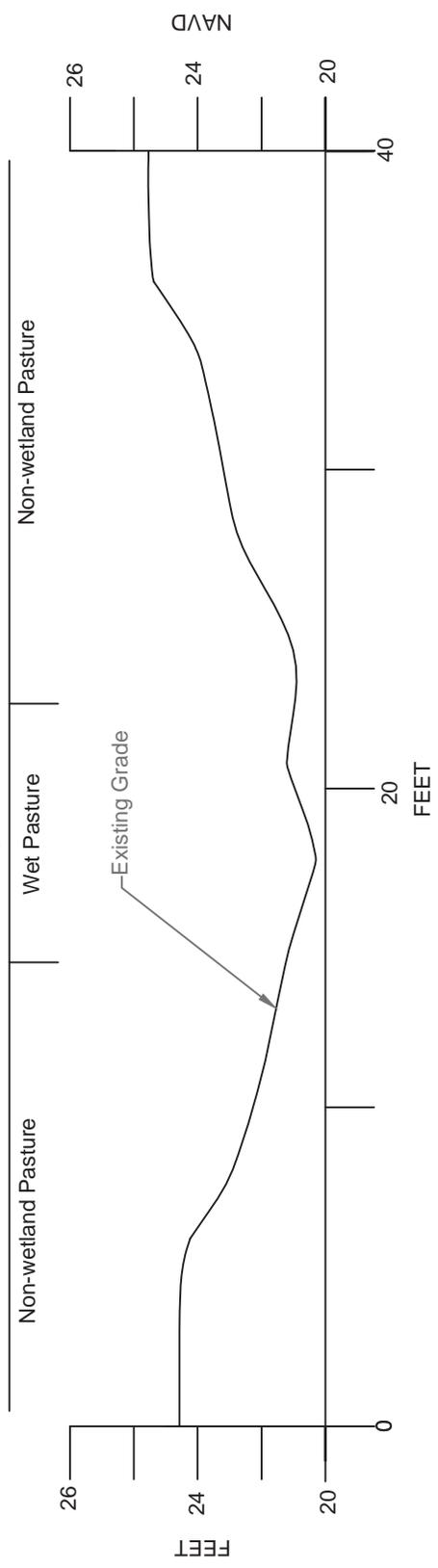
Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/19/2014
Dwg. No.:	addendum1_xsections.dwg



Figure 30

J'

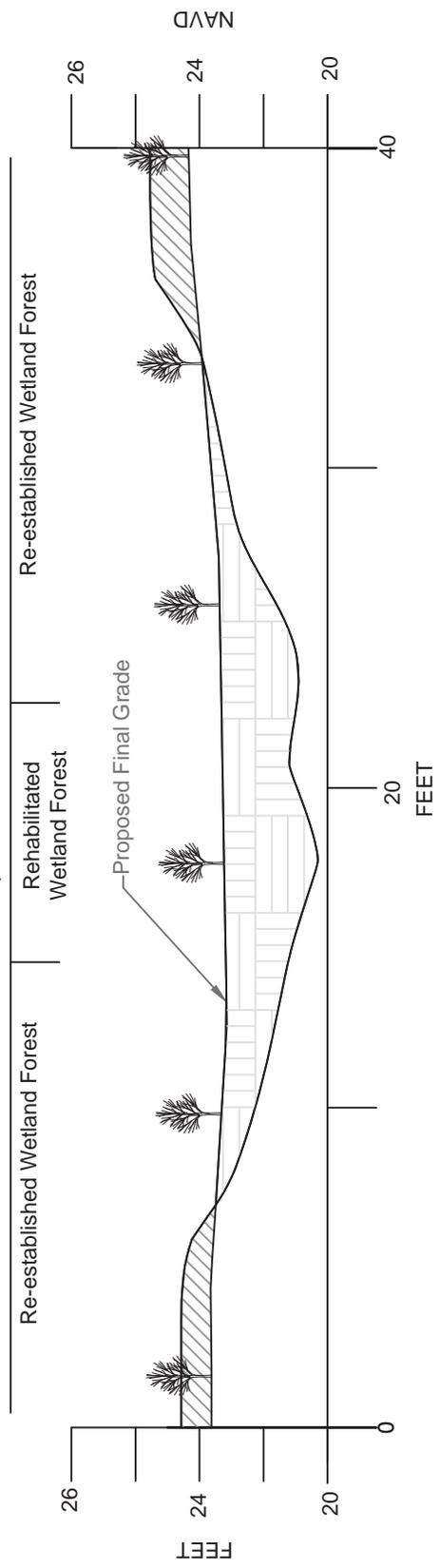
Existing Cross-Section J



J

J'

