

# Pensacola Bay Mitigation Bank

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# **Pensacola Bay Mitigation Bank Mitigation Banking Instrument**

## **1.0 Preamble**

This Mitigation Banking Instrument (MBI) regarding the establishment, use, operation and perpetual maintenance of the Pensacola Bay Mitigation Bank (Bank) has been prepared by Westervelt Ecological Services, LLC (WES), sponsor of the Bank, and Bosso, Dentzau & Imhof, Inc. in consultation with the Interagency Review Team (IRT). For this project, the IRT is composed of representatives from the U.S. Army Corps of Engineers (Corps), U.S. Environmental Protection Agency (EPA), U.S. Fish and Wildlife Service (USFWS), and the Florida Department of Environmental Protection (FDEP). This document serves as the federal MBI (Corps SAJ-2007-04377-IP-EPS). This MBI does not obviate WES from obtaining necessary federal permits for Bank activities as appropriate.

The text of this MBI is based on *33 CFR Chapter II, Part 332 – Compensatory Mitigation For Losses of Aquatic Resources*. It also makes use of publicly available documents including the “Green Book” (i.e. “*Joint State/Federal Mitigation Bank Review Team Process for Florida, Operational Draft, October 1998*”), relevant Florida Statutes, and examples of other mitigation banking instruments including the Nokuse Plantation Mitigation Bank MBI. Essential elements of this Bank, including location, mitigation service area, existing and proposed vegetative communities, and management activities are summarized by black & white line-drawing maps (Exhibit 1).

This MBI regarding the establishment, use, operation, and perpetual maintenance of the Bank is made and entered into by and among Westervelt Ecological Services and the U.S. Army Corps of Engineers.

## **1.1 Purpose of the Bank**

The Bank is proposed in Sections 32, 37 and 42, Township 1 North, Range 28 West, and Section 03, Township 1 South, Range 28 West, Santa Rosa County and lies east of Avalon Blvd. (Figure 1). The Bank is bordered by residential property, a golf course and wetlands along the western boundary, property owned by Santa Rosa County to the north, proposed and existing conservation property, and residential property to the east, and conservation property and private property to the south (Figure 2). The property is strategically located between existing and proposed conservation properties north and south of I-10 (Figure 3).

The purpose of the Bank is to offer wetland compensatory mitigation for private and public projects anticipated within the Bank Mitigation Service Area (MSA) as shown in (Figure 4). The MSA for the Bank includes those regions of the Pensacola Bay 8-digit HUC that drain into Pensacola Bay. Excluded from the MSA, but within the 8-digit Pensacola Bay HUC are the following 12-digit sub-basins:

- ▶ Santa Rosa Island, 031401050205
- ▶ Santa Rosa Sound Frontal, 0314010502050204
- ▶ Williams Creek-Oriole Beach Frontal, 031401050203 and
- ▶ Portions of the Big Lagoon-Perdido Bay-Garcon Swamp-Bayou Garcon area.



These areas were removed based upon consensus of the IRT that the predominant flow in these sub-basins was not towards Pensacola Bay.

In addition, several 12-digit sub-basins that are not within the 8-digit Pensacola Bay HUC, but do flow into the Bay and are proximally close to the Bank have been included in the MSA. These include White River, Lower Pond Creek and Wright Basin which are generally classified as parts of either the 8-digit HUC for Blackwater River or Escambia River. The 12-digit identifiers for these sub-basins are 031403050602, 031401040502 and 031401040503.

Unavoidable wetland impacts within the MSA which may be mitigated “in-kind” using the Bank, subject to regulatory approvals, include wet prairie, wet flatwoods, mixed forested/hardwood wetlands, baygall, cypress and gum depressions, and sloughs. With the approval of the regulatory agencies, impacts from outside the MSA that are in-kind and minimal, may also be mitigated using the Bank, on a case-by-case basis, and only as described in this MBI in Section 9.1. However, the use of the Bank may be inappropriate, even within the MSA, when it will result in unacceptable cumulative impacts to a waterbody, or when an impact is to a locally unique species, feature or community. The Corps may also determine, on a case-by-case basis, that use of a mitigation bank is not the most appropriate compensatory mitigation for unavoidable wetland impacts for certain other situations in accordance with 33 CFR Part 332.3. Mitigation Credits for the Bank as determined by UMAM are as follows:

Corps – 197.54 credits.

There were no locally-developed standards and criteria that were factored into either the MSA development or the credit generation.

## **2.0 Essential Mitigation Requirements**

Under the recently adopted federal mitigation guidelines entitled, *Part 332 – Compensatory Mitigation for Losses of Aquatic Resources*, all mitigation banks and site specific mitigation projects are required to document the inclusion of 12 essential items within the plan.

### **2.1 Objectives**

The objectives of the Bank are as follows:

- ▶ **Forested Wetland Preservation and Management (~419 acres)** – Ecological management of mixed forested wetland through perpetual conservation, the elimination of anthropogenic impacts, the restoration of adjacent communities with prescribed fire, and the prevention of conversion of the property for silviculture.
- ▶ **Forested Wetland Enhancement (~79 acres)** – Management and enhancement of forested wetlands embedded within wet flatwoods through the implementation of regular, low-intensity prescribed fire and the supplemental planting of hardwoods.
- ▶ **Forested Wetland Restoration (~ 6 acres)** – Restoration of hardwoods in an area of previous filling impacts and an area of chronic erosion from vehicular access.

- ▶ **Wet Prairie/Wet Flatwood Restoration (~ 659 acres)** – Restoration of prairie and flatwood communities by reduction of shrub midstory using prescribed fire, mechanical and/or chemical treatments.
- ▶ **Hydrologic Improvements** – Installation of six (6) low water crossings within an existing road network and the partial filling of 2 ditches.
- ▶ **Exotic Species Control** – Identification and chemical treatment of exotic species site wide.
- ▶ **Natural Corridor Protection** – The southern portion of the Bank is within the acquisition boundaries for the Garcon Ecosystem Florida Forever Project, and the northern portion, while not within the proposed boundaries, does connect to a parcel to the east which is within the established acquisition boundary.

## 2.2 Site Selection

The Site for the Bank was selected based upon a larger landscape context of the state and federal lands ownership in an effort to maximize the ecological value. A portion of the specific site has been targeted by the State of Florida for conservation acquisition as part of the Garcon Point Ecosystem Project.

The Bank provides an essential link between existing state owned conservation properties to the south and those proposed for acquisition to the east. As such the environmental value of this property is leveraged over a substantially larger area than the specific site. Within the Pensacola Bay watershed the ecological conditions have been degraded by intensive silviculture, residential development and to a lesser degree by commercial development along the southern portion of the watershed.

The Bank is located within the Pensacola Bay watershed which historically contained fire maintained ecosystems such as wet flatwoods and wet prairie. Restoration of these systems will be an important component of the Bank. Historically, community patterns were established and maintained by naturally occurring, lightning induced fires. Once started, these fires affected large areas because of the ample supply of fine fuels (pine needles and grasses), and the relative uninterrupted of the landscape. Construction of roads, conversion of communities to accommodate food and fiber production, and the growing population has led to landscape fragmentation and conditions that thwarted the effects of fire. Indeed, while most of the communities that historically existed in the watersheds incorporated into the Bank are considered fire dominated, this natural process is virtually extinct and has been replaced by wildfire, or in some limited cases by prescribed fire, at a drastically reduced landscape level.

A substantial component of the management of the Bank is the reintroduction of fire on a regular and periodic basis to restore and maintain ecosystems in their historic conditions. Fire has been shown to:

- ▶ Control the physical environment.
- ▶ Regulate dry-matter production and accumulation.
- ▶ Control plant species presence and abundance.
- ▶ Determine wildlife habitat patterns and populations.
- ▶ Regulate the numbers and kinds of soil organisms.

With the reintroduction of fire, the controlling of site access and the prevention of the conversion of the property to pine plantation, substantial improvements in the ecological conditions of the regional watershed will be achieved.

### **2.3 Site Protection Instrument**

The Bank will be protected in perpetuity by a conservation easement granted to the State of Florida. The U.S. Army Corps of Engineers and this MBI will be referenced in the recorded document.

### **2.4 Baseline Information**

Information concerning the existing conditions and the target community composition are discussed in Section 3.0.

### **2.5 Determination of Credits**

Credits have been determined using the Unified Mitigation Assessment Methodology as discussed in Section 4.0.

### **2.6 Mitigation Work Plan**

A mitigation work plan for the restoration and management of the Bank has been developed with input from the IRT. The mitigation work plan is detailed in Section 8.0 and Exhibit 4.

### **2.7 Maintenance Plan**

A maintenance plan that includes long-term access control, prescribed fire, and exotic control has been developed. This plan is detailed in Sections 8.0 and 9.0 and Exhibit 5.

### **2.8 Performance Standards**

Success criteria have been established which must be met and certified by the IRT before mitigation credits are released. Perpetual ecological management, long-term site-monitoring and IRT oversight will ensure that the Bank will achieve mitigation success. Success criteria are detailed in Exhibit 4.

### **2.9 Monitoring Requirements**

A monitoring plan has been developed to assess the attainment of ecological goals and milestones for the natural community restoration. The monitoring requirements are detailed in Exhibit 4.

### **2.10 Long-term Management Plan**

The Bank is owned by WES, a subsidiary of The Westervelt Company, a Delaware corporation, which owns and manages over 500,000 acres in the southeast United States. Under the terms of the conservation easement and the agency authorizations, WES is required to maintain the lands within the Bank pursuant to the



terms of the Mitigation Bank Permits issued by the State of Florida and the U.S. Army Corps of Engineers. The terms of this MBI, including ecological management in perpetuity, are binding on the property owner.

### **2.11 Adaptive Management**

Adaptive Management is incorporated as part of this document and is discussed in Section 9.2.

### **2.12 Financial Assurances**

WES will establish an irrevocable letter of credit with a standby trust in the amount of \$812,020.00 based upon the calculated costs of Bank implementation through achievement of success (Exhibit 2). This letter of credit will be reviewed and adjusted every 2 years with some amount remaining in force until such time as 90% attainment of success has been achieved at the Bank. The template for this standby trust fund agreement is found in Exhibit 9. This letter of credit must be completed and provided to the Corps Project Manager responsible for the Bank at the time of submittal. The Corps will determine if the agreement is complete and acceptable, and will advise the Bank of its decision. If this submittal is associated with a credit release request, the Corps will process the request in accordance with the timeframes and procedures of 33 CFR 332.8(o)(9).

A perpetual management fund that will be used to operate the Bank after demonstration of success, totaling \$401,700.00, will be established incrementally by depositing \$2,000/credit sale into a management endowment. The purpose of this endowment is to generate \$24,100.00 annually for the perpetual maintenance of the property. In the interim, WES will establish an irrevocable letter of credit with a standby trust in the total amount which will remain in force until the endowment is fully funded. The template for this standby trust fund agreement is found in Exhibit 9. This letter of credit must be completed and provided to the Corps Project Manager responsible for the Bank at the time of submittal. The Corps will determine if the agreement is complete and acceptable, and will advise the Bank of its decision. If this submittal is associated with a credit release request, the Corps will process the request in accordance with the timeframes and procedures of 33 CFR 332.8(o)(9).

## **3.0 Baseline Information**

### **3.1 General Site Description**

The Bank consists of approximately 1,188 acres of land within southern Santa Rosa County (Figure 1). The Bank is located east of Avalon Boulevard and consists of an approximate 1,057 acre parcel north of I-10 and a 131 acre parcel south of I-10. The southern portion of the Bank is contiguous with property owned and managed by the Northwest Florida Water Management District (District) and the FDEP. The Bank currently contains approximately 414.9 acres of Bay and Titi Swamps, 75.2 acres of Gum and Cypress Swamps, 656.3 acres of disturbed hydric flatwoods, and 41.8 acres of disturbed areas including trails and roads. The Bank occurs within the Pensacola Bay watershed which has a U.S. Geological Survey 8-digit Hydrologic Unit Code of 03140105.

The majority of the Bank has been mapped as the highest level of wildfire risk by the Florida Department of Forestry. Without the use of regular, low-intensity prescribed fires, fuel accumulates rapidly and represents a dangerous situation for residents and a detrimental disturbance regime for natural communities.

### **3.2 Ownership**

The land for the Bank was acquired in 2008 by WES for the purpose of the establishment of the Bank. The property had previously been identified for purchase by the State of Florida under the Florida Forever Program, but was removed because the property owner was not a “willing seller”, which is a requirement of that acquisition program.

### **3.3 Potential Historic/Archeological Resources**

The Florida Division of Historical Resources (DHR) maintains the Florida Master Site File, which is a paper and computer database of all known historical and archeological sites in Florida. Information on the location of significant areas within the project site and immediately adjacent properties is provided in Figure 5.

### **3.4 Surrounding Land Use**

The Bank is surrounded by a combination of conservation lands, single-family properties, a golf course and Interstate 10 (Figure 2). The Bank is divided into two overall parcels by the interstate. The southern portion of the Bank is contiguous with property owned and managed by the District and the FDEP and is part of the larger Garcon Point ecosystem project. The northern boundary of the southern piece is established by the I-10 right-of-way. The larger northern piece is bounded by I-10 on the south, lands proposed for acquisition under Florida Forever to the east, county-owned property to the north, and residential and golf course properties to the west.

### **3.5 Hydrology**

The Bank has several important hydrologic features that define the communities and drainage on the property. The large basin swamp that forms the northern boundary of the property is fed with seepage from a substantial upslope ridge that is more than 60' higher than the swamp elevations (Figure 6). This system connects southwesterly to Mulatto Bayou which ultimately drains into Escambia Bay. The southern portion of the parcel connects hydrologically to Whiteoak Bayou and ultimately to Blackwater Bay.

### **3.6 Soils**

The Bank is represented by 7 soil-mapping units as provided in the Soil Survey of Santa Rosa County, Florida (Figure 7). The units and brief descriptions are provided below.

Albany loamy sand, 0 to 5 percent slopes. This is a somewhat poorly drained, nearly level to gently sloping soil found on low upland ridges. Slopes are smooth to concave. The water table is at a depth of 12 to 30 inches for 1 to 4 months during most years. Available water capacity is moderately low to low, and natural fertility is low. Permeability is rapid in the sandy layers and moderate in the subsoil. Runoff is slow,

and the erosion hazard is slight. Vegetation consists of longleaf and slash pine and various oaks. The understory is mainly gallberry, wax myrtle, and wiregrass.

Dorovan-Pamlico Association. These nearly level, very poorly drained soils are in large hardwood swamps and on flood plains of major drainageways. Slopes are less than 1 percent. The Pamlico soil usually is only the outer part of the area, and the Dorovan soil is on the inner part. The water table is at or near the surface for most of the year. Internal drainage is very slow because of the high water table. Permeability is moderate. Organic matter content and available water capacity are very high. Vegetation consists of bald cypress, blackgum, sweetbay, sweetgum, titi, and scattered slash pine and an understory of brackenfern, greenbrier, muscadine vine and wax myrtle.

Garcon Loamy Fine Sand. This somewhat poorly drained, nearly level soil is on broad low positions in the flatwoods. Slopes are less than 2 percent. The water table is at a depth of 20 to 40 inches for 4 to 6 months during most years. Permeability is rapid above a depth of about 31 inches, moderate between depths of 31 and 51 inches, and rapid below a depth of 51 inches. Vegetation consists of longleaf and slash pine and various oaks. The understory is mainly gallberry, aster, running oak, palmetto, and wiregrass.

Mulat Loamy Fine Sand. This poorly drained, nearly level soil is in low-lying areas and in the flatwoods of the lower Coastal Plain. Slopes are less than 1 percent. The water table is above a depth of 10 inches for 6 to 8 months during most years and varies between the depths of 10 and 30 inches during droughty periods. The soils are ponded or have water above the soil surface for less than 1 month during the wettest season. Permeability is rapid above a depth of about 27 inches, moderately slow between depths of 27 and 49 inches, and rapid below a depth of 49 inches. Vegetation consists of bald cypress, pitcherplant, gallberry, and wiregrass.

Pactolus Loamy Sand, 0-5 percent slopes. This moderately well drained to somewhat poorly drained, nearly level to gently sloping soil is on low positions in the uplands. Slopes are smooth to concave. The high water table is at a depth of 18 to 30 inches for 2 to 4 months during most years. Permeability is rapid. Runoff is slow, and the erosion hazard is slight. Vegetation consists of longleaf and slash pine, dogwood, and various oaks. Understory is mainly gallberry, wax myrtle, huckleberry and pineland threeawn.

Rains Fine Sandy Loam. This poorly drained, nearly level soil is in low-lying positions on the Coastal Plain. Slopes are less than 2 percent. The water table is at a depth of less than 10 inches or is above the surface for 2 to 6 months in most years. Permeability is moderately rapid above a depth of 5 inches and moderate below this depth. Runoff is slow. Vegetation consists of blackgum and scattered cypress and longleaf pine. The understory consists of gallberry, pineland threeawn, and water-tolerant grasses and shrubs.

Rutlege Loamy Sand. This very poorly drained, nearly level soil is along small stream bottoms, in ponded areas, and on low upland flats. Slopes are less than 2 percent. The water table is at or near the surface for long periods. Many areas are ponded in wet seasons. Permeability is rapid throughout. Runoff is very slow or ponded. Vegetation consists of titi, blackgum, scattered slash and longleaf pine, and



sweetbay. The understory is mainly native grasses and low growing shrubs, primarily gallberry, wax myrtle, and pitcherplant.

### 3.7 Existing and Targeted Wetlands and Uplands

The Bank consists of approximately 1146.4 acres of wetlands and 41.8 acres of trails, ditches and disturbed lands. The existing land cover was classified and mapped by the Florida Land Use Cover and Forms Classification System (FLUCCS) as is represented in Figure 8. Given the small nature and dispersal of the uplands, these were not individually mapped.

Table 1 provides the existing classifications and acreage as represented in the figure:

Table 1 - Existing Land Cover By FLUCCS

FLUCCS CODE	Description	Acres
611/614	Bay and Titi Swamps	414.9
625/626	Hydric Pine Flatwoods/Hydric Pine Savanna	656.3
613/621	Gum/Cypress Swamps	75.2
740/8146	Disturbed Land/Trails	41.8
TOTAL		1188.2

The target communities after restoration, enhancement and management are provided in Figure 9 and Table 2 below:

Table 2 - Target Land Cover By FLUCCS

FLUCCS CODE	Description	Acres
611/614	Bay and Titi Swamps (Baygall)	418.7
625/626	Hydric Pine Flatwood/Hydric Pine Savanna	658.5
613/624	Gum/Cypress Swamps (Depressions and Sloughs)	84.8
8146	Trails and Firelines	25.9
NA	Low Water Crossings	0.3
TOTAL		1188.2

### 3.8 Erosion/Access/Hydrology

The Bank proposes to utilize the existing trail system to implement the needed prescribed fire management program. Originally, this trail system was proposed to be excavated and used to fill in small borrow areas along the sides. Although this restoration is desirable, the roads are needed to safely implement the prescribed fire management, which drives the restoration of the entire site. In lieu of removal, WES has have incorporated approximately 0.3 acres of low water crossings at 6 locations (Figures 9 & 11).

These low water crossings will require the excavation of previous fill down to a depth of approximately 6" below the adjacent elevations, and the installation of filter fabric and rock to a depth consistent with adjacent elevations. An example of the low water crossing is provided in Figure 10. Table 3 provides the approximate lengths of the low water crossings.

Table 3 – Low Water Crossings

ID Number	Length (feet)
1	275
2	146
3	135
4	111
5	45
6	56

Hydrologic restoration will also be completed through the installation of several ditch blocks as shown in Figures 11 and 12.

### 3.9 Species

Preliminary surveys and review of independent sources have identified numerous plant and animal species that are listed or otherwise considered rare that occur or are reasonably expected to occur on the property (Exhibit 3).

### 4.0 Establishment of Mitigation Credits

The Unified Mitigation Assessment Methodology (UMAM) was used to assess the potential mitigation credits available at the Bank. Although only two basic community types are being proposed for credit generation, various treatments are required based upon the degree of existing impact (Figure 13). A summary of these calculations are provided in Table 3 below.

