

MITIGATION PROSPECTUS
TCHEFUNCTE UMBRELLA
MITIGATION BANK

St. Tammany Parish, Louisiana

September 2012

Prepared for:

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1.0 Introduction

Maurepas Environmentalists, acting as agent for the Woodlands L.L.C. (Owner) and Tchefuncte Umbrella Mitigation Bank L.L.C. will serve as the Owner and Sponsor until implementation of MBI. Woodlands L.L.C. respectfully presents this prospectus to establish the proposed Tchefuncte Umbrella Mitigation Bank (Bank TUMB 1, 2 or 3), 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 three Non contiguous tracts of land totaling approximately 487.6 acres currently owned by Woodlands LLC . Tchefuncte Umbrella M.B. (TUMB 1 will be approximately 100 acres, TUMB 2 will be approximately 234.7 acres, and TUMB. 3 will be approximately 152.9 in St. Tammany Parish, Louisiana, Louisiana, owned by **Woodlands LLC (Owner)** as depicted in figures 1-4. The center of the proposed umbrella project area of Tchefuncte Umbrella M.B. 1(TUMB 1, **BANK 1**) is located at Latitude 30.54061 Longitude 90.22150, in Section 8 T6S R10 E. The center of Tchefuncte Umbrella M.B. 2 (TUMB 2, **BANK 2**) is located at Latitude 30.54597 Longitude 90.23910, in Sections 7, in T6S R10E. The center of Tchefuncte Umbrella M.B. 3 (TUMB3 **BANK 3**) is located at Latitude 30.55322 Longitude 90.23020 in Section 6 T6S R10E. TUMB1, **BANK 1** is situated at the end of Oil Field Road 3 blocks off LA Hwy 1077, 2.73 miles north of Hwy 190 Goodbee Louisiana. adjacent to La Hwy 1077, 3.68 miles north of Hwy 190 Goodbee, Louisiana in St Tammany Parish. TUMB 2, **BANK 2** is situated adjacent to La Hwy 1077, 3.68 miles north of Hwy 190 Goodbee, Louisiana(The Southern Boundary of T.U.M.B.2 in Tantella Ranch Road) . TUMB 3, **BANK 3** is also situated adjacent to La Hwy 1077, 4.07 north of Hwy 190 Goodbee, Louisiana. The directions to Tchefuncte Umbrella Mitigation Bank are as following: travel 5.9 miles North on La Hwy 1077 North of the Goodbee/Madisonville exit on I-12W. This will be Oil field Road for the entrance to TUMB. 1, **BANK 1**. Then travel 0.96 miles north the entrance to TUMB 2, **BANK 2** is on the left, West side of La Hwy 1077. Then turn right, East side of La Hwy 1077, on Tantella Ranch Road the southern boundary of TUMB.3, **BANK 3** is 0.22 miles on the North side of Tantella Ranch Road

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 Tchefuncte Umbrella Mitigation Bank 1, the first of the 3 Mitigation Bank, which are all rated the same habitat, to be known as Tchefuncte Umbrella Mitigation Banks **1, 2 and 3**

The acreage known as **BANK 1** was historically a mixed Long Leaf Pine Savannah / Bottomland Hardwood (BLH) Forest before it was cut out and planted into a Loblolly Pine tree plantation approximately 35-40 years ago.

The northern part of **BANK 1** was a mixed Pine Flat-wood/ BLH before it was cut out to be established as a Loblolly Pine tree Plantation

A Pine Flatwoods have other synonyms: *Longleaf Pine-Slash Pine, Spruce Pine Forest, Flatwoods*

A Long Leaf Pine Savannah is described by The Natural Heritage a "*Pine Flatwoods occurring primarily in the lower Florida Parishes and southwest Louisiana on essentially flat, low-relief areas with a high water table. They may infrequently occur in central Louisiana.* Soils are

normally mesic but may be saturated in winter and may become dry in summer. Soils are generally strongly acidic and fine sandy or silty. In the eastern Florida Parishes, Pinus palustris (longleaf pine) and Pinus elliotii (slash pine) are often co-dominants and are mixed in various percent composition. In places, one or the other may be almost totally dominant. Pinus taeda (loblolly pine) is often conspicuous in these forests and may be dominant in some areas. In the south-central Florida Parishes, Pinus glabra (spruce pine) is often the dominant overstory species, with longleaf pine totally absent. In southwest Louisiana, only longleaf and loblolly pine are present, the former usually most abundant. Quercus nigra (water oak), Q. laurifolia (laurel oak), Magnolia virginiana (sweetbay), Acer rubrum (red maple), Liquidambar styraciflua (sweetgum), and Nyssa sylvatica (black gum) are often predominant in the community. Taxodium distichum (baldcypress) and Taxodium ascendens (pondcypress, southeastern Louisiana) may be present in lower topographic positions. Important midstory and understory species include Sabal minor (dwarf palmetto), Ilex glabra (littleleaf gallberry, southeastern Louisiana), I. coriacea (sweet gallberry), Cyrilla racemiflora (swamp cyrilla), Lyonia spp. (fetterbush, primarily southeastern Louisiana), Morella spp. (wax myrtles), Clethra alnifolia (summer sweet, southeastern Louisiana), Vaccinium spp. (blueberries), Gaylussacia mosieri and G. dumosa (huckleberries, southeastern Louisiana), Hypericum spp. (St. John's-worts), Liatris spp. (blazing-stars), Rubus spp. (blackberries), Chaptalia tomentosa (sunbonnet), Andropogon spp. (broomsedges), and Panicum spp. (panic grasses). Many species common to Pine Savannahs occur sporadically in this community.”

The southern part of **BANK 1** was a Bottomland Hardwood Forest before it was cut out to be established as a Loblolly Pine tree Plantation

A Bottomland Hardwood Forests have other synonyms: *Mixed Bottomland Hardwoods, Broad Stream Margins, Hardwood Bottoms.*

A BLH 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 cherry bark oak, sweet pecan, and winged elm, which are adapted to lee 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 purpose of **BANK 1** is to clear cut the existing Loblolly Pine Plantation and then enhance the clear cut Loblolly Pine Plantation, approximately 70.2 acres, back into a Long Leaf Pine Savannah/BLH forest habitat, providing continuity to the forested ecosystem of the Tchefuncta River Basin HUC Number 08090201, and also preserving 5 Acres of BLH. 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 Tchefuncta River Basin as depicted in figure # 6.

The intent of the Bank is to sell mitigation credits to offset the destruction of Pine Flat-woods Savannah/BLH forest in the surrounding areas of the, Tchefuncta, Bogue Falaya, Little Bogue Falaya, Rivers, Abita Creek, Ponchitolawa Creek, Bayou Liberty, Bayou LaComb and Bayou Bonfoca. The details regarding the bank’s terms to operate as “Tchefuncta Umbrella Mitigation **Bank 1**” will be defined within the Mitigation Banking Instrument (MBI).

2.0 Objectives

The proposed project area is presently a 35-40 year old Loblolly Plantation. The goal of the Sponsor is to clear cut the forested area and then establish and preserve **Bank 1** back into a sustainable, Long Leaf Pine Savannah Bottomland Hardwood forest

It is the goal of the **Bank 1** 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 (“Swamp busters”). By providing this service, the Sponsor **will** enhance and preserve the proposed Bank back into a mixed Long Leaf Pine Savannah /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	Long Leaf Pine Savannah	39.5 Acres
Enhancement Area	BLH	30.7 Acres
Enhancement Area	Non-Wet Inclusions	24.8 Acres
Preservation Area	BLH	5 Acres
Total		100 Acres

3.0 Proposed Bank Establishment

3.1 Mitigation Work Plan

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

1. Control burning the total Enhancement Mitigation area prior to planting the proposed enhancement area. .
2. Site preparation and plantings shall be in accordance with the planting scheme and guidelines set forth in the MBI. Planting appropriate Long Leaf Pine and 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 Long Leaf Pine and hardwood seedlings.

