

# Exhibit 35 - Wetlands Agreement for Mitigation



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

MAY 23 2008

REPLY TO  
ATTENTION OF:  
Operations Division  
Eastern Evaluation Section

**SUBJECT:** MVN-2008-1055-EFF

Weyerhaeuser Companies  
Attn: Doug Hughes  
211 Armstrong Road  
Columbia, Mississippi 39429

Gentlemen:

This is in regard to your application, dated April 3, 2008, requesting Department of the Army permit approval to construct the *Talisheek Swamp- Project Specific Mitigation Plan*, located approximately 1.94 miles northwest of the junction of LA 435 and Bob Levy Road, near Abita Springs, Louisiana, within St. Tammany Parish. The subject mitigation project is intended for offsetting unavoidable impacts associated with construction and implementation of the Summit-Femaux commercial and residential development (MVN-2006-1963-EFF), located in Slidell, Louisiana, within St. Tammany Parish.

This office has made the determination that your project is authorized by Nationwide Permits Numbered 27, as found in the March 12, 2007, Federal Register, Reissuance of Nationwide Permits (72 FR 11180). Enclosed is a copy of the nationwide permit and the general conditions with which you must comply.

The following special conditions are made a part of this authorization:

1. This authorization does not obviate the permittee from obtaining any other necessary local city, parish or state approvals for the proposed work.
2. Work shall be carried out in accordance with the attached site restoration plan (Talisheek Swamp-Project Specific Mitigation Plan) and any special conditions attached herein. If the proposed project requires any modifications or additional work not expressly permitted herein and/or in the attached plan, the permittee must apply for an amendment from this office, prior to commencing that work. Additional plans and/or modifications may also be subject to review and coordination with the US Army Corps of Engineers-Vicksburg District and/or other pertinent state, federal and local resource agencies.
3. The permittee shall file an approved Conservation Servitude on the subject 322.3 acres of land shown in the attached restoration plan, in accordance with the Louisiana Conservation Servitude Act (R.S. 9:1271 et seq.), within 90 days of this authorization. The conservation servitude shall be approved by this office prior to filing with the real property records of St. Tammany Parish. Failure to comply with this request may result in the suspension of your Dept. of the Army permits (MVN-2008-1055-EFF and MVN-2006-1963-EFF); until such time that you file an approved servitude on the subject property. A copy of the final approved servitude shall be forwarded to this office.

4. Many local governing bodies have instituted laws and/or ordinances in order to regulate dredge and/or fill activities in floodplains to assure maintenance of floodwater storage capacity and avoid disruption of drainage patterns that may affect surrounding properties. Your project involves dredging and/or placement of fill; therefore, you must contact the local municipal and/or parish governing body regarding potential impacts to floodplains and compliance of your proposed activities with local floodplain ordinances, regulations or permits.

5. The permittee shall assure that workers and/or contractors associated with implementation of the subject project are equally aware of the conditions and restrictions associated with this approval.

6. If archaeological materials and/or human remains are discovered during ground disturbing activities you shall cease and desist all activities in the project area and contact this office and Mr. Philip Rivet of the Louisiana Office of Cultural Development, Division of Archaeology at (225) 342-8160.

7. The permittee is aware that future site visits and inspections may be conducted to the project area by this office, the Corps of Engineers -Vicksburg Office, and/or other resource agencies, in order to assess project compliance with this authorization and the requirements associated herewith.

You are reminded that Nationwide Permit General Condition 26 requires you to provide a signed certification stating that the authorized work was conducted in accordance with the permit, including any special conditions, and that mitigation (if required) was completed in accordance with the permit. We have attached this form. The permittee must sign the attached form and a copy of this nationwide permit authorization letter must be attached. Send this to the Department of the Army, New Orleans District Corps of Engineers, ATTN: CEMVN-OD-SE, Post Office Box 60267, New Orleans, Louisiana 70160-0267.

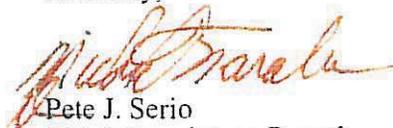
The proposed work would neither affect any species listed as endangered by the U.S. Departments of Interior or Commerce, nor affect any habitat designated as critical to the survival and recovery of any endangered species.

This determination is only applicable to the permit program administered by the U.S. Army Corps of Engineers. It does not eliminate the need to obtain other applicable federal, state or local approvals before beginning work.

This determination relative to the nationwide permit is valid for two years.

Should you have any further questions, please contact Darrell Barbara of this office at (504) 862-2260.

Sincerely,



Pete J. Serio  
Chief, Regulatory Branch

Enclosure

Dear Permittee:

Under the terms of the Nationwide Permit approval granted to you, you are required by federal regulations, to complete and return this "Completion Notice" accompanied by a copy of your authorization letter to our office at the following address:

**CEMVN-OD-SE  
Chief, Eastern Evaluation Section  
U.S. Army Corps of Engineers  
P.O. Box 60267  
New Orleans, Louisiana 70160-0267**

If at a later date you decide not to perform the work, as approved by the Nationwide Permit, please advise this office so that your file can be so noted. If you have any questions and would like to speak with a Corps of Engineers representative, please call (504) 862-2260.

**COMPLETION NOTICE**

**Permit Number: MVN-2008-1055-EFF**

The work authorized in the permit referenced above was completed in accordance with the Department of the Army authorization and applicable general and specific conditions. In addition, mitigation (if required) was completed in accordance with the permit conditions.

\_\_\_\_\_  
Name (Please Print)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**PROJECT-SPECIFIC MITIGATION PLAN  
SLIDELL DEVELOPMENT COMPANY, LLC  
(MVN 2006-1963-EFF)  
TALISHEEK SWAMP MITIGATION SITE**

**1.0 INTRODUCTION**

The following report summarizes the mitigation potential on approximately 322.3 acres in St. Tammany Parish, Louisiana. The purpose of the report is to summarize the existing conditions of the proposed Talisheek Swamp Mitigation Site (TSMS) and assess the potential for establishing a mitigation site for the purpose of providing project-specific compensatory wetland mitigation for unavoidable impacts to wetlands associated with a Section 404 permit to be issued to Slidell Development Company, LLC for the Fremaux Project by the US Army Corps of Engineers (USACE), New Orleans District (CEMVN).

**2.0 GOALS AND OBJECTIVES**

The goal of Weyerhaeuser Company (WEYCO) is to restore 272 wetland acres of the TSMS as a sustainable longleaf pine (*Pinus palustris*) savanna ecosystem, restore 7.3 acres of longleaf pine uplands, and enhance and preserve 34.9 acres of bayhead swamp. There are 8.1 acres of roads. The project area comprises a total of 322.3 acres. WEYCO proposes to restore longleaf pine forests to re-establish wetland functions and values associated with this type of habitat. The water quality and habitat will be improved in the bayhead swamp by ceasing the clear-cutting of timber surrounding the swamp, restoration of natural hydrology surrounding the swamp, and the reintroduction of fire which should reduce the number of invasive species in the swamp and allow the natural habitat to return. WEYCO intends for the TSMS to serve as a longleaf pine mitigation site to provide mitigation as compensation for unavoidable impacts to wetlands to satisfy the mitigation requirements for a permit (MVN 2006-1963-EFF) to be issued to Slidell Development Company, LLC (SDC).

It is the intention of WEYCO to implement wetland restoration for SDC, which needs compensatory mitigation to satisfy permit requirements. Through a contractual agreement with SDC, WEYCO will, for a fee to be paid by SDC, commit to implementing the mitigation specified in Department of the Army (DA) permit and incur the responsibility of the long-term maintenance, management, protection and overall success of the TSMS, as well as record a conservation servitude limiting future use of the property.

### **3.0 LOCATION**

The 322.3 acre TSMS is located immediately south of the Nature Conservancy's Talisheek Pine Wetlands Preserve in St. Tammany Parish, Louisiana. The site is approximately 1.94 miles northwest of the junction of LA 435 and Bob Levy Road. The TSMS is bordered on the east by Bob Levy Road, on the north by Money Hill Restoration Area and an unnamed access road, on the west by an unnamed access road and forests, and on the south by Talisheek Swamp. The approximate center of the TSMS is Latitude 30°33'31.05"N; Longitude 89°55'17"W in Sections 5 & 6, Township 6 South, Range 13 East.

### **4.0 PROPERTY OWNERSHIP**

The Sponsor is WEYCO, the legal owner of the land encompassed by the TSMS, through contract with Bayer Properties, LLC, a partner in the Slidell Development, LLC Fremaux Proposed Project. There are no liens, encumbrances, easements, servitudes, or restrictions that have been identified on the portion of the property proposed for restoration.

### **5.0 WETLAND DELINEATION**

A wetland data report and request for jurisdictional determination are attached for your use. WEYCO acknowledges that acreage figures used in this prospectus may change and/or become modified pending jurisdictional determination.

### **6.0 CURRENT TSMS CONDITIONS**

WEYCO currently manages the 322.3 acre TSMS for growing and harvesting pure stands of pine trees. The TSMS is composed of approximately 272 acres of pine forested wetlands, 7.3 acres of pine forested uplands, 34.9 acres of Bay head swamp and 8.1 acres of access roads. Talisheek Swamp encroaches on the southern portion of the TSMS.