Table 3 – UMAM Summary

Assessment Area	Location Before-After		Water Environ. Before-After		Community Structure Before-After		UMAM Delta	Preservation Adjustment Factor	Risk	Time Lag	RFG	Acres	Credits
#1 Bay/Titi Pres outside 300' Manage. Buffer	7.0	8.0	9.0	9.0	7.0	8.0	0.067	0.7	1.00	1.00	0.047	230.36	10.75
#2 Bay/Titi Pres w/in 300' Manage. Buffer	7.0	9.0	9.0	9.0	7.0	9.0	0.133	0.8	1.00	1.00	0.106	71.9	7.67
#3 Bay/Titi Cut, Herbicide, Plant	7.0	9.0	8.0	9.0	7.0	9.0	0.167	1.0	1.00	1.14	0.147	6.9	1.01
#4 Gum/ Cypress From Wet Fill	0.0	9.0	0.0	9.0	0.0	9.0	0.900	1.0	1.00	1.46	0.616	2.2	1.36
#5 Gum/ Cypress From ORV Impacts	5.0	9.0	2.0	9.0	0.0	9.0	0.667	1.0	1.00	1.46	0.457	7.4	3.38
#6 Gum/ Cypress From Fire Suppressed Areas	7.0	9.0	8.0	9.0	7.0	9.0	0.167	1.0	1.00	1.00	0.167	50.7	8.45
#7 Gum/ Cypress From Wildfire Impacts	7.0	9.0	9.0	9.0	5.0	9.0	0.200	1.0	1.00	1.46	0.137	24.5	3.36
#8 Rutted Hydric Flatwoods	7.0	9.0	3.0	9.0	2.0	9.0	0.500	1.0	1.25	1.00	0.4000	11.2	4.48
#9 Bay/Titi Ruts	5.0	9.0	2.0	9.0	0.0	9.0	0.667	1.0	1.00	1.46	0.457	3.8	1.74

Enhanced													
#10 Hydric Flatwoods	6.0	9.0	7.0	9.0	6.0	10.0	0.300	1.0	1.25	1.00	0.2400	647.3	155.34
#11 Bay/Titi Preservation – Gulf Power CE	7.0	7.0	7.0	7.0	7.0	7.0	0	0.7	1.00	1.00	0.000	105.74	0.00
Roads/Trails	-	-	-	-	-	-	-	-	-	-	-	26.2	
											Totals	1188.2	197.54

UMAM areas 1 and 2 represent largely the preservation of wetlands systems that could reasonably be expected to be impacted by silviculture, ORV impacts, and wildfire in the absence of the Bank. With respect to the first two categories of Bay/Titi Preservation a differentiation was made for those wetlands within a 300' distance of proposed active management activities under the concept that the benefits to these adjacent wetlands would be secondarily apparent to a distance of at least 300'. Therefore, the Bay/Titi Preservation Within the Management Buffer was assigned greater environmental lift than those outside of this buffer.

UMAM area 3 represents an enhancement area in which the larger titi will be cut and chemically treated. The open areas in the canopy created by this activity will be planted with sweetbay and black gum.

UMAM area 4 represents an area that was used as a staging area for the construction of Interstate 10. The foreign material will be excavated to a level to support the restoration of the area as a depressional hardwood, then planted with woody and herbaceous species.

UMAM area 5 incorporates areas disturbed by ORV traffic, which at times prior to the ownership by WES, has been significant. The ruts will be planted in a mixture of hardwoods.

UMAM area 6 includes Gum/Cypress systems disturbed from logging and fire suppression. Initially, mechanical and hand-cutting will reduce woody shrub coverage. The reintroduction of fire will also further reduce titi, gallberry, and other woody shrub encroachment into the edges of the systems and assist in the creation of healthy community transitional zones.

UMAM area 7 includes Gum/Cypress areas that were impacted by wildfire in 1999. While it is expected that fires would burn into these systems normally, the cycle of fire suppression followed by wildfire produces extremely hot fires that ladder into the canopy and kill the wetland hardwoods. The current proposal requires replanting and then a short delay until reintroduction of frequent, low-intensity fires.

UMAM area 8 includes flatwoods interspersed with rutting from substantial ORV traffic. This area will be planted with herbaceous species.

UMAM area 9 includes an area of substantial impact within the Bay/Titi community from ORV and logging. This area will be replanted in mixed hardwoods.

UMAM area 10 includes degraded flatwoods. Restoration will include a reduction of the woody mid- and overstory, reduction of recruiting slash pine, regular prescribed fire and some longleaf pine augmentation to represent more historic conditions.



UMAM area 11 represents a portion of the Bank that has been placed into conservation easement with the State of Florida for a Gulf Power project (SAJ-2007-1783 IP-MBH). Because the credits for this Bay/Titi area have been allocated for the permitted project, the acreage will generate no further credits. This area remains included as a perpetual management area for the Bank.

All the lift generated in the individual target communities results from a combination of the following facts:

1. Prescribed fire is essential to the perpetual maintenance of the majority of the communities within the Bank. Although there have been fires on the site prior, these have been catastrophic fires that have substantially damaged hardwoods, and put human life and structure in harms way. The management plan will introduce regular, frequent, low-intensity fires that will maximize diversity and more closely mimic the natural fire regime.
2. The site is currently becoming increasingly impacted by off road vehicles. Without long-term protection this impact will continue.
3. Evidence of exotics is present and without treatment will substantially impact the ecological structure and function.
4. The highest and best use of the property other than a mitigation bank would require conversion to more intensive land uses that would be detrimental to the specific ecosystem components and the overall landscape value of the general area.
5. The Bank is strategically located to connect existing and proposed state owned conservation lands.
6. Fire maintained ecosystems are becoming exceptionally rare in Florida.

## **5.0 Use of Mitigation Credits**

The Bank credits generated by the management activities and authorized in the State and Federal permitting documents are available for use by public, private and commercial entities within the MSA referenced in Figure 4, and as described in this MBI in Section 9.1. As determined by UMAM, there are 159.82 wet flatwoods/wet prairie credits and 37.72 forested wetland credits available upon complete success of the Bank. The category break-down for the credits takes into consideration that the distinction between wet flatwoods and prairie is largely a factor of pine tree cover, and hence it was assumed that lumping these communities together would be appropriate.

In accordance with the 33CFR Part 332.3(e), required compensatory mitigation shall be of a similar type to the affected aquatic resources, except in certain cases where out-of-kind compensatory mitigation would serve the needs of the watershed. Wet flatwoods/wet prairie and forested wetland habitats are expected to occur and be preserved and enhanced on the Bank site. The habitats and communities listed below would be considered to be of similar types, or “in-kind”.

The hardwood credits would be available to offset impacts to the following FLUCCS category communities in the areas described in this MBI in Section 9.1:

- 610 Wetland Hardwood Forests

- ▶ 611 Bay Swamps
- ▶ 613 Gum Swamps
- ▶ 614 Titi Swamps
- ▶ 617 Mixed Wetland Hardwoods
- ▶ 621 Cypress.

The wet flatwood/wet prairie credits would be available to offset impacts to the following FLUCCS category communities in the areas described in this MBI in Section 9.1:

- ▶ 625 Hydric Pine Flatwoods
- ▶ 626 Hydric Pine Savanna
- ▶ 646 Treeless Hydric Savanna.

In addition the wet flatwood/wet prairie credits could also be used for the following FLUCC categories within the MSA if historic information and/or reasonable scientific judgment suggest these communities are artifacts of altered hydrology, altered fire regime and/or habitat fragmentation, and have been demonstrated to historically be either FLUCCS 625, 626 or 646:

- ▶ 611 Bay Swamps
- ▶ 614 Titi Swamps
- ▶ 620 Wetland Coniferous Forests
- ▶ 627 Slash Pine Swamp Forest
- ▶ 630 Wetland Forests Mixed
- ▶ 631 Wetland Shrub
- ▶ 640 Vegetated Non-Forested Wetlands.

A determination of applicability of the Bank for these communities shall be made by the Corps in association with the entities proposing the impacts and attempting to utilize the Bank credits.

The following community types would not be considered in-kind with the credits generated, and therefore, the Bank would not be adequate for an offset of these, any tidally-influenced systems, or other out-of-kind communities:

- ▶ 623 Atlantic White Cedar
- ▶ 642 Saltwater Marshes
- ▶ 641 Freshwater Marshes
- ▶ 651 Tidal Flats
- ▶ 652 Shorelines
- ▶ 653 Intermittent Ponds
- ▶ 654 Oyster Bars.

## **6.0 Interagency Review Team**

The IRT provides oversight to the execution of the provisions of this MBI. At the time of preparation of this MBI the following individuals actively represented the IRT:

Agency	Representative
FDEP – Tallahassee	Vicki Tauxe – <a href="mailto:vicki.tauxe@dep.state.fl.us">vicki.tauxe@dep.state.fl.us</a>
USCOE – Pensacola	Edward Sarfert - <a href="mailto:Edward.P.Sarfert@usace.army.mil">Edward.P.Sarfert@usace.army.mil</a>
FWS – Panama City	Hildreth Cooper – <a href="mailto:hildreth_cooper@fws.gov">hildreth_cooper@fws.gov</a>
EPA – Atlanta	Cecelia Harper – <a href="mailto:harper.cecilia@epa.gov">harper.cecilia@epa.gov</a>

Larry O'Donnell with the FDEP and Ted Hoehn of the Florida Fish and Wildlife Conservation Commission also provided input during the early stages of discussions regarding creation of this Bank.

## 7.0 Authorities

The establishment, use and operation of the Bank is carried out in accordance with the following authorities:

### A. Federal

1. Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Part 332).
2. Clean Water Act Section 404 (33 U.S.C. 1344).
3. Rivers and Harbors Act of 1899 Section 10 (33 U.S.C. 403 et seq.).
4. Environmental Protection Agency, Section 404(b)(1) Guidelines (40 CFR Part 230). Guidelines for Specification of Disposal Sites for Dredged or Fill Material.
5. Department of the Army, Section 404 Permit Regulations (33 CFR Parts 320-330). Policies for Evaluating Permit Applications to Discharge Dredged or Fill Material.
6. Memorandum of Agreement between the Environmental Protection Agency and the Department of the Army concerning Determination of Mitigation Under the Clean Water Act, Section 404 (b)(1) Guidelines (February 6, 1990).
7. Title XII Food Security Act of 1985 as amended by the Food, Agriculture, Conservation and Trade Act of 1990 (16 U.S.C. 3801 et seq.).
8. National Environmental Policy Act (42 U.S.C. 4321 et seq.), including the Council on Environmental Quality's implementing regulations (40 CFR Parts 1500-1508).
9. Fish and Wildlife Coordination Act (16 U.S.C. 661 et seq.).
10. Magnuson Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.).
11. National Marine Fisheries Service Habitat Conservation Policy (48 CFR pages 53142-53147, 1983).

### B. State

1. Part IV of Chapter 373, Florida Statutes.
2. Title 62, Florida Administrative Code.

## 8.0 Establishment of the Bank

WES agrees to perform all necessary work, in accordance with the provisions of this MBI, to establish and maintain in perpetuity the Bank. WES must demonstrate to the satisfaction of the agencies represented on the IRT (acting through the Co-Chairs) that the project complies with all conditions contained herein. WES will obtain all appropriate environmental documentation, permits or other authorization needed to establish and maintain the proposed Bank. This MBI does not fulfill or substitute for such authorization.

### 8.1 Mitigation Plan

Mitigation activities at the Bank will include the following specific actions:

- ▶ Preservation of all wetland and upland communities for a total of approximately 1,188.2 acres. This will be completed through a perpetual conservation easement with the FDEP.
- ▶ Management and enhancement of approximately 408 acres of Bay and Titi Swamp along the northern border of the site.
- ▶ The enhancement of approximately 6.9 acres of baygall through the cutting and chemical treatment of canopy black titi and the replanting with mixed hardwoods.
- ▶ Recreation of approximately 2.2 acres of mixed hardwood wetlands from a wetland spoil disposal site. This is to be accomplished by the excavation of fill and the planting of blackgum and cypress.
- ▶ Restoration of approximately 7.4 acres rutted by ORV traffic with mixed hardwoods.
- ▶ Restoration and management of approximately 50.7 acres of Cypress and Gum wetlands through the cutting of perimeter shrub vegetation, the reintroduction of frequent, low-intensity prescribed fires to restore a natural transitional zone, and the control of exotics.
- ▶ Restoration and management of approximately 24.5 acres of Cypress and Gum wetlands that were impacted by wildfire. This is to be accomplished through the planting of black gum, cypress and other species within defined depressions and the controlled re-introduction of fire to the system after some time for establishment of the plantings.
- ▶ Restoration of approximately 11.2 acres of flatwoods impacted by ORV traffic.
- ▶ Restoration of approximately 3.8 acres of mixed hardwoods impacted by ORV traffic.
- ▶ Restoration and management of approximately 647.3 acres of flatwoods through the selective herbiciding of shrubs, treatment of exotics, and the implementation of a prescribed fire management program.
- ▶ Installation of six (6) low water crossings in an existing loop road.
- ▶ Installation of six (6) ditch plugs in two ditches.
- ▶ Perpetual ecological management including exotic and invasive species control and prescribed fire.

The specific mitigation activities proposed in each area are depicted in Figures 14 and 15. The Bank will provide for perpetual ecological management, including exotic and invasive species control, prescribed fire management

programs appropriate for all communities, controlling of access, elimination of cumulative impacts, and restoration of historic biodiversity.

The Bank has been broken into Management Units largely based upon the need for fire management and adequate fire control. Discussions with the Florida Division of Forestry have generated a number of fire management blocks. In addition, the existence of firelines from historic fire fighting activities have further served to delineate the Management Units (Figure 16). Different treatments will be applied to the existing communities to generate the target outcome. The individual Management Units and the activities proposed for each unit are provided in (Figures 17-26). The plans for the UMAM polygons and Management Units at the Bank, with goals, success criteria, specific tasks, timeframes, monitoring, and target fire regimes are given in Exhibit 4. A fire management plan is provided in Exhibit 5.

### **8.1.1 Preservation**

One of the most important features of the mitigation bank is the perpetual conservation of existing and restored communities. In the without bank scenario, the potential cumulative impacts to the site from uncontrolled access, high intensity wildfires, and conversion to silviculture are substantial. In addition, in the without bank scenario the property is reasonably expected to be under some development pressure. The most reasonable use would be conversion of the flatwoods into pine plantation and some limited development adjacent to roads and existing development. Although the development would in most cases require federal regulatory authorization, the silviculture could be accomplished, with bedding of the soils, under silviculture Best Management Practices without the need for further ACOE authorization.

### **8.1.2 Hydrologic Enhancements**

Hydrologic enhancement at the Bank consists of the installation of six (6) low water crossings and installation of a minimum of six (6) ditch blocks. The Bank proposes to utilize the existing trail system to implement the needed prescribed fire management program. Originally, this trail system was proposed to be excavated and used to fill small borrow areas along the sides. Although this restoration is desirable, the roads are needed to safely implement the prescribed fire management, which drives the restoration of the entire site. In lieu of removal, we have incorporated approximately 0.3 acres of low water crossings at 6 locations (Figures 9 & 11).

These low water crossings will require the excavation of previous fill down to a depth of approximately 6" below the adjacent elevations, and the installation of filter fabric and rock to a depth consistent with adjacent elevations. An example of the low water crossing is provided in Figure 10.

### **8.1.3 Fire Management**

Prescribed fire which will be carried out in perpetuity, will be the primary restoration and maintenance activity for the Bank. Exhibit 5 details the prescribed fire management plan for the property. A conceptual fire prescription

is included in that Exhibit 5, however, each prescribed burn activity must be developed and supervised by a certified burn specialist. Following each prescribed burn activity conducted at the Bank, the permittee shall submit documentation, signed by the certified burn specialist, that a burn was conducted, and provide a summary of the unit(s) and acres treated with assessment of burn success, including photographs. For the purposes of this MBI, a successful burn shall mean the fire shall carry over a minimum of 70% of the flatwoods and the herbaceous ground cover is regenerating (“greening up”) in the burned area. For the hardwoods the goal is to allow the fires to shape the transitional edges with the flatwoods without substantially impacting hardwood survival in the interior. It is the intent to burn all target management units within 18 months of permit issuance. If this target is not met, the permittee shall document the cause(s) to the Corps in writing and propose corrective activities. Prior to the release of credits associated with this activity, the permittee shall arrange a site visit that includes the Corps, WES and its representatives, and any Interagency Review Team (IRT) members that are available to review the activities. WES or its representatives shall submit a summary of the site visit for the file to facilitate future compliance reviews.

Although the goal of most prescribed fires would be to incorporate large blocks to maximize the economic value of each burn effort, the specific location of the property with respect to the Interstate requires the creation of burn units under 80 acres in size to the greatest extent possible. Although this increases the number of “burn days” needed for management and restoration, it minimizes the amount of smoke generated by each event and allows quicker completion of a block in the event that weather conditions change rapidly.

In general, fire management will be returned to the pyric communities on site on shorter return intervals than typically used by State and Federal management agencies. Under ideal conditions, fire will be returned to all units on a 2-3 year interval. This shorter return cycle has been demonstrated to provide for the best hardwood control over the long-term. A return frequency of up to 5 years is allowed, however, to accommodate varying conditions. The adjacent District lands have a burn return interval of approximately 5 years. If the interval exceeds 5 years, the credit release schedule and/or credit amounts will be reviewed and/or modified by the Corps, and appropriate steps taken by the Bank at the Corps’ direction, including implementation of contingency plans.

It is anticipated that most burning will be completed December through early May. During the winter period, the weather conditions are much more predictable which is essential to the safe and continued use of prescribed fire on the property. This timing is also similar to that used by the surrounding state agencies with respect to the management of their properties.

Recent information suggests that burn frequency is more important than burn seasonality in achieving restoration and management goals in longleaf/wiregrass and flatwood communities. In fact, variation in the season of burn will allow variable flowering opportunities for species and should help to increase the diversity of the groundcover.

Although it would be desirable for the fire management program to be allowed to burn into the northern Bay and Titi Swamp communities to maximize the transitional zone between communities, concerns about suppression and safety have arisen which must be incorporated into the management plan. The Bank, therefore, is proposing the installation of a 15'-wide mineral soil line on the southern edge of the Baygall community with the intent of restricting prescribed fire from this area. Burn units on the north of the Interstate will require a southerly wind component while that unit south of the interstate will require a northerly wind.

#### 8.1.4 Wetland Enhancement, Restoration and Management

After all activities in the Bank have been fully implemented and shown to be successful, the following wetland communities will be represented:

- ▶ FLUCCS 611/614 – Bay and Titi Swamps/Baygall
- ▶ FLUCCS 613/621 – Gum and Cypress/Depressional Wetlands and Sloughs
- ▶ FLUCCS 625/626 – Hydric Pine Flatwoods and Savanna.

The specific mitigation activities proposed for each UMAM area are summarized in Table 4 below and detailed in Exhibit 4:

Table 4 – Mitigation Activities

UMAM Area	Management Activity Summary
1 and 2	Exotic species control; access control.
3	Cutting and chemical treatment of titi and pine; underplanting with 1,898 mixed hardwood saplings; exotic species control; access control.
4	Excavation of previous fill impacts to target wetland elevation; planting with 1,000 mixed hardwood saplings and 1,000 wiregrass plugs; exotic species control; access control; suppression of fire until hardwoods have attained adequate height with soft firelines; ultimately allowing prescribed fire to shape the transitional zone with flatwoods.
5	Planting of impact areas with 4,000 hardwood saplings; exotic species control; access control; suppression of fire until hardwoods have attained adequate height with soft firelines; ultimately allowing prescribed fire to shape the transitional zone with flatwoods.
6	Controlled prescribed fire; review to determine coverage of shrubs after fire; reduction in shrub component by cutting and herbicide as necessary; exotic species control; access control.
7	Planting of 2,500 hardwood saplings; suppression of fire until hardwoods have attained adequate height with soft firelines; reintroduction of controlled prescribed fire; exotic species control; access control.
8	Planting of 11,200 wiregrass plugs; prescribed fire; exotic species control; access control.
9	Planting of 1,900 hardwood saplings; exotic species control; access control.
10	Fireline installation; prescribed fire; tree/shrub reduction by mechanical and chemical means as necessary; underplanting with 97,095 longleaf pine; exotic species control; access control.
11	Exotic species control; access control.