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 1/50th 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

There are no plans for any hydrological improvements in **Bank 1**.

3.3 Proposed Vegetative Plantings

After clear cutting the loblolly pine plantation the Sponsor intends to enhance the area back into the original Long Leaf Pine Savannah/BLH wetland vegetation ~~in~~ 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. In the Long Leaf Savannah area the planting ratio will be 85%-90% Long Leaf Pine to 10%to 15% hard mast. In the BLH area the ratio will be 85%-90% hard mast to 10%to 15% soft mast species

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 enhancement 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 08070201 as depicted in figure 7 which includes Washington, Tangipahoa and St. Tammany 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 08090201 identified as the primary service area as well as the following secondary cataloging units: 08070202, 08070203, 08070204, 08070205, 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 Tchefuncte water shed.

5.0 General Need and Technical Feasibility

The general need for **Bank 1** lies in the 100 acres of existing Loblolly Pine Plantation to be cut and converted into an enhanced Long Leaf Pine Savannah/BLH forest. **Bank 1** will provide compensatory mitigation primarily for the HUC # 08090201 watershed as well as secondary HUC areas. This watershed represents significant growth areas such as the Washington, Tangipahoa and St Tammany 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 Long Leaf Pine Savannah/BLH forest but has since been converted into a pine plantation which is now ready to be harvested. 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 70.2 acres of Long Leaf Pine Savannah/BLH to be enhanced
2. Add 5 Acres of preserved BLH
3. And 24.8 acres(upland) to be enhanced;
4. Providing enhanced forested wetlands;
5. Provide continuity to the ecosystem of the Tchefuncte River Basin'
6. Provide water quality benefits and floodwater retention to an already impaired area; and
7. Reduce future stress on the ecosystem resulting from future development of the Tchefuncte 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 an undeveloped open field

The west side of the Bank is residential homes consisting of at least 1 acre lots

The south side of the Bank is undeveloped Loblolly Pine Plantation.

The east side of the Bank is undeveloped Loblolly Pine Plantation and a home site containing a large amount of acreage. .

6.0 Proposed Future Ownership and Long-Term Management Strategy

At this point Woodlands LLC is the current owner, but at the time of signing the MBI, the ownership will be transferred to Tchefuncte Umbrella Mitigation Bank L.L.C., and will serve as the Sponsor and Owner, and will also serve the long term steward to be responsible for the long term management of the Bank. Jimmy Scherer is listed below and will be “Owner/ representatives”, but if things change in the future he will coordinate with CEMVN for any transfer of ownership.

Tchefuncte Umbrella 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 preserve an existing Loblolly Pine Plantation back into a healthy Long Leaf Pine Savannah/Bottom-land Hardwood forest to provide a better habitat for wildlife and improve the hydrology for the Tchefuncte River basin.

6.1 Long-term Ownership, Management, and Contact Information

Sponsor :

Tchefuncte Umbrella Mitigation Bank L.L.C. (becomes Sponsor upon implementation of MBI)
Jimmy Scherer (Representative)
Tchefuncte Umbrella Mitigation Bank LLC
P.O. Box 1451
Hammond, Louisiana 70404
985-345-4107

Owner :

Woodlands LLC (Current Owner, but Tchefuncte Umbrella Mitigation Bank L.L.C. becomes Owner upon implementation of MBI)
Jimmy Scherer (Representative)
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)

The proposed Tchefuncte Umbrella Mitigation Bank is currently owned by Woodlands LLC .The officers of the LLC are Jimmy Scherer and Jan Songy, listed above as Owners Tchefuncte Umbrella 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). Tchefuncta Umbrella Mitigation Bank L.L.C. whose representative is Jimmy Scherer 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, liens, right of ways or easements, and does not have any attached mortgages to any Bank.

A perpetual, conservation servitude (pursuant to the Louisiana Conservation Servitude Act, R.S. 9:1271 et seq.) will be placed on the 100 acre **Bank 1** 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 solely owned and managed by Woodlands LLC, but upon ~~implementation~~ filing the final ~~of the~~ MBI, Tchefuncta Umbrella Mitigation Bank LLC will be the Sponsor and Owner.

Although the Sponsor and Owner'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, but the raising of Loblolly pine trees has given the owner an insight into how trees a grown.

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, and from his past experience from setting up other Mitigation Banks. 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.

7.0 Ecological and Site Suitability

7.1 Ecological Site Conditions

The Bank contains 75.2 acres of wetlands that will be enhanced and preserved into viable wetlands and 24.8 acres of up-lands. The 24.8 acres of uplands will be classified as Non-Wet Inclusions.

7.2 Existing Soils

According to the Soil Survey: St. Tammany Parish (US Department of Agriculture-Soil Conservation Service) According to the Soil Survey: St Tammany Parish (US Department of Agriculture-Soil Conservation Service) there are four major and one minor soil types within the area including but not limited to **My, Myatt fine sandy loam, St., Stough fine sandy loam, Pr., Prentiss fine sandy loam, 0-1 per cent slopes, Aa., Abita silt loam, 0-2 percent slopes, Gt., Guyton silt loam** .The field examination matches the described description as per the NRCS Soil Survey.

Aa., Abita silt loam, 0-2 percent slopes, 17.4 acres (19.0%) of proposed **TUMB 3**. This soil is nearly level and somewhat poorly drained. This soil is classified as Potentially Hydric.

Gt., Guyton silt loam, 5.3 acres (5.0%) of the proposed **TUMB 3**. This soil is level and poorly drained. This soil is classified as Hydric

My, Myatt fine sandy loam frequently flooded , 24.5 acres (23.2%) of proposed **TUMB 3**. This soil is level and poorly drained. This soil is Hydric in classification.

Pr., Prentiss fine sandy loam, 0-1 per cent slopes, 29.3 acres (30.3%) of proposed **TUMB 3**. This soil is nearly level. It is moderately well drained and could be potentially wet in the level areas. This soil is Potentially Hydric

St., Stough fine sandy loam, 23.5 acres (22.2%) of proposed **TUMB 3**. This soil is level and somewhat poorly drained, and is classified as Potentially Hydric

7.3 Existing Vegetation

The existing vegetation on the site consisting of the loblolly pine plantation are tupelo gum trees, bay magnolias, magnolia grandiflora, water oaks, swamp chestnut oaks, live oaks, willow oaks, white oaks, red oaks, cherry bark oaks, red maple trees, sweet gum trees, green ash, and bitter pecan tree.

For remediation the Bank, The Sponsor plans to return the area back to a forested Long Leaf Pine Savannah/BLH wetland of high quality by planting BLH species in the enhancement and

reestablishing areas. The entire 100 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; and/or
4. USDOA Corps of Engineers.
5. Department of Natural Resources

Suggested Tree Species for Site include:

Long Leaf Pine (*Pinus palustris*)
Water oak (*Quercus nigra*)
Willow oak (*Quercus phellos*)
White oak (*Quercus alba*)
Cherrybark oak (*Quercus pagoda*)
Red maple (*Acer rubrum*)
Green ash (*Fraxinus pennsylvanica*)
Sweetgum (*Liquidambar styraciflua*)
Pecan (*Carya Illinoensis*)
Water hickory (*Carya aquatica*)
Live Oak (*Quercus virginian*)

7.1.2 Existing Hydrology

The project area is located in a flat, partially undulating; poorly drained area east of Louisiana Highway 1077 2.73 miles north of Goodbee. The main form of hydrology on the property is the average rainfall.

There are no existing hydrological disturbances on or adjacent to the site that the sponsor has any control over.

According to the NRCS Soil Survey book the total annual rain fall for St. Tammany Parish is 61 inches. Of this, 32 inches, or 50%, usually falls between April and September. The growing season for most crops falls within this period. In 2 years out of 10 there can be a low average of 27 inches and a high of 78.7 inches. The average number of days with a rainfall of 0.10 inches or more is 82 days.