Proposed Cross-Section J



J

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

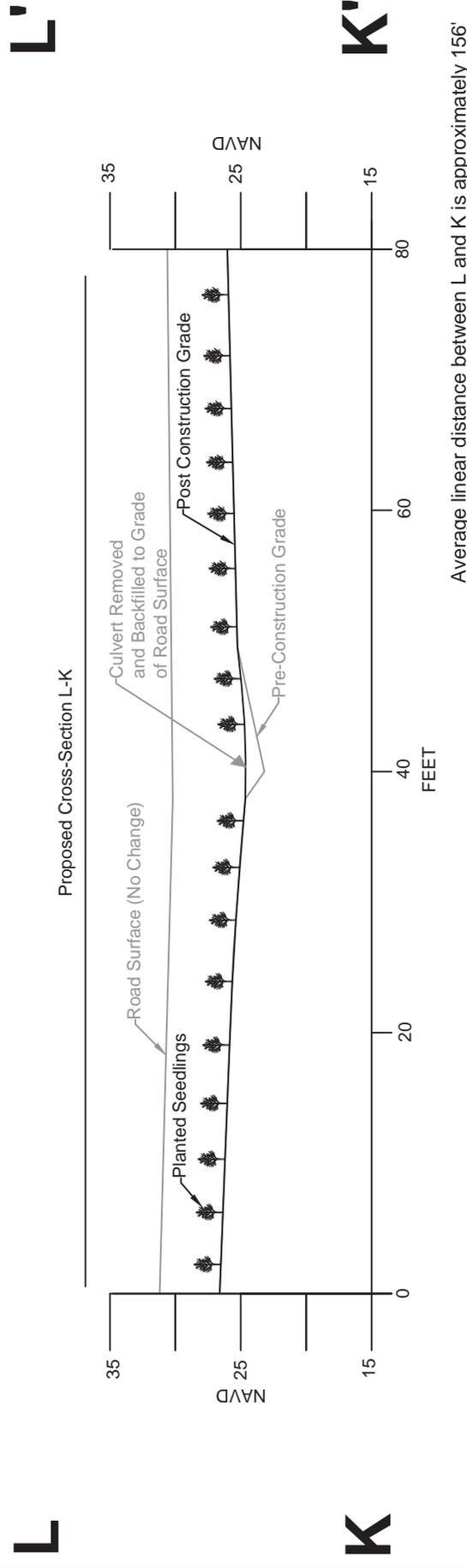
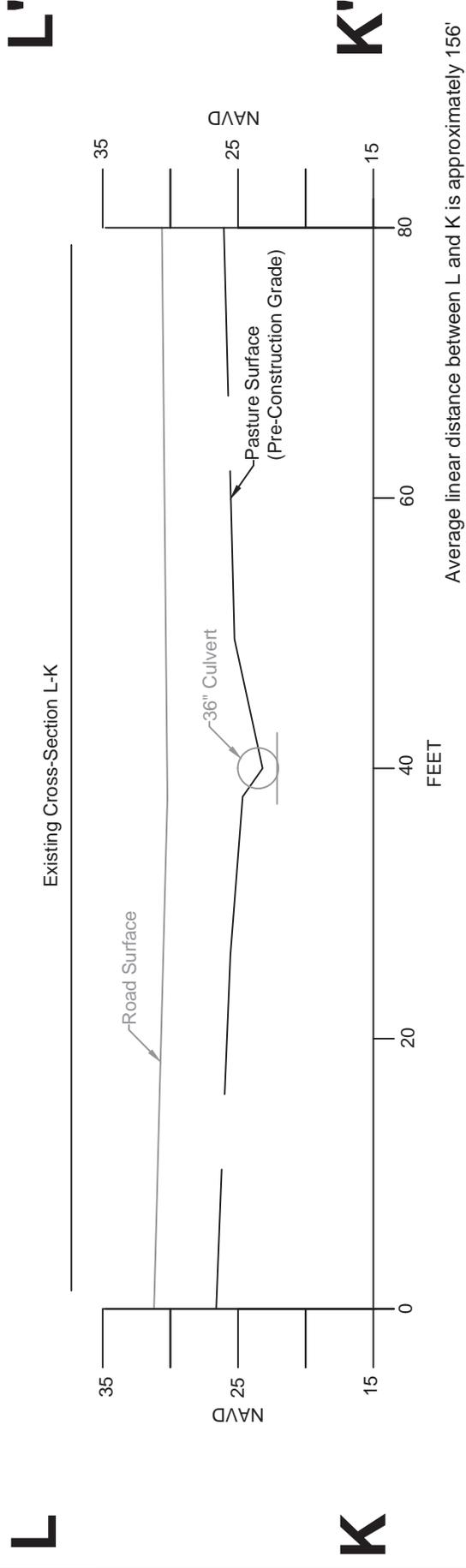
EXISTING CONDITION WITH PROPOSED SWALE

Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/15/2014
Dwg. No.:	addendum1_xsections.dwg



Figure 31





Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One

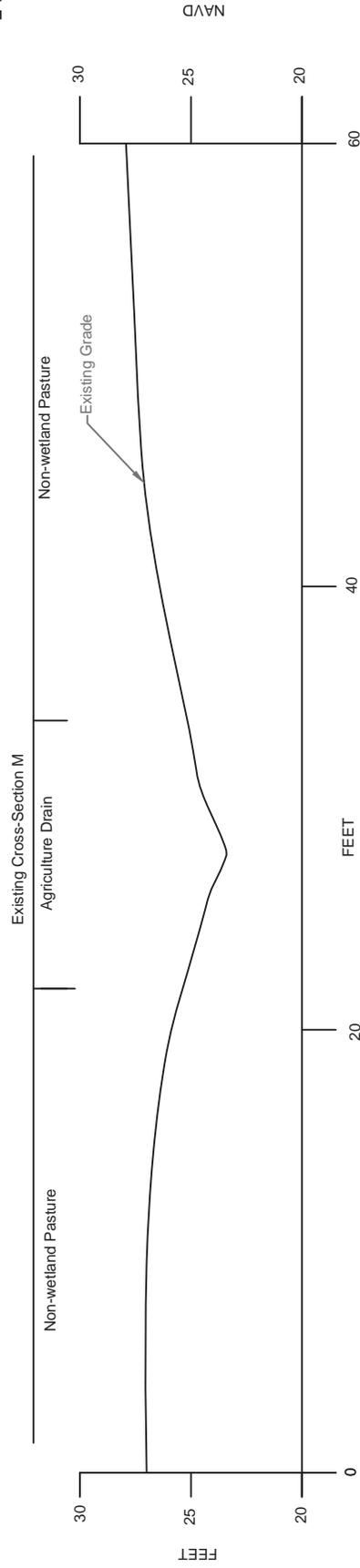
CROSS-SECTION L-K

Created:	TSC/AutoCAD
Approved:	LIW
Date:	9/15/2014
Dwg. No.:	addendum1_sections.dwg