#### 8.1.5 Reference Site

A reference wetland site will be identified and utilized as described in Exhibit 4 on lands in close proximity to the Bank, and potentially on District property, prior to release of credits beyond the initial “preservation” credit release. This site will be established in association with the District or

appropriate landowner to represent optimal vegetation characteristics of the target community for the Corps' approval. The reference wetland site must be found appropriate and approved by the Corps prior to its use. The intent of this reference wetland is to develop a species list to be used to gauge the species diversity success described by this MBI. Random vegetation sampling transects within the reference wetland will be completed in the fall and then in the following spring. The reference wetland boundary and transects will be GPS-located and identified on an aerial photograph. This reference wetland will be sampled again in 5 years to generate an additional species list to account for any impacts resulting from weather patterns of the previous approximately 5 years. Although the generation of the species list is important to the species richness success criteria, this site will also serve as example of a highly functioning wetland hydric flatwoods/prairie community from which comparisons other than just species presence or absence can be made, and as such, may be used in a qualitative manner at the discretion of the Corps to otherwise demonstrate final compliance in this community category.

## 8.2 Generalized Implementation Timetable

Implementation of the Bank will follow a general timetable that focuses on maintenance of existing high quality communities in their current or enhanced condition, followed by restoration activities in more disturbed areas. The following implementation schedule is proposed to cover the Bank activities.

Activity	Estimated Completion Date From Date of Corps Permit Issuance
Execution of Conservation Easement, fencing & security	1-3 mo.
Identification of Reference Wetland	1-3 mo.
Demonstration of Financial Assurances	1-3 mo.
Establishment of reference wetland; sampling & species list generation	1 yr.
Installation of Low Water Crossings	1-6 mo.
First Prescribed Fire	1 yr.
Exotic and Nuisance Species Control	Ongoing
Titi & Pine Reduction; Hardwood Underplanting -Mgmt Unit 2	1 yr.
Fill Excavation; hardwood planting Management Unit 12	1 yr.
Hardwood Plantings w/in ORV Impacts in Management Unit 6	1 yr.
Shrub Reduction in Management Units 5, 6 and 8-13	2 yr.
Planting in Cypress-Gum Management Units 4, 5, 11 and 15	1 yr.
Planting Wiregrass in Management Units 3, 5-8 and 15	1 yr.
Planting in Bay/Titi in Management Unit 1	1 yr.
Shrub/Tree Reduction in Flatwoods-Mgmt Units 3-13 and 15	1-2 yr.
Mowing in Management Unit 14	1 yr.
Monitoring Year 1 / Initial Annual Report Preparation	1 yr.
Ditch Plugs and Filling in Management Units 13, 910 and 15	1-2 yr.
Monitoring Year 2 / Annual Report Preparation	2 yr.
Second Prescribed Fire	4 yr.
Plant Longleaf in Hydric Flatwoods	5 yr.
Monitoring Year 3/ Annual Report Preparation	3 yr.
Monitoring Year 4 / Annual Report Preparation	4 yr.
Monitoring Year 5 / Annual Report Preparation	5 yr.
Monitoring Year 6 / Annual Report Preparation	6 yr.
Third Prescribed Fire	7 yr.
Monitoring Year 7/Annual Report Preparation	7 yr.
Monitoring Year 8 / Annual Report Preparation	8 yr.



Monitoring Year 9 / Annual Report Preparation	9 yr.
Monitoring Year 10/Annual Report Preparation/Final Success	10yr.
Perpetual Management	Ongoing

## 9.0 Bank Operation

### 9.1 Mitigation Service Area (MSA)

The MSA was developed by the Bank in consultation with the IRT. The purpose of the Bank is to offer wetland compensatory mitigation for private and public projects anticipated within MSA as shown in Figure 4. The MSA is centered on the Pensacola Bay Watershed (HUC 03140105) with some exceptions. Specifically excluded are portions of the watershed at the extreme southwestern location encompassing areas west of Blue Angel Parkway that include flow to Bayou Garcon, Big Lagoon and Perdido Bay, and portions of the drainage basin that are presumed to drain into Santa Rosa Sound as defined by the most recent 12-digit HUC classification provided by the NRCS. The MSA also includes the extreme southern portions of the Escambia River (HUC 03140305) and Blackwater River (HUC 03140104) Watersheds as defined by several distinct 12-digit HUCs. When determining if a project near to or on an MSA boundary does or does not fall within the MSA, the Corps will utilize available information, including local knowledge of the site conditions and surrounding communities, field verifications, and information provided by applicants to determine towards which watershed flow from the site would move to. For all sites, including those without a definitive flow pattern, the Corps will make its determination using the methods above and best professional judgment on whether the project lies within the MSA or not.

The Bank may also be applicable for projects within specific other areas. If within 1 linear mile of the MSA boundary, in-kind impacts that involve  $\leq$  0.50-acre of wetland impact may use the Bank for mitigation, with the Corps' approval, and with certain modifiers and exceptions as described below. This additional 1-mile "belt" around the MSA extends out from that portion of the Pensacola Bay 8-digit HUC used for the MSA, but does not exist on those sub-basins of the adjacent upstream Blackwater River and Escambia River 8-digit HUCs that are included in the MSA. Further extension beyond those additional sub-basins that lie outside the Pensacola Bay 8-digit HUC could not be justified. This additional 1-mile "belt" around the MSA will be referenced in this MBI as the Mitigation Service Area Belt or MSAB.

The 1-mile MSAB was chosen in recognition that watershed boundaries as mapped can be diffuse in many areas. Wildlife utilization is likely very similar immediately on both sides of watershed boundaries. The somewhat central location of the bank site within the MSA also fits with diminishing relevance based on proximity both purely linear and by watershed. This approach allows reasonable flexibility for permit applicants to potentially use the Bank in additional area, while still appropriately compensating for wetland impacts. Nothing stated herein assumes that the Bank will always be suitable when considering all factors including the scope and location of the impacts, the relationship of those impacts to remaining ecosystems, or the quality or type of the impacted ecosystem, but this document does allow appropriate consideration by the permitting entity.

Acreage of impact, not functional loss, is used as one limiting threshold to help determine the appropriateness of using the Bank within this MSAB. This is in order to

align with the typical Nationwide Permit (NWP) impact threshold, and therefore its classification as a minor permit. NWPs have been determined to have minimal individual and cumulative adverse impacts on the aquatic environment. However, verification under an NWP is not a requirement for use of the Bank's MSAB. Due to regional conditions and other factors, some projects impacting <0.5 acre of wetlands may not be authorized under a NWP. If in-kind, location and acreage threshold factors described above are met, and the Corps determines the Bank would allow for appropriate compensatory mitigation, those projects authorized under Letters of Permission or Standard Permits could also qualify to use the Bank.

While wildlife support functions are noted above, compensation for diminishing relevance based on proximity both linear, but more importantly by watershed, must also be factored into use of the Bank for impacts within the MSAB. Projects lying within this 1-mile MSAB and within the 8-digit Pensacola Bay HUC would have a proximity modifier of 1.385 applied. Projects lying within this 1-mile MSAB and outside the 8-digit Pensacola Bay HUC would have a 1.835 proximity modifier applied. These modifiers were developed using the proximity calculator in the Joint State/Federal Mitigation Bank Review Team Process for Florida ("Green Book").

## **9.2 Adaptive Management**

The IRT accepts that all ecological restoration projects are site specific, that multiple endpoints are possible owing to the stochastic nature of ecological processes, and that human activities offsite and beyond the control of the Bank may influence the course of restoration. For these reasons, the Bank may request to change the restoration strategy, modify the objectives, and adjust the performance standards and monitoring protocols at any given time prior to full project release. Such requests must be made in writing and must qualify as adaptive management in response to site specific conditions. These modification requests and any others will be evaluated under the procedures outlined in 33 CFR Part 332.8(g). The Bank must demonstrate good-faith efforts to comply with restoration requirements and cannot invoke an alleged need for adaptive management as a pretext for non-compelling reasons. Prescribed burning is a critical component of the restoration and enhancement of the habitats. Alternative methods to attempt to achieve results similar to those from prescribed burning are not likely to have an identical range of effects; it's recognized that this may influence credit releases or numbers. Alternatively, credit has been assigned for management including prevention of uncontrolled fire. If this goal, or other management techniques are not proven successful, the Corps will require adaptive management as necessary to meet those goals. This may also influence credit releases or amounts.

Management actions will be designed to facilitate the Bank's overall restoration goals and to respond to situations that could potentially jeopardize the project's success. Intensive management is to be avoided; however, the ability to introduce prescribed fire and thin pine trees is essential to the long-term sustainability of the Bank. A responsive management approach will correct problems identified during monitoring, prevent deterioration of wetland functions, and respond to unforeseen changes that may occur.

## **9.3 Provisions for Site Audits**

Representatives of the Corps & IRT will have access to the Bank at any reasonable time to perform site inspections, provided at least 24 hours advance notice is

provided to the Bank. Regular inspections may be scheduled by the IRT following restoration and management activities.

#### **9.4 Site Security**

The Bank shall be posted with appropriate signage and held secure. Vehicular access to the Bank shall be controlled by locked gates. All access will be monitored randomly and during the quarterly inspections. Hunting and fishing for the general public will not be permitted; however, still hunting for deer, turkey and hog will be permitted under a lease with WES, provided that such activities are consistent with hunting regulations, do not result in impacts to the natural community restoration, prohibit the use of vehicles off the main road and the construction of permanent hunting blinds, and food plots.

#### **9.5 Success Criteria**

Success criteria have been established for natural communities as provided in Exhibit 4.

#### **9.6 Schedule of Credit Availability**

The number of wetland credits available for release (i.e. – debiting) will generally be commensurate with the level of wetland and aquatic functions attained at the Bank at the time of release. Credits will be generated as specific activities are completed and documented in accordance with the Credit Release Schedule (Exhibit 6). The actual credit release will be determined by when the specified activity is completed or criteria achieved.

#### **9.7 Procedures for Credit Release**

Whenever the Bank believes that a specific milestone warranting the release of credits has been made, it shall submit a request in writing for a determination of success from the Corps. The request shall be sent by mail to the Corps Project Manager responsible for the Bank at that time, and shall include detailed information outlining the Bank's position on success and the milestone. The Corps will process the request in accordance with the timeframes and procedures of 33 CFR 332.8(o)(9). If the request is denied, the Corps will provide specific descriptions of the conditions that led to a denial of the request and provide mechanisms for compliance.

#### **9.8 Conditions for Debiting of Bank Wetland Credits**

Credits will be withdrawn from the Bank through Department of the Army Section 404 fill discharge permits. The Bank will coordinate with the Corps, FDEP and the applicants for wetland impacts to provide information on the MSA and type of available credits. The responsibility for demonstration that credits from the Bank would constitute adequate and appropriate compensation for proposed impacts lies with the impact applicant.

If the impact is authorized, the permittee shall provide an agreement for the transfer of mitigation credits from the Bank. This agreement, accompanied by a current total of available credits, will be signed by the permittee and the Bank, and shall be

attached to the permit instrument. Proof of this transfer of mitigation credit will be provided to the Corps as required by any permit special conditions.

### **9.9 Ledger of Available Mitigation Credits**

The Bank and/or WES is required to establish and maintain a ledger (Exhibit 7) to account for all credit transactions. Each time an approved Federal credit transaction occurs, the Bank must immediately notify the district engineer in accordance with the notification requirements of the associated Department of the Army permit/authorization. Included with that notification must be a copy of the applicable portion of the Federal permit/authorization requiring the credit purchase. The Corps will verify all changes to the credit balance and revise the Bank ledger accordingly.

### **9.10 Mineral Rights**

The mineral rights for the property are fractionated between multiple entities and did not transfer with the deed for the surface rights. To accommodate the unlikely event that hydrocarbon or other exploration would be deemed economical, three (3) five acre outparcels have been removed from the Bank boundary. Utilization of these areas as staging for subsurface exploration would be subject to all appropriate state and federal regulatory review and approval. The legal descriptions for these outparcels are provided in Exhibit 8.

## **10.0 Maintenance and Monitoring**

### **10.1 Management and Monitoring**

The monitoring methodologies selected have been chosen to efficiently cover the areas monitored and to effectively record those aspects of site condition necessary to determine project success and ongoing management needs (Exhibit 4). Nothing herein represents that the monitoring meets the statistical rigors typically associated with research monitoring.

### **10.2 Reporting and Record Keeping**

The Bank shall submit annual reports to the Corps until a determination of final success has been made by the Corps. These reports may include, but not be limited to, the following:

- ▶ Date permitted activities were begun or are anticipated to begin.
- ▶ Brief description of work completed since previous reporting cycle.
- ▶ Qualitative and quantitative sampling report.
- ▶ Maps showing location of activities completed since last report.
- ▶ Fixed point photographs.
- ▶ Description of any minor problems encountered and solutions tendered.
- ▶ Description of work anticipated for the next year.
- ▶ Assessment of the degree to which the Bank is attaining success criteria, including appropriate community comparisons with the approved Reference Site.

Prescribed burn reports shall also be submitted in accordance with Section 8.1.3, Fire Management.

If major problems affecting wetland functions, such as wildfire, occur at the Bank, WES or its representatives will notify the Corps immediately in writing of the event, and include a description of any actions taken in response.

### **10.3 Contingency Plans**

In the event the Bank fails to achieve success criteria, the Bank shall immediately initiate remedial action by notifying and consulting with the Corps and IRT and submitting contingency plans. The Corps must review any proposed contingency plan, and if the Corps finds it appropriate, it must be formally approved by the Corps prior to its implementation. Failure to complete scheduled tasks related to credit releases, or achieve interim or final mitigation success criteria as established herein will result in the Corps delaying or denying release, transfer or withdrawal of mitigation credits.

### **10.4 Long-term Management Responsibilities**

The Bank lands will be preserved and managed for ecological integrity by the Bank in perpetuity. It is the Bank's intent to eventually donate the property and the perpetual management fund to the State for inclusion as part of the Garcon Ecosystem Preserve. This transfer must be approved by the Corps prior to its release.

### **10.5 Legal Responsibilities**

Once an applicant or permittee for a wetland impact has purchased and secured the appropriate number of credits from the Bank/WES, the legal responsibility for providing the appropriate compensatory mitigation lies with the Bank Sponsor. Nothing herein suggests that WES shall be responsible for negotiating with the federal agencies for the amount of compensatory mitigation needed by a particular project, nor will WES be responsible for justifying that the use of the Bank meets the mitigation requirements of Part 332 as it applies to the impact project.

## **11.0 Other Provisions**

### **11.1 Force Majeure Clause**

The requirements of this MBI shall not be enforceable against WES or the letter of credit if WES has been precluded from performing the conditions of the permit due to acts of God, rebellion, strikes, or natural disaster, including but not limited to hurricane, flood, or fire. In the event such occurrence causes substantial damage to the project to preclude completion of that particular phase of the project, FDEP/Corps shall release the balance of any letter of credit for such phase of the project. If the acts of war, acts of God, rebellion, strikes, or natural disaster, including but not limited to hurricane, flood, or fire do not preclude WES from performing the project without unreasonable expense, then it shall not be relieved of its obligations under this MBI.

## **11.2 Dispute Resolution**

Resolution of disputes about application of the MBI shall be in accordance with those stated in Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Part 332).

## **11.3 Bank Default**

WES shall be in default if it fails to observe or perform any obligation or responsibilities required of it by this MBI. In the event WES realizes it is in default, it shall promptly notify the Corps. Once the Corps has received notification, or otherwise becomes aware that WES may be in default, informal dispute resolution shall be initiated as per 33 CFR Part 326.4d. (Enforcement). All parties involved in the dispute resolution agree to work in good faith to resolve disputes to correct the default condition within 60 days of notice by WES.

In the event that informal dispute resolution does not satisfactorily correct the default condition, the Corps may elect to cause the holder of the financial assurances specified in Section 2.12 to draw upon those assurances as necessary to continue Bank development, management, or operation as provided herein. Nothing within this section shall be construed to modify or limit any specific right, remedy, or procedure in any Section of this MBI or any remedy available under application of State and/or Federal Law.

## **11.4 Bank Closure**

The Corps will review a written request, and if it determines closure is appropriate, closure may then occur only upon the Corps' approval of one of the following:

a. All performance standards have been met, the last authorized credit has been transferred, and the perpetual management endowment is fully funded in cash as specified in Section 2.12; or

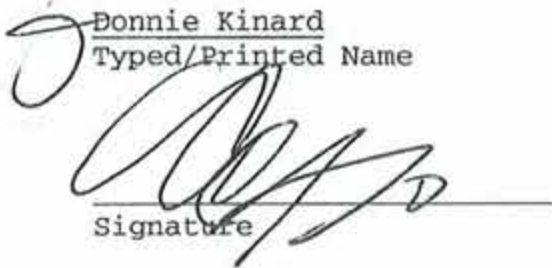
b. The WES requests closure based upon the level of success attained (which should be commensurate with the amount of credits issued), the last authorized credit has been transferred, and the perpetual management endowment is fully funded in cash as specified in Section 2.12.

## **12.0 Signature Pages**

IN THE TESTIMONY WHEREOF the **U.S. Army Corps of Engineers**  
hereunto set their hands this 21<sup>st</sup> day of DECEMBER,  
2009.

**U. S. Army Corps of Engineers**  
**Jacksonville District**

Donnie Kinard  
Typed/Printed Name

  
Signature

Acting Chief, Regulatory Division  
Title



IN THE TESTIMONY WHEREOF the U.S. Fish and Wildlife Service have set their hands this 16th day of November, 2009.

**U.S. Fish and Wildlife Service**

  
Signature

GAIL A. CARMODY Field Supervisor  
Printed Name and Title

Bank Enabling Instrument Signature Page  
Pensacola Bay Mitigation Bank, SAJ-2007-04377-IP-EPS

IN THE TESTIMONY WHEREOF WESTERVELT ECOLOGICAL SERVICES,  
LLC has hereunto set their hands this 21<sup>st</sup> day of  
December, 2009.