St. Tammany Parish has a humid, subtropical climate characterized by relatively high rainfall (average 61 inches per Year). The average daily maximum temperature is 78.7°F and the average daily minimum temperature is 55.3°F. The growing season in St. Tammany Parish averages 244 days (equal to or greater than 32°F, 5 Years in 10) and spans from March 11 to November 11 (United States Department of Agriculture [USDA] Soil Conservation Service 1990). The proposed mitigation site is located in the Eastern Gulf Coast Flatwoods major land resource area. Elevation ranges from 64 to 78 feet above the North American Vertical Datum for mean sea level throughout the TSMS.

### 6.1. Existing Land Use

The property consists of 279.3 acres of managed pine forests (containing 272 acres of wetlands and 7.3 acres of uplands), 34.9 acres of Bay head swamp, and 8.1 acres of access roads. The property is managed for timber harvest and is currently leased to several local deer hunters. The surrounding land within 0.5 mile of the project site consists of bottomland hardwood swamp (30%) and cutover/immature pine forest (70%). The surrounding land is all managed for timber.

### 6.2. Existing Plant Communities

Forested areas of the majority of the TSMS are dominated by dense stands of bedded slash pine (*Pinus elliottii*) and loblolly pine (*Pinus taeda*). Stand age varies across the TSMS depending on when WEYCO conducted plantings. The southernmost portion of the TSMS is the northern end of a degraded bayhead swamp (Talisheek Swamp). Bedded slash and loblolly pine overstory cover in the forested areas range from 90-100%.

### 6.3. Soils

The *NRCS Web Soil Survey, St. Tammany Parish, Louisiana* shows that the TSMS may be underlain by Myatt sandy loam, Prentiss sandy loam, and Stough sandy loam. Myatt sandy loam is listed as a poorly drained, slowly permeable, hydric soil in *Soil Mapping Units and Hydric Soils Designations of Louisiana* (USDA Natural Resources Conservation Service 1995). Stough sandy loam is listed as a somewhat poorly drained, moderately permeable, non-hydric soil, while Prentiss sandy loam is a moderately well drained, moderately permeable, non-hydric soil. Based on site observations, it appeared that the TSMS is entirely underlain by Myatt sandy loam. Areas mapped as Stough and Prentiss sandy loam on the attached soil map (Figure 4) were not observed at the time of the site visit.

### 6.4. Existing Hydrology

The sources of hydrology to the TSMS are primarily rainfall and sheet flow from adjacent properties. The TSMS drains from north to south via sheet flow into Talisheek Swamp. Talisheek Swamp encompasses the southern portion of the TSMS and ultimately drains southeast into Talisheek Creek. The majority of the TSMS appeared somewhat-poorly-drained, and was inundated in many areas at the time of the site visit.

## 7.0 GEOGRAPHIC SERVICE AREA

The TSMS is located in the Pearl River Basin, within United States Geological Survey (USGS) Cataloging Unit 03180004 which includes portions of St. Tammany and Washington Parishes.

## 8.0 TSMS RESTORATION PLAN

The Sponsor proposes to restore approximately 279.3 acres of the total 322.3 acres back to Eastern Longleaf Pine Savannah, which historically was the dominant habitat throughout the Eastern Gulf Coast Flatwoods. Of the 279.3 acres to be restored, there are 272 acres of wetlands and 7.3 acres of uplands. Eastern Longleaf Pine Savannahs are fire maintained natural communities that are floristically rich, herb dominated habitats with sparsely stocked long leaf pines as the dominate tree species. This ecosystem type is poorly drained and seasonally saturated. Soils tend to be hydric, strongly acidic, and nutrient poor (LDWF 2005).

### 8.1. Surface Hydrology

The TSMS is centered between Abita and Talisheek Creeks. The majority of the TSMS remains flooded for extended periods of the growing season and was inundated at the time of the site visit.

WEYCO will carefully survey the mitigation site to determine the existence of any unnatural hydrologic influence such as drains, dams, and other surface feature alterations like bedding, disking or placement of fill. Existing roads will be maintained for site access and fire breaks. All roads and ditches that could possibly affect surface hydrology will be identified and culverts/gaps and plugs will be installed to return the site to its natural sheet flow. WEYCO will take appropriate actions to restore natural hydrologic conditions.

#### Restoration of Areas That Have Beds

##### Impact of Bedding

Historically, the pine plantations in the project area have been disked to produce planting beds to allow the pine seedlings to withstand wet/saturated conditions. The planting beds are highest at the time of establishment and slowly erode over the life of the plantation. Additionally, planting beds are lowered by the impact of harvesting at the first thinning and are additionally lowered when the final harvest occurs. As a result, the planting beds have to be totally re-established at the end of the rotation. These planting beds have the greatest impact on hydrology when they are newly established and are at their highest level. As the beds age and naturally erode from harvesting operations, the impact on hydrology is diminished.

**Timber stand ages (1 - 8) years**

The portion of the site in these plantation age classes, approximately 15 acres, have been plowed and bedded. The timber on these stands is not of merchantable age; therefore harvesting operations will not be performed. In order to restore the natural hydrology to these areas, we will mechanically shear and/or disk the beds to flatten them.

**Timber stand ages (9 years and older)**

The plantation timber on these areas, approximately 264.3 acres, will be harvested as a part of the restoration plan. The removal of timber will be performed immediately as weather permits for minimal impact on soil and vegetation, once the plan has been approved and the permit has been issued by the USACE. The harvesting operation will naturally level the majority of the beds to an acceptable condition required to restore natural hydrology. In the event that the harvesting operation does not adequately reduce the beds to an acceptable level to restore natural hydrology (this will be determined by the COE and Weyerhaeuser Company), Weyerhaeuser Company will mechanically shear and/or disk the beds to flatten them as required to restore sheet flow to the site.

**Natural drainage and water flow**

In addition to flattening the planting beds, natural drainage and water flow will be restored by adding or removing culverts, as required.

**Timeframe**

Once the site has been approved and the permit has been issued by the USACE, the timber removal will begin immediately as weather permits to minimize impact to the site. After the timber is removed, targeted for the summer of 2008, the goal is to restore near natural hydrology as soon as possible before planting, but any additional work will be completed no later than 12 months after planting.

**1-12 Months after Approval:**

- Timber harvest conducted on merchantable plantations
- The site will be burned in preparation for planting within two years
- Planting beds in plantations 1-8 years of age will be mechanically flattened.
- Culverts or other devices installed to restore natural drainage and water flow through the site.

**12-18 Months after Approval:**

- Planting bed condition assessed after timber harvest in merchantable timber stands.
- Decision made on any mechanical operations to supplement the impact of harvesting on the planting beds.

**8.2. Proposed Longleaf and Slash Pine Savanna Vegetation Restoration**

Longleaf and slash pine seedlings will be planted on approximately 279.3 acres, 272 acres of wetland and 7.3 acres of upland. Seedlings shall be planted at an initial stocking level of approximately 300 trees per acre. Longleaf pine seedlings will be planted based on terrain and edaphic conditions observed in the field. Slash pine will be planted only in fire-protected zones such as steep slopes, lower flats and near streams where a variety of hardwoods and other pines were found. The planted areas will be subsequently thinned to mimic natural clusters of Longleaf pine to achieve targeted stocking and to create the park-like effect of the historical savanna. We will target 125 - 150 pine trees per acre for the 1 year survival criteria and 25 – 65 trees per acre for the year 5.

Herbaceous understory will be re-established through natural recruitment. The native ground cover communities that historically characterized the great majority of the site have been impacted by the pine plantation management, but there exist desired wetland herbaceous plants and grasses in remnant pockets and between the planting beds. Prescribed fire will arguably be the most important long-term management tool used on the tract to reestablish the native grasses, forbes, and herbaceous plants. Burning is essential for rehabilitation/perpetuation of grass-herbaceous ground-cover communities. Among other effects, properly timed fires stimulate native grass and herbaceous plants to grow vigorously, flower and produce seeds, stimulate longleaf pine to grow out of the "grass-stage", and control brown spot needle-blight on young longleaf.

WEYCO proposes to reestablish a fire regime on the TSMS through a strictly regulated ecological burning program. Growing season burns, that mimic historical wildfire occurrences (April 15<sup>th</sup> – June 15<sup>th</sup>), will be favored over dormant season burns. The regulated burning program will commence the first year as a site preparation burn and continued every two years for the first six years and then on a two to three year rotation as needed. Natural or existing fire breaks will be used whenever possible to reduce unnatural disturbances to the site and allow burns to mimic natural fire behavior (e.g., burning into Bayhead swamp).

Controlled burns will be administered in large blocks to mimic a natural wildfire by a crew of properly equipped and trained on the

techniques of prescribed burning.

### 8.3. Control of Undesirable Species and Harvesting

Non-desirable species including non-longleaf or slash species of pines, native hardwoods as well as exotic/ noxious hardwood species (e.g., Chinese tallow, cottonwood, and black willow) will be controlled by burning and hardwood specific herbicides (e.g. Arsenal), if needed. Prescribed fire will be used as the primary tool to control undesirable species and facilitate the growth of the longleaf pines. The control of non-indigenous herbaceous species that do not respond to fire will be controlled with chemical applications.