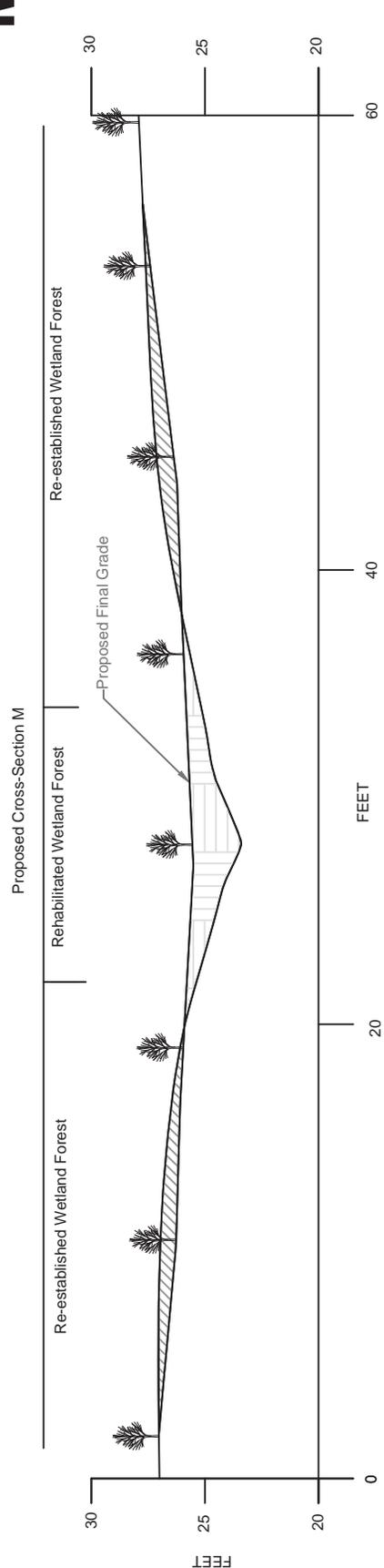
Figure 32



M'



M'



**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**
EXISTING CONDITION WITH PROPOSED SWALE

Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/15/2014
Dwg. No.:	addendum1_xsections.dwg

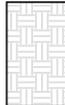


Figure 33

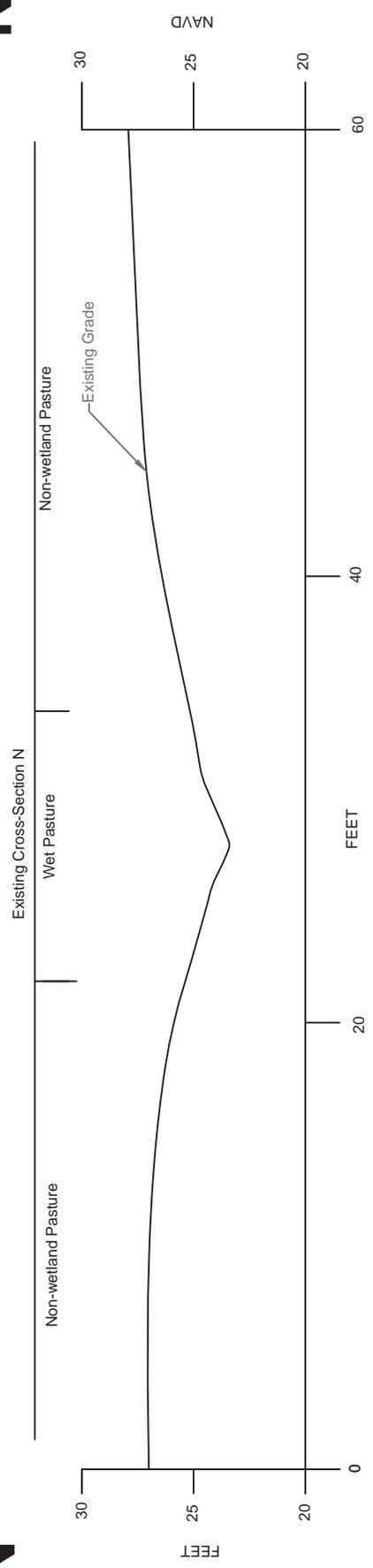
Proposed Excavation



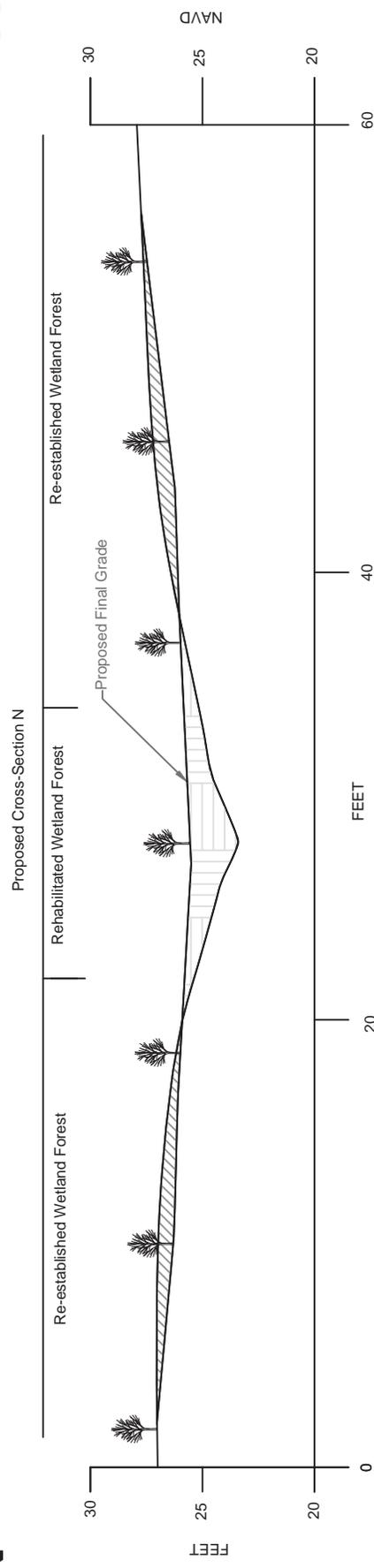
Proposed Earthen Fill



N



N



**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**
EXISTING CONDITION WITH PROPOSED SWALE

Pointe Coupee Parish, Louisiana	
Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/15/2014
Dwg. No.:	addendum1_xsections.dwg