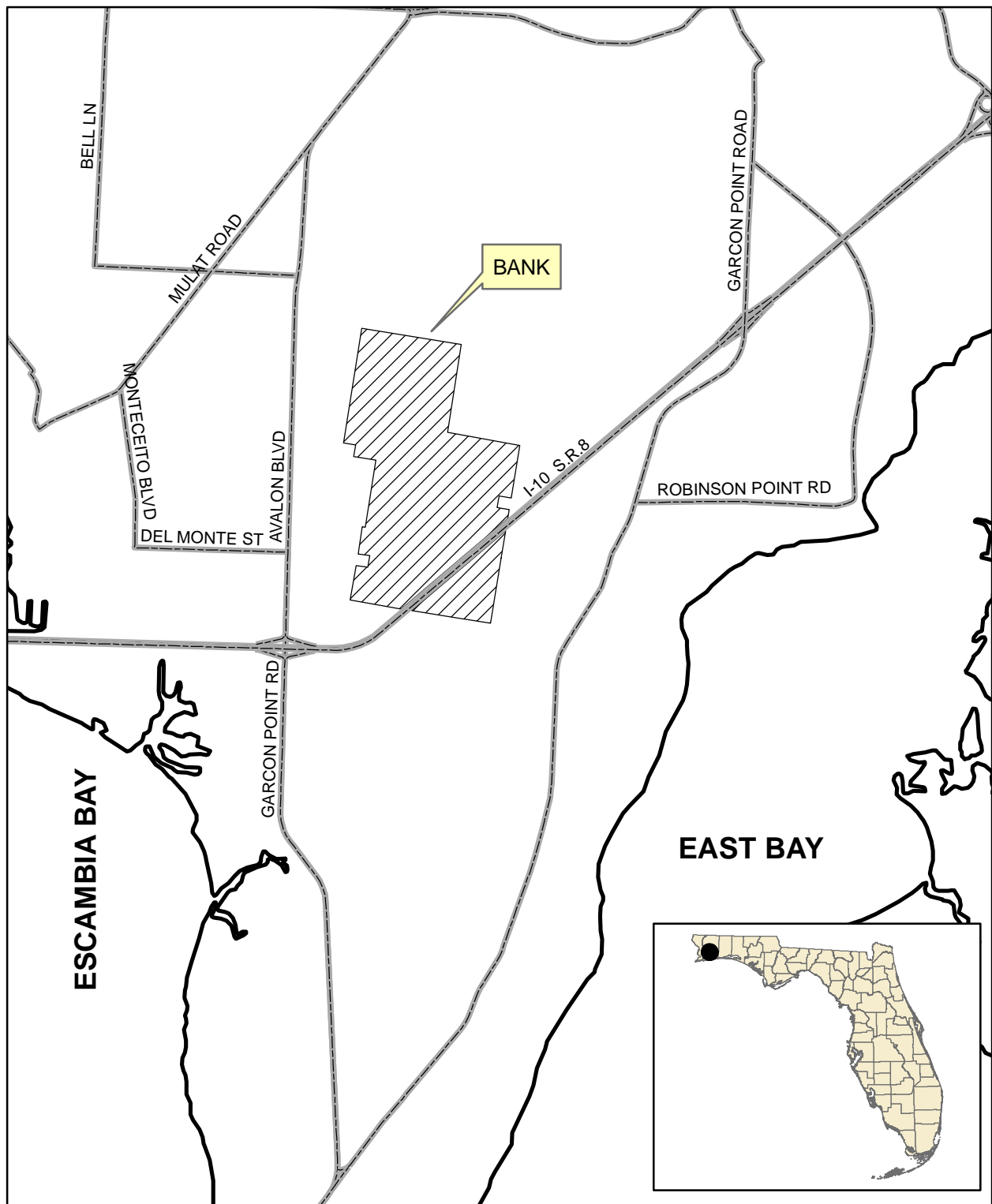
WESTERVELT ECOLOGICAL SERVICES, LLC

John Wigginton  
Typed/Printed Name

  
Signature

Southwest Region Mgr  
Title

# Figures



E

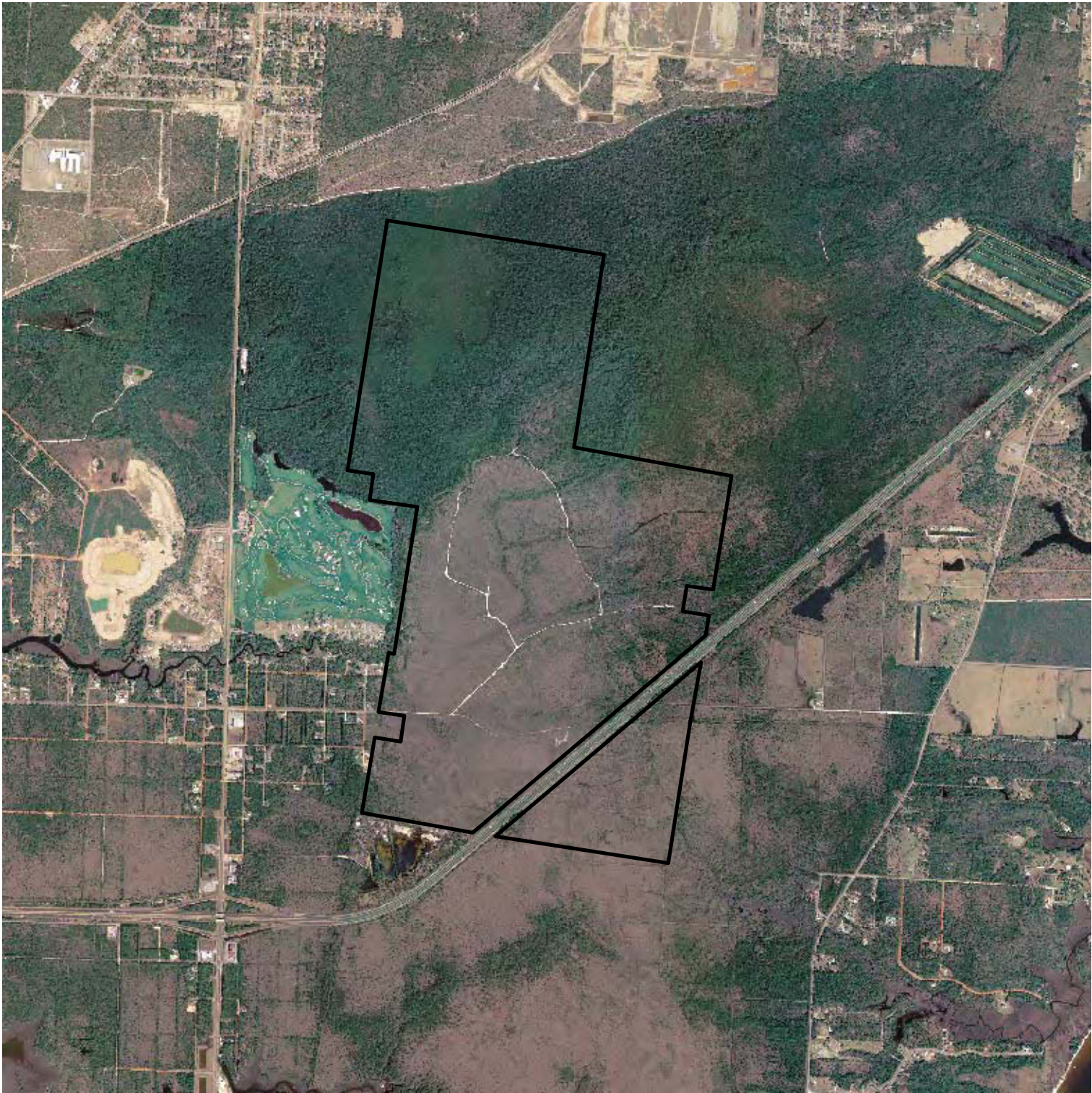
0 0.5 1 2 Miles

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Tallahassee, FL 32312  
850-893-7238

Figure 1 - Pensacola Bay Mitigation Bank Location







 Boundary

0 1,500 3,000 6,000 Feet

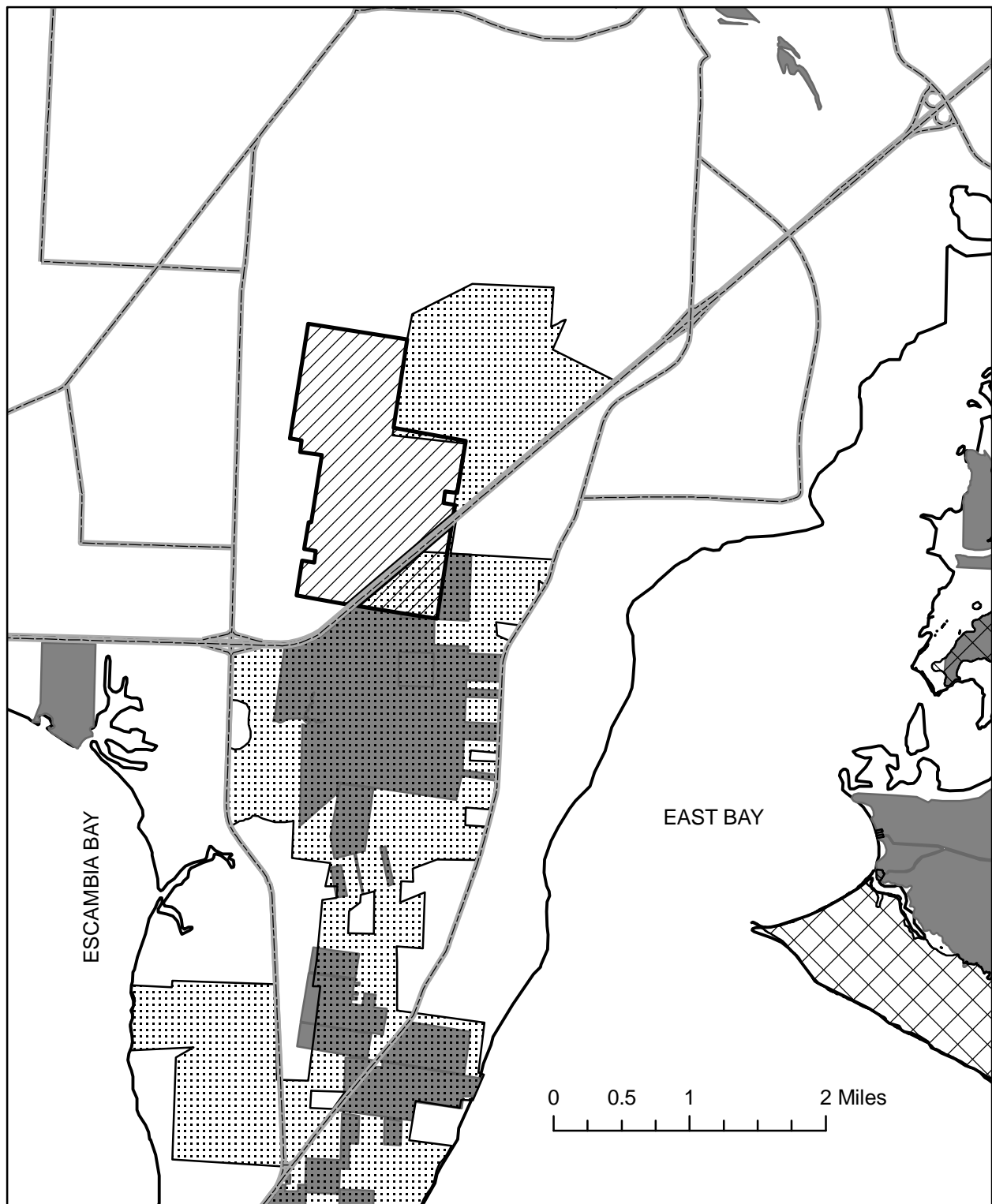
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Bosso, Dentzau & Imhof, Inc.  
1882 Log Ridge Trail  
Tallahassee, FL 32312  
850-893-7238





Figure 2 - Bank and Surrounding Area

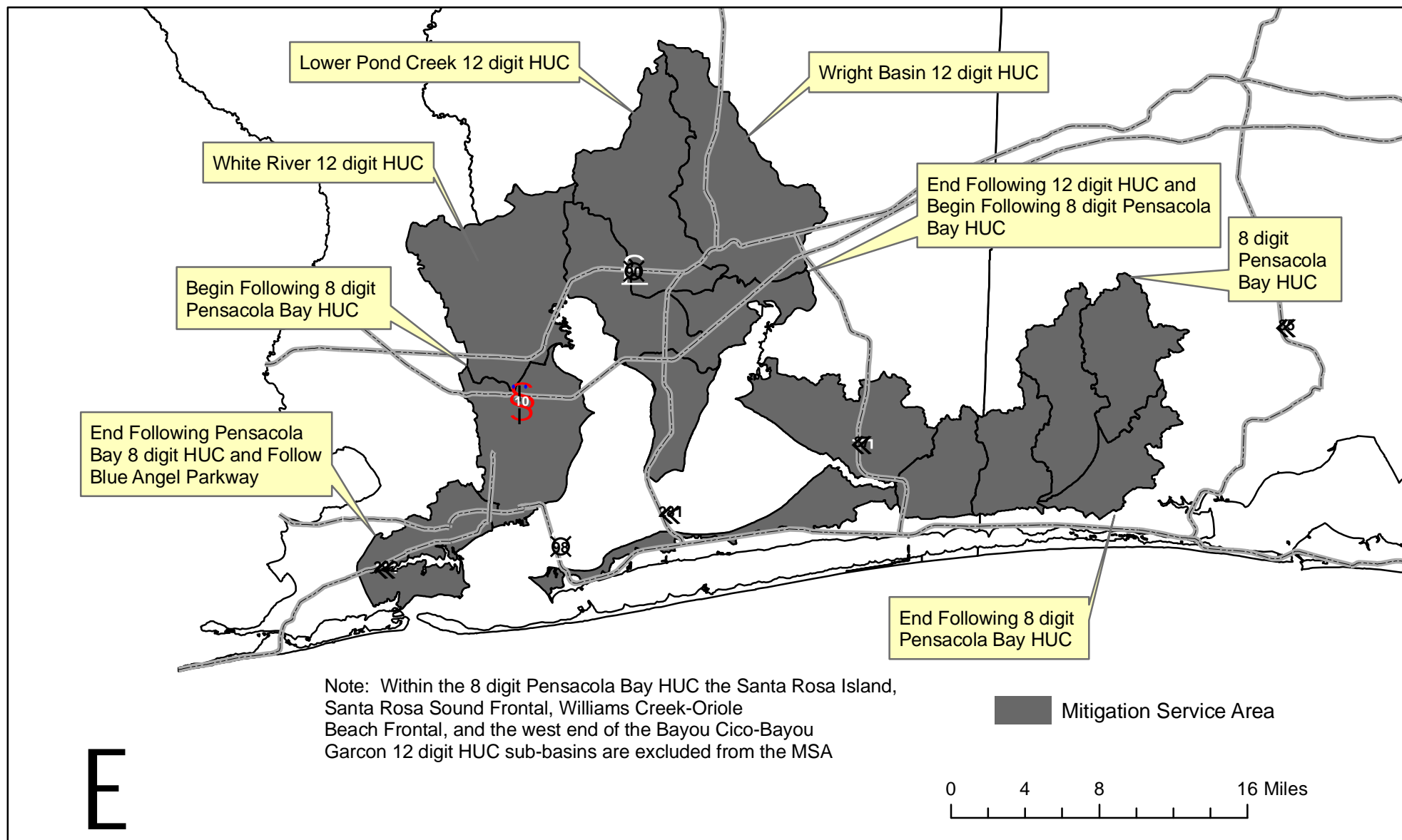


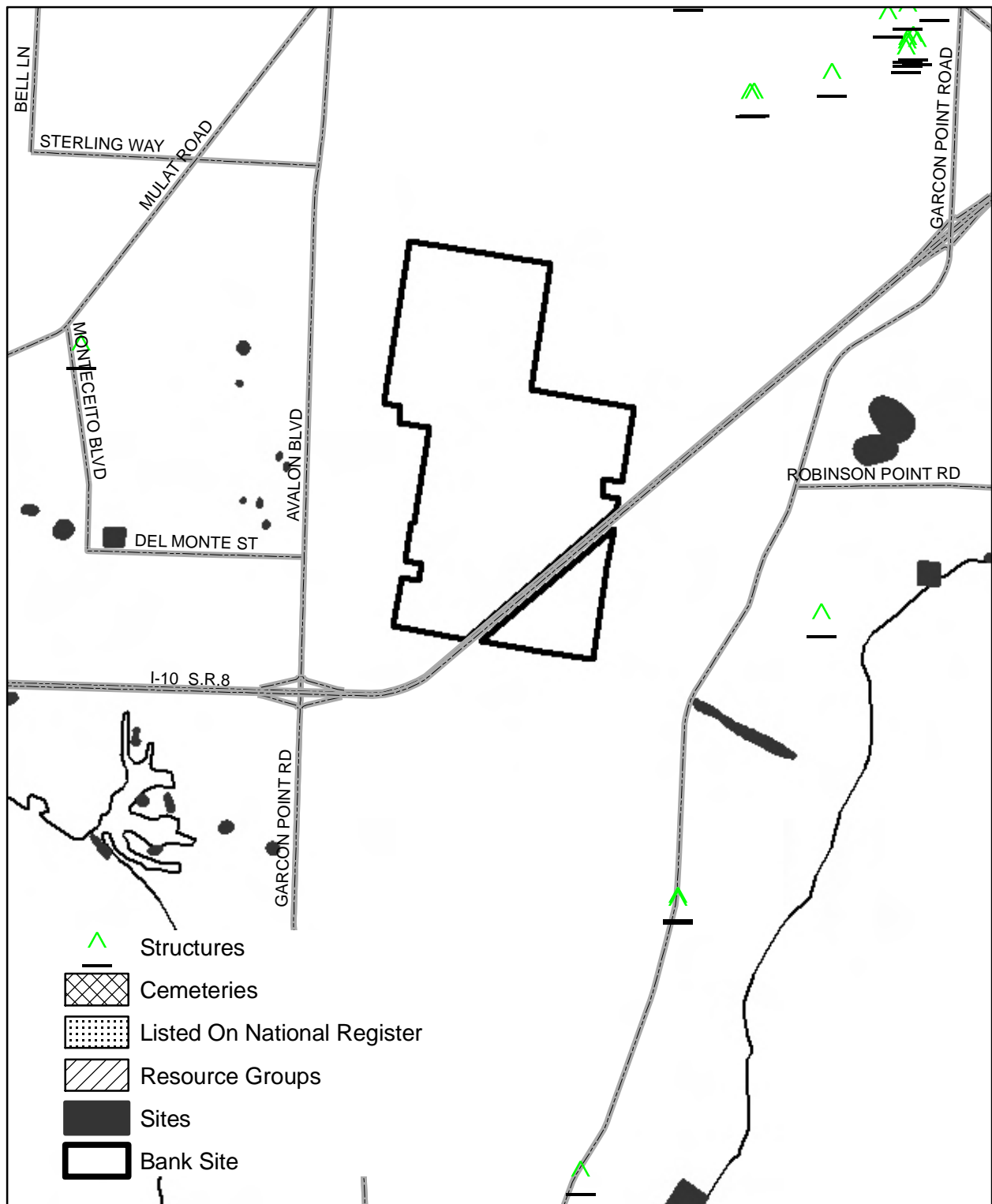




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-  PENSACOLA BAY MITIGATION BANK
-  OTHER BOT PROJECTS
-  GARCON ECOSYSTEM FLORIDA FOREVER BOT PROJECT
-  ACQUIRED LANDS

