## **MITIGATION PROSPECTUS**

# WADESBORO ROAD MITIGATION BANK MVN # 2012-00907-MS Tangipahoa Parish, Louisiana

**April** 2012

Prepared for:

## Wadesboro Road Mitigation Bank L.L.C.

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#### 1.0 Introduction

Maurepas Environmentalists, acting as agent for the **Wadesboro Road Mitigation Bank L.L.C.** (Sponsor), respectfully presents this prospectus to establish the proposed <u>Wadesboro Road</u> <u>Mitigation Bank</u> (Bank), to the United States Army Corps of Engineers, New Orleans District (CEMVN), and the Interagency Review Team (IRT).

The following document summarizes the mitigation potential of one contiguous tract of land totaling approximately 310.7 acres of which 106.5 acres will be enhanced and reestablished mixed Pine/Bottomland Hardwood and approximately 200.4 Cypress/Tupelo Gum Swamp preservation bank in Tangipahoa Parish, Louisiana, owned by Wadesboro Road Mitigation Bank LLC (sponsor) as depicted in figures 1-4. The center of the proposed project area is located Latitude 30.41491 Longitude 90.47564, in Sections 38, and 37, in T7S R7E. The land is situated at the end of Shingle Mill Road, Southwest of Ponchatoula, Louisiana in Tangipahoa Parish. The directions to Wadesboro Road Mitigation Bank are as following: travel 0.92 miles west of Interstate 55, Ponchatoula/Springfield exit, on La Hwy 22, turn left on Kraft Road 0.9 miles South of La. Hwy 22, turn right on Wadesboro Road 0.3 miles, turn left on Shingle Mill Road, Entrance to Bank is through gate.

The purpose of this document is to identify existing conditions of the Sponsor's property, outline specific modifications to these properties and to assess the potential for establishing the Wadesboro Mitigation Bank (WMB).

Wadesboro Road Mitigation Bank area was historically a Bottomland Hardwood Forest before it was cut out and planted into a Loblolly Pine tree plantation approximately 35-40 years ago. A Bottomland Hardwood Forest is described, by The Natural Heritage "as a type of wetland community found along the floodplains of rivers and streams. The timing duration and frequency of the flooding play important roles in determining the type of vegetations present in these forests. Bottomland hardwood swamp communities have soils saturated with water much of the time and may have water 10-12 months a year. These areas are dominated by flood-tolerant trees species such as cypress and water tupelo. Areas with drier soils support additional hardwood trees such as cherrybark oak, sweet pecan, and winged elm, which are adapted to less frequent flooding

Most of these forests were cleared for agriculture. As the bottomland hardwood forests disappeared, so did the Ivory-billed woodpecker. Bottomland hardwood forests are also important for flood protection and groundwater recharge."

The uplands are considered to be a Live Oak Forest: Synonym: Natural Levee Forest, Front land Forest. This area is described by the Natural Heritage as "This community occurs principally in southeastern Louisiana on natural levees or frontlands and on islands within marshes and swamps. It is similar in some respects to coastal live oak-hackberry forest in that both develop on natural ridges in the coastal zone and overstory dominants are comparable. Quercus virginiana (live oak) typically dominates the stand, but Q. nigra (water oak), Ulmus americana (American elm), Celtis laevigata (hackberry), Acer rubrum var.drummondii (Drummond red maple), and Fraxinus pennsylvanica (green ash) are usually prominent community members, and maybe predominant in areas.Overstory associates may include Q.falcata var. pagodaefolia (cherrybark oak), Q. nuttallii (Nuttall oak), Gleditsia triacanthos (honey locust), Liquidambar syraciflua (sweetgum), and Acer negundo (box-elder).

Nyssa aquatica (tupelo gum) and Taxodium distichum (baldcypress) are often present in wet depressions or on edges. Sabal minor (dwarf palmetto) is usually the most conspicuous midstory and understory shrub, often attaining heights of up to 10 feet.

The Preservation Bank Area is a Bald Cypress-Tupelo Gum Swamp also known as Freshwater Swamp, Brake, and Swamp Forest. This area is described by the Natural Heritage as "forested, alluvial swamps growing on intermittently exposed soils. The soils are inundated or saturated by surface water or ground water on a nearly permanent basis throughout the growing season except during periods of extreme drought. Bayous commonly intersect these wetlands. There is relatively low floristic diversity. Taxodium distichum (baldcypress) and Nyssa aquatica (tupelo gum) are co-dominants. Common associates are Nyssa sylvatica var. biflora (swamp blackgum), Acer rubrum var. drummondii (swamp red maple), Salix nigra (black willow), Fraxinus profunda (pumpkin ash), F. pennsylvanica (green ash), Planera aquatica (water elm), Gleditsia aquatica (water locust), Itea virginica (Virginia willow), and Cephalanthu occidentalis (buttonbush). Composition of associate species may vary widely from site to site. Undergrowth is often sparse because of low light intensity and long hydroperiod."

The Bank will *enhance and reestablish existing 106.5* acres of BLH, providing enhanced *and reestablished* forested wetlands and continuity to the ecosystem of the Tickfaw River Basin HUC Number 08070203. The Bank will provide water quality benefits and floodwater retention to an already impaired area and will reduce future stress on the ecosystem resulting from future development of the Tickfaw River Basin as depicted in figure # 6.

The intent of the Bank is to sell mitigation credits to offset the destruction of bottomland hardwood (BLH) forest in the surrounding areas of the Blood River, Little Natalbany River, Natalbany and the Tickfaw River. The details regarding the bank's terms to operate as "Wadesboro *Road* Mitigation Bank" will be defined within the Mitigation Banking Instrument (MBI).