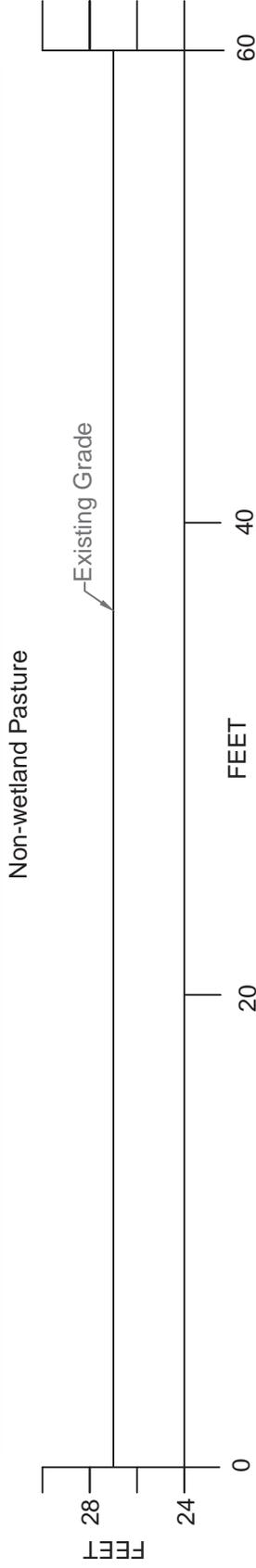
Figure 34

Proposed Excavation

Proposed Earthen Fill

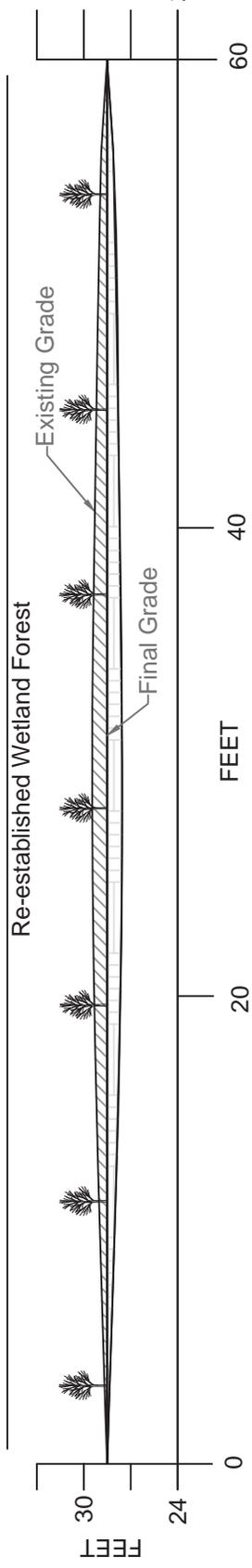
O'

Existing Cross-Section O



O'

Proposed Cross-Section O



**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

EXISTING CONDITION WITH PROPOSED SWALE

Created:	TSC/AutoCAD
Approved:	LJW
Date:	9/15/2014
Dwg. No.:	addendum1_xsections.dwg

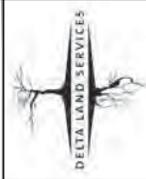
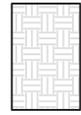