All timber harvests and thinning operations conducted in the TSMS will be authorized by the CEMVN and will be performed in a manner that maintains and enhances timber stand and wildlife habitat quality. Such harvests will be subject to appropriate permitting by the USACE which may be required at the time the harvests are proposed.

With the exception of exotics, no clearing shall occur in the gum swamp (slash pine/pond cypress dominated) area. Any clearing in this area should be limited to non-mechanized means.

## 9.0 PERFORMANCE STANDARDS

The TSMS vegetation, soils and hydrology shall be restored such that the TSMS meets wetland criteria as described in the Corps 1987 Wetlands Delineation Manual. Historical accounts of early longleaf pine forests of the region clearly indicate the prevailing natural character was very open forests, woodlands, or savannas, greatly dominated by longleaf pine in the overstory (almost to the exclusion of other trees), with little mid-story or understory of woody species other than young longleaf pine. This was true generally across the landscape due to the frequent occurrence of lightning-generated surface fires that regularly swept through the region. Only in fire-protected zones, such as steep slopes, lower flats and near streams, was there found a variety of hardwoods and other pines. Longleaf pine reproduces in cohorts (small groups of closely-spaced, even-aged trees) in gaps in mature forests. Because of this and other factors, longleaf trees are not evenly spaced throughout a natural stand, but are thick in some places and scattered or absent in others. Numbers of stems tend to be greater in dryer areas than wetter areas, with what are called "pine savannas" (very open, with relatively few trees) arising in wet soils associated with very poorly drained flats and broad swales. The ground cover in historical longleaf pine savannas was generally thick, diverse and continuous, dominated by grasses, sedges and forbs encouraged by frequent fire and abundant sunlight reaching the ground.

**Desired Vegetation Composition in Pine Savanna Restoration Areas:**

Composition parameters of high quality longleaf pine savannas in the East Gulf Coastal Plain (may be thought of as a hypothetical "reference stand") are outlined in the table below. These values will serve as restoration target values, or performance standards for composition. Longleaf pine will eventually be prominent in the overstory (decades after site establishment), and there will be additional age classes of longleaf in the mid-story and understory. A mid-story dominated by longleaf pine will develop some years after site establishment. The herbaceous ground cover will eventually consist of a variety of desirable native species (see Table 1.), mainly native grasses, sedges and forbs. There should be minimal cover of undesirable native and non-native species (see Table 2.). Should new information indicate values different than those listed below are more ecologically appropriate, changes will be made to the target ranges pending approval by the COE.

Vegetation Stratum	Species/type Composition/Abundance
Overstory ( $\geq$ 20 feet tall)	70 - 90%* longleaf pine; < 30% other pines, native hardwoods

*Note: Overstory will not develop for decades after site establishment*

Midstory/Understory (<20 feet tall)	> 50%* longleaf pine; 4+ species of indigenous shrubs/hardwood trees
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*Note: Mid-story will not develop for years after site establishment*

Herbaceous Ground Cover	50 – 90%* grasses/sedges; 10 – 50%* forbs; $\geq$ 10 native species/restoration unit by Year 6; $\geq$ 15 native species/restoration unit by year 10; $\geq$ 30 native species/restoration unit by year 20. Undesirable species < 1%*.
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\*Percent of total cover of designated stratum

**Table 1.** Native herbaceous plant species that characterize high-quality wet longleaf pine savannas and mesic longleaf pine flatwoods of St. Tammany Parish, LA\*

__Acalypha gracilens	__Bartonia paniculata	__D. capillaries
__Agalinis aphylla	__B. verna	__D. Intermedia
__A. fasciculata	__B. virginica	__Eleocharis montana
__A. filicaulis	__Bidens mitis	__E. tuberculosa
__A. linifolia	__Bigelovia nudata	__Eleocharis spp.
__A. obtusifolia	__Boltonia diffusa	__Eragrostis elliottii
__A. oligophylla	__Buchnera floridana	__E. refracta
__A. pinetorum	__Burmannia capitata	__Erigeron vernus
__A. purpurea	__Cacalia ovata	__Eriocaulon compressum
__A. tenuifolia	__Calopogon multiflorus	__E. decangulare
__Agrostis perennans	__C. pallidus	__Eryngium integrifolium
__Aletris aurea	__C. tuberosus	__E. yuccifolium
__A. lutea	__Carex spp.	__E. leucolepis
__Allium canadense	__C. glaucescens	__E. perfoliatum
__Andropogon capillipes	__C. turgescens	__E. rotundifolium
__A. gerardii	__Carphephorus odoratissimus	__E. semiserratum
__A. glaucopsis	__Carphephorus pseudoliatris	__Euphorbia corollata
__A. glomeratus	__Cassia fasciculata	__Euthamia leptcephala
__A. gyrans gyrans (elliottii)	__Centella erecta	__E. tenuifolia (caroliniana)
__A. gyrans stenophyllus	__Chaptalia tomentosa	__Fuirena breviseta
__A. hirsutior	__Cirsium lecontei	__F. squarrosa
__A. mohrii	__Cleistes bifaria	__Galium tinctorium
__A. ternarius	__Coelorachis rugosa	__Gaura lindheimeri
__A. virginicus	__C. tessellata	__Gratiola brevifolia
__Anthraenantia rufa	__Coreopsis lanceolata	__G. pilosa
__A. villosa	__C. linifolia	__Gymnopogon ambiguus
__Aristida longispica	__C. nudata	__Hedyotis nigricans
__A. purpurascens purpurascens	__Ctenium aromaticum	__Helenium vernale
__A. purpurascens virgata	__Cyperus spp.	__Helianthus angustifolius
__Arundinaria tecta	__Desmodium lineatum	__H. heterophyllus
__Asclepias lanceolata	__D. tenuifolium	__H. radula
__A. longifolia	__Dichantherium aciculare	__Hibiscus aculeatus
__A. michauxii	__D. angustifolium	__Hydrocotyle sp.
__Aster (Symphyotrichum) adnatus	__D. consanguineum	__Hypericum brachyphyllum
__A. concolor	__D. dichotomum ensifolium	__H. cistifolium
__A. dumosus	__D. dichotomum tenue	__H. crux-andreae
__A. hemisphericus	__D. leucothrix	__H. denticulatum
__A. lateriflorum	__D. longiligulatum	__H. galioides
__A. patens	__D. scabriusculum	__H. hypericoides
__A. subulatus	__D. strigosum strigosum	__H. setosum
__Axonopus affinis	__Dichromena latifolia	__Hypoxis hirsuta
__Bacopa caroliniana	__Diodia teres	__H. rigida
__Balduna uniflora	__D. virginiana	__H. sessilis
__Baptisia alba macrophylla	__Drosera brevifolia	__Hyptis alata
__Juncus elliottii	__Pityopsis graminifolia	__R. oligantha