#### 2.0 Objectives

The proposed project area is presently a cutover Loblolly Plantation. The goal of the Sponsor is to establish the Bank into a sustainable, mixed Pine/Bottomland Hardwood forest and also to preserve the surrounding Cypress/ Tupelo Gum swamp in its natural habitat.

It is the goal of the Bank to provide credits to clients that are in need of fulfilling their requirements for cypress swamp and bottomland hardwood mitigation as a process of the Clean Water Act, Section 404 permit applications and the wetland conservation provisions of the Food Securities Act ("Swampbusters"). By providing this service, the Sponsor hopes to reestablish, enhance and preserve the Bank back into a mixed Pine/Bottomland Hardwood forest, thus providing a high quality wetland that provides extensive habitat for various wildlife and wetland resources.

#### 2.1 Mitigation Summary Table

Mitigation Credit Type	Habitat Type	Acreage
Enhancement Area	BLH	93.1 Acres
Enhancement Area	Uplands	10.4 Acres
Re-Establishment	BLH	3 Acres
Preservation Area	Cypress/Tupelo Gum Swamp	200.4 Acres
Non-Mitigation	Road traversing the Bank	3.8 Acres
Total		310.7Acres

## 3.0 Proposed Bank Establishment

#### 3.1 Mitigation Work Plan

The Sponsor intends to enhance, reestablish, and preserve the wetland functions and values by:

- 1. Prescribe burning the total Enhancement Mitigation area prior to planting the proposed enhancement, restoration area. The preservation area will not be burned.
- 2. Planting appropriate BLH tree species with a specific ratio of hard mass to soft mass trees;
- 3. Spray to kill the invasive vegetation, i.e. Chinese tallow trees 3 years after the planting of the hardwood seedlings.
- 4. To till and disk the road that traverses the Bank in a North to South direction. This proposed work will be in the portion of the road south of the fork where the road traverses in a West to East direction, thus reestablishing the road as BLH forest.
- 5. To place Culverts in the *old logging* road that traverses the Bank in a west to east direction to help increase sheet flow across the Bank

A monitoring plan for the growth of the trees for the 15 years deemed so by the MBI will be submitted to the IRT after the trees are planted. There will be one (1) monitoring site 1/50<sup>th</sup> of an acre for every 20 acres in the Bank. Each monitoring site will have an eight (8) foot tall painted PVC pipe in the ground to locate the monitoring site and GPS coordinates of each monitoring site will be provided to the Corps. Each tree within the monitoring site will have a metal stake at the base of the tree with a metal number attached to the metal stake. Maurepas Environmentalist will be responsible for the monitoring the tree for the duration according to the M B I.

#### 3.2 Proposed Hydrology Improvements

The Sponsor proposes to plug the ditches along both sides of the road that traverses the property in a North to South directions by Deep Tilling and disking the road to slow the runoff and replace the proper hydrological sheet flow across portions of the Bank. The plugging of the ditch will be in the portion of the road south of the fork where the road traverses in a West to East direction, thus reestablishing the road as BLH forest as depicted in figures 10,13, and 14.

The road that traverses the property in a West to East direction acts as a spoil bank and slows the hydrological flow across the property. The Sponsor proposes to place culverts in the road in several places to allow proper hydrological sheet flow through the road as depicted in figures 10, 11, and 12. All proposed hydrological work will be depicted in drawings figures 11-14 for the Nation Wide Permit request.

## 3.3 Proposed Vegetative Plantings

The Sponsor intends to rehabilitate the original BLH wetland vegetation in the pine plantation area by plantings 1 year old seedling within the mitigation areas. The planting will be conducted during the first planting season of December 15 – March 15. The site will first be prepared by mowing, grading, herbicide, etc. Appropriate seedlings of mixed BLH species will then be planted at approximately 9' X 9" spacing at an initial stand density of, at a minimum, 538 stems per acre. Hard mast species shall comprise of not less than 50% or greater than 80% of the planted seedlings.

The Sponsor intends to use all prudent efforts, physical, chemical, or mechanical to eliminate existing undesirable/exotic vegetation present such as Chinese tallow on the site. In addition, following the planting in the rehabilitation areas of the Bank, the Sponsor will control these undesirable/exotic species as part of the maintenance and monitoring plan.

#### 4.0 Proposed Service area

The primary service area for the Bank is located within the United States Geological Survey (USGS) cataloging unit 08070203 as depicted in figure 7 which includes Livingston, St. Helena, and Tangipahoa Parishes. Considering a watershed approach, this cataloging unit will serve as the primary service area for unavoidable impacts to wetlands and "Waters of the United States". Where appropriate, the entire Lake Pontchartrain Basin will serve as the secondary service area. This basin consists of the cataloging unit of 08070203 identified as the primary service area as well as the following cataloging units: 08070202, 08070204, 08070205, 08090201, 08090202 and 08090203. Use beyond this area will be determined by the CEMVN on a case-by case basis as depicted in figure # 6.

The USGS does not have any water shed plans for the Tickfaw water shed.

#### 5.0 General Need and Technical Feasibility

The general need for the Bank lies in the 310.7 acres of enhanced, restored BLH and preserved Cypress/ Tupelo Gum Swamp. The Bank will provide compensator mitigation primarily for the HUC # 08070203 watershed as well as secondary HUC areas. This watershed represents significant growth areas such as the Livingston and Tangipahoa Parish. This area is well-suited to provide compensatory mitigation for CEMVN permitted projects with unavoidable wetland impacts within this watershed. Since the aftermath of Hurricane Katrina, there has been a need for mitigation banks in this area because of the movement of residential and commercial ventures north from New Orleans. The USGS was contacted to determine if there are any watershed plans for this watershed. USGS was unaware of any.