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

This site was chosen for because the Sponsor owns 153+/- acres within the same watershed and thought that **Bank 1** would be suitable for any work at this site. In the near future the land owner has plans to develop this area, and so he thought **Bank 1** would be suitable to set up a mitigation bank to off-set the loss of wetlands on his 153+/- acre parcel of land. Both areas are the same long leaf pine savannah/bottomland hardwood classification.

The Bank is free from any encumbrances, including liens, right of ways, easements and/or servitudes.

The current land use of the enhancement/preservation area is a pine plantation. St Tammany Parish does not have any zoning outside any Municipalities. Even when subdivisions are built outside of Municipalities they are not zoned "Residential" in St. Tammany 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

The project area is located in a flat, partially undulating; poorly drained area east of Louisiana Highway 1077 2.73 miles north of Goodbee. The main form of hydrology on the property is the average rainfall.

According to the NRCS Soil Survey book the total annual rain fall for St. Tammany Parish is 61 inches. Of this, 32 inches, or 50%, usually falls between April and September. The growing season for most crops falls within this period. In 2 years out of 10 there can be a low average of 27 inches and a high of 78.7 inches. The average number of days with a rainfall of 0.10 inches or more is 82 days.

There is a low area that traverses through the middle of the property in a northwest to a southeast direction. This area is not considered "Waters of the U.S."

7.4 Jurisdictional Determination

Jurisdictional Determination has been granted and is depicted in Figure 11.

8.0 Hydrological Influences

The project area is located in a low, poorly drained area located 2.73 miles north of Goodbee, East of La. Hwy. 1077 at the end of Oil Well Road. The Bank was historically solely influenced by annual rain fall. There is a low area in the middle of Bank3 that allow water to flow through the Bank but is not considered Waters of the US, but Wet Botomland Hardwood . This area will be used as the preservation area of **Bank 1**. The main form of hydrology on the property is the average rainfall

According to the NRCS Soil Survey book the total annual rain fall for St. Tammany Parish is 61 inches. Of this, 32 inches, or 50%, usually falls between April and September. The growing season

for most crops falls within this period. In 2 years out of 10 there can be a low average of 27 inches and a high of 78.7 inches. The average number of days with a rainfall of 0.10 inches or more is 82 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.

10.0 Financial Assurances (Short and Long Term)

The amount of the required short and long term financial assurances must be approved by the CEMVN in consultation with Tchefuncte Umbrella Mitigation Bank L.L.C..

The financial assurances shall be requested as an escrow account created from a deposit of \$1,000 for each Wetland Credit sold or in the form of a Letter Of Credit if the escrow account is not suitable:

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.

11.0 Conclusion:

In summary, the Mitigation Bank area has the potential to enhance, and preserve 75.2 acres of Long Leaf Pine/bottomland hardwood. The enhancement and preservation of Long Leaf Pine/ bottomland hardwood vegetation, along with proper management and long term protection will ensure the growth and success of this forested wetland habitat. All 3 banks proposed to be placed in The Umbrella Agreement are the same habitat consisting Long Leaf Pine/ Bottomland hardwood, but banks 2 and 3 have been clear cut 18 months ago.

The other 2 banks will be phased in as a “needed situation” for extra mitigation credits that occurs in the watersheds.

Figure # 1 Vicinity Map for Tchefuncte Umbrella M.B.

(Date Drawn 6/27/11)



Figure # 2 Tchefuncte Umbrella 487.6 Acre Mitigation Banks

(Drawn 6/28/11)

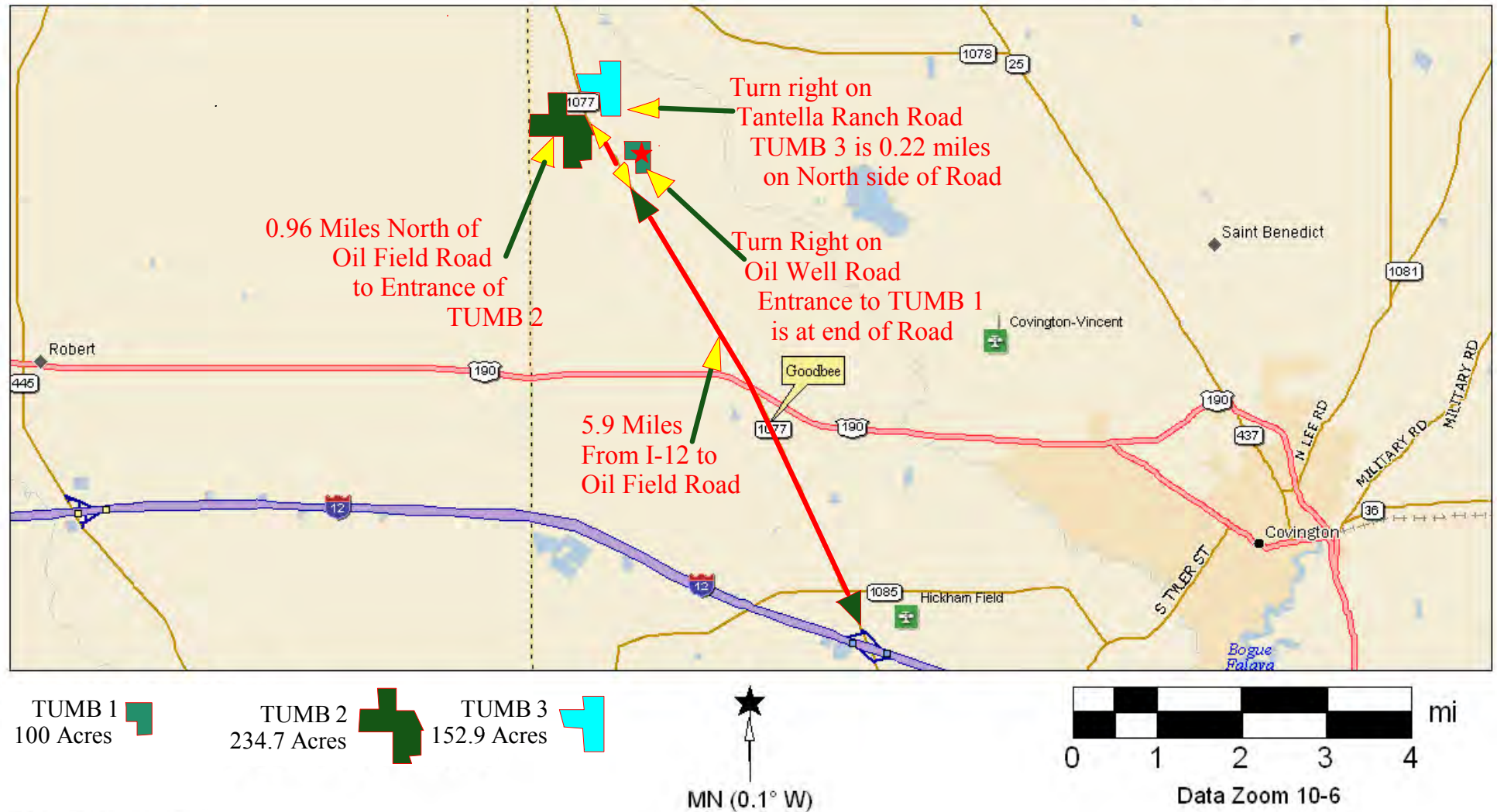


Figure # 3 Tchefuncte Umbrella 487.6 Acre M.B.-1998 Aerial Map (Drawn 3/27/12)