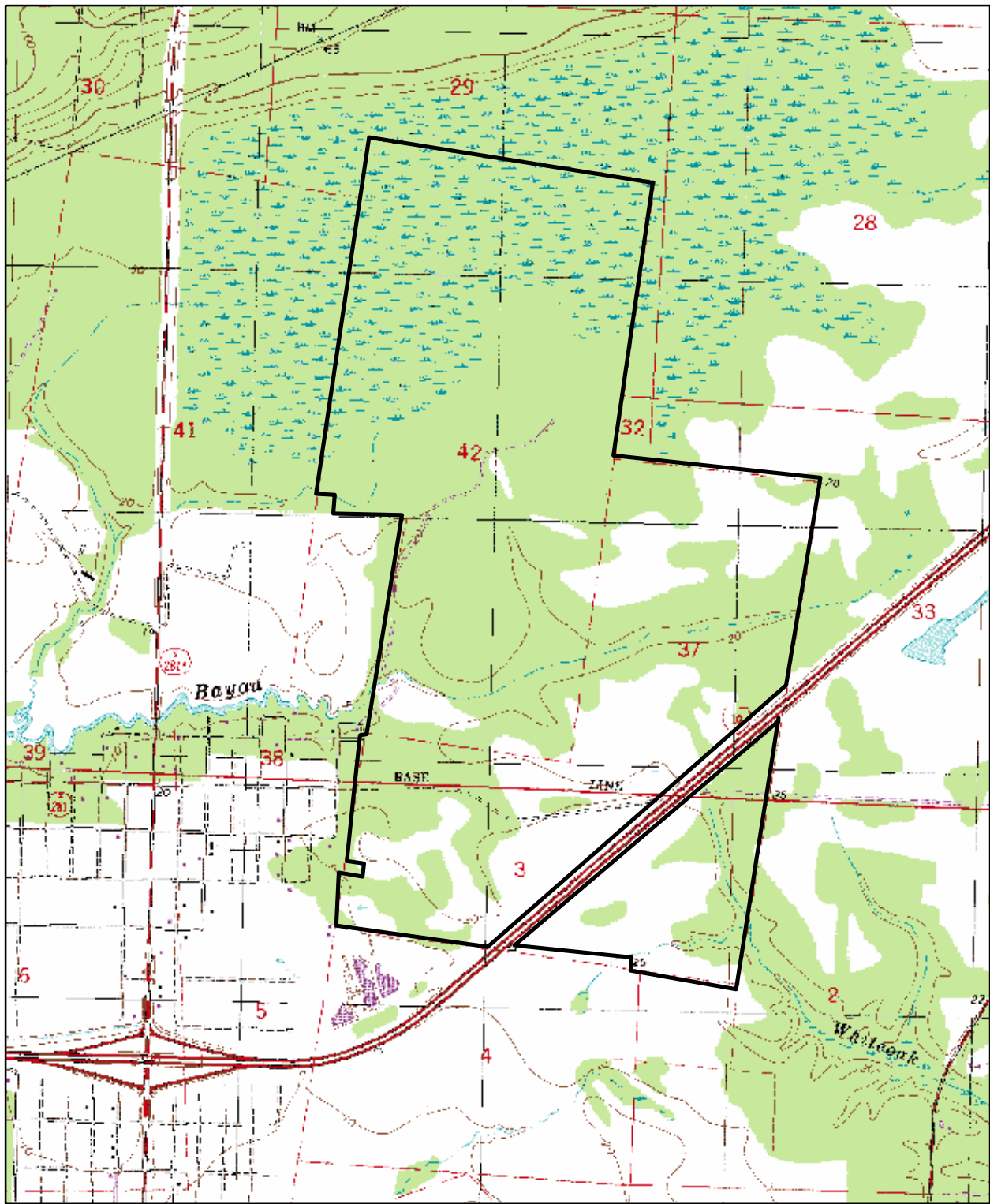




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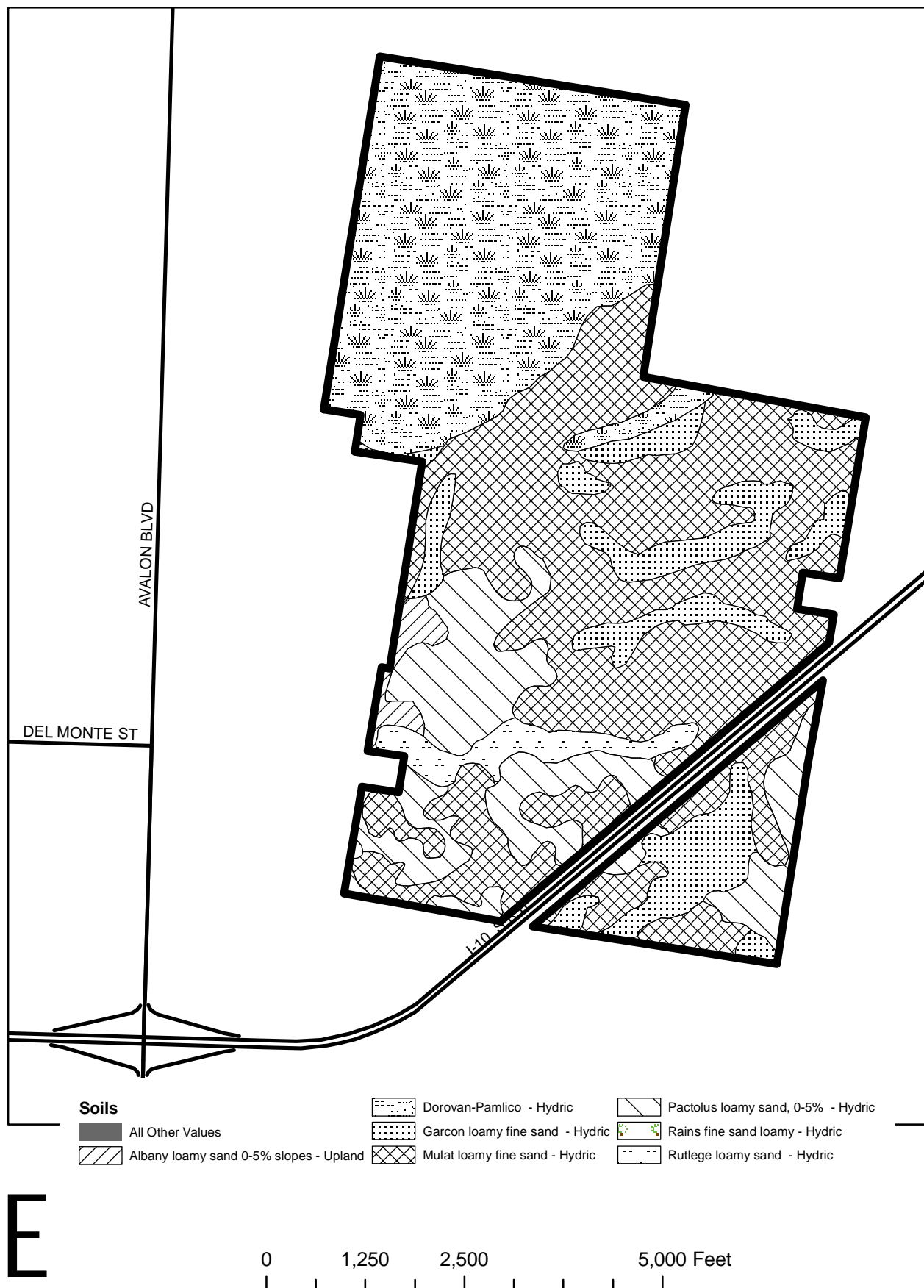
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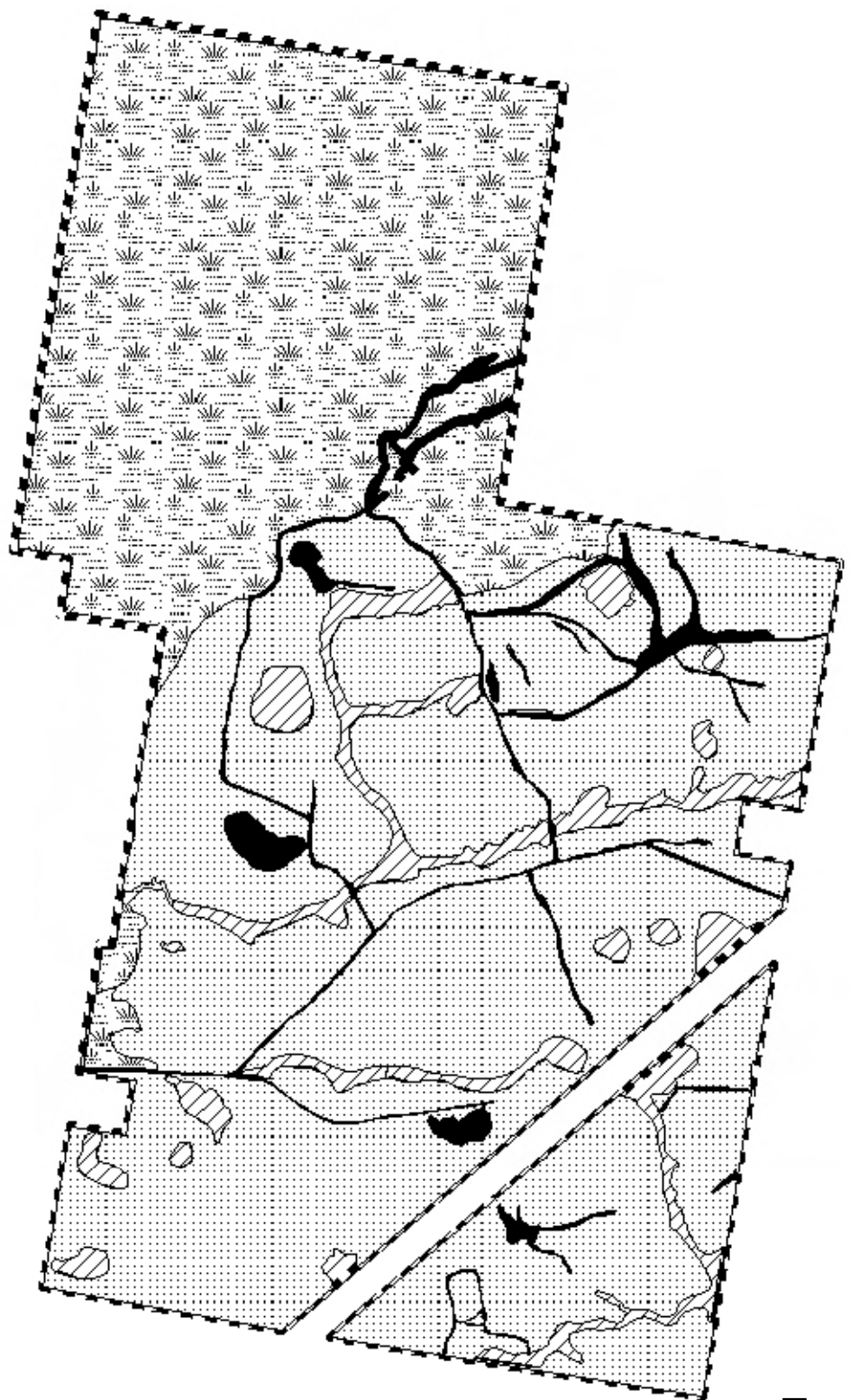
0 0.5 1 2 Miles






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Figure 6 - Quadrangle Map







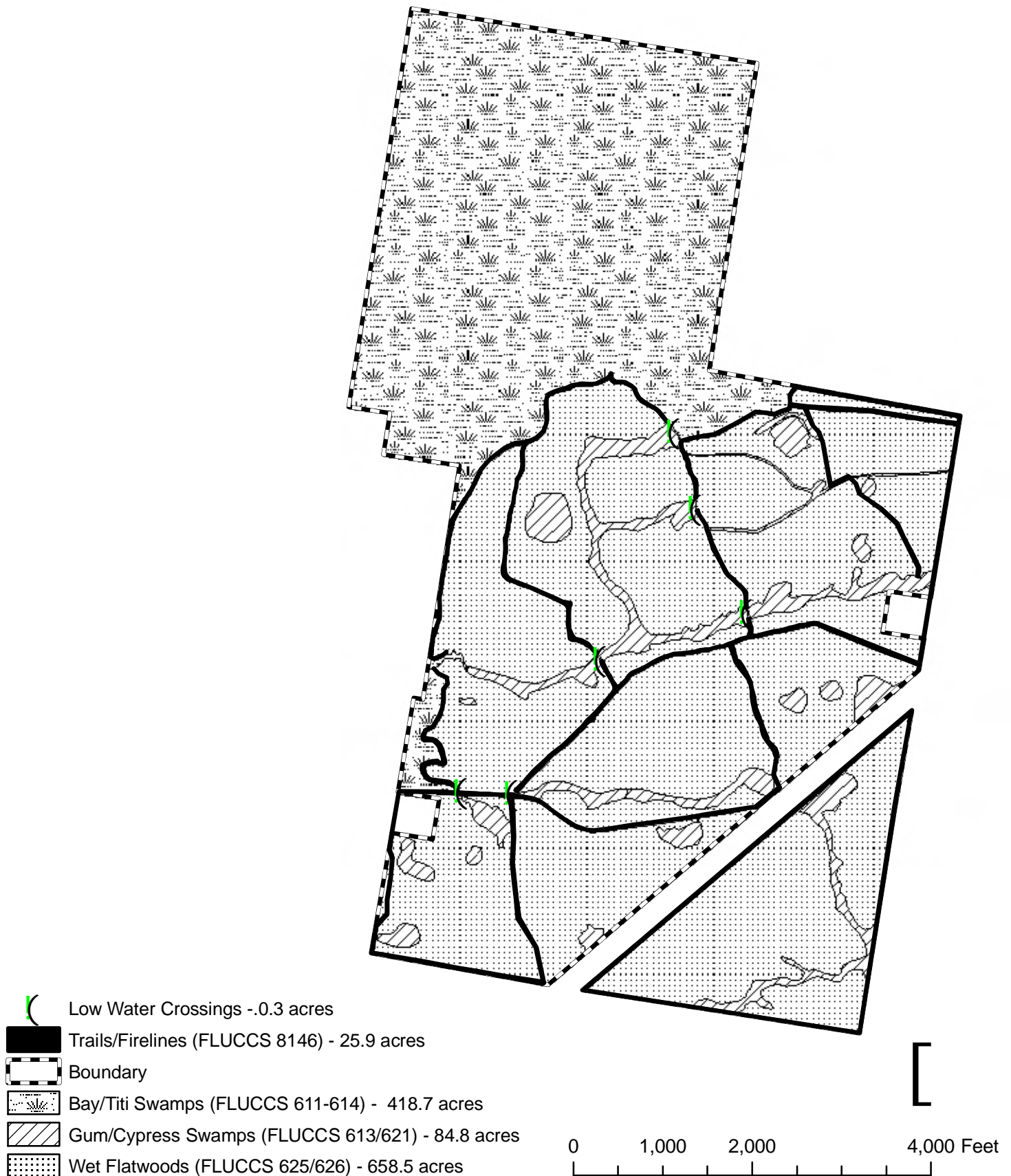
-  Boundary
-  Disturbed Lands (FLUCCS 740/8146)
-  Bay and Titi Swamps (FLUCCS 611/614) - 414.9 acres
-  Gum/Cypress Swamps (FLUCCS 613/621)
-  Wet Flatwoods (FLUCCS 625/626)

0 1,000 2,000 4,000 Feet

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Figure 8 - Existing FLUCCS Communities  
 Pensacola Bay Mitigation Bank





# TYPICAL HARDENED LOW WATER CROSSING DETAIL

(NOT TO SCALE)

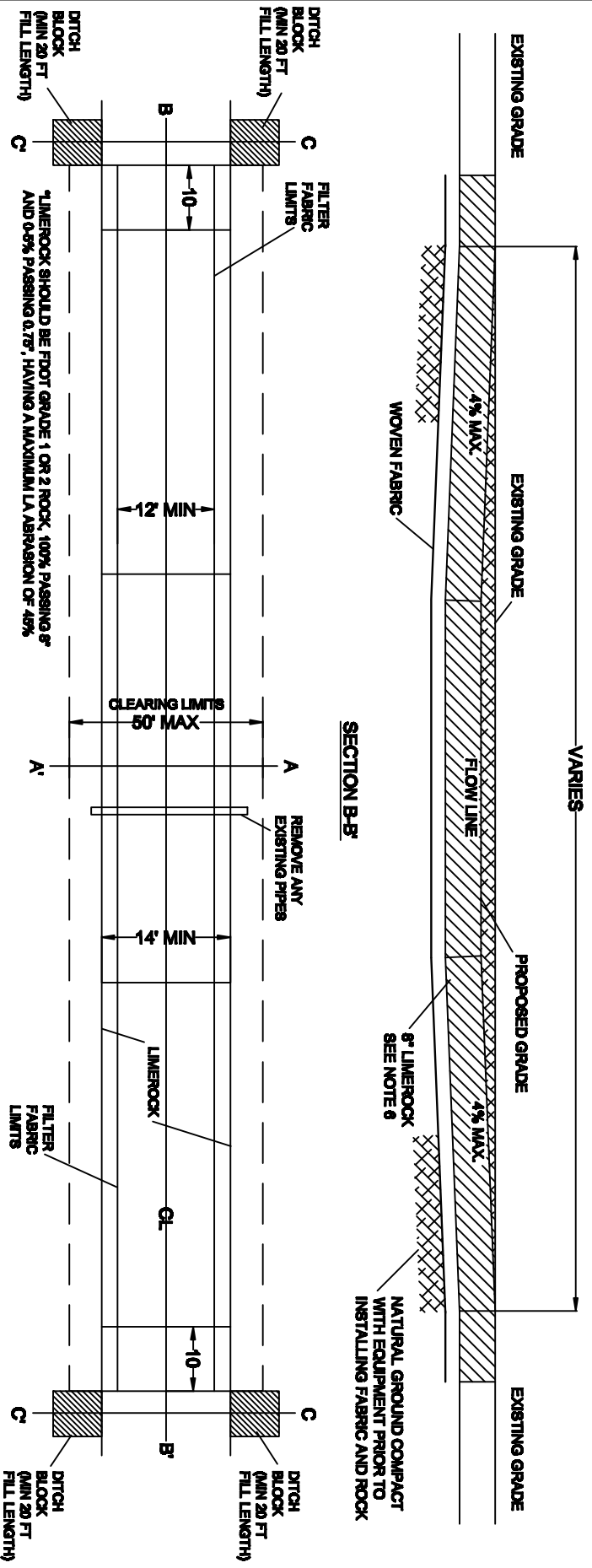


FIGURE 10

- NOTES:
1. LIMEROCK SHALL BE TRUCK DUMPED AND MACHINE SPREAD
  2. COMPACTION OF LIMEROCK SHALL BE ACCOMPLISHED BY SPREADING EQUIPMENT
  3. FABRIC SHALL CONFORM TO MIRAFI INC. 800X GEOTECHNICAL FABRIC OR EQUAL
  4. MINIMUM FABRIC OVERLAP SHALL BE 6' ON EACH EDGE. ROCK SHALL BE PLACED ON LAP PRIOR TO PLACING ROCK ON SINGLE LAYERS OF FABRIC TO PREVENT LATERAL MOVEMENT
  5. ALL MATERIALS TO BE PROVIDED BY THE CONTRACTOR
  6. UNLESS OTHERWISE APPROVED BY ENGINEER LIMEROCK SHALL MEET THE FOLLOWING GRADATION.  
 \*LIMEROCK SHOULD BE FDOT GRADE 1 OR 2 ROCK, 100% PASSING 6" AND 0-5% PASSING 0.75", HAVING A MAXIMUM LA ABRASION OF 45%