The Bank was historically a BLH forest but has since been converted into a pine plantation. The Bank contains hydric soils typical of those associated with the lower Mississippi River floodplain between Baton Rouge and New Orleans. This makes the site selection most feasible at this location. The wetland functions and values lost within the watershed would be compensated and replaced with a restored extension of a large drainage basin and important ecosystem within the watershed.

#### The Bank will:

- 1. Add *106.5* acres of BLH to be enhanced and reestablished plus 200.4 acres to be preserved;
- 2. Providing enhanced, reestablished, and preserved forested wetlands;
- 3. Provide continuity to the ecosystem of the Tickfaw River Basin'
- 4. Provide water quality benefits and floodwater retention to an already impaired area; and
- 5. Reduce future stress on the ecosystem resulting from future development of the Tickfaw River Basin.

The construction work required to develop the bank is routine in nature and feasible. The mitigation activities involve primarily reforestation using bare-root seedlings. These activities have long been utilized in wetland restoration and mitigation projects and are proven methods. The Sponsor has the necessary funds and personnel to successfully implement the proposed vegetative planting.

The Bank is bordered on the north by residential homes and Cypress/Tupelo Gum Swamp.

The west side of the Bank is undeveloped Cypress/ Tupelo Gum Swamp.

The south side of the Bank is undeveloped Cypress/Tupelo Gum Swamp.

The east side of the Bank is undeveloped Cypress/ Tupelo Gum Swamp.

## **6.0** Proposed Future Ownership and Long-Term Management Strategy

At this point Wadesboro Road Mitigation Bank L.L.C. will serve as the mitigation service provider (Sponsor) and also Wadesboro Road Mitigation Bank LLC (Owner) will serve the long term steward to be responsible for the long term management of the Bank. Jimmy Scherer and Jan Songey are listed below and will be "Owner/ representatives", but if things change in the future he will coordinate with CEMVN for any transfer of ownership.

Wadesboro Road Mitigation Bank LLC will hire Thom Barlow d.b.a. Maurepas Environmentalists as the consultant to monitor the Bank.

The Conservation Servitude will be held by *Louisiana Conservation Corporation L.L.C*, a non-profit L.L.C. that is compliance with Louisiana's Non-Profit Corporation Law, Title 12, Sections, 201-209 of the Louisiana Revised Statutes.

The future strategy of the Owner is to *enhance and* reestablish a healthy Bottom-land Hardwood forest to provide a better habitat for wildlife and improve the hydrology for the Tickfaw River basin.

## 6.1 Long-term Ownership, Management, and Contact Information

#### **Sponsor:**

#### **Woodlands LLC**

Jimmy Scherer and Jan Songey (Representatives) Wadesboro Road Mitigation Bank LLC P.O. Box 1451 Hammond, Louisiana 70404 985-345-4107

#### Owner:

#### **Woodlands LLC**

Jimmy Scherer and Jan Songey (Representatives) Wadesboro Road Mitigation Bank LLC P.O. Box 1451 Hammond, Louisiana 70404 985-345-4107

#### **Agent:**

Thom Barlow d.b.a. Maurepas Environmentalists; 39016 S. Thibodeaux Road Ponchatoula, La. 70454 Phone (985) 386-4281 (email) thombarl@yahoo.com

## 6.2 Long Term-Site Protection (see Figure 1)

Wadesboro Road Mitigation Bank is currently owned by Woodlands LLC . The officers of the LLC are Jimmy Scherer and Jan Songy, listed above as Owners. Wadesboro Road Mitigation Bank LLC will be the legal OWNER upon its implementation as a mitigation bank (i.e. Conservation servitude filing and implementation of the mitigation work plan). Wadesboro Road Mitigation Bank LLC, whose representatives are Jimmy Scherer and Jan Songey, will also serve as the mitigation service provider (Sponsor) and Louisiana Conservation Corporation L.L.C., the long term steward of the Bank. The property is not presently encumbered by any servitude and does not have any attached mortgages to the Bank.

A perpetual, conservation servitude (pursuant to the Louisiana Conservation Servitude Act, R.S. 9:1271 et seq.) will be placed on the **310.7 acres** Bank as depicted in figure # 3. This servitude will be held by *Louisiana Conservation Corporation*, Inc. a non-profit organization dedicated to conservation land management. The conservation servitude will be binding to and run with the title of the property. This conservation servitude will prohibit activities that would reduce the quality and quantity of the restored/enhanced wetlands, such as clear cutting, the discharge of fill, construction activities, and cattle grazing or other agricultural activities. The servitude will also specify permissive activities such as hunting, fishing, recreational use, and mineral exploration given the activity does not negatively affect the functions and values of the reestablished, enhanced and preservation wetlands.

#### **6.2** Sponsor's Qualifications

The property is presently solely owned and managed by Woodlands LLC, but upon implementation of the MBI, Wadesboro Road Mitigation Bank LLC will be the Sponsor and Owner

Although the Sponsor's representative has extensive experience in land management activities such as raising loblolly pine tree plantations, this company is new to the mitigation banking ownership. The Sponsor has had several different projects that he has wanted to develop and has had several different Jurisdiction Determinations granted from the Army Corp of Engineers before work could start. The Sponsor was made aware if there were wetlands on the project that had to be mitigated. If the project had wetlands the Sponsor knew that there was a fee to be paid to a mitigation bank within the water shed of the project for the destruction of the wetlands before The Army Corps of Engineers would allow the project to start.

The Sponsor has retained an agent to help with the banking process. The Agent, Mr. Thom Barlow, has completed the Hardwood Bottom Restoration and Wetland Determination course at the Wetland Training Institute. This course was based on the U.S. Corps of Engineers Wetland Delineation Manual. These courses were given by the Wetland Institute. The Agent has also completed a course for Wetland Functional Assessment for Determining Wetland Mitigation for the Gulf Coast. This course was sponsored by The Society of Wetland Scientists.