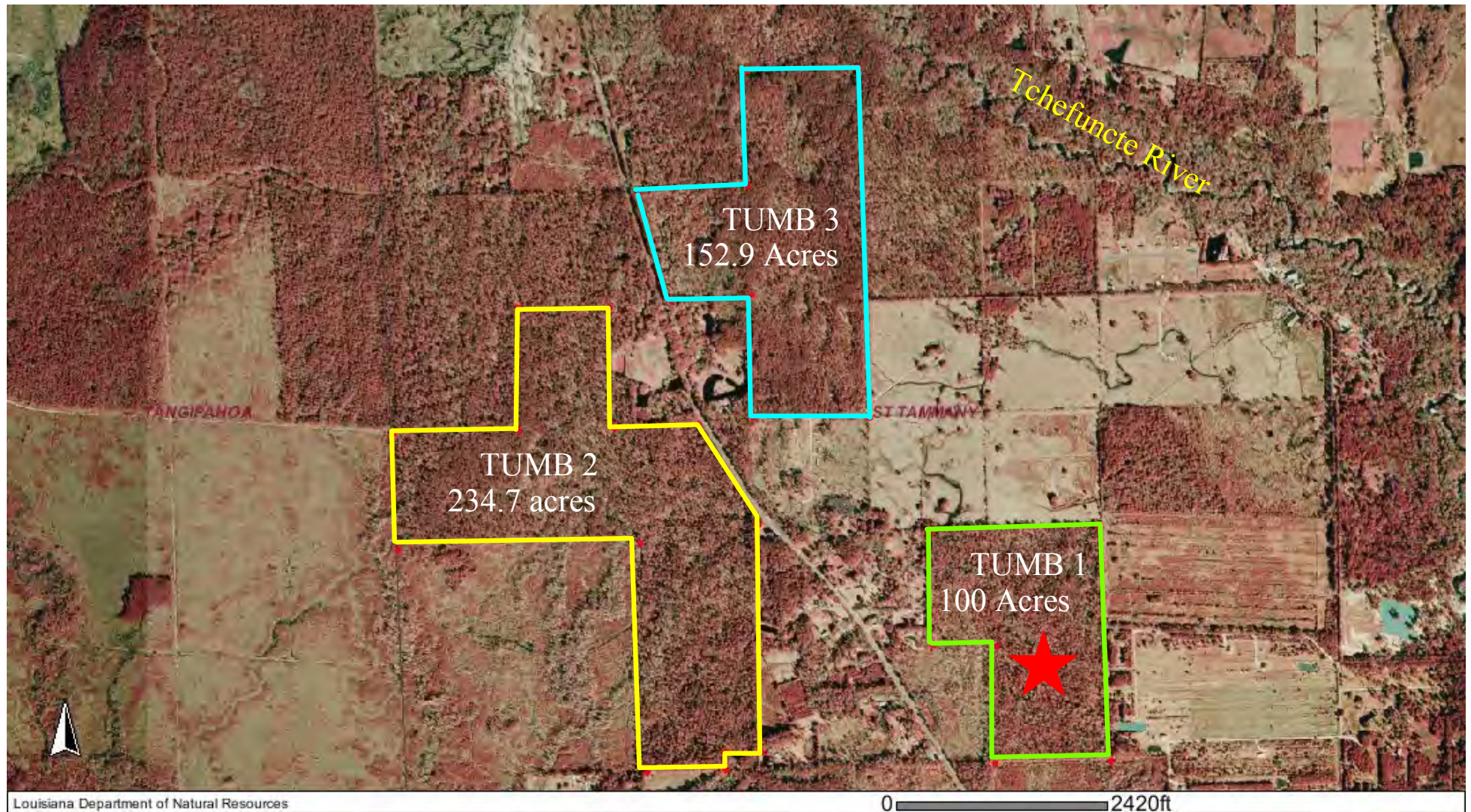


Figure # 4 Tchefuncte Umbrella M.B.- TUMB 1 and TUMB 2 Map (Drawn 3/27/12)

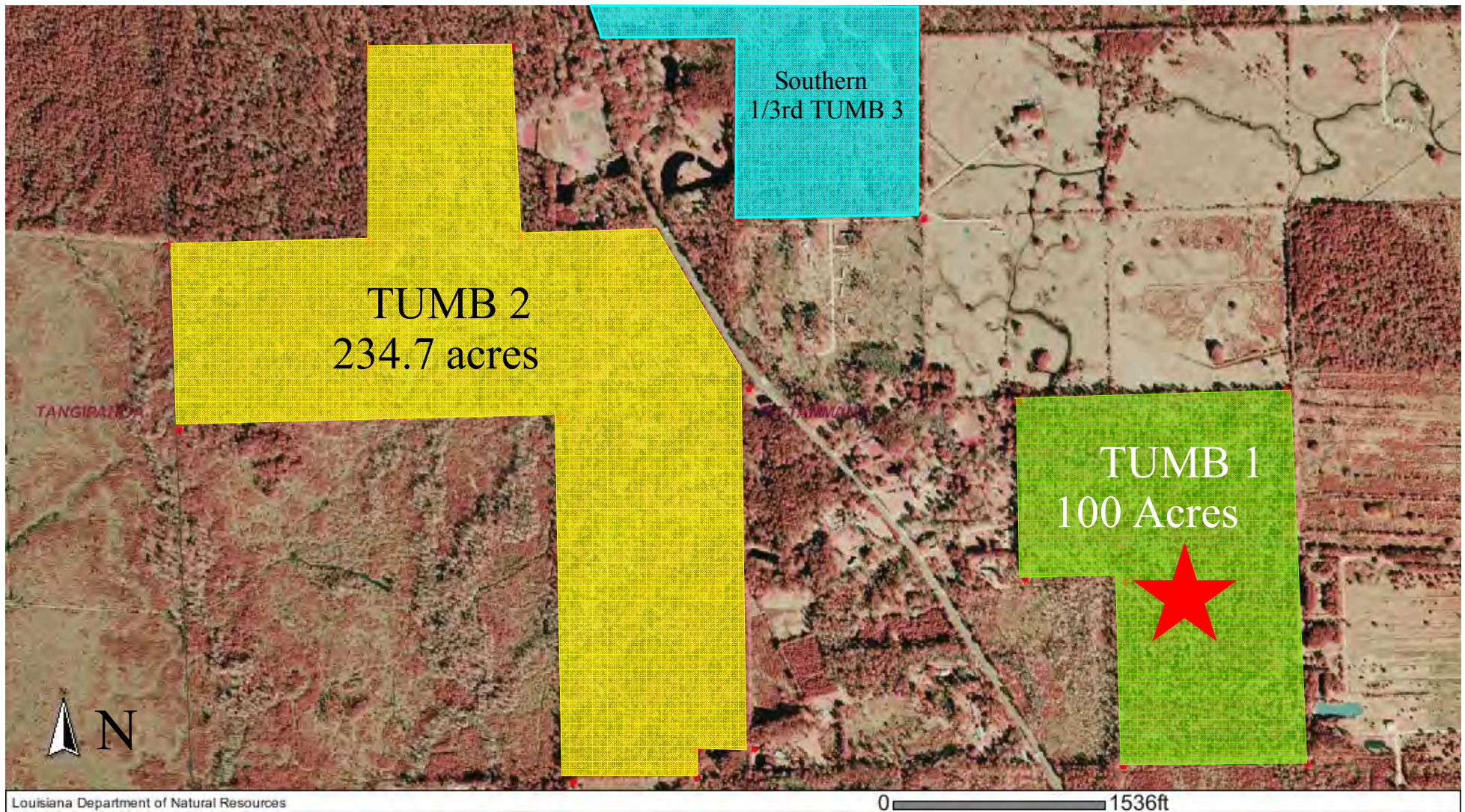


Figure # 5 Tchefuncte Umbrella # 1 and #3 M.B.-St Tammany Water Shed
(Drawn 3/27/12)