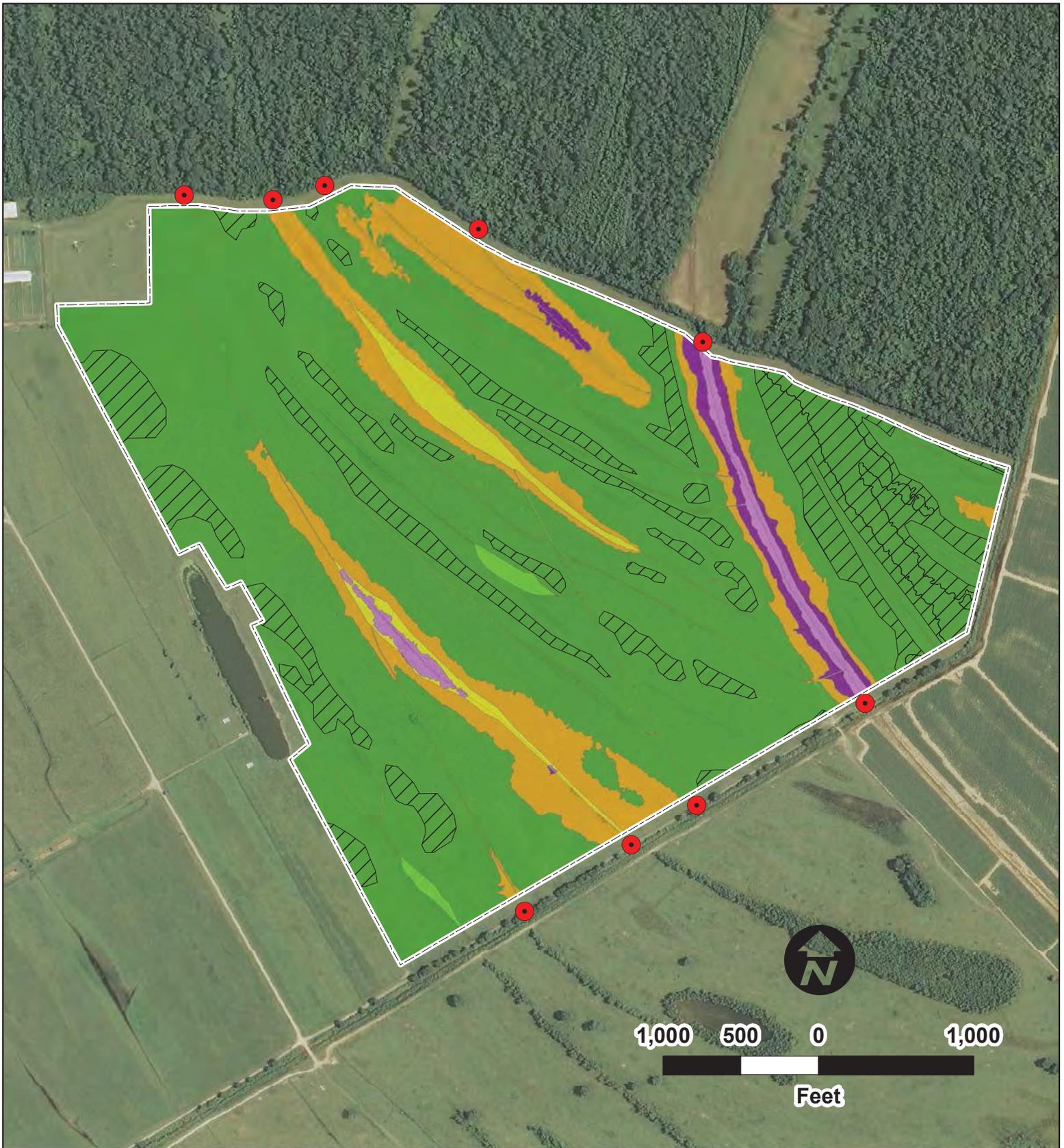
Figure 35

Overburden Excavation (Approximately 6" Depth) (Topsoil to be Excavated and Returned to Area)

Proposed Excavation (To be used as Earthen Fill Material on-site)



NOTE: 1) Topsoil in excavated areas will be removed and stockpiled on-site in non-wetland areas during excavation. Topsoil will be returned to excavated areas upon completion of excavation. Excavated areas will be approximately 6-12" lower in elevation than existing elevations.
2) Total Excavation = Approximately 18"



Legend

-  Project Area (386.4 Acres)
-  Type 2-3 BLH Re-establishment (309.2 Acres)
-  Type 2-3 BLH Rehabilitation (4.0 Acres)
-  Type 1-2 BLH Rehabilitation (8.1 Acres)
-  Type 1-2 BLH Re-establishment (52.7 Acres)
-  Baldcypress Swamp Re-establishment (6.6 Acres)
-  Baldcypress Swamp Rehabilitation (5.8 Acres)
-  Areas to be Excavated to Below 29'
-  Culvert to be Removed and Backfilled