The Agent has explained the concept of mitigation banking to the Sponsor from the knowledge of these courses. This has helped the Sponsor with his understanding of the mitigation banking process and will make the Sponsor a better mitigation bank owner in the future.

The Sponsor will have complete knowledge of the Mitigation banking industry by the time the MBI is signed and has other properties to be proposed as other mitigation banks after *Wadesboro Road Mitigation Bank* is accepted as a mitigation bank.

### 7.0 Ecological and Site Suitability

## 7.1 Ecological Site Conditions

The Bank contains 93.1 acres of wetlands that will be enhanced into viable wetlands, 3 +or- acres to be reestablished back into a viable wetland habitat, 10.4 acres of up-lands and 200.4 acres to be

used as a preservation area. In addition, the following non-mitigation feature is within the Bank: 3.8 acres non-mitigation for the road traversing through Bank.

7.1.2 Existing Soils

According to the <u>Soil Survey: Tangipahoa Parish</u> (US Department of Agriculture-Soil Conservation Service) there are three major soil types within the area as depicted in figure # 5. Which are included but not limited to Gy.: Guyton, Silt Loam, occasionally flooded, Mp.: Maurepas Muck. The soil that is level, very poorly drained, organic soils that are mucky throughout, Ke.: Kenner Muck Soil that is level, very poorly drained, organic soils. Permeability is rapid in the organic layers and very slow in the clayey layers. The field examination matches the described description as per the NRCS Soil Survey.

Gy.: Guyton, 168.7 Acres (55%) Silt Loam, occasionally flooded,

**Mp.**: Maurepas Muck, 129 Acres (40.4%) Soil that is level, very poorly drained, organic soils that are mucky throughout

**Ke.**: **Kenner Muck** 13 Acres (04.3%) Soil that is level, very poorly drained, organic Permeability is rapid in the organic layers and very slow in the clayey layers.

## 7.1.3 Existing Vegetation

The existing vegetation on the site consisted of the loblolly pine plantation with Tupelo gum trees, bay magnolias, magnolia grandiflora, water oaks, swamp chestnut oaks, live oaks, willow oaks, white oaks, red oaks, cherry bark oaks, nuttall oaks, overcup oaks, maple trees, sweet gum trees, green ash, bitter pecan tree, and pond cypress.

The entire property was clear cut in the spring of 2011. The plants growing in the cutover areas were mainly **FacW** and **OBL** shrubs or saplings as well as herbaceous plants such as: juncos, carex, cyperaceae, eriocaulaceae, liliaceae, poaceae, and acanthaceae.

For remediation the Bank, The Sponsor plans to return the area back to a forested BLH wetland of high quality by planting BLH species in the enhancement and reestablishing areas. The entire 110.4 acres will be planted with one-year old seedlings that have been properly handled to insure viability. This will occur within 12 months of site preparations, during the period of December 15 through March 15 following acceptance of the property as Mitigation Bank. Proper handling of seedlings includes:

- 1. Keeping the seedlings in appropriate cold storage until the time of planting; or
- 2. Planting the seedlings within 14 days from the time of lifting, provided that the seedlings are kept cool, moist and out of the direct sunlight. It may also be required the Chinese tallow (*Triadica* sebiferum) be controlled by intensive management techniques such as cutting or poisoning of this species as well as others, such as vines that may hinder the plant growth.

Selection of species to be planted shall be made in consultation with:

- 1. U.S. Fish and Wildlife Service;
- 2. Louisiana Department of Wildlife and Fisheries;
- 3. Louisiana Office of Forestry;
- 4. US DOA Corps of Engineers.

#### 5. and/or D.N.R.

Suggested Tree Species for Site include:
Water oak (Quercus nigra)
Willow oak (Quercus phellos)
Overcup oak (Quercus lyrtata)
White oak (Quercus alba)
Nuttall oak (Quercus nuttallii)
Cherrrybark oak (Quercus pagoda)
Red maple (Acer rubrum)
Green ash (Fraxinus pennsylvanica)
Sweetgum (Liquidambar styraciflua)
Pecan (Carya Illinoinensis)
Water hickory (Carya aquatica)

## 7.1.4 Existing Hydrology

The project area is located in a low, poorly drained area located West of Ponchatoula south of La. Hwy. 22 south of Wadesboro Road at the end of Shingle Mill Road. The main form of hydrology on the property is the average rainfall and sometimes the occasional tidal flooding from a Hurricane or extremely strong southeasterly winds.

According to the NRCS Soil Survey book the total annual rain fall for Tangipahoa Parish is 34 inches. Of this, 19 inches, or 55%, usually falls between April and September but 2 years in 10 there can be a low average of 51.66 inches and a high of 74.96 inches. The average number of days with a rainfall of 0.10 inches or more is 80 days.

## 7.2 Site Suitability, Site Information, Land Use, and Zoning/Encumbrances

This site was chosen for because the Sponsor owns 45+/- acres within the same watershed and thought the Bank would be suitable for any work at this site. A wetland determination was done on this property, and it was determined that there was approximately 11 acres of wetlands on the site. In the near future the land owner has plans to develop this area, and so he thought *Wadesboro Road Mitigation Bank* would be suitable to set up a mitigation bank to off-set the loss of wetlands on his 45+/- acre parcel of land. Both areas are the same bottomland hardwood classification.

The Bank is free from any liens, and/or servitudes,

The pervious and current land use of the enhancement/reestablishment area was a pine plantation. The preservation area is an old growth Cypress/Tupelo Gum Swamp. Tanigpahoa Parish does not have any zoning outside any Municipalities. Even when subdivisions are built outside of Municipalities they are not zoned "Residential" in Tangipahoa Parish.

The Bank is undeveloped/rural property, as well as most of the property adjacent on the north, south, east and west sides.