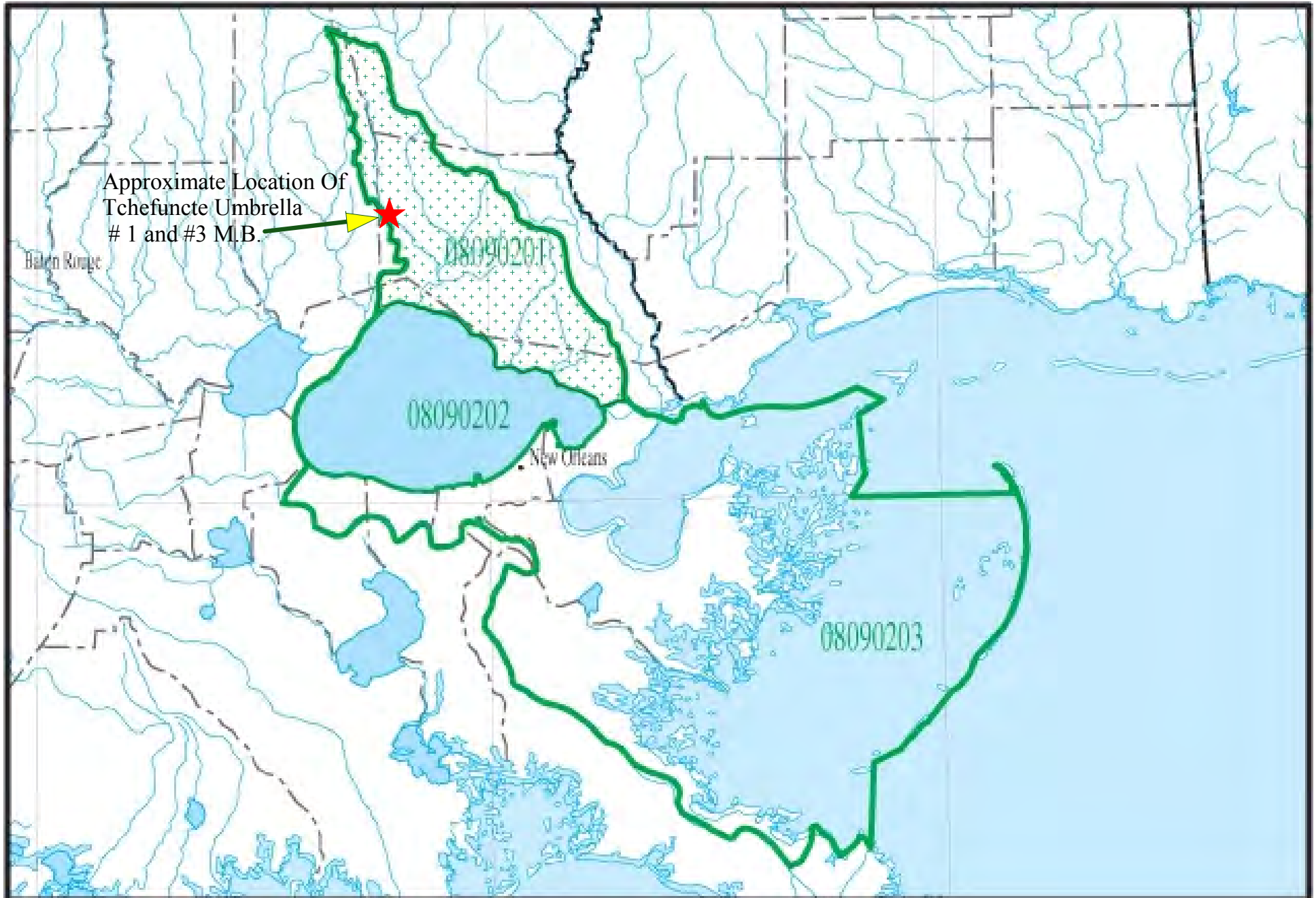
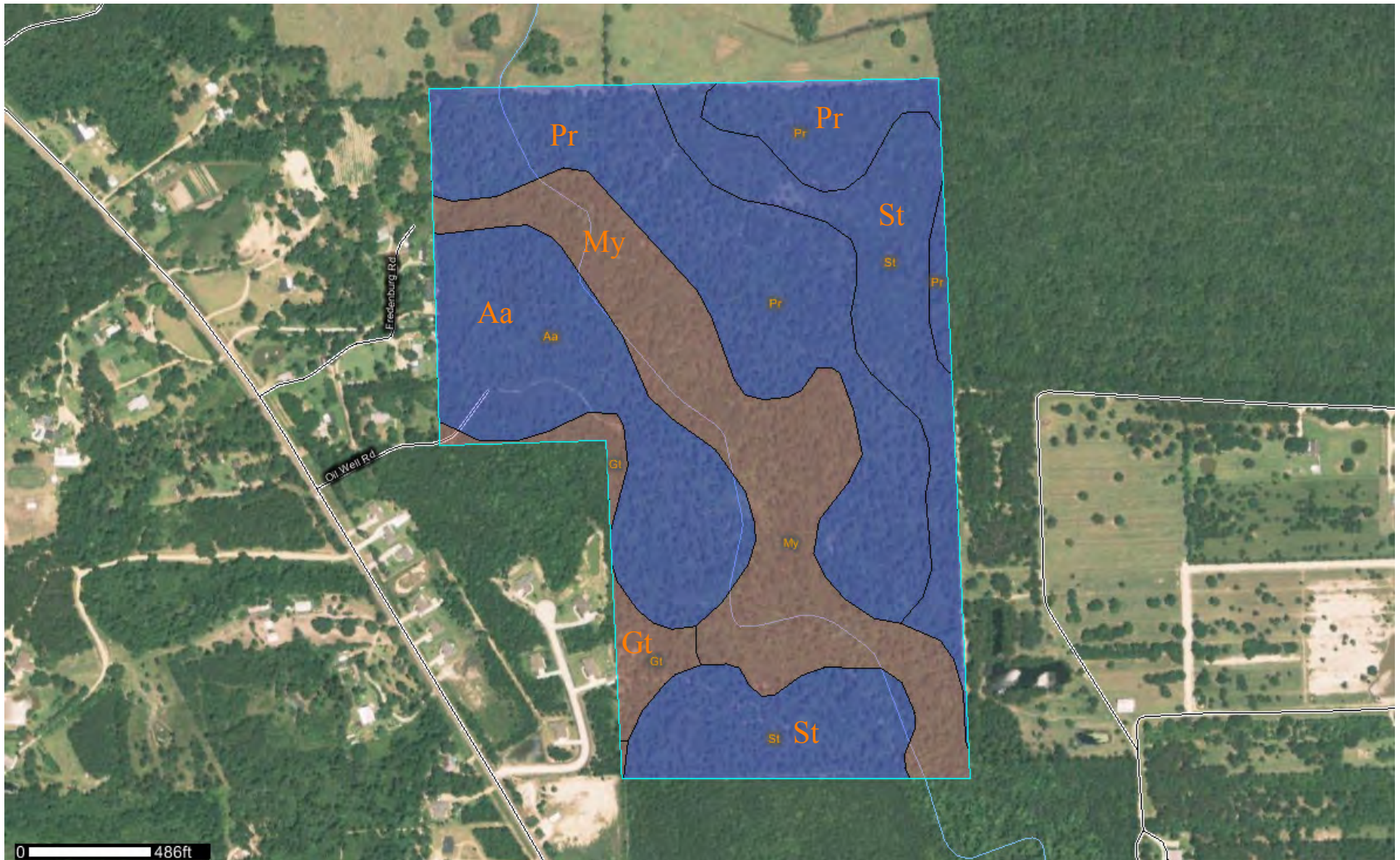


Figure # 6 Tchefuncte #1 Soil Map (Drawn 7/15/2012)