TALISHEEK SWAMP MITIGATION SITE

<input type="checkbox"/> <i>J. repens</i>	<input type="checkbox"/> <i>Platanthera blephariglottis</i>	<input type="checkbox"/> <i>R. plumosa</i>
<input type="checkbox"/> <i>J. scirpoides</i>	<input type="checkbox"/> <i>P. ciliaris</i>	<input type="checkbox"/> <i>R. pusilla</i>
<input type="checkbox"/> <i>J. tenuis</i>	<input type="checkbox"/> <i>P. cristata</i>	<input type="checkbox"/> <i>R. rariflora</i>
<input type="checkbox"/> <i>J. triglomerata</i>	<input type="checkbox"/> <i>P. flava</i>	<input type="checkbox"/> <i>Rudbeckia hirta</i>
<input type="checkbox"/> <i>Lachnanthes caroliniana</i>	<input type="checkbox"/> <i>P. integra</i>	<input type="checkbox"/> <i>Ruellia humilis</i>
<input type="checkbox"/> <i>Lachnocaulon anceps</i>	<input type="checkbox"/> <i>P. nivea</i>	<input type="checkbox"/> <i>R. noctiflora</i>
<input type="checkbox"/> <i>Lechea pulchella</i>	<input type="checkbox"/> <i>Pluchea sp.</i>	<input type="checkbox"/> <i>Sabatia campanulata</i>
<input type="checkbox"/> <i>Liatris. pycnostachya</i>	<input type="checkbox"/> <i>Pogonia ophioglossoides</i>	<input type="checkbox"/> <i>S. gentianoides</i>
<input type="checkbox"/> <i>L. spicata</i>	<input type="checkbox"/> <i>Polygala crenata</i>	<input type="checkbox"/> <i>S. macrophylla</i>
<input type="checkbox"/> <i>Linum floridanum</i>	<input type="checkbox"/> <i>P. cruciata</i>	<input type="checkbox"/> <i>Saccharum baldwinii</i>
<input type="checkbox"/> <i>L. medium</i>	<input type="checkbox"/> <i>P. cymosa</i>	<input type="checkbox"/> <i>Saccharum brevibarbe</i> var. <i>brevibarbe</i>
<input type="checkbox"/> <i>Lippia nodiflora</i>	<input type="checkbox"/> <i>P. hookeri</i>	<input type="checkbox"/> <i>Saccharum brevibarbe</i> var. <i>contortum</i>
<input type="checkbox"/> <i>Lobelia brevifolia</i>	<input type="checkbox"/> <i>P. incarnata</i>	<input type="checkbox"/> <i>Saccharum giganteum</i>
<input type="checkbox"/> <i>L. floridana</i>	<input type="checkbox"/> <i>P. leptocaulis</i>	<input type="checkbox"/> <i>Sagittaria graminea</i>
<input type="checkbox"/> <i>L. puberula</i>	<input type="checkbox"/> <i>P. lutea</i>	<input type="checkbox"/> <i>Sarracenia alata</i>
<input type="checkbox"/> <i>Lophiola aurea</i>	<input type="checkbox"/> <i>P. mariana</i>	<input type="checkbox"/> <i>S. psitticina</i>
<input type="checkbox"/> <i>Ludwigia hirtella</i>	<input type="checkbox"/> <i>P. ramosa</i>	<input type="checkbox"/> <i>Schizachyrium scoparium</i>
<input type="checkbox"/> <i>L. microcarpa</i>	<input type="checkbox"/> <i>Polygonum hydropiperoides</i>	<input type="checkbox"/> <i>S. tenerum</i>
<input type="checkbox"/> <i>L. pilosa</i>	<input type="checkbox"/> <i>Polygonum spp.</i>	<input type="checkbox"/> <i>Schrankia (Mimosa) microphylla</i>
<input type="checkbox"/> <i>L. sphaerocarpa</i>	<input type="checkbox"/> <i>Polypremum procumbens</i>	<input type="checkbox"/> <i>Scirpus spp.</i>
<input type="checkbox"/> <i>Lycopodium alopecuroides</i>	<input type="checkbox"/> <i>Proserpinaca pectinata</i>	<input type="checkbox"/> <i>Scleria baldwinii</i>
<input type="checkbox"/> <i>L. appressum</i>	<input type="checkbox"/> <i>Pteridium aquilinum</i>	<input type="checkbox"/> <i>S. ciliata</i>
<input type="checkbox"/> <i>L. carolinianum</i>	<input type="checkbox"/> <i>Ptilimnium spp.</i>	<input type="checkbox"/> <i>S. georgiana</i>
<input type="checkbox"/> <i>Lycopus virginicus</i>	<input type="checkbox"/> <i>Pycnanthemum albesens</i>	<input type="checkbox"/> <i>S. hirtella</i>
<input type="checkbox"/> <i>Lythrum alatum</i>	<input type="checkbox"/> <i>P. tenifolium</i>	<input type="checkbox"/> <i>S. muhlenbergia</i>
<input type="checkbox"/> <i>L. lineare</i>	<input type="checkbox"/> <i>Rhexia alifanus</i>	<input type="checkbox"/> <i>S. pauciflora</i>
<input type="checkbox"/> <i>Manfreda virginica</i>	<input type="checkbox"/> <i>R. lutea</i>	<input type="checkbox"/> <i>S. verticillata</i>
<input type="checkbox"/> <i>Marshallia graminifolia</i>	<input type="checkbox"/> <i>R. mariana</i>	<input type="checkbox"/> <i>Scutellaria integrifolia</i>
<input type="checkbox"/> <i>Mecardonia acuminata</i>	<input type="checkbox"/> <i>R. nashii</i>	<input type="checkbox"/> <i>Sisyrinchium atlanticum</i>
<input type="checkbox"/> <i>Mitreola petiolata</i>	<input type="checkbox"/> <i>R. petiolata</i>	<input type="checkbox"/> <i>Solidago fistulosa</i>
<input type="checkbox"/> <i>Mitreola sessilifolium</i>	<input type="checkbox"/> <i>R. virginica</i>	<input type="checkbox"/> <i>S. nitida</i>
<input type="checkbox"/> <i>Muhlenbergia expansa</i>	<input type="checkbox"/> <i>Rhynchospora caduca</i>	<input type="checkbox"/> <i>S. odora</i>
<input type="checkbox"/> <i>Osmunda cinnamomea</i>	<input type="checkbox"/> <i>R. cephalanthus</i>	<input type="checkbox"/> <i>S. patula</i>
<input type="checkbox"/> <i>O. regalis</i>	<input type="checkbox"/> <i>R. chapmanii</i>	<input type="checkbox"/> <i>S. rugosa</i>
<input type="checkbox"/> <i>Oxypolis filiformis</i>	<input type="checkbox"/> <i>R. ciliaris</i>	<input type="checkbox"/> <i>S. stricta</i>
<input type="checkbox"/> <i>Panicum anceps</i>	<input type="checkbox"/> <i>R. compressa</i>	<input type="checkbox"/> <i>Sorghastrum elliottii</i>
<input type="checkbox"/> <i>P. rigidulum</i>	<input type="checkbox"/> <i>R. corniculata</i>	<input type="checkbox"/> <i>S. nutans</i>
<input type="checkbox"/> <i>P. tenerum</i>	<input type="checkbox"/> <i>R. debilis</i>	<input type="checkbox"/> <i>Sphagnum spp.</i>
<input type="checkbox"/> <i>P. verrucosum</i>	<input type="checkbox"/> <i>R. elliottii</i>	<input type="checkbox"/> <i>Spiranthes spp.</i>
<input type="checkbox"/> <i>P. virgatum</i>	<input type="checkbox"/> <i>R. fascicularis</i>	<input type="checkbox"/> <i>Stokesia laevis</i>
<input type="checkbox"/> <i>Paspalum floridanum</i>	<input type="checkbox"/> <i>R. filifolia</i>	<input type="checkbox"/> <i>Tephrosia hispida</i>
<input type="checkbox"/> <i>P. praecox</i>	<input type="checkbox"/> <i>R. globularis</i>	<input type="checkbox"/> <i>T. florida</i>
<input type="checkbox"/> <i>P. setaceum</i>	<input type="checkbox"/> <i>R. glomeratus</i>	<input type="checkbox"/> <i>T. onobrychoides</i>
<input type="checkbox"/> <i>Phlox pilosa</i>	<input type="checkbox"/> <i>R. gracilentia</i>	<input type="checkbox"/> <i>T. spicata</i>
<input type="checkbox"/> <i>Physostegia angustifolia</i>	<input type="checkbox"/> <i>R. inexpansa</i>	<input type="checkbox"/> <i>Tofieldia racemosa</i>
<input type="checkbox"/> <i>Pinguicula lutea</i>	<input type="checkbox"/> <i>R. miliacea</i>	<input type="checkbox"/> <i>Tridens ambiguus</i>
<input type="checkbox"/> <i>Utricularia juncea</i>		
<input type="checkbox"/> <i>U. purpurea</i>		
<input type="checkbox"/> <i>U. subulata</i>		
<input type="checkbox"/> <i>Vernonia gigantea</i>		

- Woodwardia virginica*
- Xyris ambigua*
- X. baldwiniana*
- X. caroliniana*
- X. difformis curtissii*
- X. fimbriata*
- X. laxifolia iridifolia*
- X. louisianica*
- X. platylepis*
- X. serotina*
- X. stricta*
- Zigadenus leimanthoides*

\* This is not a comprehensive list but contains most of the native herbaceous species found in the wet longleaf pine savannas and associated dryer pine flatwoods of St. Tammany Parish, LA. It is based on extensive field experience in the region by the Louisiana Natural Heritage Program and the Louisiana Field Office of The Nature Conservancy over the last 25 years.

**Table 2.** Undesirable herbaceous plant species in pine savanna restoration projects, St. Tammany Parish, LA. \*

Scientific Name	Common Name
<i>Cirsium horridulum</i>	bull thistle
<i>Cynodon dactylon</i>	bermuda grass
<i>Eupatorium capillifolium</i>	yankee weed
<i>Eupatorium serotinum</i>	late-flowering thoroughwort
<i>Imperata cylindrica</i> or <i>brasiliensis</i>	cogon grass
<i>Ligustrum sinense</i>	chinese privet
<i>Lonicera japonica</i>	japanese honeysuckle
<i>Lygodium japonicum</i>	japanese climbing fern
<i>Paspalum notatum</i>	bahia grass
<i>Paspalum uvrillei</i>	vasey grass
<i>Ranunculus</i> spp.	buttercup
<i>Rhus radicans</i>	poison ivy
<i>Roettbellia cochinchinensis</i>	itch grass
<i>Rubus</i> spp.	blackberry
<i>Triadica (Sapium) sebiferum</i>	chinese tallow tree
<i>Solidago altissima</i>	goldenrod
<i>Sorghum halapense</i>	johnson grass
<i>Verbena</i> spp.	verbena

\* This list is subject to revision following approval by the COE.

**9.1. Initial Success Criteria:**

**Hydrology**

Ground surface elevations must be conducive to the establishment and support of wetland vegetation, and re-establishment and maintenance of hydric soil characteristics.

Planting beds in plantations 1-8 years of age will be mechanically flattened by the end of 1 year.

**Vegetation**

Minimum of 125 - 150 Longleaf pine trees per acre after 1 year from planting.

**Restoration**

The TSMS Restoration Plan outlined in Section 8.0 will be followed and completed. All roads and ditches that could possibly affect surface hydrology will be identified and culverts/gaps and plugs will be installed to return the site to its natural sheet flow.

**9.2. Interim Success Criteria:**

**Hydrology**

By Year 3, TSMS hydrology shall be restored such that the TSMS meets the wetland criterion as described in the Corps 1987 Wetlands Delineation Manual. Data demonstrating that wetland hydrology has been re-established is to be collected and provided by WEYCO, and approved by CEMVN.