**Ponderosa Ranch of Pointe Coupee
Mitigation Bank Amendment One**

MITIGATION FEATURES

Pointe Coupee Parish, Louisiana

Created : LJW/ArcView10

Approved : DEB

Date : 08/28/2014

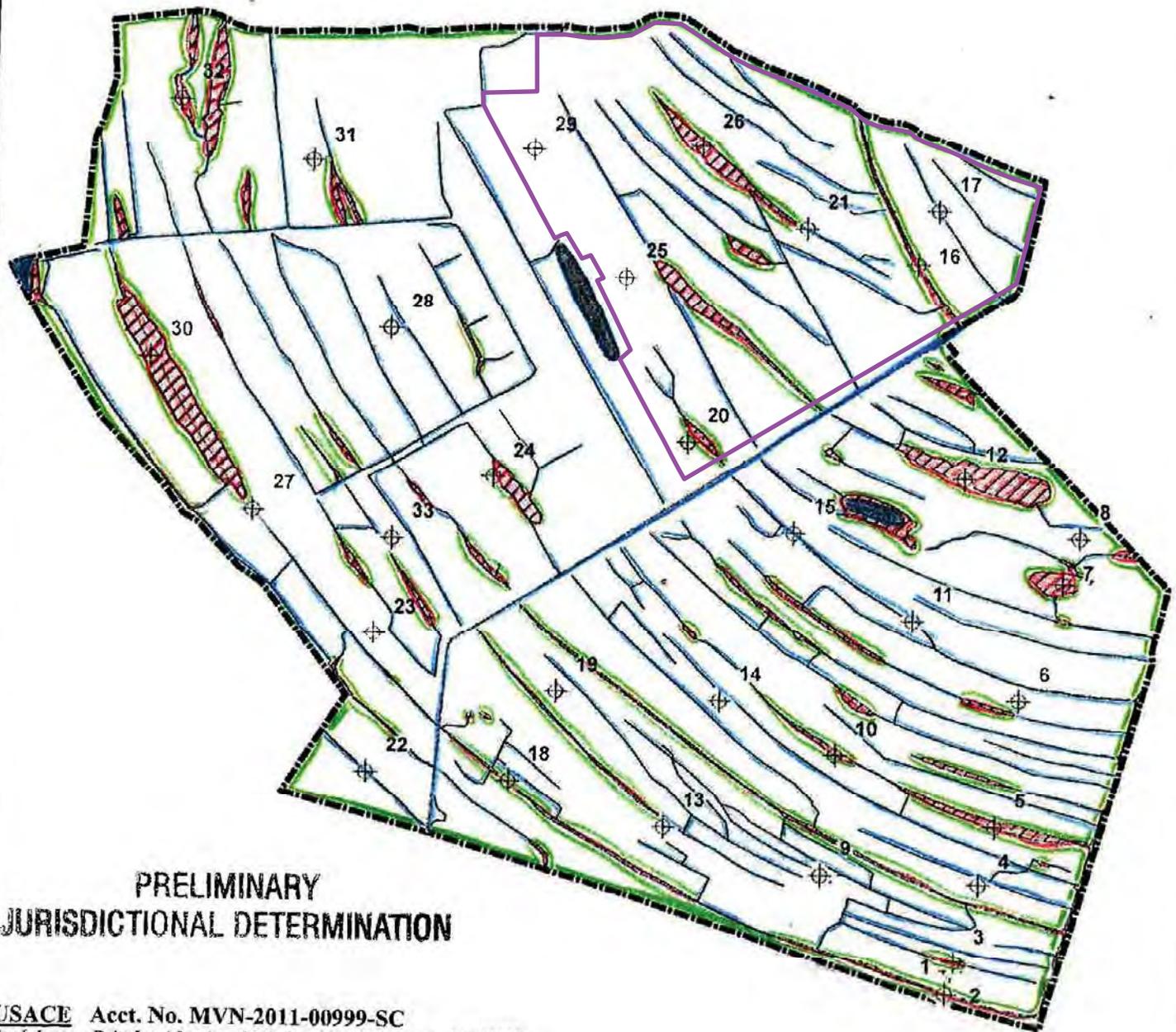
Map : F36_Mitigation Features.mxd



FIGURE 36

Legend

 Project Area (386.4 Acres)

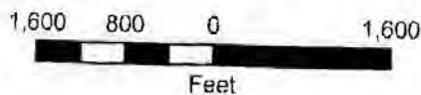


PRELIMINARY JURISDICTIONAL DETERMINATION

USACE Acct. No. MVN-2011-00999-SC
 For J. Jarreau, Delta Land Services, LLC. Lat. 30.648625, Long. -91.413637
 Sections 55 & 101, T5S, R10E and Sections 7, 18, 97 & 98, T5S, R11E,
 Pointe Coupee Parish, La., 6-22-11gmc P&V

Legend

-  Project Area (2,109.7 Acres)
-  Sec. 404 Wetlands (99.7 Acres)
-  Other Waters of the U.S. (15.3 Acres)
-  Data Points
-  Nonwetland



Ponderosa Ranch

WETLAND DELINEATION MAP

Pointe Coupee Parish, LA

Created : JMJ/ArcView

Approved : DEB

Date : 3/15/2011

Map No. : DelineationMap.mxd

FIGURE 3

ATTACHMENT MWP-B

Cost Analysis Report

Cost Reference for Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One
ver 1.1

Item	Units	Unit Values	Price Per Unit	Total Cost
Boundary Maintenance	Miles	3.4	\$ 150.00	\$ 510.00
Invasive Species Control	Acre	386.4	\$ 90.00	\$ 34,776.00
Invasive Species Control Mobilization	Fixed	Fixed	Fixed	\$ 100.00
Inspections (rate and per diem)	Day	1.0	\$ 790.00	\$ 790.00
Taxes on Project Acreage	Acre	386.4	\$ 3.00	\$ 1,159.20
Planted Acreage	Acre	386.4	NA	NA
Planting Rate	Trees/Acre	538.0	NA	NA
Seedling Cost (BRS)	Seedling	538.0	\$ 0.22	\$ 118.36
Seedling Installation Rate	Seedling	538.0	\$ 0.17	\$ 91.46
Planting Cost (BRS and Installation)	Seedling	538.0	\$ 0.39	\$ 209.82
Earth Moving	Cubic Yards	148000.0	\$ 2.00	\$ 296,000.00
Culvert Removal	Culvert	9.0	\$ 200.00	\$ 1,800.00
Site Prep and Preemergent Spray	Acres	386.4	\$ 120.00	\$ 46,368.00
Credit Acreage	Acres	386.4	NA	NA
Conservation Servitude Acreage	Acres	386.4	NA	NA
Access Road Maintenance	Acres	0.0	\$ 10.00	\$ -

BRS= bare-root seedlings

Estimated Construction Costs for
Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One
Year 0

<i>Item</i>	<i>Units</i>	<i>Unit Values</i>	<i>Price Per Unit</i>	<i>Cost</i>
Hydrology Restoration	Cubic Yards	148,000.0	\$ 2.00	\$ 296,000.00
Culvert Removal	Culvert	9	\$ 200.00	\$ 1,800.00
Site Prep and Preemergent Spray	Acres	386.4	\$ 120.00	\$ 46,368.00
Planting Costs	Acres	386.4	\$ 209.82	\$ 81,074.45
<i>Subtotal</i>				\$ 425,242.45
Construction Cost with 5% Contingency				\$ 446,504.57
Cost Per Credit Acre				\$ 1,155.55

Estimated Establishment Costs for
Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One
Year 1 to 15