Aa., Abita silt loam, 0-2 percent slopes, 17.4 acres

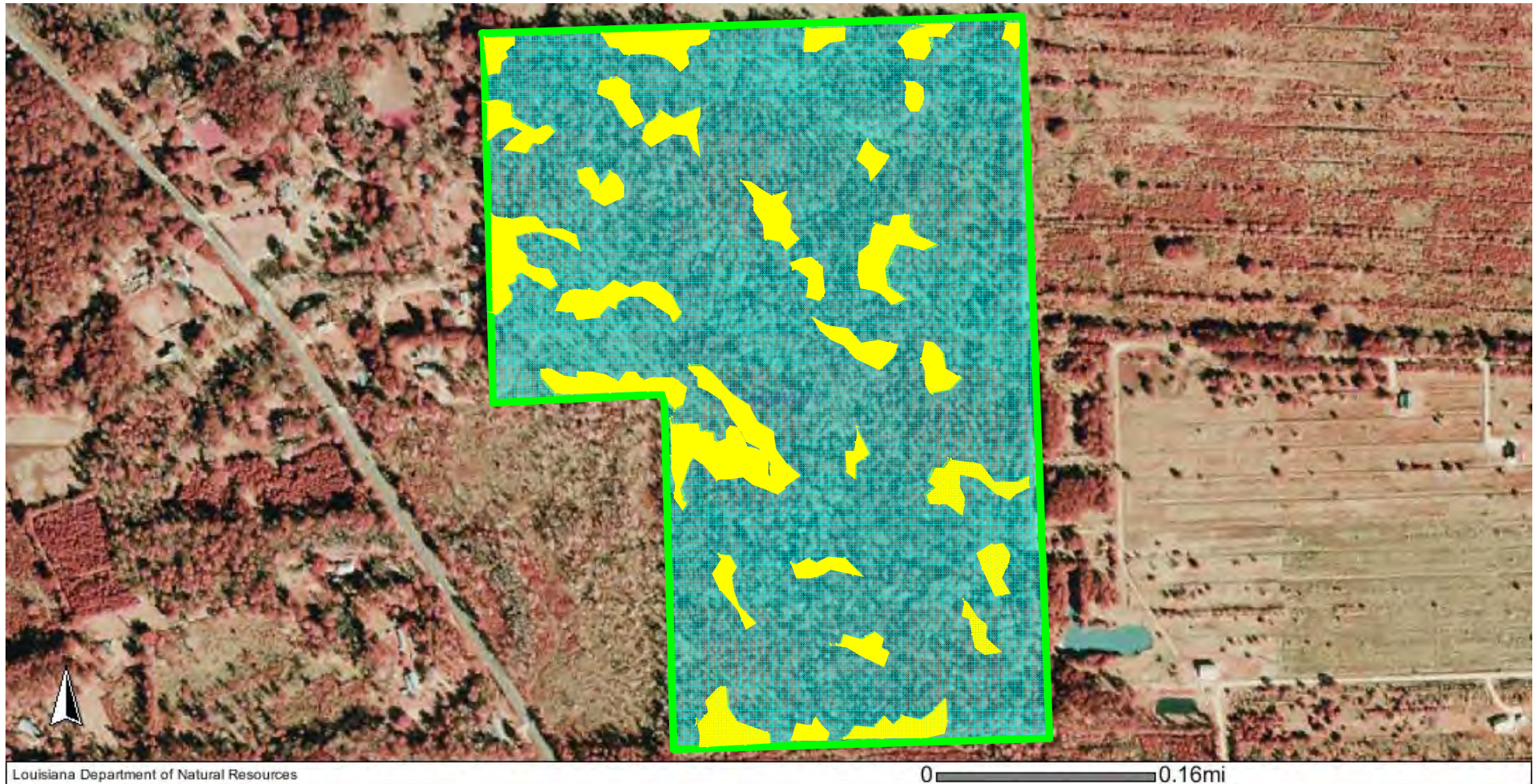
Gt., Guyton silt loam, 5.3 acres

My, Myatt fine sandy loam frequently flooded , 24.5

Pr., Prentiss fine sandy loam, 0-1 per cent slopes, 29.3 acres

St., Stough fine sandy loam, 23.5 acres

Figure # 7 Tchefuncte U.M.B. Area 1 : Wet/ Non Wet Map
(Drawn 3/27/12)



24.8 Acres

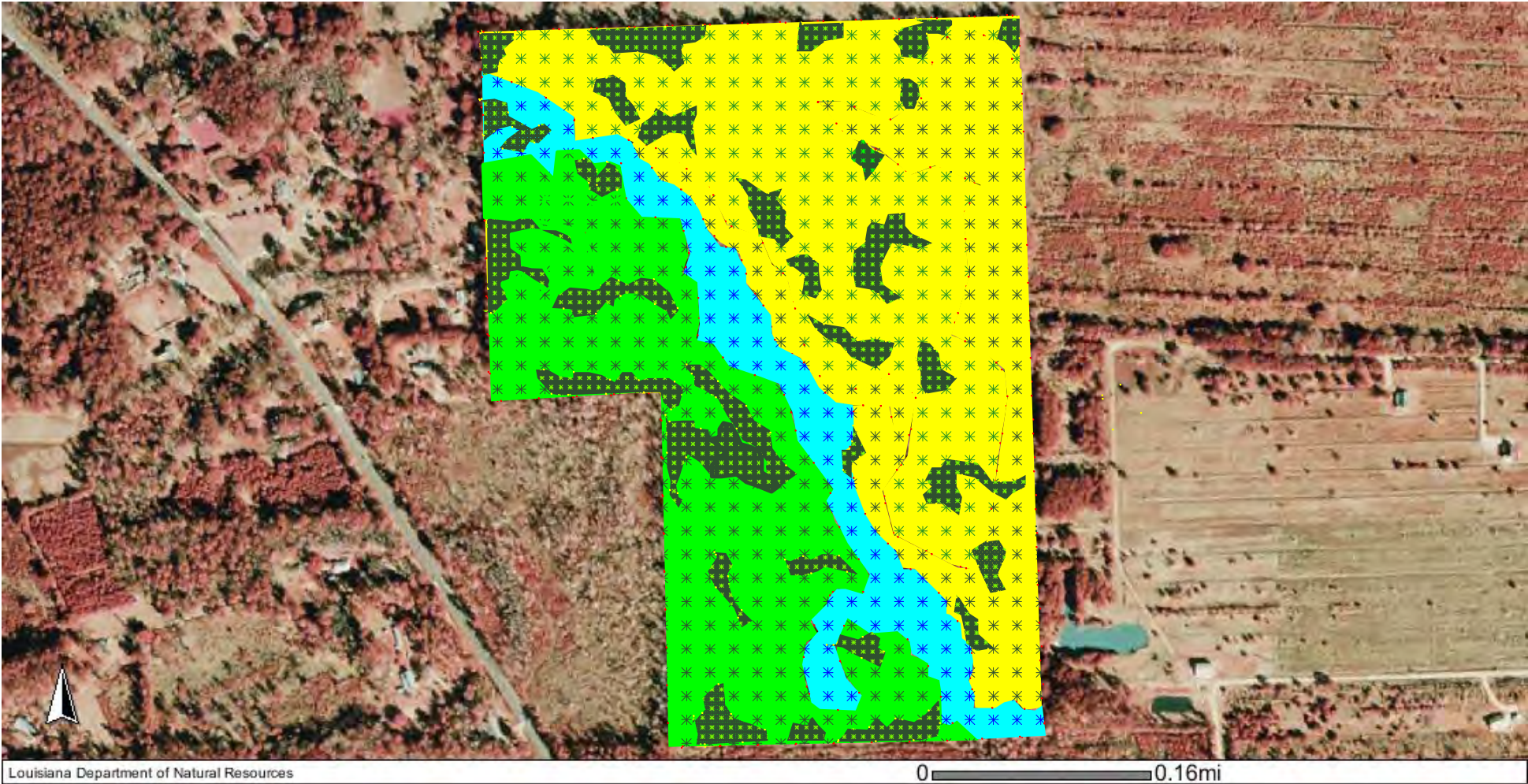
Non-Wet Area

70.2 Acres

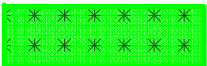
Wet Area

Figure # 8 Tchefuncte U.M.B. Area 1 :Different Habitat Map

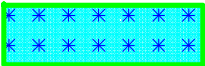
(Drawn 7/27/12)