## SECTION C-C'

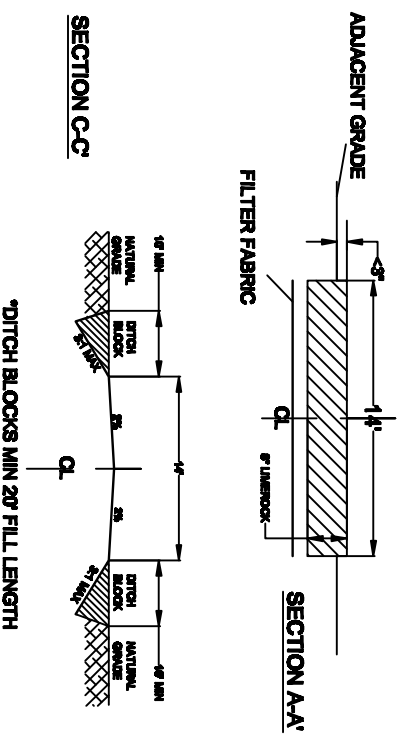
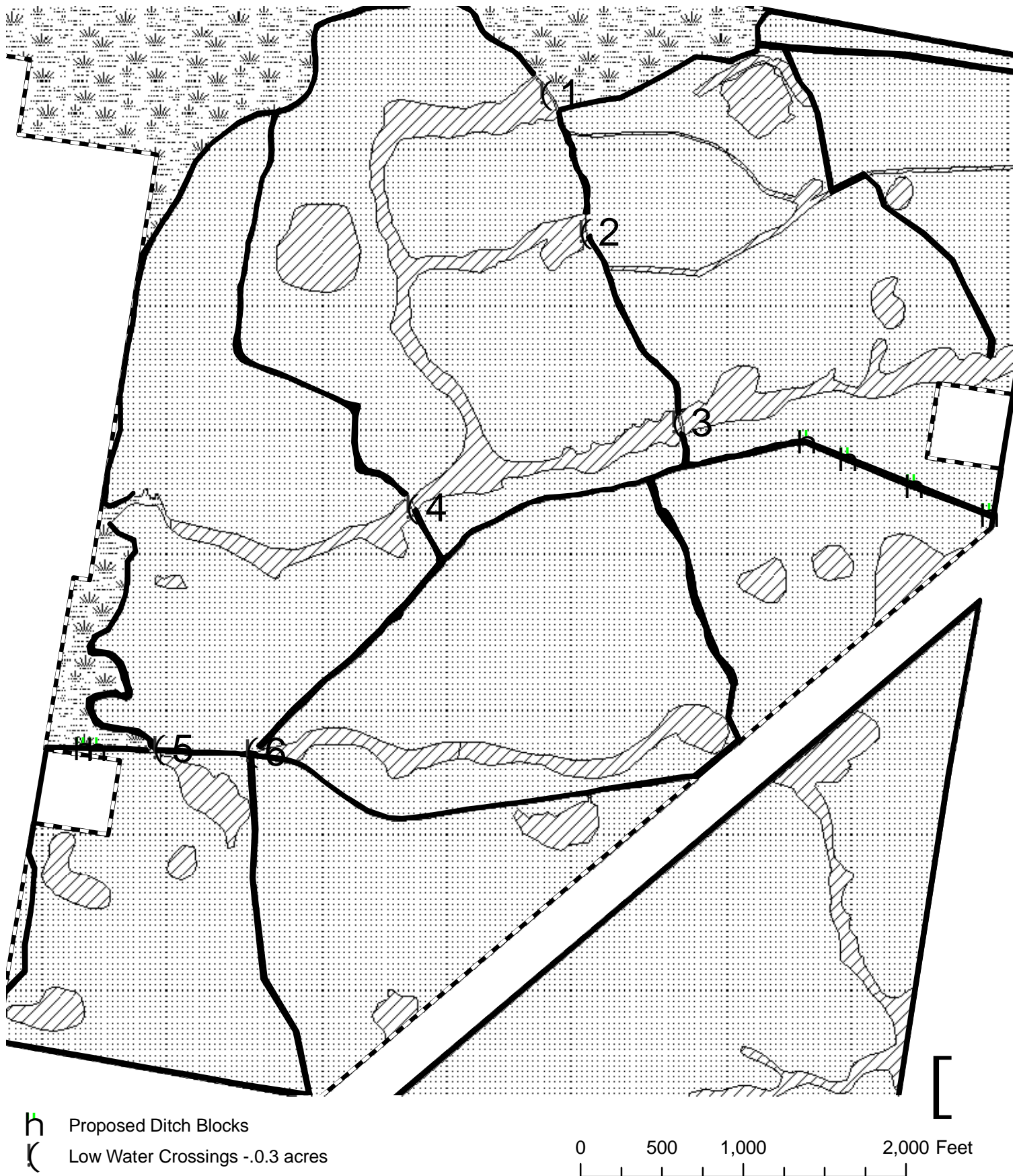


FIGURE 10



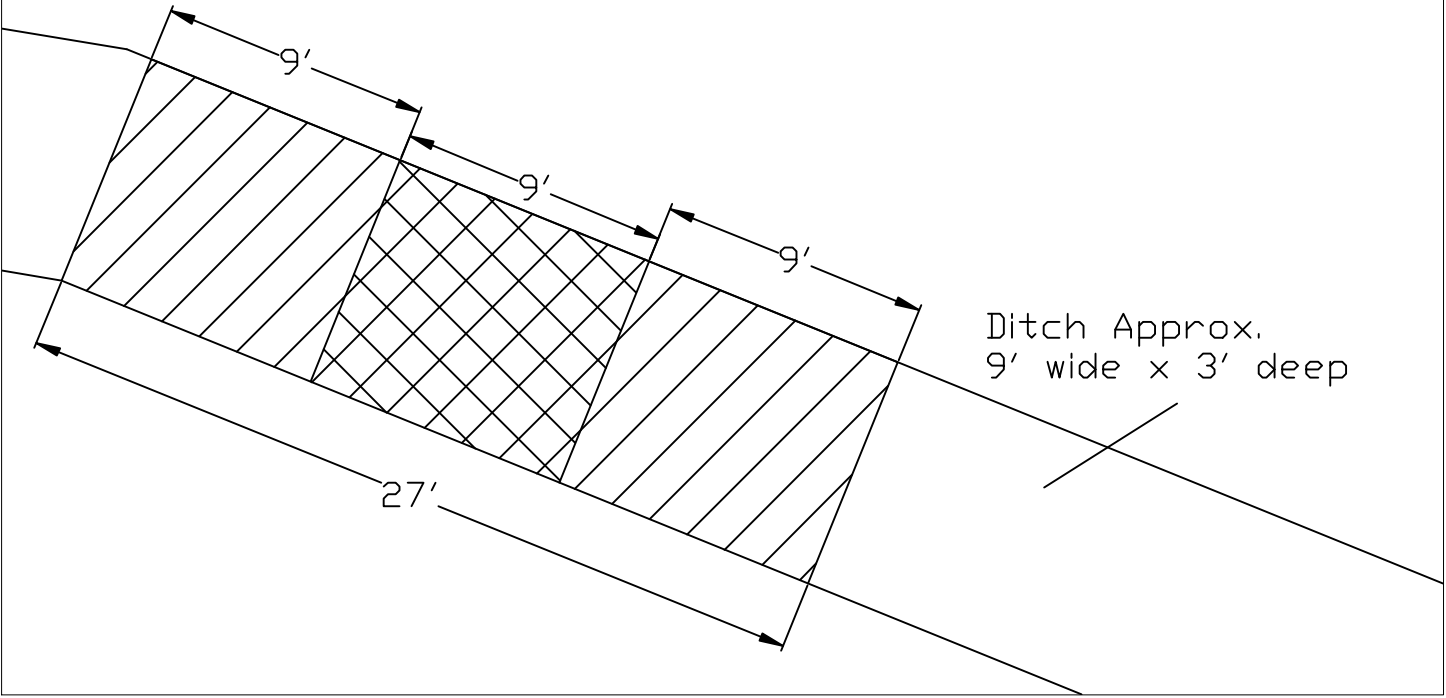


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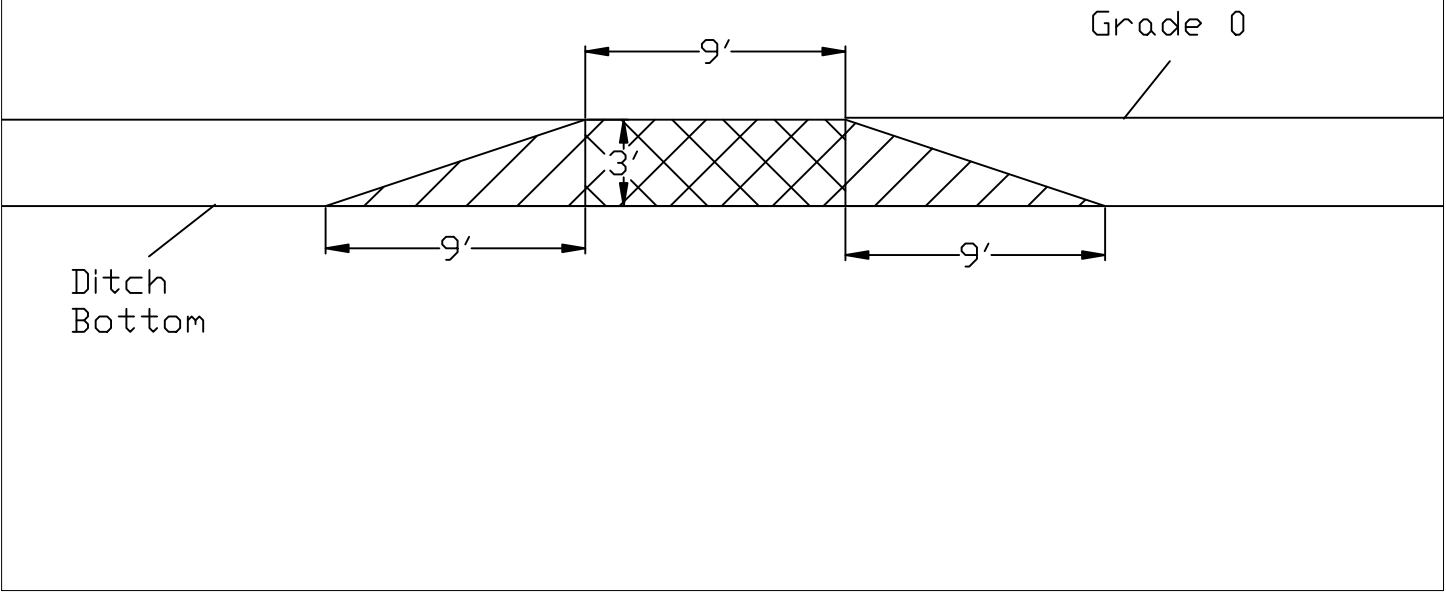
Figure 11 - Locations of Proposed Ditch Blocks and Low Water Crossings  
 Pensacola Bay Mitigation Bank

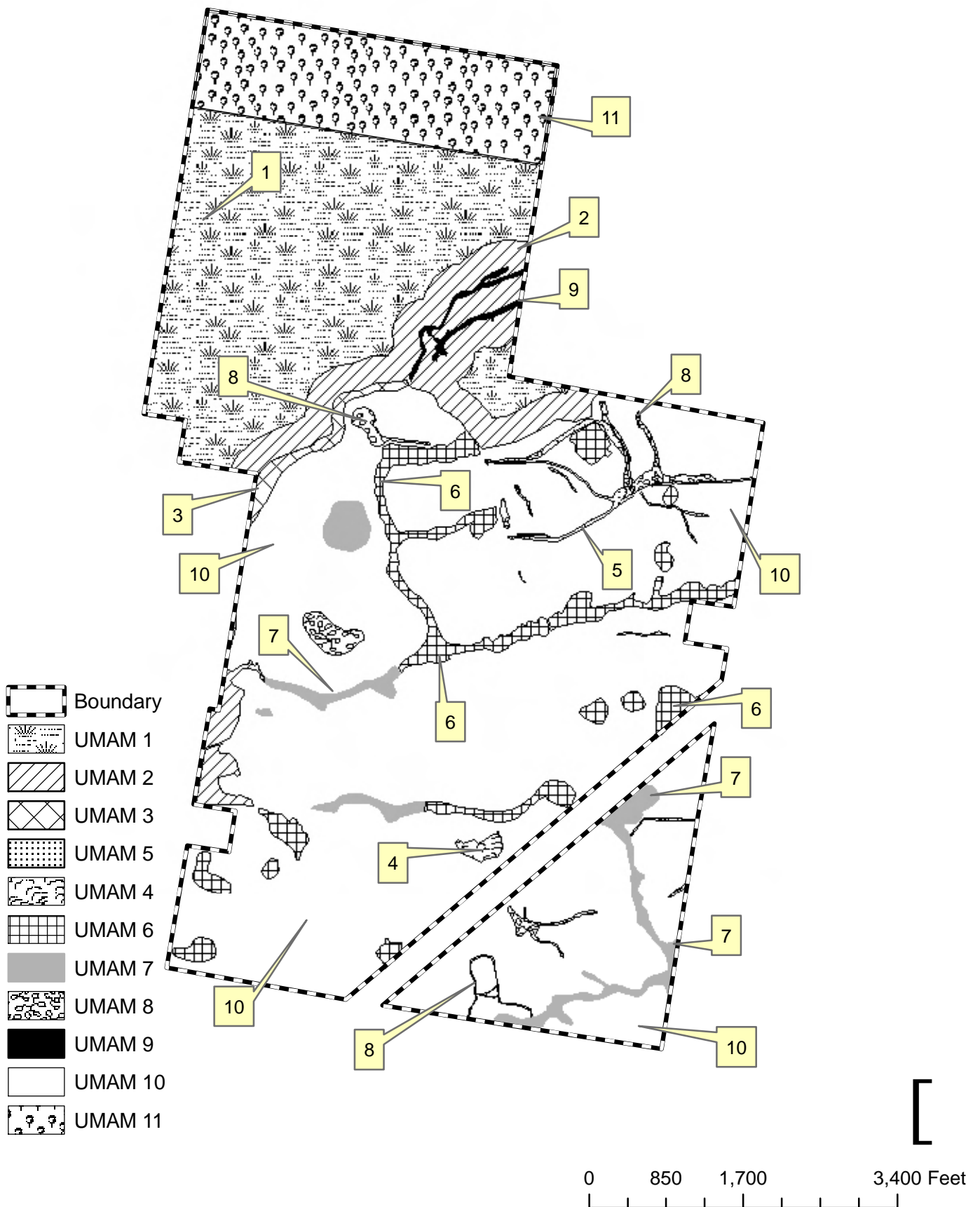


Ditch Block Plan View

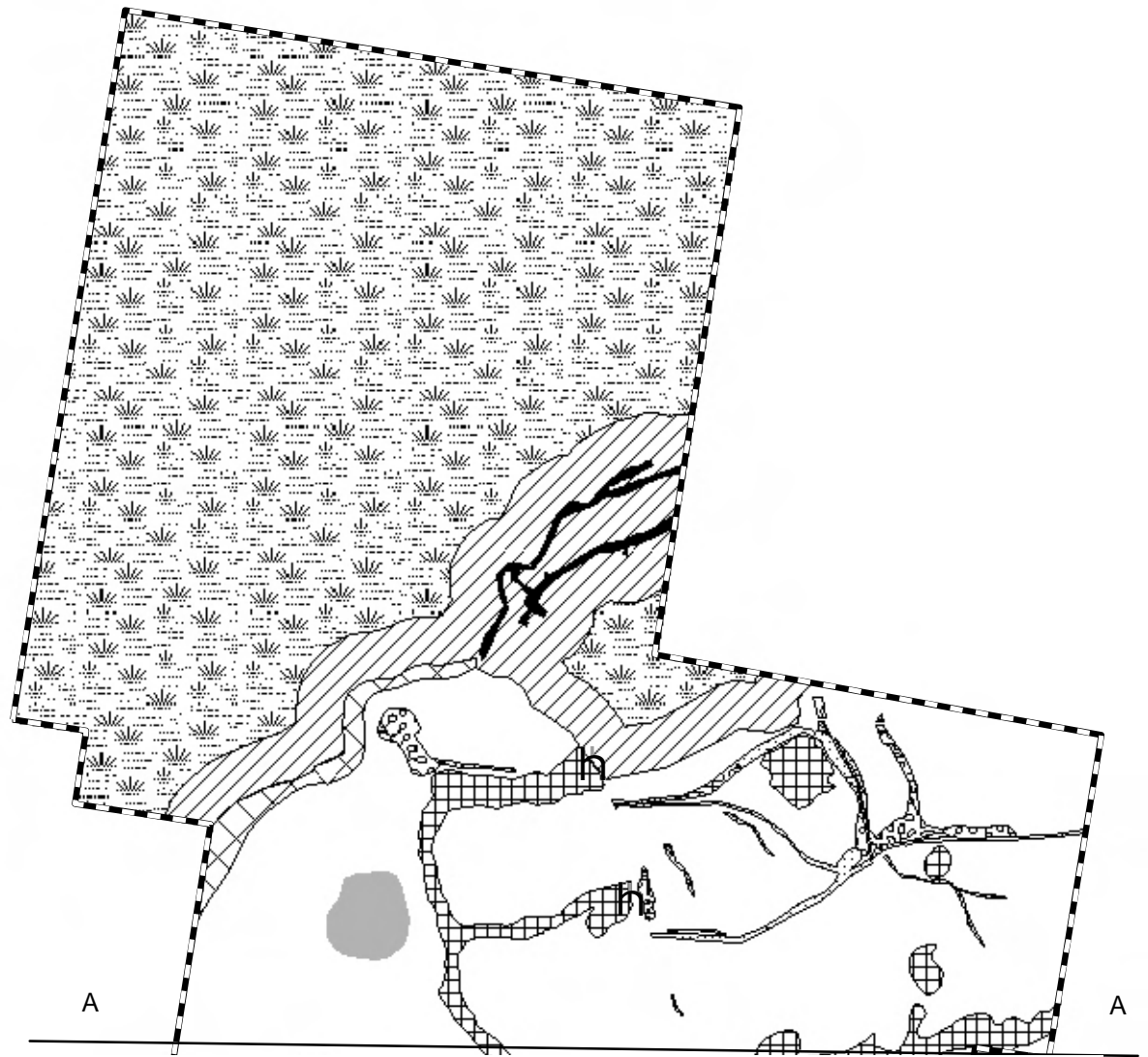


Ditch Block Profile View









h

Low Water Crossings



Preservation; Protection from Logging; Access Control; Exotic Control



Preservation; Protection from Logging; Access Control; Exotic Control; Adjacent to Managed Lands



Preservation; Cut/Chemical Treat Titi; Plant Hardwoods; Control Access; Exotic Control