Year	Event	Event Cost	Percent	Occurrences Per Year	Inflation Factor	Cost	Percent of Cost	Release Milestone
1	Monitoring/ Inspection	\$ 790.00	100%	0	1.0000	\$ -		\$132,705.33
1	Replant (30%)	\$ 81,074.45	30%	1	1.0000	\$ 24,322.33		
1	Invasive Species Control (100%)	\$ 34,776.00	100%	1	1.0000	\$ 34,776.00		
1	Invasive Species Mobilization	\$ 100.00	100%	1	1.0000	\$ 100.00		
1	Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		
1	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		
1	Subtotal					\$ 60,357.53	45.5%	Initial Success
2	Monitoring/ Inspection	\$ 790.00	100%	5	1.0000	\$ 3,950.00		\$60,357.53
2	Replant (10%)	\$ 81,074.45	10%	1	1.0000	\$ 8,107.44		\$72,347.79
2	Invasive Species Control (25%)	\$ 34,776.00	25%	1	1.0000	\$ 8,694.00		
2	Invasive Species Mobilization	\$ 100.00	100%	1	1.0000	\$ 100.00		
2	Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		
2	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		
2	Subtotal					\$ 22,010.64	16.6%	
3	Monitoring/ Inspection	\$ 790.00	100%	5	1.0000	\$ 3,950.00		
3	Invasive Species Control (20%)	\$ 34,776.00	20%	1	1.0000	\$ 6,955.20		
3	Invasive Species Mobilization	\$ 100.00	100%	1	1.0000	\$ 100.00		
3	Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		
3	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		
3	Subtotal					\$ 12,164.40	9.2%	
4	Monitoring/ Inspection	\$ 790.00	100%	5	1.0000	\$ 3,950.00		
4	Invasive Species Control (10%)	\$ 34,776.00	10%	1	1.0000	\$ 3,477.60		
4	Invasive Species Mobilization	\$ 100.00	100%	1	1.0000	\$ 100.00		
4	Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		
4	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		
4	Subtotal					\$ 8,686.80	6.5%	
5	Monitoring/ Inspection	\$ 790.00	100%	5	1.0000	\$ 3,950.00		
5	Invasive Species Control (5%)	\$ 34,776.00	5%	1	1.0000	\$ 1,738.80		
5	Invasive Species Mobilization	\$ 100.00	100%	1	1.0000	\$ 100.00		
5	Wildlife Opening and Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		
5	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		
5	Subtotal					\$ 6,948.00	5.2%	Interim Success
6	Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		\$49,809.84
6	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		\$22,537.95
6	Subtotal					\$ 1,159.20	0.9%	
7	Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		
7	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		
7	Subtotal					\$ 1,159.20	0.9%	
8	Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		
8	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		
8	Subtotal					\$ 1,159.20	0.9%	
9	Access Road Maintenance	\$ -	100%	1	1.0000	\$ -		
9	Property Taxes	\$ 1,159.20	100%	1	1.0000	\$ 1,159.20		
9	Subtotal					\$ 1,159.20	0.9%	
10	Monitoring/ Inspection	\$ 790.00	100%	5	1.0249	\$ 4,048.36		
10	Invasive Species Control (2%)	\$ 34,776.00	2%	1	1.0249	\$ 712.84		
10	Invasive Species Mobilization	\$ 100.00	100%	1	1.0249	\$ 102.49		
10	Access Road Maintenance	\$ -	100%	1	1.0249	\$ -		
10	Property Taxes	\$ 1,159.20	100%	1	1.0249	\$ 1,188.06		
10	Boundary Maintenance	\$ 510.00	100%	1	1.0249	\$ 522.70		
10	Subtotal with Year 10 Adjusted Inflation (2.49%)					\$ 6,574.45	5.0%	
11	Access Road Maintenance	\$ -	100%	1	1.0249	\$ -		
11	Property Taxes	\$ 1,159.20	100%	1	1.0249	\$ 1,188.06		
11	Subtotal with Year 11 Adjusted Inflation (2.49%)					\$ 1,188.06	0.9%	
12	Access Road Maintenance	\$ -	100%	1	1.0249	\$ -		
12	Property Taxes	\$ 1,159.20	100%	1	1.0249	\$ 1,188.06		
12	Subtotal with Year 12 Adjusted Inflation (2.49%)					\$ 1,188.06	0.9%	
13	Access Road Maintenance	\$ -	100%	1	1.0249	\$ -		
13	Property Taxes	\$ 1,159.20	100%	1	1.0249	\$ 1,188.06		
13	Subtotal with Year 13 Adjusted Inflation (2.49%)					\$ 1,188.06	0.9%	
14	Access Road Maintenance	\$ -	100%	1	1.0249	\$ -		
14	Property Taxes	\$ 1,159.20	100%	1	1.0249	\$ 1,188.06		
14	Subtotal with Year 14 Adjusted Inflation (2.49%)					\$ 1,188.06	0.9%	
15	Monitoring/ Inspection	\$ 790.00	100%	5	1.0249	\$ 4,048.36		
15	Invasive Species Control (2%)	\$ 34,776.00	2%	1	1.0249	\$ 712.84		
15	Invasive Species Mobilization	\$ 100.00	100%	1	1.0249	\$ 102.49		
15	Access Road Maintenance	\$ -	100%	1	1.0249	\$ -		
15	Property Taxes	\$ 1,159.20	100%	1	1.0249	\$ 1,188.06		
15	Boundary Maintenance	\$ 510.00	100%	1	1.0249	\$ 522.70		
15	Subtotal with Year 15 Adjusted Inflation (2.49%)					\$ 6,574.45	5.0%	Long-Term Success
								\$22,537.95
	Total					\$ 132,705.33	100.0%	\$132,705.33
	Total Per Credit Acre					\$ 343.44		

Years 10-15 adjusted using an inflation rate of 2.49%. This is the average Consumer Price Index (CPI) from 1983-2012.

Estimated Long-Term Annualized Cost Summary
Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One

Item	Units	Unit Values	Price Per Unit	Unit Percent	Cost	Years	Annualized Cost
Boundary Maintenance (5-year event)	Miles	3.4	\$ 150.00	100.0%	\$ 510.00	5	\$ 102.00
0.5% Invasive Species Control (annual event)	Acre	386.4	\$ 90.00	0.5%	\$ 173.88	1	\$ 173.88
Invasive Species Control Mobilization (annual event)	Fixed	Fixed	Fixed	NA	\$ 100.00	1	\$ 100.00
Access Road Maintenance	Acre	0.0	\$ 10.00	100.0%	\$ -	1	\$ -
Inspection (annual event)	Day	5.0	\$ 790.00	20.0%	\$ 790.00	1	\$ 790.00
Taxes (annual event)	Acre	386.4	\$ 3.00	100.0%	\$ 1,159.20	1	\$ 1,159.20
Average Annual Cost (Starting at Year 16)							\$ 2,325.08

Estimated Long-Term Costs and Projected Account Activity for
Ponderosa Ranch of Pointe Coupee Mitigation Bank Amendment One Utilizing Investments In Direct Obligations of the USA
Year 16 to 50