#### 7.3 Historical Hydrology

There is an old logging road, approximately 2,576 foot long that traverses the property, in a westerly to easterly direction. which affects part of the Bank's natural hydrology. This road causes the natural sheet flowto be restricted.

The Hydrology for the property has historically come from the inundation of the property from annual rain fall *and sometimes a strong southeasterly wind could push tidal water on to the lowest part of the Bank*.

#### 7.4 Jurisdictional Determination

Jurisdictional Determination has been granted and is depicted in Figure 9.

#### 8.0 Hydrological Influences

The project area is located in a low, poorly drained area located West of Ponchatoula south of La. Hwy. 22 south of Wadesboro Road at the end of Shingle Mill Road. The Bank was historically solely influenced by annual rain fall. There are no Streams or Creeks that flow through the Bank. The main form of hydrology on the property is the average rainfall and sometimes the occasional tidal flooding from a Hurricane or extremely strong southeasterly winds.

During a non-normal year a hurricane could push tidal water on to the property due to the proximity next to a low lying Cypress /Tupelo Gum Swamp.

According to the Soil Survey: Tangipahoa Parish (US Department of Agriculture-Soil Conservation Service), the total annual rain fall for Tangipahoa Parish is 34 inches. Of this, 19 inches, or 55%, usually falls between April and September but 2 years in 10 there can be a low average of 51.66 inches and a high of 74.96 inches. The average number of days with a rainfall of 0.10 inches or more is 80 days.

## 9.0 Methods for Determining Credits and Release of Credits

To determine the amount of acres required to offset a particular impact to wetlands, CEMVN will use either best professional judgment or an 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. Credits will be determined in cooperation with the I.R.T. using the M.C.M. (or other wetland assessment methods). The total granted credits will be listed in the Corps approved M.B.I. Credit release is tied to achieving all the milestones within the success criteria at specific monitoring times as outlined in the Mitigation Work Plan.

## 10. Accounting Procedures

The Sponsor will use RIBITS (Regulatory In lieu fee and Bank Information Tracking System) for their accounting procedure for the sales of wetland credits. RIBITS was developed by the U.S. Army Corps of Engineers with support from the Environmental Protection Agency to provide better information on mitigation banking and in-lieu fee programs across the country. RIBITS allows users to access information on the types and numbers of mitigation bank and in-lieu fee program sites, associated documents, mitigation credit availability, service areas, as well information on national and local policies and procedures that affect mitigation bank and in-lieu fee program

development and operation.

The Sponsor shall establish and maintain a ledger to account for all credit transactions, and shall notify the CEMVN each time a credit transaction occurs as agreed upon in the MBI. In addition, the Sponsor shall compile an annual ledger report showing:

- 1. The beginning and ending balance of available credits and permitted impacts for each resource type;
- 2. All additions and subtractions of credits; and
- 3. Any other changes in credit availability.
- 4. Reporting procedures for reporting shall be defined in the final MBI.

#### 11.0 Adaptive Management Practices

The proposed Bank is within a larger wetland ecosystem that has been impacted by:

- 1. Large and small-scale drainage projects;
- 2. Oil and gas activity; and
- 3. Poor forest management practices.

As such, an adaptive management strategy will be incorporated into the long-term management plan in order to meet the long-term success criteria and result in a forested system that can essentially maintain itself. The adaptive management plan will outline specific practices and measures that will guide decisions for revising compensatory mitigation plans if needed.

## 12.0 Ecological Performance Standards

The final mitigation banking instrument will contain performance standards that will be used to assess—whether the Bank is achieving its goals and objectives. These performance standards will be based on variables or measures of functional capacity described in the functional assessment methodologies, measurements of hydrology, other aquatic resource characteristics and/or comparisons to reference aquatic resources of similar type and landscape position. These performance standards may take into—account the expected stages of the aquatic resource development process in order to allow early identification of potential problems and appropriate adaptive management.

#### 13.0 Monitoring

Monitoring is necessary to determine if the bank is meeting its performance standards and to determine if measures are necessary to ensure that the goals and objectives of the Bank are met. The monitoring requirements and methodology will be defined in the mitigation banking instrument <u>and will be clearly detailed in the work plan</u> and will ultimately be approved by the CEMVN. These requirements include:

- 1. Biological parameters to be monitored;
- 2. The duration and frequency of the requisite monitoring activities;
- 3. The party responsible for conduction the monitoring;
- 4. The frequency for submitting monitoring reports to the CEMVN; and
- 5. The party responsible for submitting those monitoring reports to the CEMVN.

#### 14.0 Maintenance

Maintenance activities will be conducted throughout the life of the Bank, as certain ecological performance standards are reviewed and as monitoring reports are completed. This will assure that certain milestones are met as defined in the mitigation banking instrument. All scheduled maintenance activities will be approved by the CEMVN in the mitigation banking instrument. Prior to and following commencement of any maintenance activity, the Sponsor will notify the CEMVN, in accordance with the mitigation banking instrument.

#### 15.0 Financial Assurances (Short and Long Term)

The amount of the required short and long term financial assurances must be <u>approved</u> by the CEMVN in consultation with Wadesboro Road Mitigation Bank LLC.

The financial assurances shall be requested as an escrow account created from a deposit of \$1,000 for each Wetland Credit sold:

In determining the assurance amount, the CEMVN may consider the following:

- 1. Cost of providing replacement mitigation;
- 2. Including costs for land acquisition;
- 3. Planning and engineering;
- 4. Legal fees;
- 5. Mobilization; and
- 6. Construction and monitoring.

In general, Short Term Financial Assurances may be in the form of an escrow account. A percentage of each credit/acre sold may be placed in an escrow account, in accordance with the mitigation banking instrument. The monies reserved in this account will be used exclusively for maintenance and management purposes.