**Vegetation and Vegetative Plantings**

- 1) For a given planting, no less than 25 Longleaf Pine trees per acre must survive through 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.
- 2) By Year 5 following successful attainment of the one-Year survivorship criteria, the bank acreage and the perimeter of that acreage shall be virtually free (approximately 2% or less on an acre-by-acre basis) of exotic/invasive vegetation.
- 3) By year 5, the herbaceous strata should contain at least 50% desirable vegetative species representing at least 10 separate positive indicator species.

**9.3. Long-term Success Criteria:**

- 1) By Year 15 TSMS shall be essentially void of exotic/invasive vegetation (approximately 1% or less of the overstory vegetation on an

acre-by-acre basis). An active treatment program shall continue as part of the long-term maintenance program.

- 2) Timber harvesting/thinning will only be approved if the CEMVN determines that such activities are needed to maintain or enhance the ecological value of the TSMS and shall be performed by WEYCO/Long-term Steward. Measures to control the encroachment of exotic/invasive vegetation after the thinning operation shall be implemented.
- 3) By Year 15 planted tracts must exhibit vegetation compositions of 70-90% longleaf pine overstory (>15 ft. ht.), 50% longleaf pine midstory (2-15 ft. ht.), and 50-90% native grass/sedge/forb understory.
- 4) By year 15, 80% of the herbaceous layer should contain desirable vegetation including at least 20 positive indicator species. Undesirable species should not comprise more than 20% of the total area.

## **10.0 LONG-TERM MAINTENANCE AND PROTECTION**

WEYCO shall be responsible for protecting and maintaining lands contained within the TSMS in perpetuity, unless property is transferred or sold. The conservation servitude shall incorporate this mitigation plan by reference and bind WEYCO and future owners to complying with the terms of this copy of the mitigation plan. A copy of the conservation servitude to be filed in the real estate records of the Mortgage and Conveyance Office of St. Tammany Parish shall be provided to CEMVN for review and approval prior to filing. After filing, a copy of the recorded conservation servitude, clearly showing the book, page and date of filing, will be provided to CEMVN.

### **10.1. Uses Prohibited by the Conservation Servitude:**

- 1) Placing, filling, storing, or dumping of refuse, trash, vehicle bodies or parts, rubbish, debris, junk, waste, or other such items on the Property.
- 2) Mechanized land clearing or deposition of soil, shell, rock or other fill on the Property without written authorization from CEMVN.
- 3) Cutting, removal or destruction of vegetation on the property except in accordance with prescribed burning, the Sponsor's conservation servitude and/or in accordance with any permits authorized by the Corps of Engineers at the time the cutting is proposed. Timber harvests/thinning will only be approved if the CEMVN determines that such activities are needed to maintain or enhance the ecological value of the TSMS.
- 4) Grazing of cattle or other livestock on the property.
- 5) Commercial, industrial, agricultural, or residential uses of the Property or partitioning by fencing without prior approval from the CEMVN.

- 6) Dredging, draining, ditching, damming or in any way altering the hydrology of the Property except as required or permitted by this mitigation plan.
- 7) All other activities, which the CEMVN determines to be inconsistent with the establishment, maintenance and protection of wetlands within the TSMS and that may or may not be subject to Corps of Engineers regulatory authority.

#### 10.2. Uses Allowed By the Conservation Servitude:

No other human activities that result in the material degradation of habitat on the TSMS shall occur without written authorization from CEMVN. *However, it is understood that the conservation servitude shall not prohibit, subject to appropriate regulatory authority, hunting, fishing, trapping, non-consumptive recreational pursuits, exploration and production of minerals, and timber harvesting conducted for enhancing performance of wetland functions, subject to all applicable Federal, State and/or local licenses and permits and other provisions contained herein.*

- 1) Monitoring of vegetation, soils and water;
- 2) Hunting and fishing, and non-consumptive recreational uses such as hiking and bird watching;
- 3) Ecological education;
- 4) Exploration and production of minerals subject to obtaining all appropriate permits.
- 5) Provision of rights-of-way;
- 6) Timber harvesting as set forth herein; and
- 7) Compliance with Federal regulations or appropriate court orders.

#### 11.0 MONITORING AND REPORTING PROVISIONS

WEYCO agrees to perform all work necessary to monitor the TSMS to demonstrate compliance with the success criteria established in this mitigation plan. The monitoring program shall follow the guidelines established below:

##### 11.1. Timing of reports

- 1) Vegetative monitoring and reports shall be completed in the spring (when new growth makes identification practicable) of Years 1, 3, 5, 10, 15, and prior to and following the first thinning operation. Reports will be submitted by June 1st of each monitoring Year.
- 2) Monitoring reports shall be provided to CEMVN and made available to other natural resource agencies upon request.
- 3) If Year 1 success criteria is obtained, but all performance criteria have

not been met in the 5th Year, a monitoring report shall be required for each consecutive Year until two annual sequential reports indicate that all criteria have been successfully satisfied (i.e., that corrective actions were successful).

**11.2. Initial and Interim Success Criteria:**

- 1) Visual descriptions shall be provided with each monitoring report. Digital images recorded on compact disc shall be submitted from each survey plot at each monitoring period. Additionally, WEYCO should provide photos taken from various locations throughout the mitigation TSMS to document overall visual conditions of the mitigation TSMS.
- 2) WEYCO shall conduct a survey of living and dead seedlings near the beginning of the first planting season following planting and annually thereafter when new growth can be identified. Surveys shall be conducted in accordance with an accepted academic or industrial sampling methodology. WEYCO shall also perform an examination of the entire planted acreage to determine if the survey results are indicative of overall survival rates.
- 3) WEYCO shall provide a written report to CEMVN indicating the number and species of surviving seedlings in each survey plot.
- 4) The report also shall describe the condition of applicable hydrology altering features (culverts, ditches, plugs, etc.), the general condition of the seedlings, and discuss likely causes for observed mortality within those tracts that did not exhibit a seedling survival rate as indicated by the success criteria.
- 5) The report shall identify the generalized degree and location of exotic/invasive species colonization and identify measures to eradicate them.
- 6) The report should detail the nature and composition of the herbaceous understory.
- 7) Document evidence of wetland hydrology to meet the Interim success criteria, a wetland delineation must be included.
- 8) Reports discussing measures to control exotic/invasive species shall be provided annually until such time as all Initial Success Criteria and Interim Success Criteria have been met and verified by the CEMVN. The annual reports should document items such as exotic/invasive species, method of treatment/control, machinery and/or chemical treatments utilized, timing of treatments/work, effectiveness of previous treatments/work, etc.

**11.3. Long-Term Monitoring Reports:**

- 1) WEYCO shall randomly establish 20 permanent sets of circular nested sample plots. Two nested circular (1/10<sup>th</sup> acre and 1/50<sup>th</sup> acre) plots will be placed around each determined plot center at the time of planting. These plots shall be identified with a permanent marker (e.g., a 6 foot Steel T Post) and GPS coordinates shall be recorded. A map depicting the location of the survey plots and a listing of the coordinates for each survey plot is to be provided to CEMVN and the Fish and Wildlife Service for approval. The survey plots shall be representative of the plantings. All trees falling within the plot shall be permanently tagged and numbered. Data to be collected from the plots are listed below:

<u>Vegetation Plot Size</u>	<u>Strata</u>	<u>Data Collected</u>
1/10 <sup>th</sup> acre	Overstory	Planted tree height/diameter Non-planted tree height/diameter Species & % overstory Exotic/invasive or native Qualitative vigor estimate
1/50 <sup>th</sup> acre	Understory	% cover by herbaceous species  Total cover all species  Total cover desirable species

- 2) The monitoring report shall:
  - a. Identify seedling survivorship and colonization by volunteer mid-story and overstory species. Results of vegetation survey including visual estimates of percentage (%) overall cover and % cover by each vegetation layer, species diversity, % exotic vegetation in each vegetation layer, total % "facultative" and total % "upland" species in each vegetation layer, survival rate of planted vegetation, an estimate of natural revegetation, and a qualitative estimate of plant vigor as measured by evidence of reproduction.
  - b. Discuss the general health of the planted trees.
  - c. Describe the herbaceous vegetative communities and determine the number of positive indicator species.
  - d. Describe wildlife usage and herbivory/browse problems, if present.
  - e. Summarize the condition of the mitigation TSMS.

- f. Identify maintenance activities performed.
  - g. Document measures to control exotic/invasive species colonization/establishment.
- 3) Post-harvest inspection reports shall be submitted to CEMVN by December 31 of the Year in which the harvest occurred. WEYCO shall record where harvests occurred, the approximate basal area of standing timber by species, and the number and species of seedlings that were replanted.

## **12.0 ADAPTIVE MANAGEMENT**

WEYCO is ultimately responsible for ensuring that restoration of the site proceeds in a timely fashion, and that the site is meeting established restoration objectives and performance standards. In the event that the site does not attain desired restoration objectives and performance standards in a timely manner, WEYCO, in coordination with the COE, will take action to determine what impediments are preventing such attainment, and to devise a course of action to remedy the situation if possible.