Long Leaf Pine
Enhancement
39.5Acres



BLH
Enhancement
30.7 Acres



BLH
Preservation
5 Acres



Upland
Enhancement
24.8 Acres

Figure # 9 Tchefuncte Umbrella # 1 LIDAR Map (Drawn 7/15/2012)



Figure # 10 Tchefuncte U.M.B. Area 1 Data Points (Drawn 3/27/12)

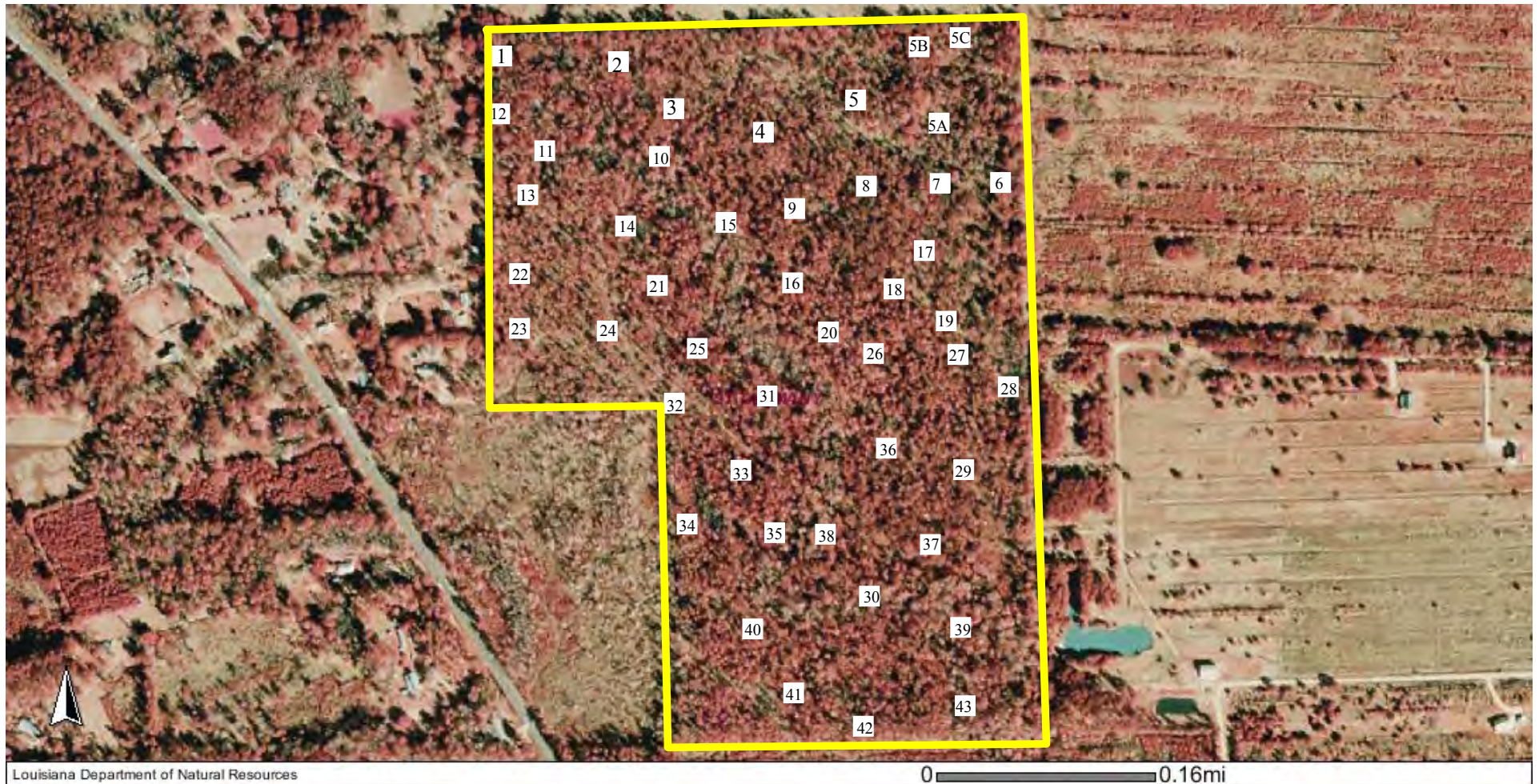
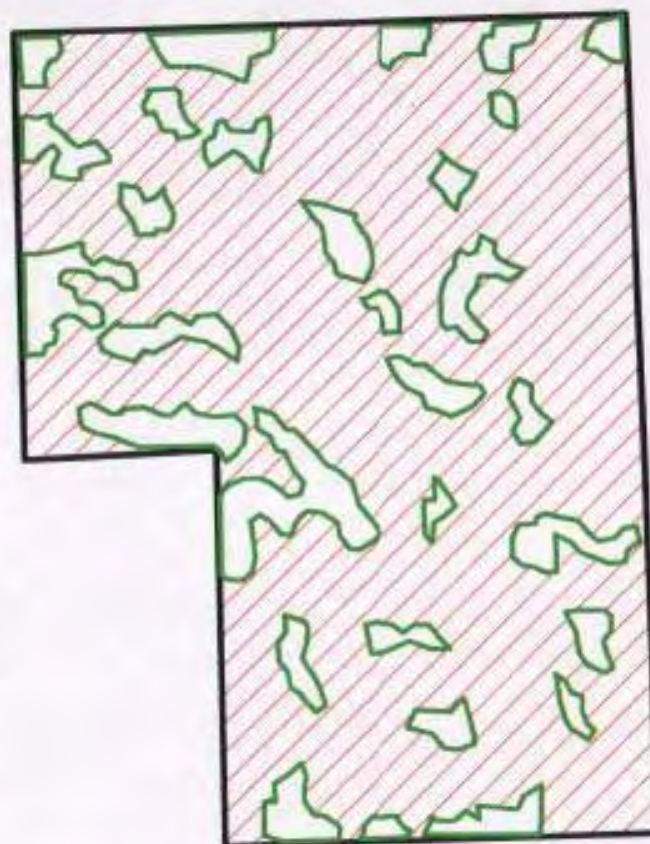


Figure #11 Tchefuncte M.B #1Corps J.D. Map

(Drawn 6/12/2012)

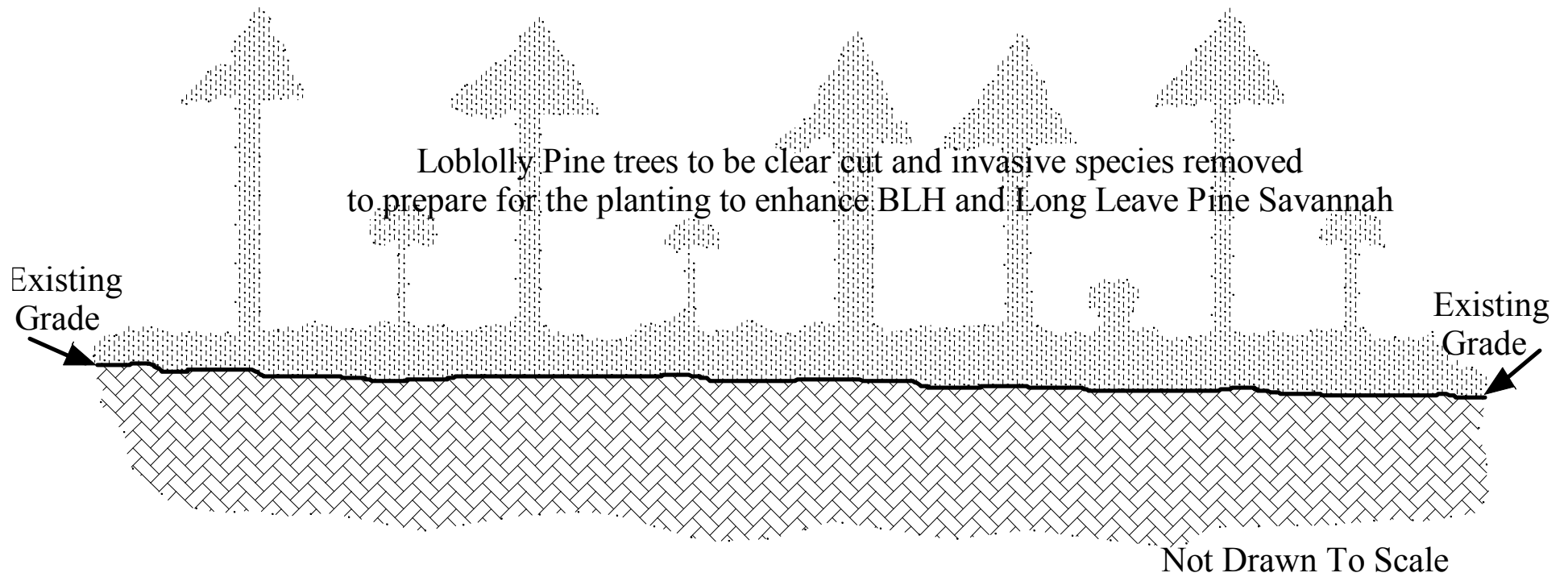
USACE	w/ CONSULTANT DATA
ESV / IH	Date: 12 June 2012
Botanist: GASPARD	
Requestor: BARLOW	
# MVN-2012-00900-SE	
 - WETLAND	
 - NON-WETLAND	