#### 16.0 Conclusion

In summary, the Mitigation Bank area has the potential to enhance, reestablish, and preserve 310.7 acres of bottomland hardwood and Cypress/ Tupelo Gum Swamp habitat. The enhancement, reestablishment and preservation of bottomland hardwood vegetation, along with proper management and long term protection will ensure the growth and success of this forested wetland habitat

Figure # 1 Vicinity Map for Wadesboro M.B. (Date Drawn 6/27/11)

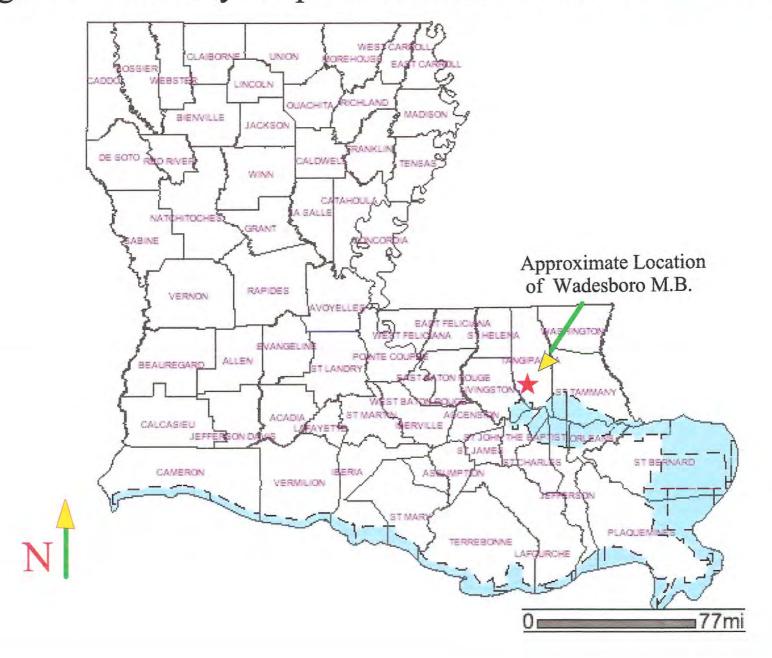
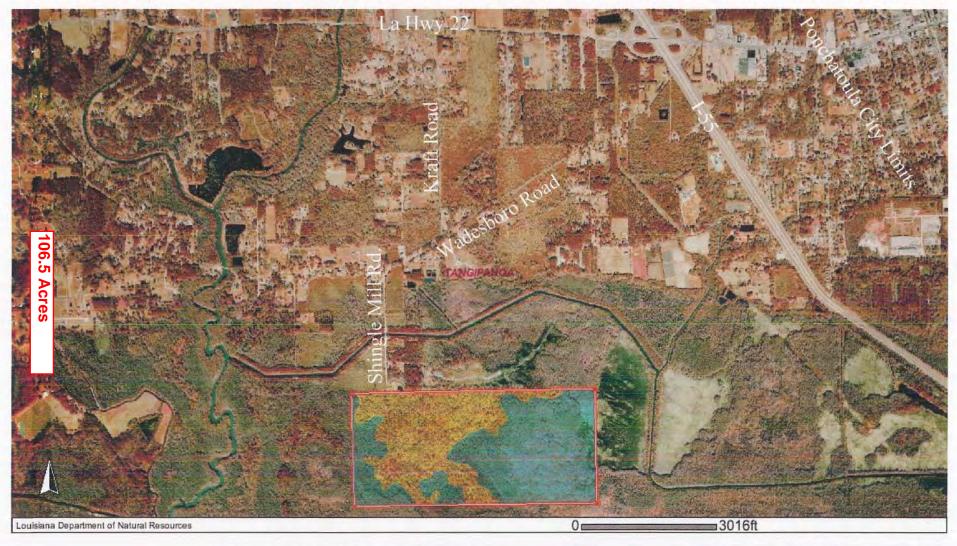


Figure # 2 Wadesboro Road 310.74 Acre M. B. Road Map (Drawn 6/27/11)



Figure # 3 Wadesboro Road 310.7 Acre Mitigation and Preservation Bank
This Map Also Serves as The Conservation Servitude Map (Drawn 6/27/11)



Enhancement Mitigation Bank Area
106.5 Acres



Preservation Bank Area 200.4 Acres

Figure # 4 Wadesboro 310.74 Acre Mitigation/Preservation Bank Topo Map

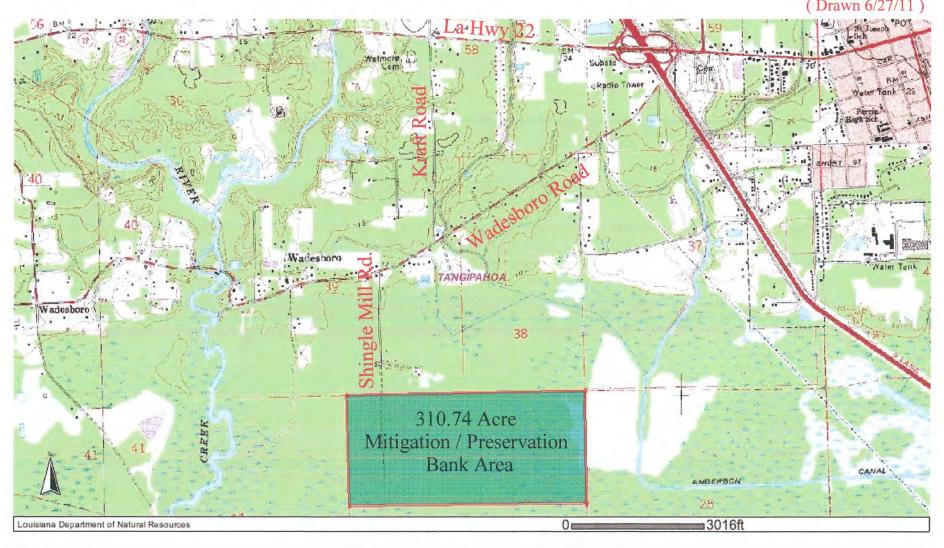


Figure # 5 Wadesboro Mitigation/Preservation Bank Soil Map (Drawn 6/27/11)