The most significant challenge to restoration of the TSMS tract will be the successful re-colonization of native herbaceous species and establishment of a diverse ground cover in areas formerly occupied by pine savanna. The restoration will focus on utilizing existing native desirable wetland savanna plants to serve as an on-site source for natural recruitment. With the reintroduction of growing season burns, the non-desirable and non-fire adapted species will be eliminated to the benefit of the native plants. Over time, this process should allow for natural recruitment of the desirable species. However, should ground cover restoration fall short of stated restoration goals, Weyco will confer with the COE to determine a course of actions to achieve satisfactory conditions within an acceptable time frame.

In the event monitoring reveals that Longleaf/Slash pine initial success criteria have not been met, WEYCO shall take measures to achieve those criteria in accordance with the following plan:

- 1) If seedling survival is less than levels defined in the performance standards, WEYCO shall take appropriate actions, as recommended by the COE, to address the causes of mortality and shall replace all dead seedlings with new 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 one-Year survival rate.
- 2) Year 5 monitoring shall verify seedling composition and survivorship goals. WEYCO shall implement remedial action, as deemed necessary by the COE, to ensure attainment of Year 5 survivorship and composition criteria.

Another potential challenge to successful restoration of the TSMS tract will

include factors or situations that would preclude frequent application of prescribed fire. Such factors/situations may include extended drought (e.g., WEYCO cannot conduct prescribed burns when Drought Index reaches a certain level), new government regulations that would restrict the application of fire to wildlands (e.g., EPA/DEQ air quality regulations), and excessive residential development in the immediate area of the tract that may restrict burning. In the event that prescribed burning is constrained to the extent that timely restoration is not timely, Weyco will consult with the COE to determine alternative steps to achieve desired conditions in an acceptable time frame.

As highly invasive non-native species continue to increase in the local area (e.g., cogon grass), and as new ones continue to arrive in the region, control of such species may prove to be a significant ongoing challenge. Weyco will remain constantly vigilant to detect the presence of such species, and should any be found, an appropriate and aggressive treatment program will be devised and implemented.

As stated previously, in the event that any of the performance standards are not being met in a timely manner, WEYCO, in coordination with the COE, will work to determine what impediments are preventing attainment, and to devise a course of actions to remedy the situation if at all possible. Should it become apparent that certain of the performance standards set forth herein are unrealistic, or unattainable without extreme and unreasonable effort, WEYCO will consult with the COE to determine how the standards may be revised to achieve an adequate level of site restoration that satisfies mitigation intent.

If wetland hydrology is not re-established by Year 5, WEYCO shall assess which areas need attention and make necessary alterations to achieve hydrology.

#### **12.1. Force Majeure:**

*Force Majeure* is defined here as a natural event over which WEYCO has no control to prevent the damage from occurring. The following are examples of *Force Majeure*: Fire, wind, flood, drought and other natural disasters and insect damage, or infection damages to planted vegetation.

Damages caused by events beyond the control of WEYCO may be repaired using funds (principal and interest) accumulated in the endowment account by WEYCO, the Long-Term Steward or Holder once all Interim Success Criteria (9.2) have been achieved. WEYCO shall bear the financial responsibility for any and all remedial measures necessary to correct any deficiency caused by any means prior to successful attainment and verification of the Interim Success Criteria (9.2) by the COE. The funds will be provided to whichever entity has responsibility to repair the resulting damages at the time of catastrophic event.

### 13.0 FINANCIAL ASSURANCES

The purposes of financial assurances are to assure that (1) construction, including planting the TSMS and restoring wetland hydrology to the TSMS, is performed in accordance with the TSMS Restoration Plan, (2) to ensure the availability of funds for long-term maintenance, monitoring, and remediation by a third party, and (3) to ensure project success. To accomplish these goals, sufficient funds to perform the restoration work must be escrowed and a Long-Term Management Fund established. Therefore, WEYCO agrees to establish a financial mechanism to ensure that sufficient funds are available to a third party in the case of non-compliance or bank failure. In the event that WEYCO does not fulfill their obligations to perform, as specified in this agreement, the escrow account shall guarantee payment to a third party as necessary to complete the work. "Third party" is defined to mean the Holder, Long-Term Steward or an agency/organization determined appropriate by the CEMVN.

To establish the required financial assurance, \$350,000.00 (\$1250.00/ac for 280 ac restoration) shall be placed within an escrow account administered by a federally-insured depository that is "well-capitalized" or "adequately-capitalized" as defined in Section 38 of the Federal Deposit Insurance Act. Copies of depository account statement shall be provided to CEMVN upon request and/or in their annual report. Any accrued interest shall be used in the construction, development, operation, management or other purpose that directly benefits the mitigation bank, if necessary to conduct activities required by the Restoration Plan. Upon verification by the CEMVN that the initial success criteria have been attained for the TSMS, the escrow requirement will be reduced to \$ \$250,000.00 (322 ac site long-term mgmt).

In the event of a catastrophic event, as determined by the CEMVN, that affects the long term viability of the mitigation TSMS, the CEMVN can cause the appropriate corrections to occur by directing WEYCO or Third Party to implement corrections which will be funded partially or in entirety by a release of escrowed funds. Any short fall in funding shall be guaranteed by WEYCO. Any unspent funds shall remain in this fund. If escrowed funds are used, interest generated on the remaining escrowed funds shall remain in the escrow fund until it reaches \$250,000.00. If the property is sold or donated by WEYCO, this Long-Term Management Fund will be transferred to the designated Long-Term Steward or other landowner for use in addressing future catastrophic events or land management requirements once all monitoring has been completed and all credits from the mitigation TSMS have been debited.

If the CEMVN believes that WEYCO is not being prudent in complying with the terms and intent of this project specific mitigation plan, it will provide written notice to WEYCO, including a detailed description of the basis of the non-compliance. WEYCO shall submit a written corrective action plan to CEMVN and other members of the CEMVN for review and approval within forty-five (45) days of receiving written notice of non-compliance. The corrective action plan shall, at

a minimum, identify the cause of the non-compliance, the remedial measures necessary, and a time line for implementing said measures and come into compliance. To the extent practicable, CEMVN and the CEMVN shall approve or disapprove the corrective action plan within forty-five (45) days of receipt, provided that sufficient information and acceptable measures are contained within the plan.

In the event that WEYCO is placed in non-compliance and either does not provide the corrective action plan within the time frame specified above or does not implement the features of the corrective action plan within the time frames specified therein, all or a portion of the Long-Term Management Fund shall be released to a third party designated by CEMVN at the time of default to conduct necessary corrective actions or acquire equivalent ecological value elsewhere.

#### **14.0 MITIGATION SITE SELECTION & JUSTIFICATION**

The 322.3 acre TSMS has the potential to be restored to longleaf pine savannah conducive to the historical ecosystems throughout the Eastern Gulf Coast Flatwoods. The proposed mitigation consists of restoration of 272 acres of longleaf pine forested wetlands currently consisting primarily of row planted and bedded slash and loblolly pine, restoration of 7.3 acres of longleaf pine uplands and the enhancement and preservation of 34.8 acres of bayhead swamp. There are 8.1 acres of roads.

Longleaf pine savannahs are the most globally endangered ecosystems. They support nearly one quarter of all plant species in North America due to the high number of endemic species (Mitchell et al 2000). Based on the *Comprehensive Habitat Management Plan for the Lake Pontchartrain Basin* (Lake Pontchartrain Basin Foundation 2005) sixty-six rare and endangered plant species can be found in eastern longleaf pine savannahs. Longleaf pine savannahs also provide essential wildlife habitat to several species. The endangered red-cockaded woodpeckers thrive in longleaf pine ecosystems as well as white-tailed deer which benefit from the constant supply of early successional vegetation as a result of prescribed burning.