Excavation; Plant Hardwoods; Prescribed Fire Management; Exotic Control



Plant Hardwoods; Exotic Control



Shrub Reduction; Prescribed Fire; Exotic Control



Supplemental Hardwood Plantings; Low Intensity Fire; Exotic Control



Recontour Ruts; Plant Native Herbaceous; Exotic Control

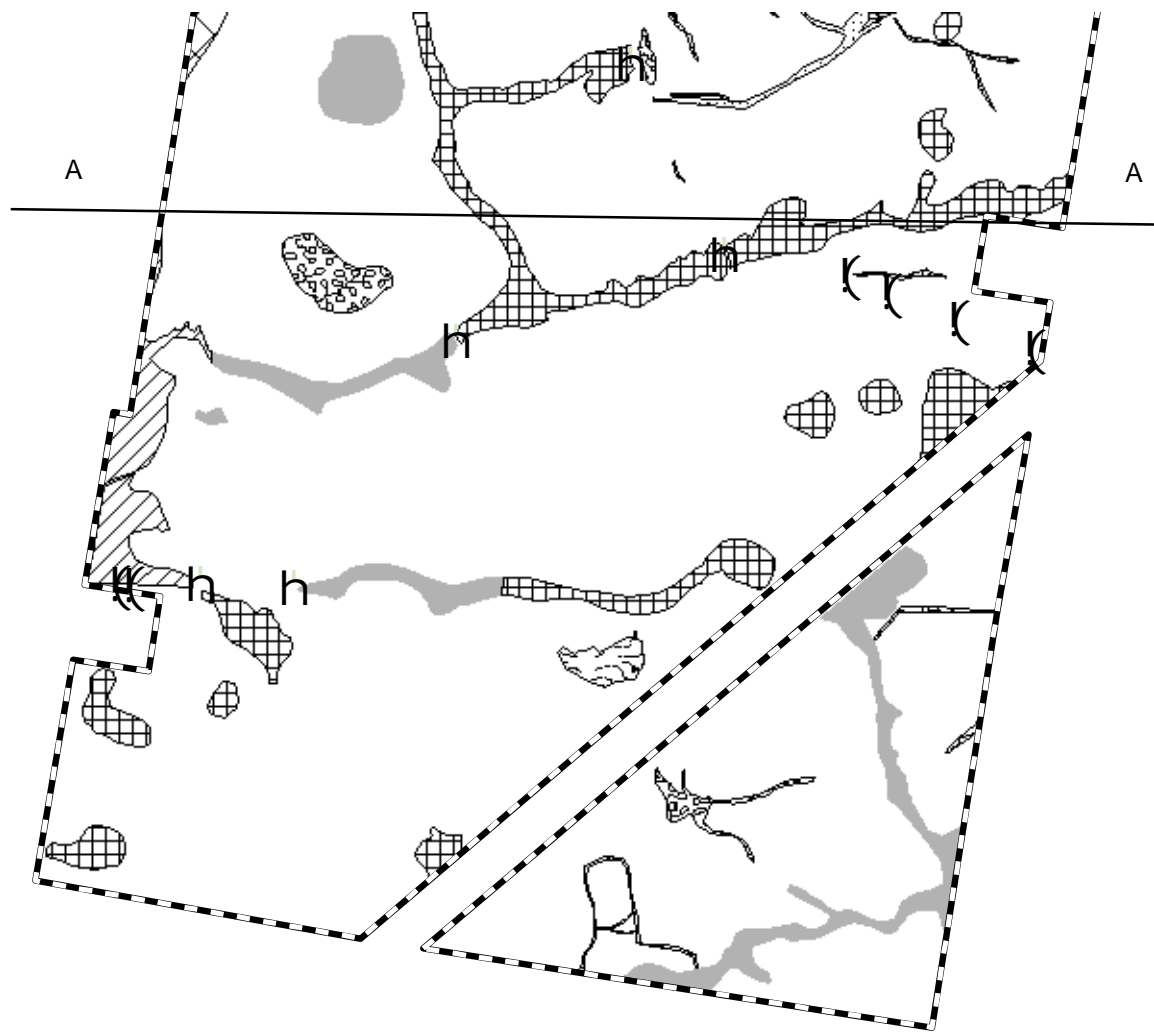












Plant Mixed Hardwoods; Exotic Control



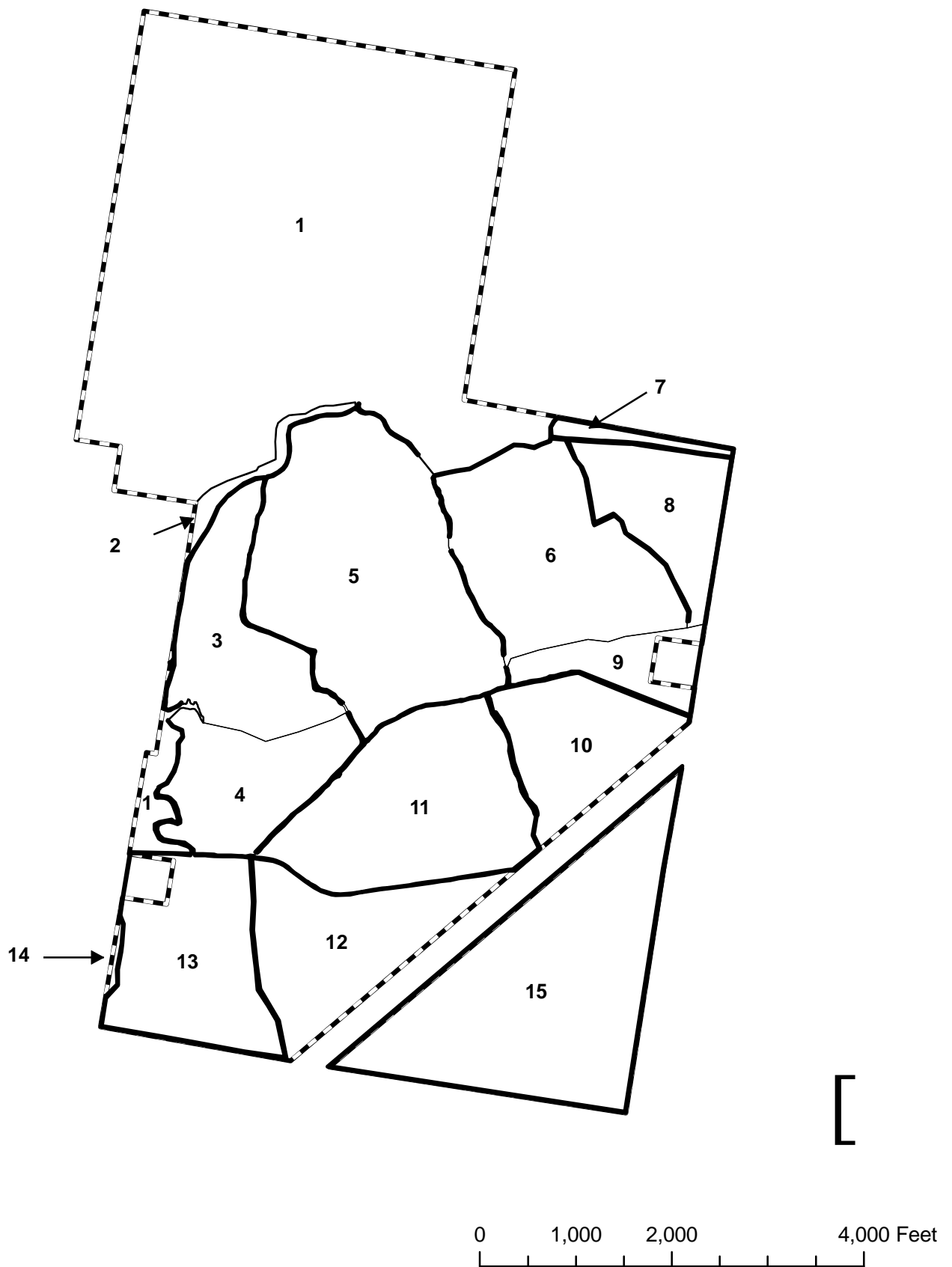
Shrub Reduction; Prescribed Fire; Exotic Control

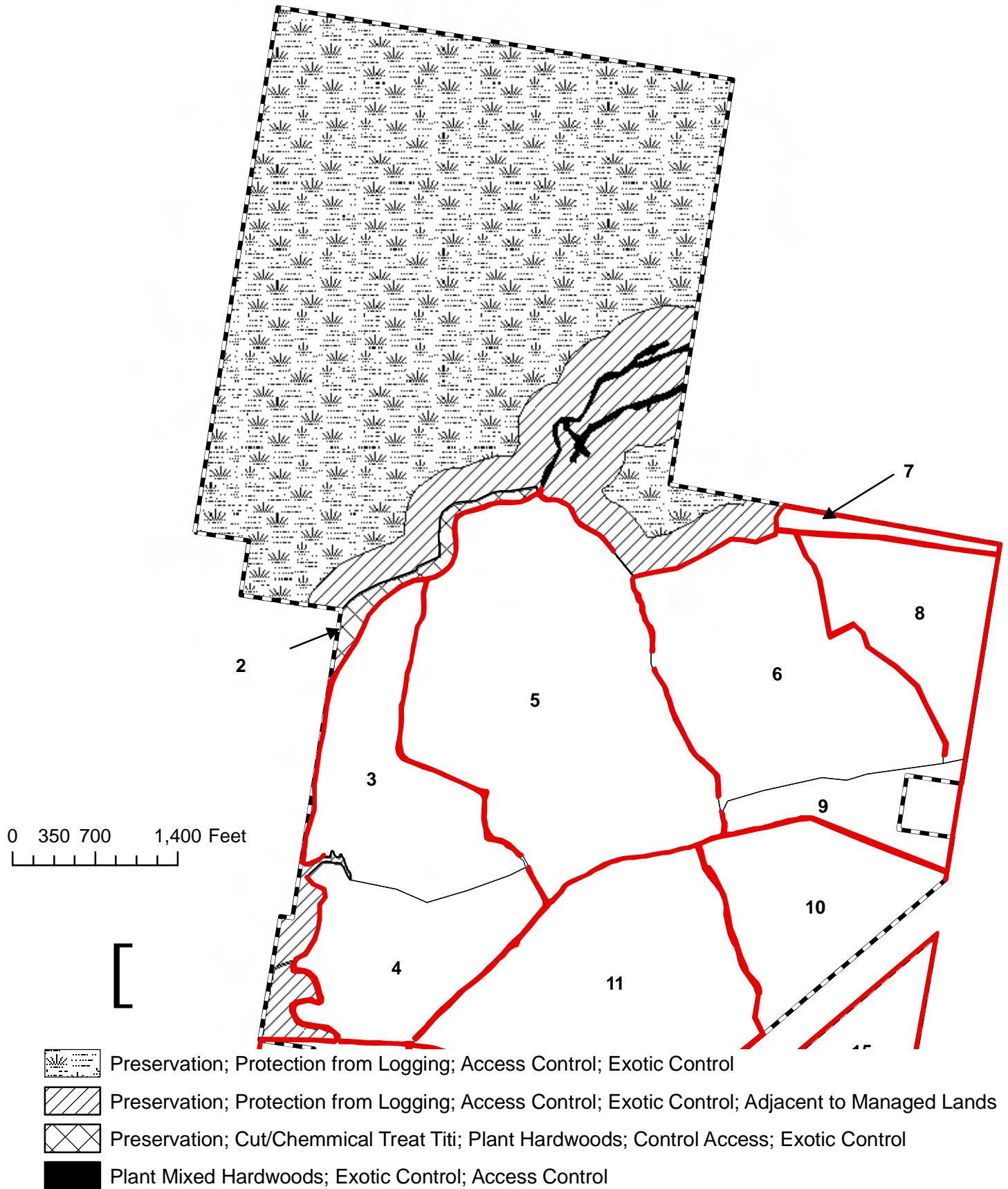
0 700 1,400 2,800 Feet

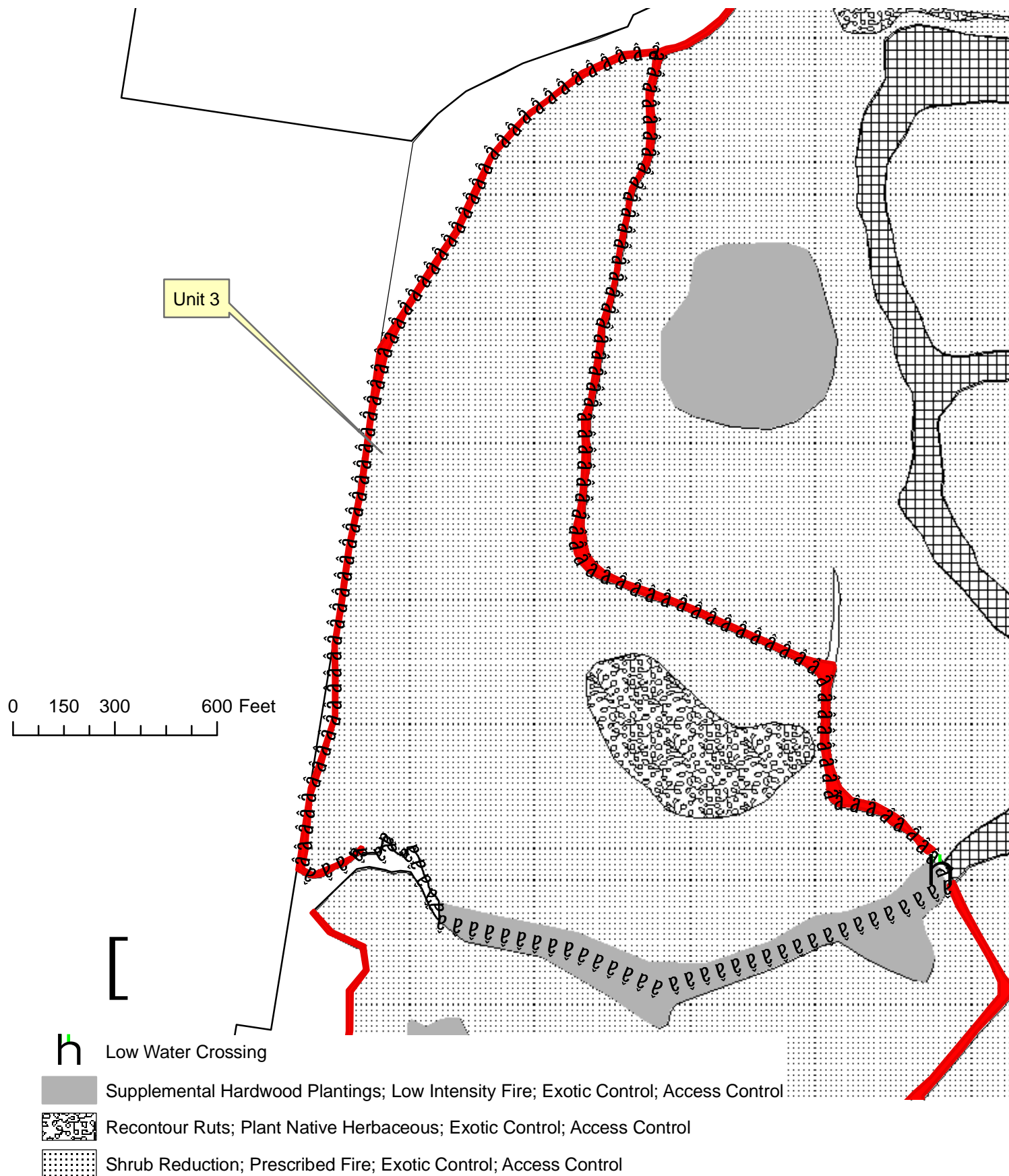


- ( Ditch Blocks
- h Low Water Crossings
-  Preservation; Protection from Logging; Access Control; Exotic Control
-  Preservation; Protection from Logging; Access Control; Exotic Control; Adjacent to Managed Lands
-  Preservation; Cut/Chemical Treat Titi; Plant Hardwoods; Control Access; Exotic Control
-  Excavation; Plant Hardwoods; Prescribed Fire Management; Exotic Control
-  Plant Hardwoods; Exotic Control
-  Shrub Reduction; Prescribed Fire; Exotic Control
-  Supplemental Hardwood Plantings; Low Intensity Fire; Exotic Control
-  Recontour Ruts; Plant Native Herbaceous; Exotic Control
-  Plant Mixed Hardwoods; Exotic Control
-  Shrub Reduction; Prescribed Fire; Exotic Control

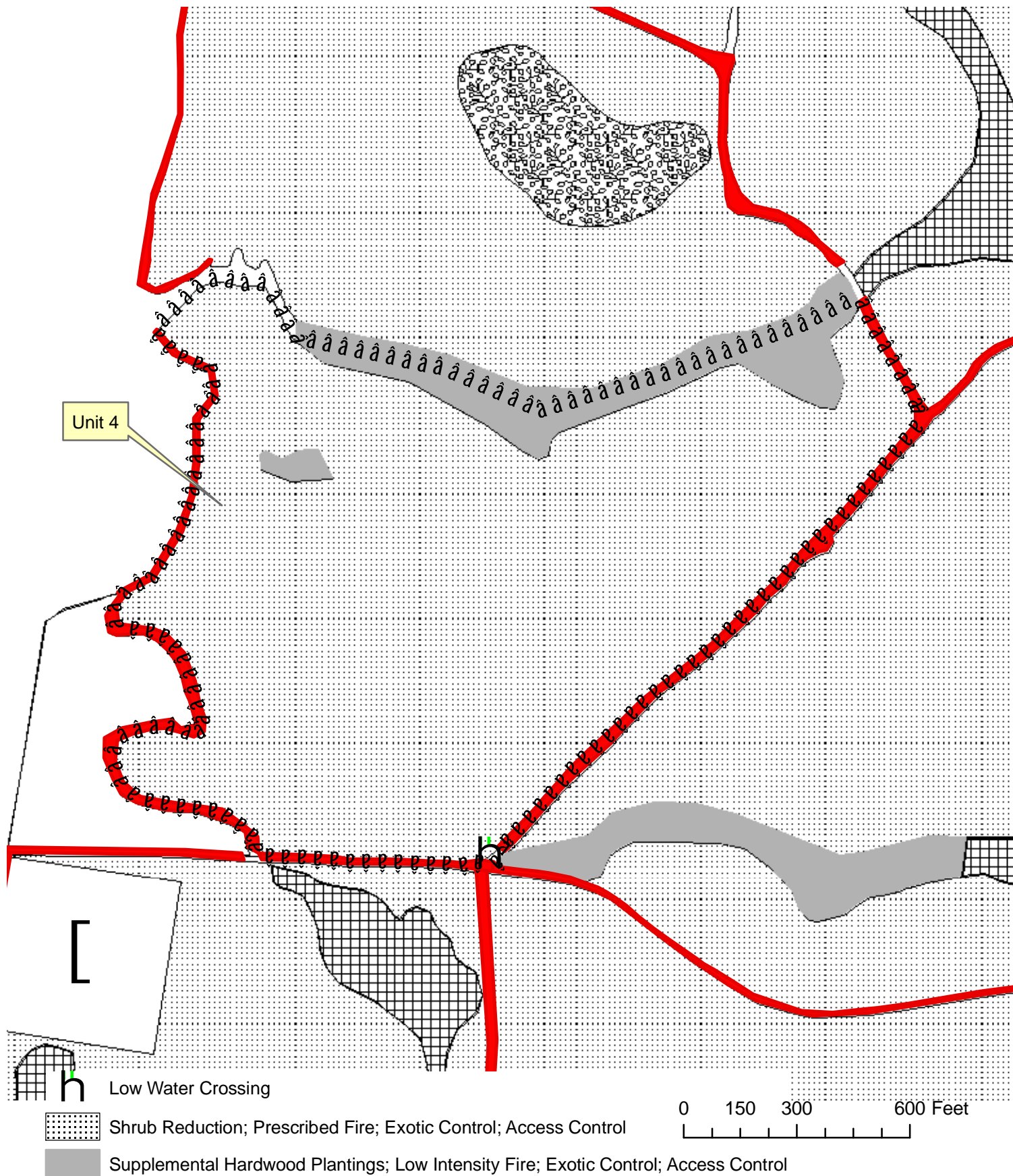
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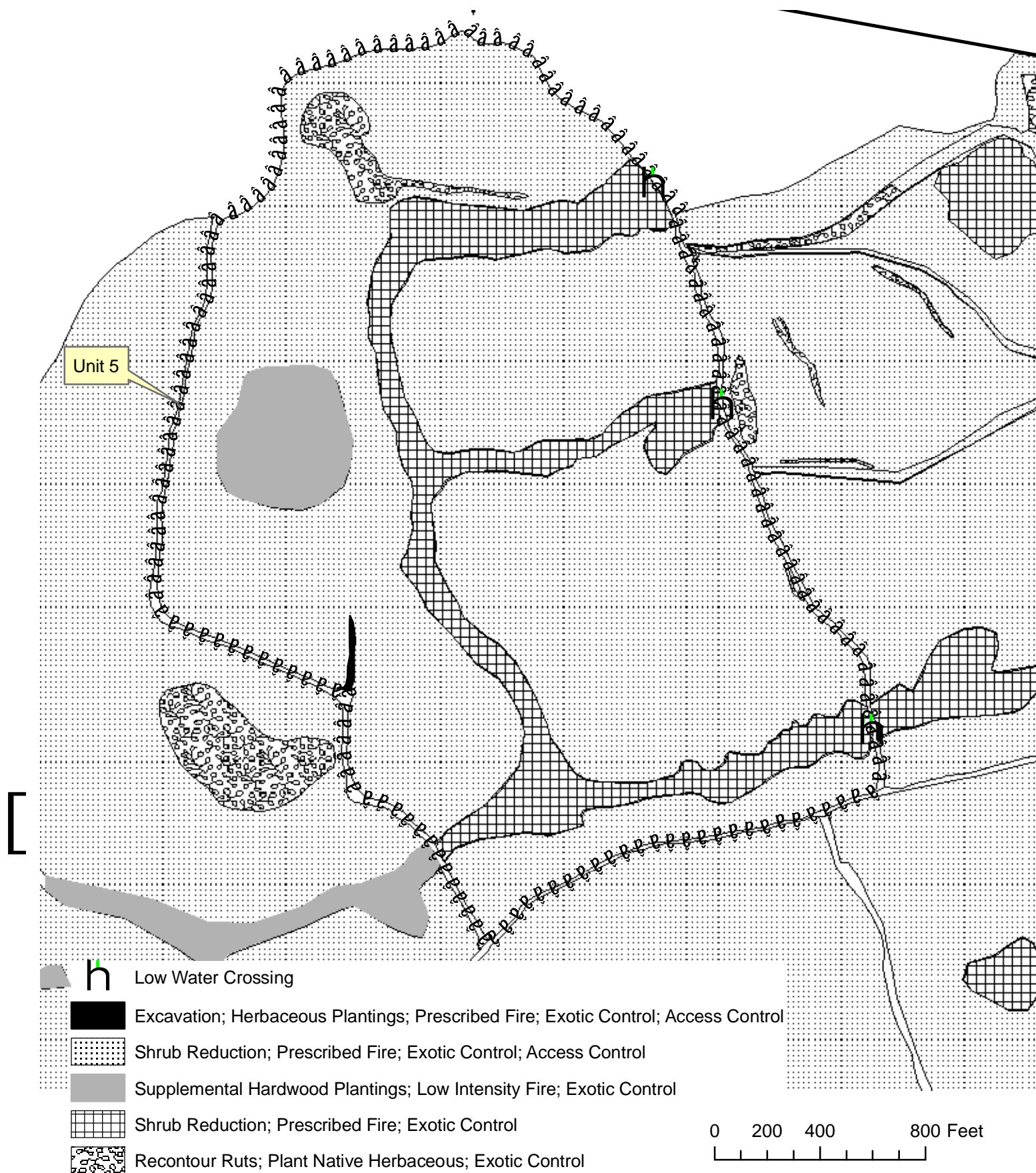