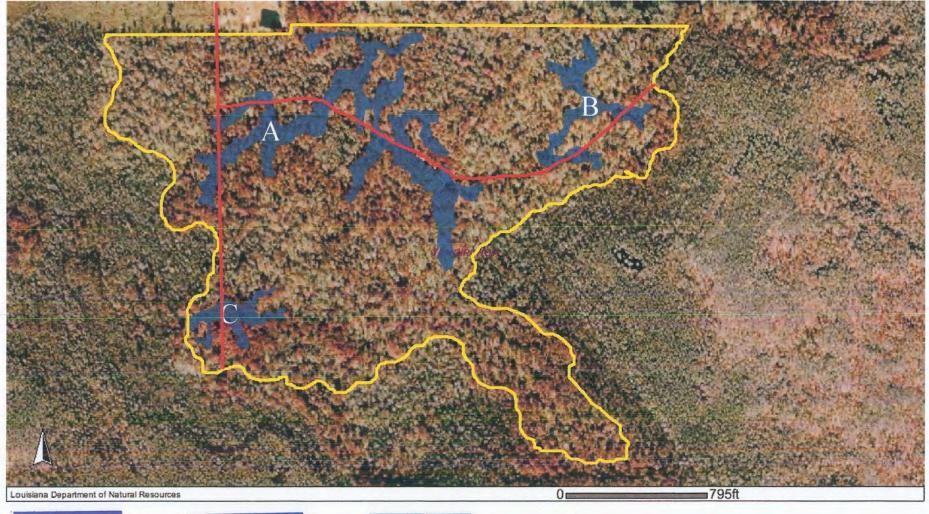
Gy.- Guyton silt loam, occasionally flooded 168.7 Acres (55.%)

**Mp.- Maurepas Muck** 129.04 Acres (40.4%)

Ke.- Kenner Muck 13 Acres (4.3%)

Figure # 6 Wadesboro M. B.: Water Shed Map (Date Drawn 6/27/11) Approximate Location of Wadesboro M.B. Saton Rouge

Figure # 7 Wadesboro Road M.B. Wet - Non Wet Areas



A 9.56 Acres



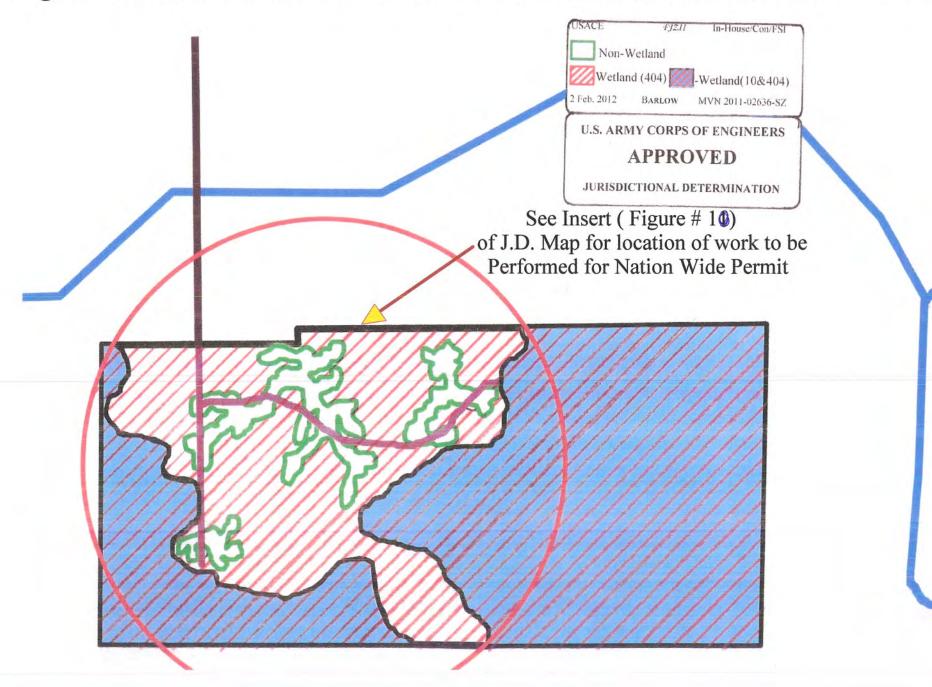


Total Non-Wet Acres 11.04 Acres

Figure # 8 Wadesboro Road M.B. Data Points for Wetland Determination

(Date Drawn 9/9/11)

Figure # 9 Wadesboro Road M. B. Jurisdictional Determination Map





#### DEPARTMENT OF THE ARMY

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

REPLY TO ATTENTION OF

FEB 1 0 2012

Operations Division Surveillance and Enforcement Section

Mr. Thom Barlow Maurepas Environmental 39016 South Thibodeaux Road Ponchatoula, Louisiana 70454

Dear Mr. Barlow:

Reference is made to your request for a U.S. Army Corps of Engineers' (Corps) jurisdictional determination on property located in Section 38, Township 7 South, Range 7 East, Tangipahoa Parish, Louisiana (enclosed map). Specifically, this property is identified as a 310-acre tract south of the end of Shingle Mill Road, and proposed as the Wadesboro Road Mitigation Bank.