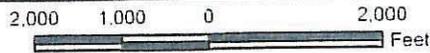
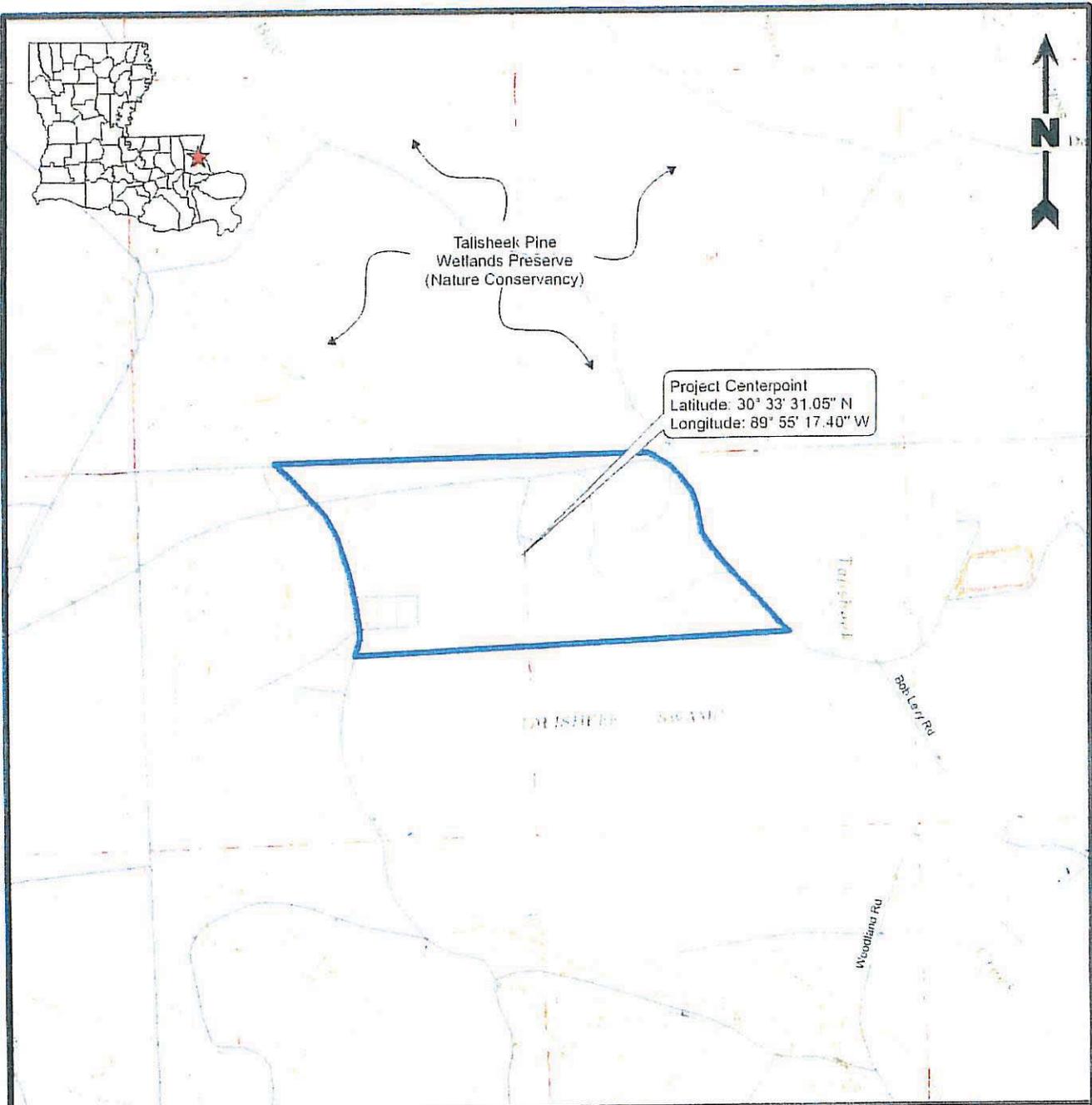
It is the intention of WEYCO to restore a 279.3 acre longleaf pine ecosystem comprised of 272 acres of wetland and 7.3 acres of upland and to enhance and preserve 34.8 acres of bayhead swamp on the proposed TSMS for SDC, who needs compensatory mitigation to satisfy permit requirements for unavoidable impacts to marginal pine-hardwood forest.

#### **15.0 TRANSFER OF PROPERTY**

WEYCO may donate or otherwise convey the property to a conservation organization or other entity, with the approval of the Corps.

**16.0 REFERENCES**

- Mitchell, R.J., W.L. Neel, J.K. Hiers, F.T. Cole, and J.B. Atkinson (2000). *A Model Management Plan for Conservation Easements in Longleaf Pine-Dominated Landscapes*. 27pp.
- Lake Pontchartrain Basin Foundation (2005). *Comprehensive Habitat Management Plan for the Lake Pontchartrain Basin*. 125pp.
- The Longleaf Alliance (2002). *Longleaf Pine Forest Reforestation*. [http://www.auburn.edu/academic/forestry\\_wildlife/longleafalliance/ecosystem/ecosystem.htm](http://www.auburn.edu/academic/forestry_wildlife/longleafalliance/ecosystem/ecosystem.htm)
- United States Department of Agriculture, Natural Resources Conservation Service (1995). *Soil Mapping Units and Hydric Soils Designations of Louisiana*, Third Edition.
- Web Soil Survey*. Version 1.1. Natural Resources Conservation Service. October 5, 2007. <http://websoilsurvey.nrcs.usda.gov/app/>
- United States Department of Agriculture, Soil Conservation Service (1977). *Soil Survey of Iberville Parish, Louisiana*. Woodland Management and Productivity Table.
- The Nature Conservancy's Long Leaf Pine Restoration McCulla Site Plan, in St Tammany Parish, Louisiana*



**Legend**

- Property Boundary (322.3 Acres)
- Roads

**Reference**

Base map comprised of U.S.G.S. 7.5 minute topographic map, "Bush, LA" and "Industrial, LA-MS" dated provisional edition 1983.

**Site Location Map**

Talisheek Swamp Mitigation Site  
 322.3-Acre Talisheek Swamp Site  
 St. Tammany Parish

**Harrison Law, LLC**  
 Baton Rouge, Louisiana

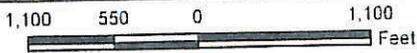
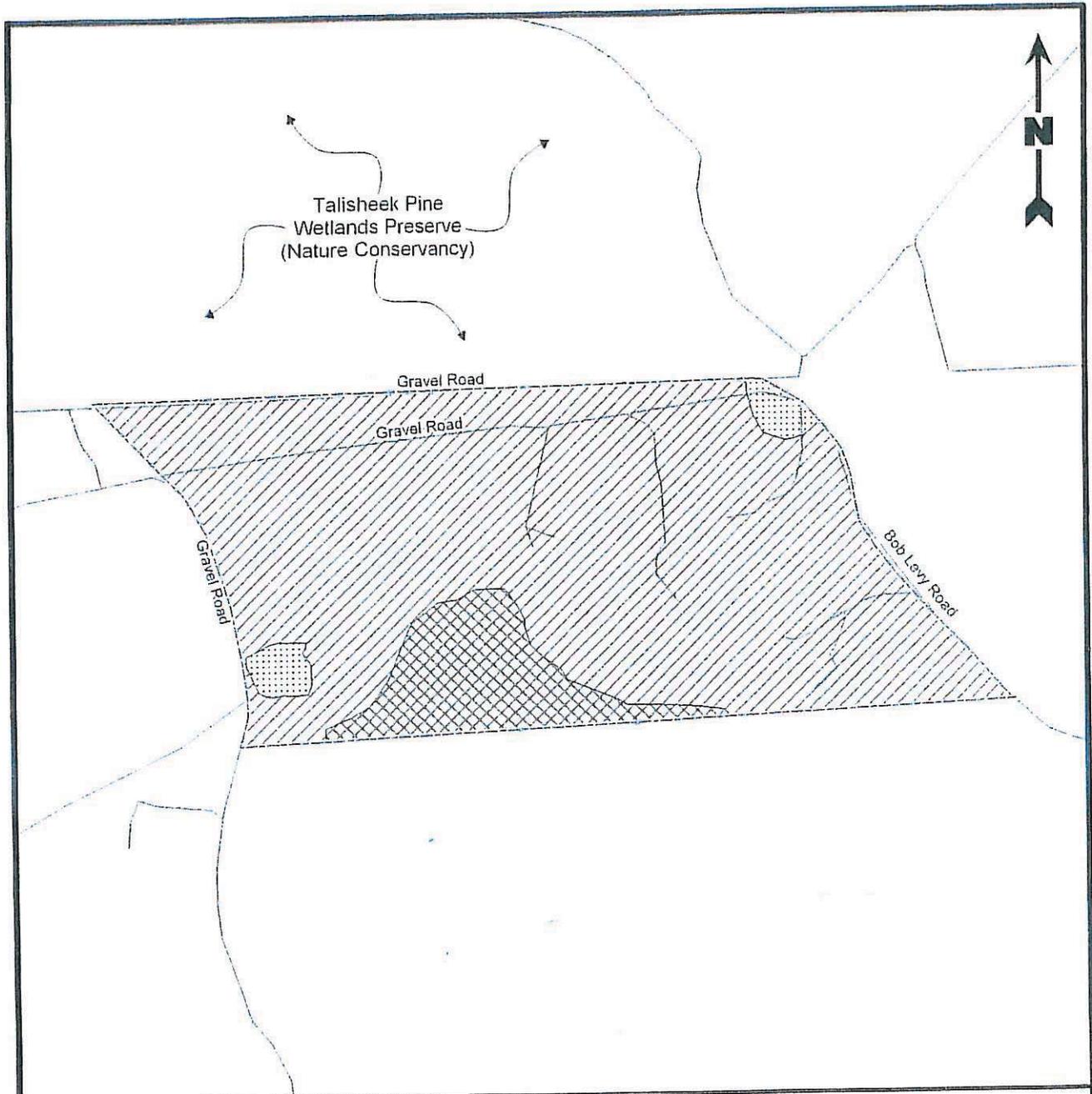


**PROVIDENCE**

Drawn By	DRA	01/21/08
Checked By	LMH	01/21/08
Approved By	LW	02/05/08

Project Number	299-009
Drawing Number	299-009-A006

**1**  
Figure



**Legend**

- Property Boundary (322.3 Acres)
- Bayhead Swamp Restoration (34.9 Acres)
- Longleaf Pine Restoration (272 Acres)
- Longleaf Pine Upland Restoration (7.3 Acres)
- Roads (8.1 Acres)