Year	Item	Total Cost	Inflationary Adjustment ¹	Beginning Balance ²	Ending Balance ³
15	Annual Cost	\$ -	\$ -	\$ 94,124.28	\$ 94,124.28
16	Annual Cost	\$ 2,325.08	\$ 2,382.97	\$ 97,540.99	\$ 95,158.02
17	Annual Cost	\$ 2,325.08	\$ 2,442.31	\$ 98,612.25	\$ 96,169.94
18	Annual Cost	\$ 2,325.08	\$ 2,503.12	\$ 99,660.91	\$ 97,157.79
19	Annual Cost	\$ 2,325.08	\$ 2,565.45	\$ 100,684.61	\$ 98,119.16
20	Annual Cost	\$ 2,325.08	\$ 2,629.33	\$ 101,680.89	\$ 99,051.56
21	Annual Cost	\$ 2,325.08	\$ 2,694.80	\$ 102,647.13	\$ 99,952.33
22	Annual Cost	\$ 2,325.08	\$ 2,761.90	\$ 103,580.60	\$ 100,818.69
23	Annual Cost	\$ 2,325.08	\$ 2,830.67	\$ 104,478.41	\$ 101,647.74
24	Annual Cost	\$ 2,325.08	\$ 2,901.16	\$ 105,337.55	\$ 102,436.39
25	Annual Cost	\$ 2,325.08	\$ 2,973.40	\$ 106,154.83	\$ 103,181.44
26	Annual Cost	\$ 2,325.08	\$ 3,047.43	\$ 106,926.92	\$ 103,879.49
27	Annual Cost	\$ 2,325.08	\$ 3,123.32	\$ 107,650.32	\$ 104,527.00
28	Annual Cost	\$ 2,325.08	\$ 3,201.09	\$ 108,321.33	\$ 105,120.24
29	Annual Cost	\$ 2,325.08	\$ 3,280.79	\$ 108,936.11	\$ 105,655.32
30	Annual Cost	\$ 2,325.08	\$ 3,362.48	\$ 109,490.60	\$ 106,128.12
31	Annual Cost	\$ 2,325.08	\$ 3,446.21	\$ 109,980.57	\$ 106,534.36
32	Annual Cost	\$ 2,325.08	\$ 3,532.02	\$ 110,401.56	\$ 106,869.54
33	Annual Cost	\$ 2,325.08	\$ 3,619.97	\$ 110,748.90	\$ 107,128.93
34	Annual Cost	\$ 2,325.08	\$ 3,710.11	\$ 111,017.71	\$ 107,307.61
35	Annual Cost	\$ 2,325.08	\$ 3,802.49	\$ 111,202.87	\$ 107,400.39
36	Annual Cost	\$ 2,325.08	\$ 3,897.17	\$ 111,299.02	\$ 107,401.85
37	Annual Cost	\$ 2,325.08	\$ 3,994.21	\$ 111,300.54	\$ 107,306.33
38	Annual Cost	\$ 2,325.08	\$ 4,093.66	\$ 111,201.55	\$ 107,107.88
39	Annual Cost	\$ 2,325.08	\$ 4,195.60	\$ 110,995.90	\$ 106,800.30
40	Annual Cost	\$ 2,325.08	\$ 4,300.07	\$ 110,677.15	\$ 106,377.09
41	Annual Cost	\$ 2,325.08	\$ 4,407.14	\$ 110,238.58	\$ 105,831.44
42	Annual Cost	\$ 2,325.08	\$ 4,516.88	\$ 109,673.12	\$ 105,156.24
43	Annual Cost	\$ 2,325.08	\$ 4,629.35	\$ 108,973.41	\$ 104,344.07
44	Annual Cost	\$ 2,325.08	\$ 4,744.62	\$ 108,131.76	\$ 103,387.14
45	Annual Cost	\$ 2,325.08	\$ 4,862.76	\$ 107,140.09	\$ 102,277.33
46	Annual Cost	\$ 2,325.08	\$ 4,983.84	\$ 105,990.00	\$ 101,006.16
47	Annual Cost	\$ 2,325.08	\$ 5,107.94	\$ 104,672.68	\$ 99,564.74
48	Annual Cost	\$ 2,325.08	\$ 5,235.13	\$ 103,178.95	\$ 97,943.82
49	Annual Cost	\$ 2,325.08	\$ 5,365.48	\$ 101,499.18	\$ 96,133.70
50	Annual Cost	\$ 2,325.08	\$ 5,499.08	\$ 99,623.35	\$ 94,124.27
	Total	\$ 81,377.80	\$ 130,643.94		
	Average	\$ 2,325.08	\$ 3,732.68		

Inflation	0.0249
Interest	0.0363
Per Credit	
Acre	\$ 243.59
70%	\$ 347.99

- Adjusted using an inflation rate of 2.49%. This is the average Consumer Price Index (CPI) from 1983-2012.
- Adjusted using an interest rate of 3.63% applied to the previous years' ending balance. The rate of return is based on a 30-year Treasury Bond rate as of August 13, 2013
- The ending balance is the beginning balance less the estimated, inflated cost.

ATTACHMENT D

Acceptance Letter

US Army Corps of Engineers
Regulatory Branch
PO Box 60267
New Orleans, LA 70160
ATTN: *{CORPS PROJECT MANAGER}*

Gentlemen:

{MITIGATION BANK NAME} has made arrangements with *{PERMITTEE'S NAME}* to purchase *{NUMBER OF ACRES OR CREDITS}* *{ACRES OR CREDITS}* of *{HABITAT TYPE}* for unavoidable impacts associated with work authorized by the Department of the Army permit number *{MVN-XXXX-XXXXX-XX}*. The *{MITIGATION BANK NAME}* assumes the responsibility for the permittee's compensatory mitigation requirements (i.e., to implement, assure performance, and provide long-term management of the compensatory mitigation project) in accordance with provisions of the Mitigation Banking Instrument governing this bank.

{CLOSING}

{NAME}
{TITLE}