Based on review of recent maps, aerial photography, soils data, information provided with your request, and a brief site inspection conducted on January 20, 2012, we have determined that part of the property is wetland and subject to Corps' jurisdiction. The approximate limits of the wetland are designated in red on the map. A Department of the Army permit under Section 404 of the Clean Water Act will be required prior to the deposition or redistribution of dredged or fill material into this wetland. Additionally, a portion of the wetlands are tidal and therefore subject to Corps' jurisdiction under Section 10 of the Rivers and Harbors Act. A DA Section 10 permit will be required prior to any work in these tidal wetlands.

Please be advised that this property is in the Louisiana Coastal Zone. For additional information regarding coastal use permit requirements, contact Ms. Christine Charrier, Coastal Management Division, Louisiana Department of Natural Resources at (225) 342-7953.

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

Should there be any questions concerning these matters, please contact Mr. Furcy Zeringue at (504) 862-2099 and reference our Account No. MVN 2011-02636-SZ. If you have specific questions regarding the permit process or permit applications, please contact our Central Evaluation Section at (504) 862-2577. The New Orleans District Regulatory Branch is committed to providing quality and timely service to our customers. In an effort to improve customer service, please complete and return the enclosed Customer Service Survey.

Sincerely,

342-4556

Pete J. Serio
Chief, Regulatory Branch

JAY PECOT

ZUS 3420884

JAY PECOT & LA. GOY

Enclosures

Figure # 10 Wadesboro Road M.B. J.D. Map Insert For Nation Wide Permit

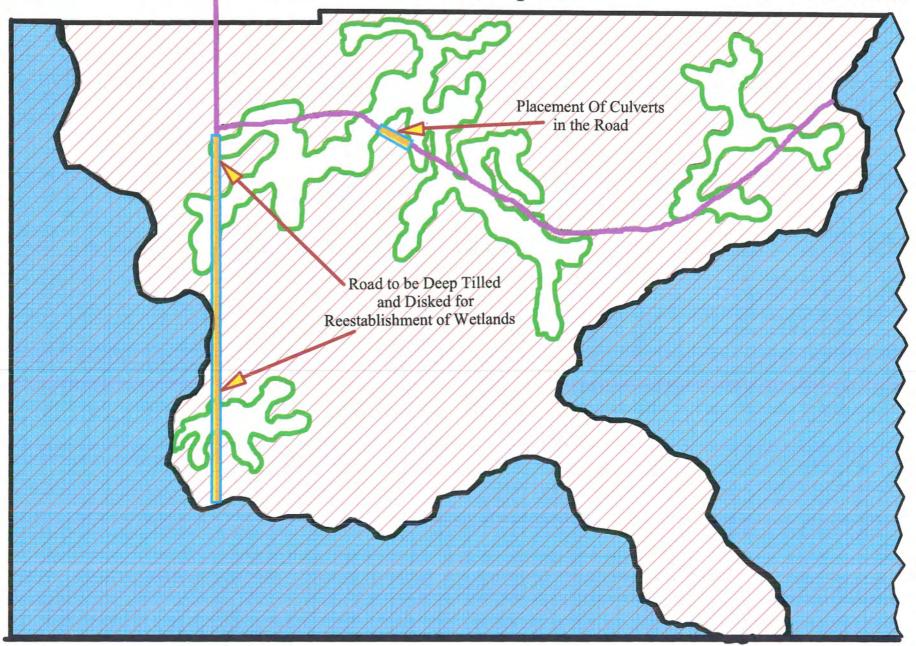


Figure #11
Wadesboro Road M.B. Plan View for Road Culverts to Be Added to Obtain Proper Sheet Flow

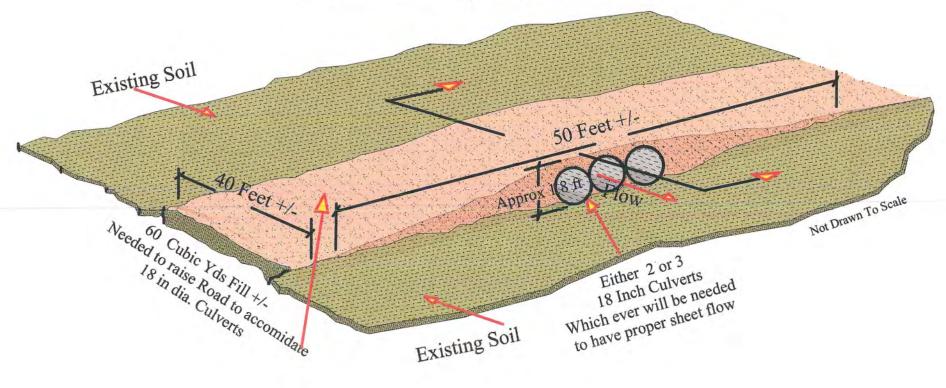
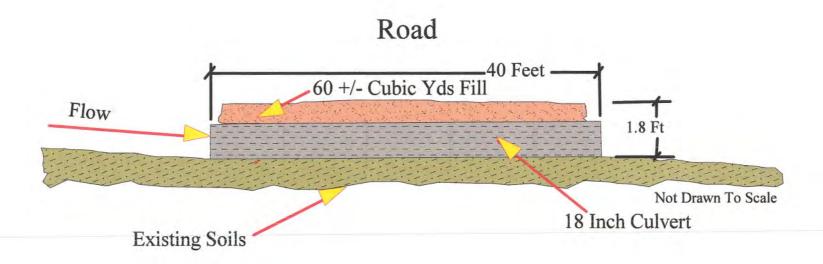


Figure # 12 Wadesboro Road M.B. Typical Road Cross Section For Culverts



Wadesboro Road M.B. Plan View of Typical Road Cross Section

Ditches Will be Plugged

During Deep Tilling and Disking Not Drawn To Scale -Existing Soil Road to be \
Deep Tilled and Disked
For Reestablishment of BLH

Figure # 14
Wadesboro Road M. B. Typical Road Cross Section