**Restoration Site Plan**

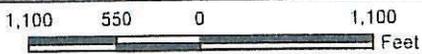
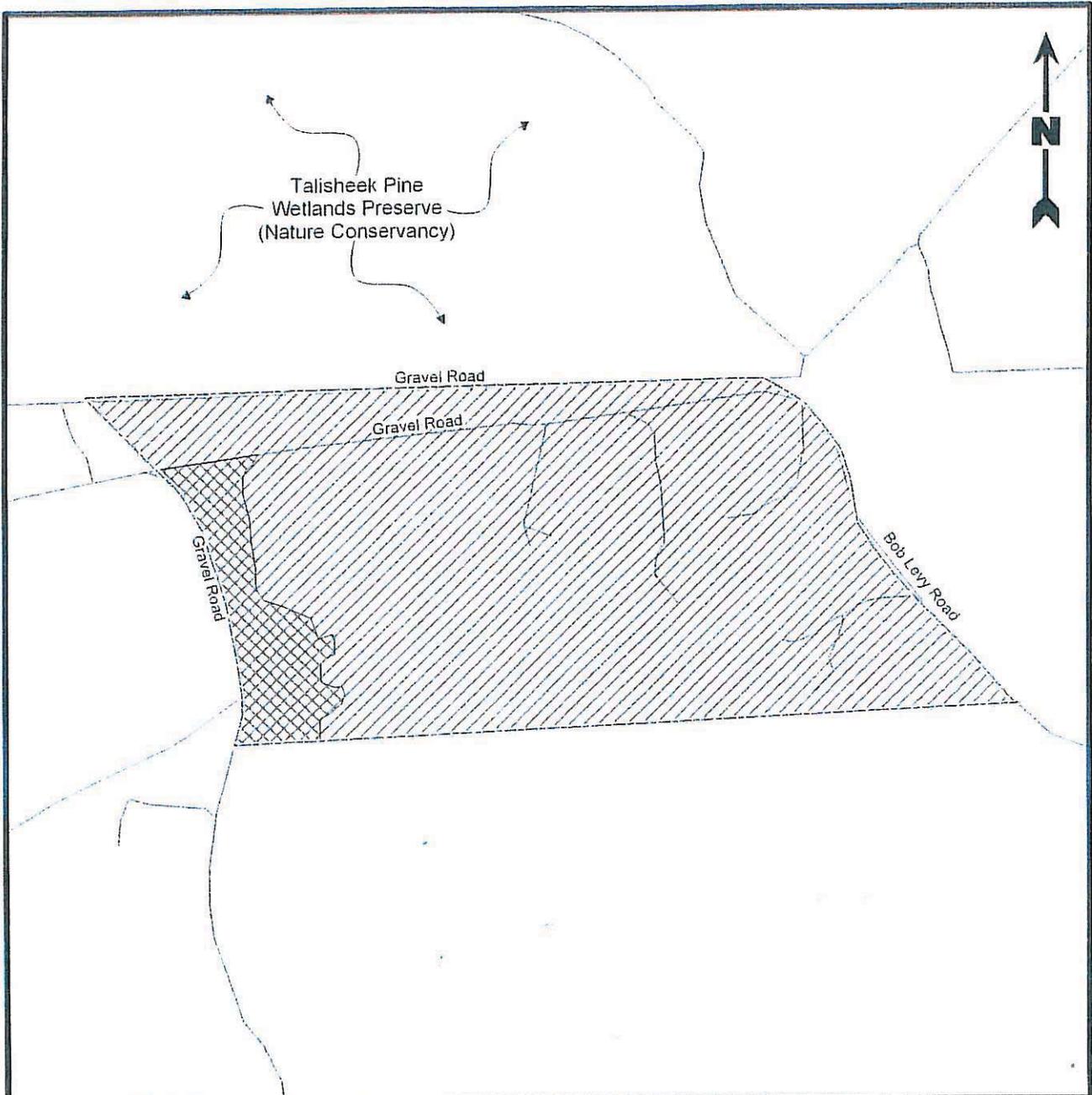
Talisheek Swamp Mitigation Site  
 322.3-Acre Talisheek Swamp Site  
 St. Tammany Parish

**Harrison Law, LLC**  
 Baton Rouge, Louisiana



Drawn By	DRA	01/21/08
Checked By	LMH	01/21/08
Approved By	LW	02/05/08

Project Number 299-009	<b>3</b> Figure
Drawing Number 299-009-A008	



**Legend**

-  Property Boundary (322.3 Acres)
-  Forested (287.8 Acres)
-  Pine Cutover (26.4 Acres)
-  Roads (8.1 Acres)

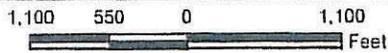
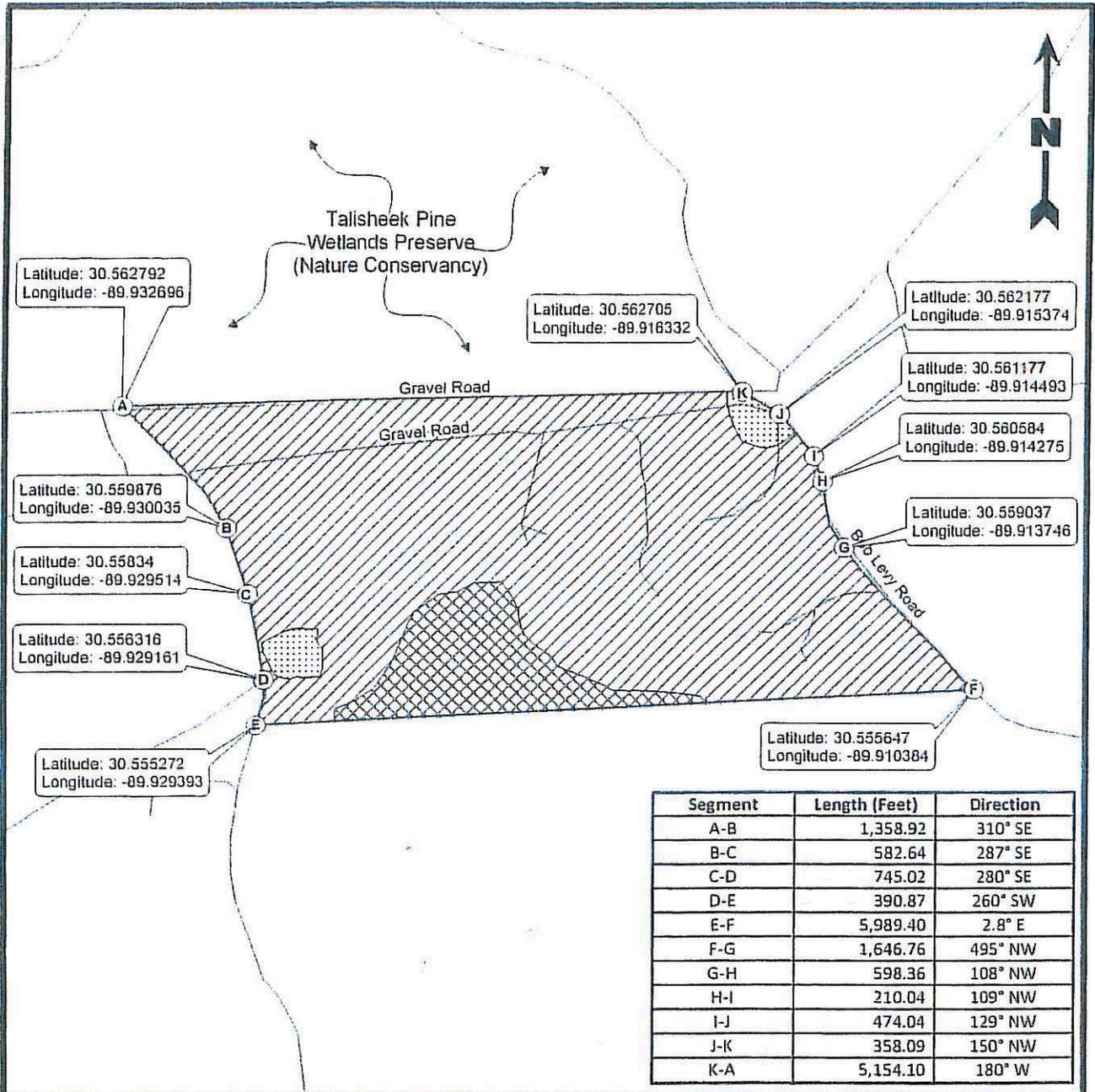
**Site Plan**

Talisheek Swamp Mitigation Site  
 322.3-Acre Talisheek Swamp Site  
 St. Tammany Parish

**Harrison Law, LLC**  
 Baton Rouge, Louisiana



Drawn By	DRA	01/21/03
Checked By	LMH	01/21/03
Approved By	LW	02/05/03
Project Number		<b>2</b> Figure
299-009		
Drawing Number		
299-009-A007		



**Legend**

- Property Boundary (322.3 Acres)
- Bayhead Swamp Restoration (34.9 Acres)
- Longleaf Pine Restoration (272 Acres)
- Longleaf Pine Upland Restoration (7.3 Acres)
- Roads (8.1 Acres)
- Property Boundary Survey Points

**Perimeter Survey Map**

Talisheek Swamp Mitigation Site  
322.3-Acre Talisheek Swamp Site  
St. Tammany Parish

**Harrison Law, LLC**  
Baton Rouge, Louisiana



Drawn By	DRA	01/21/08
Checked By	LMH	01/21/08
Approved By	LW	02/05/08

Project Number	<b>4</b> Figure
299-009	
Drawing Number	
299-009-A009	