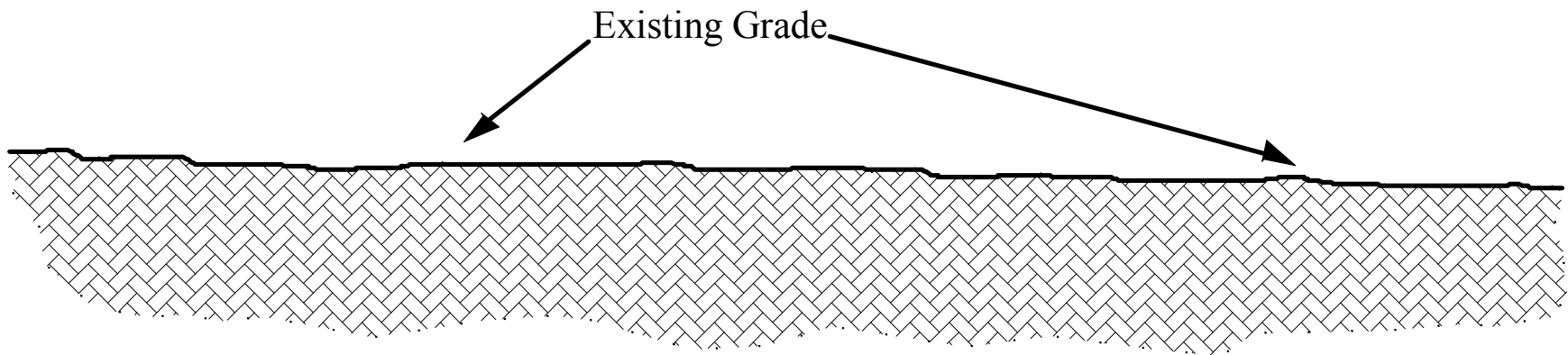
APPROVED
JURISDICTIONAL DETERMINATION

Tchefuncte Mitigation Bank 1: Ecological Enhancement drawing

Prior to clearing for Planting, No Change in Contour of Landscape



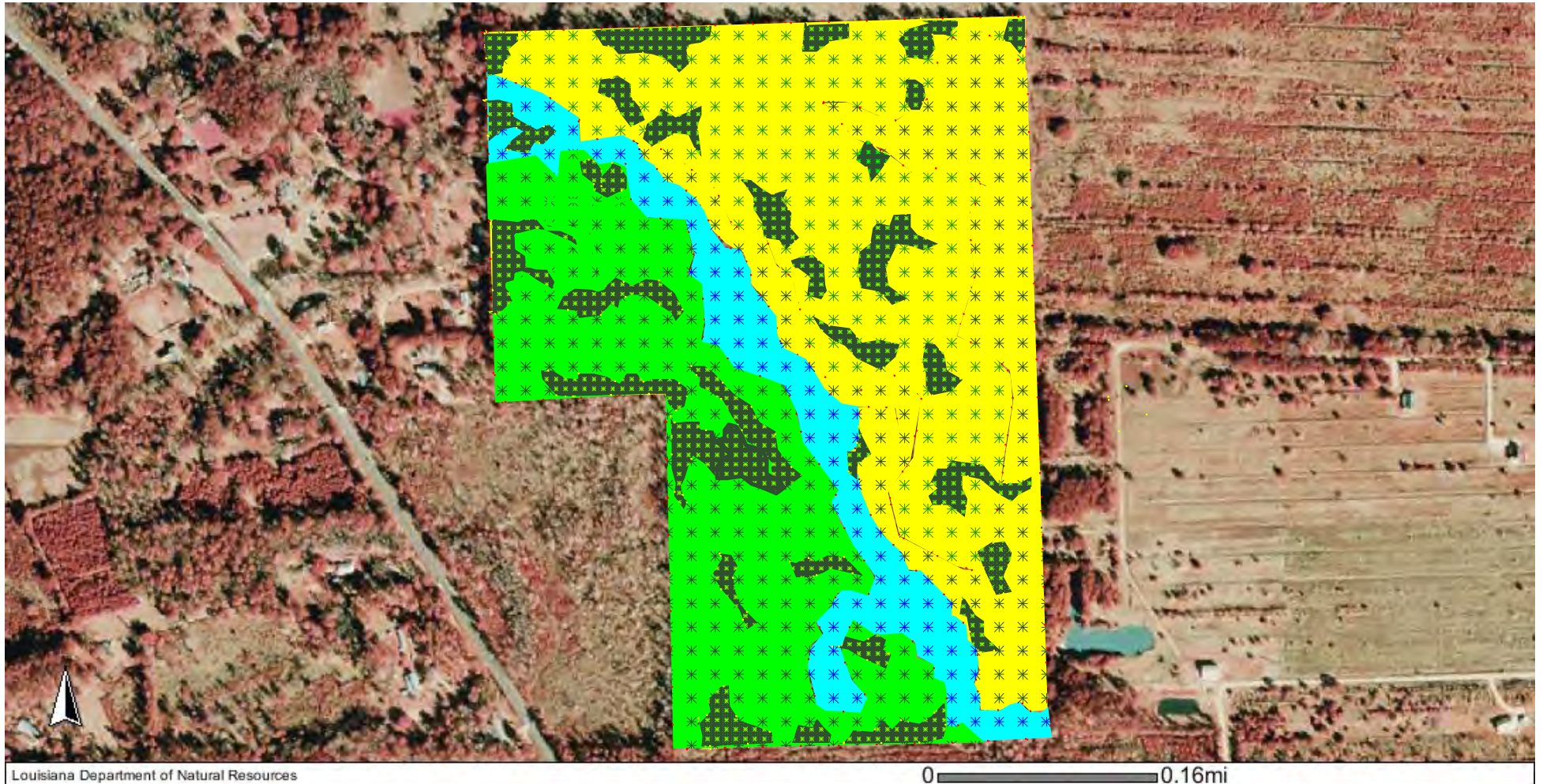
Tchefuncte Mitigation Bank1:Ecological Enhancement drawing
after clearing and invasive species removal for Planting,
No Change in Contour of Landscape



Not Drawn To Scale

Plan View for Permit

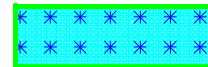
(Drawn 7/27/12)



Proposed
Long Leaf Pine
Ecological
Enhancement
39.5 Acres



Proposed BLH
Ecological
Enhancement
30.7 Acres



BLH
Preservation
5 Acres



Proposed Upland
Ecological
Enhancement
24.8 Acres