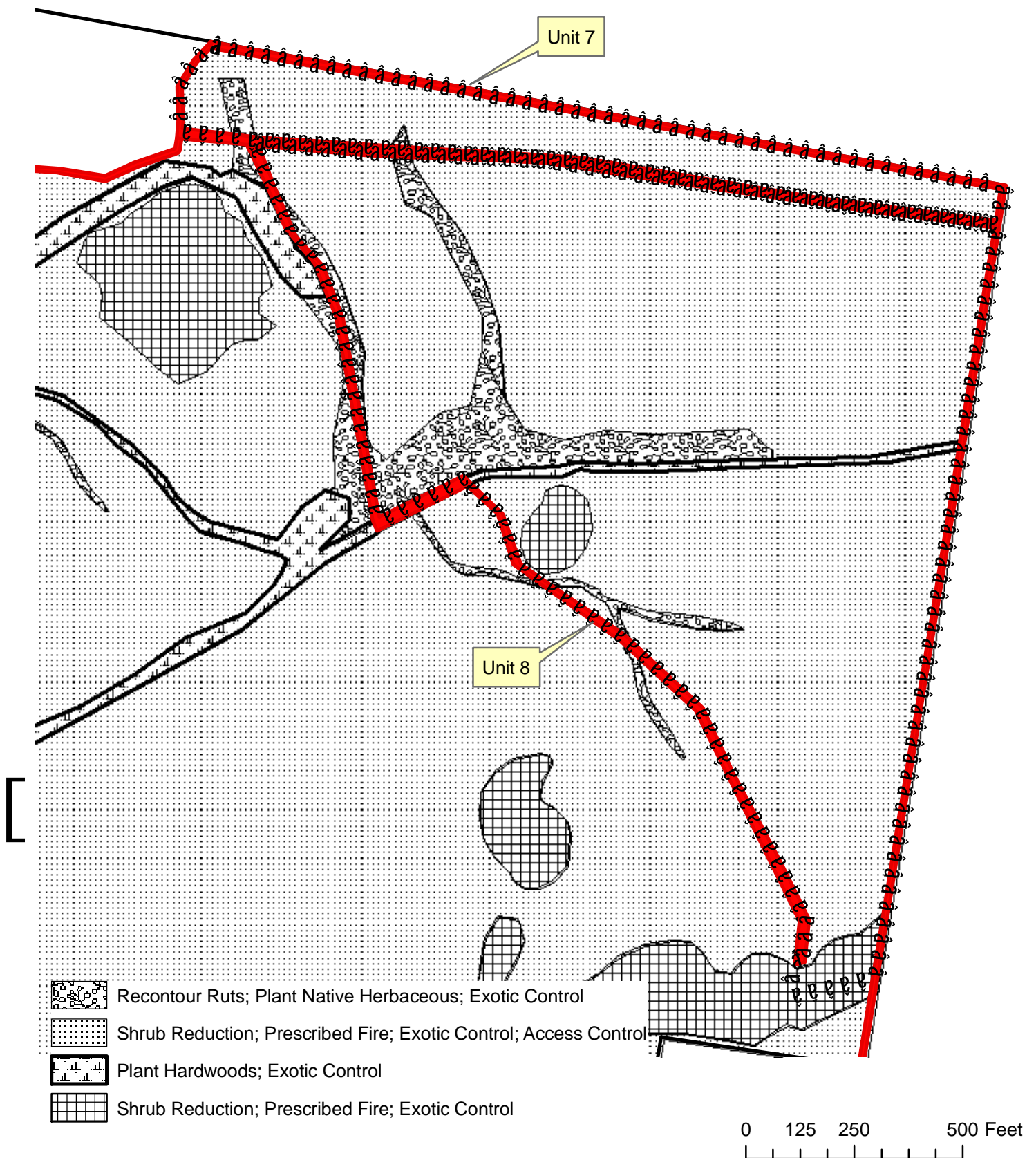


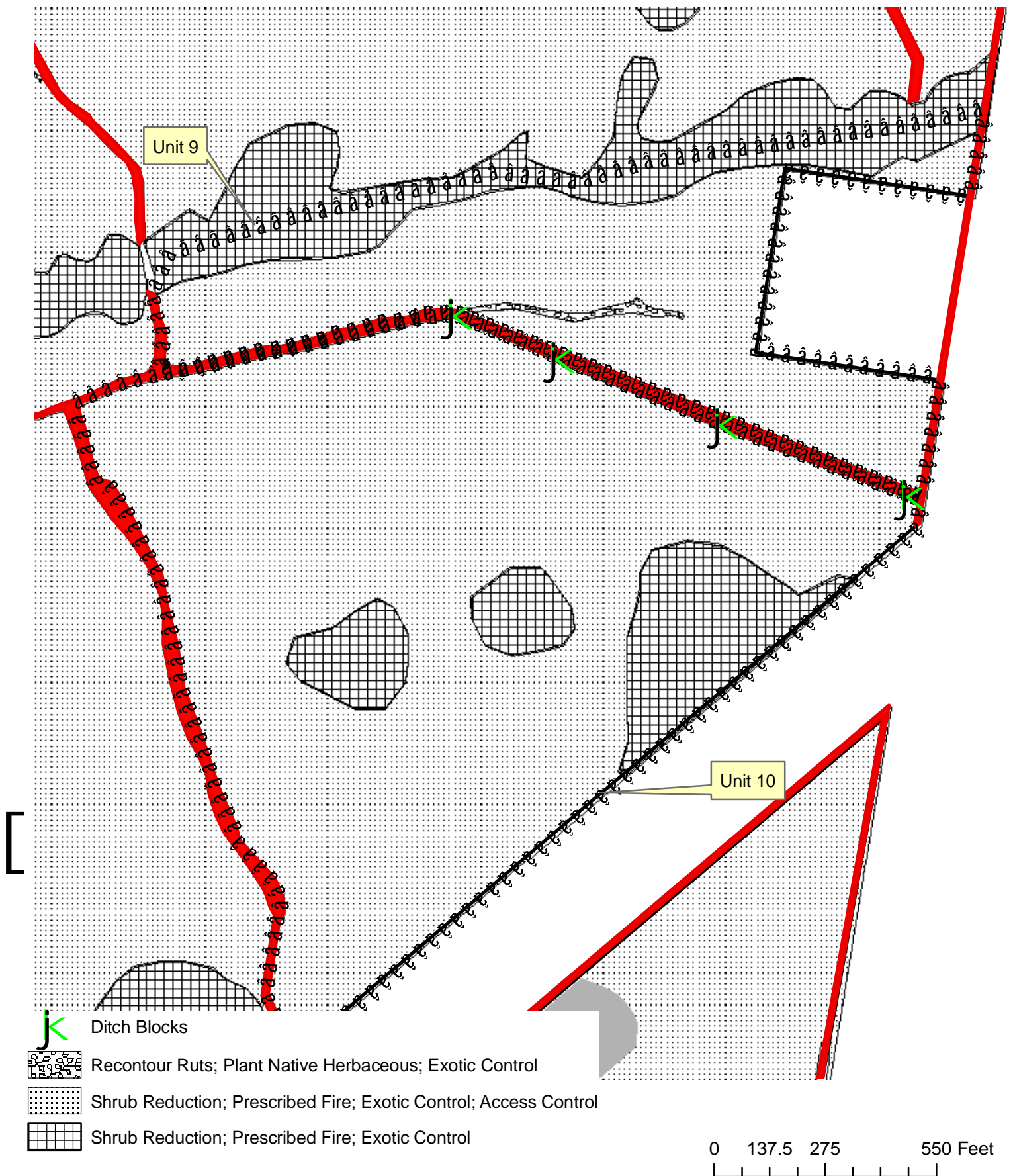


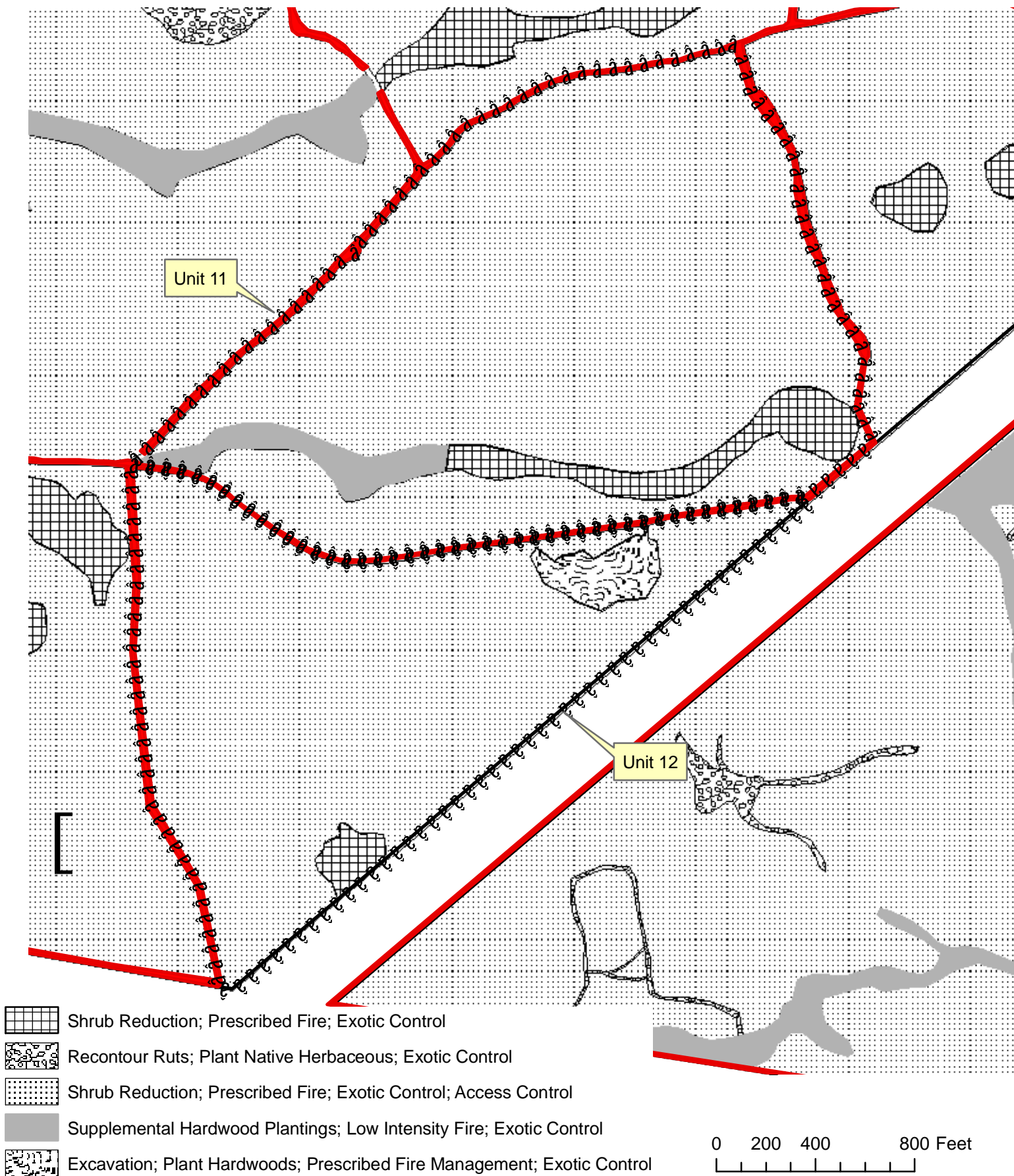










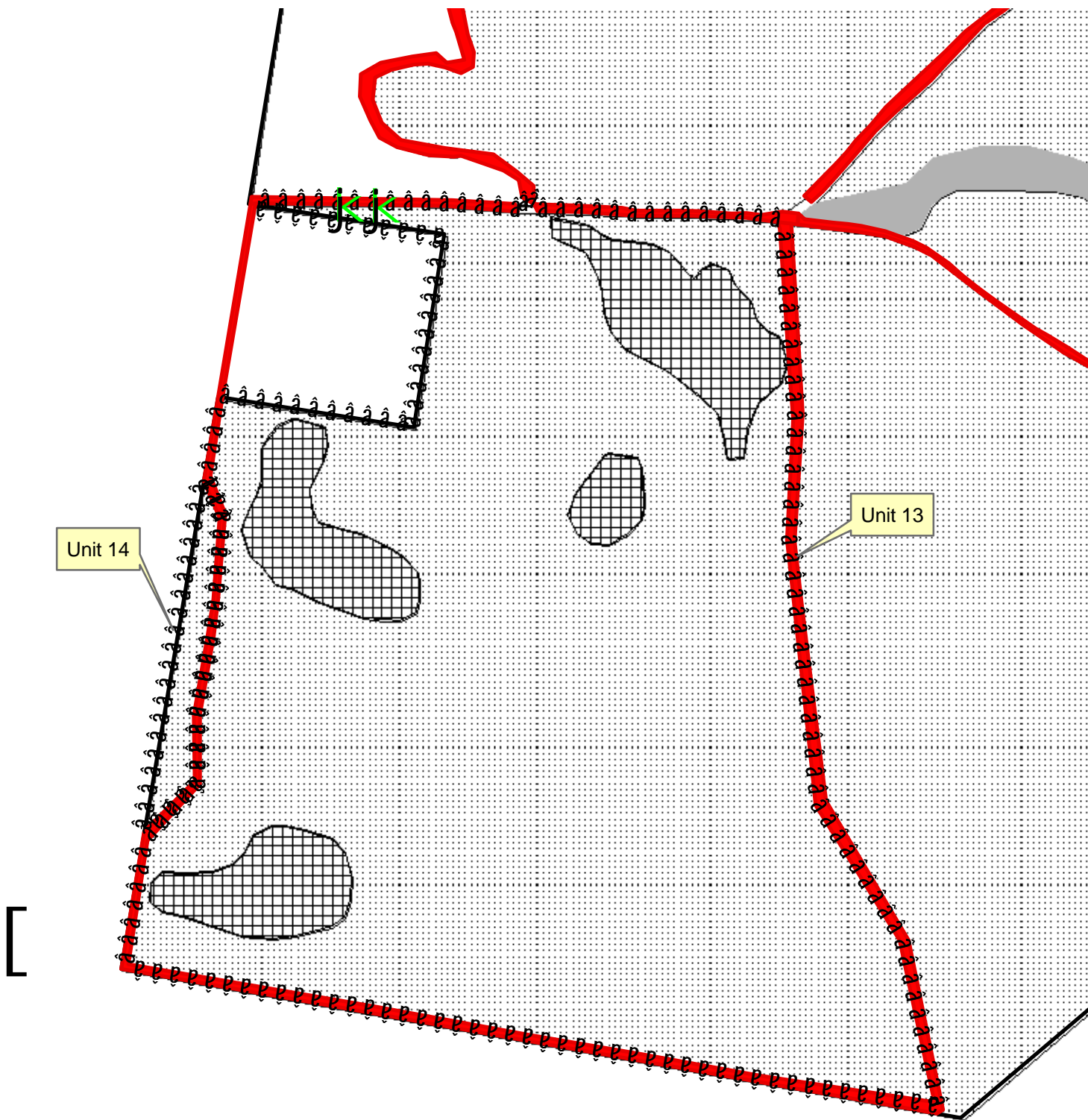





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 850-893-7238

Figure 24 - Management Activities For Units 11 & 12  
 Pensacola Bay Mitigation Bank







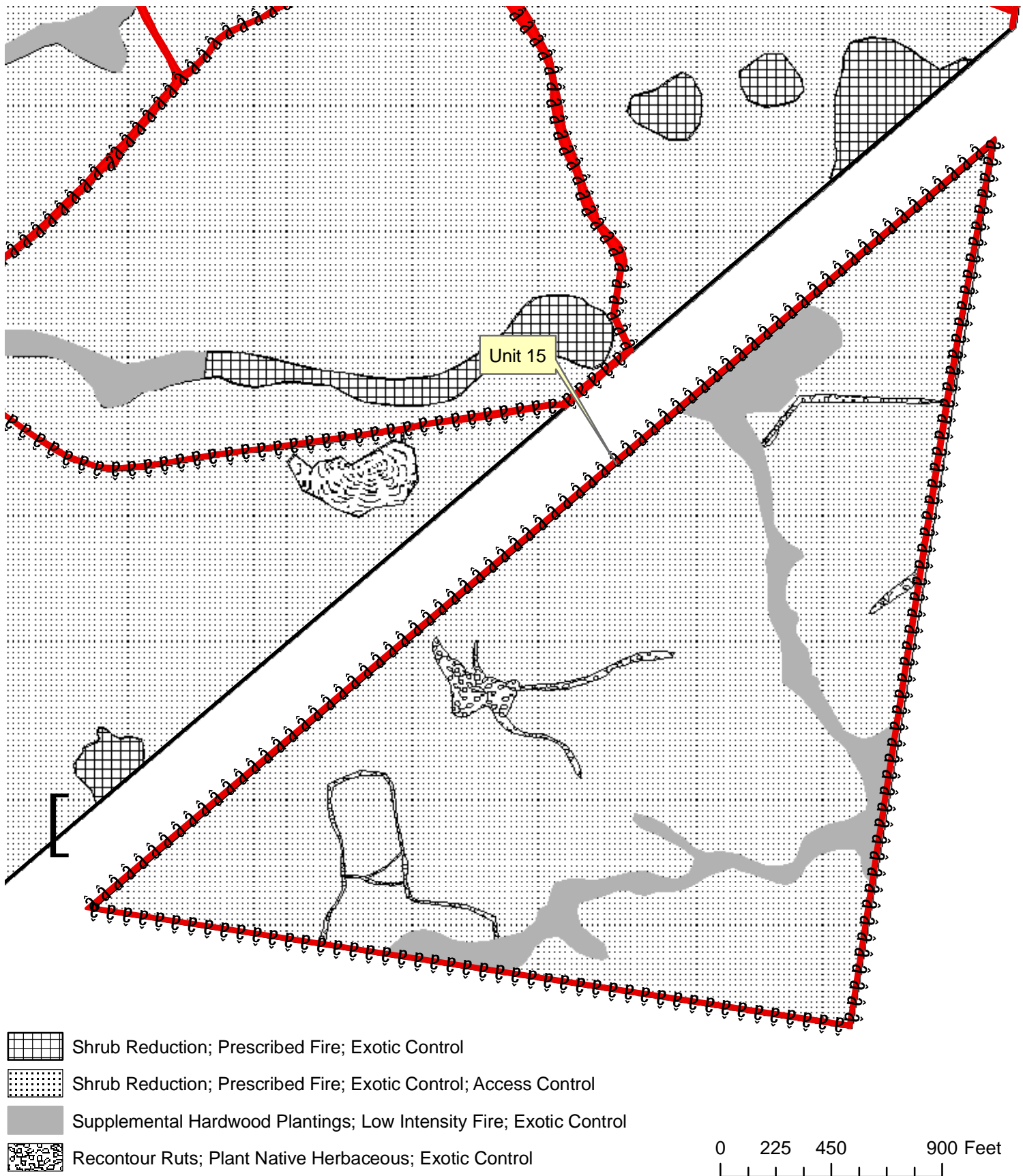
-  Ditch Blocks
-  Shrub Reduction; Prescribed Fire; Exotic Control
-  Shrub Reduction; Prescribed Fire; Exotic Control; Access Control

0 145 290 580 Feet

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Figure 25 - Management Activities For Units 13 & 14  
Pensacola Bay Mitigation Bank





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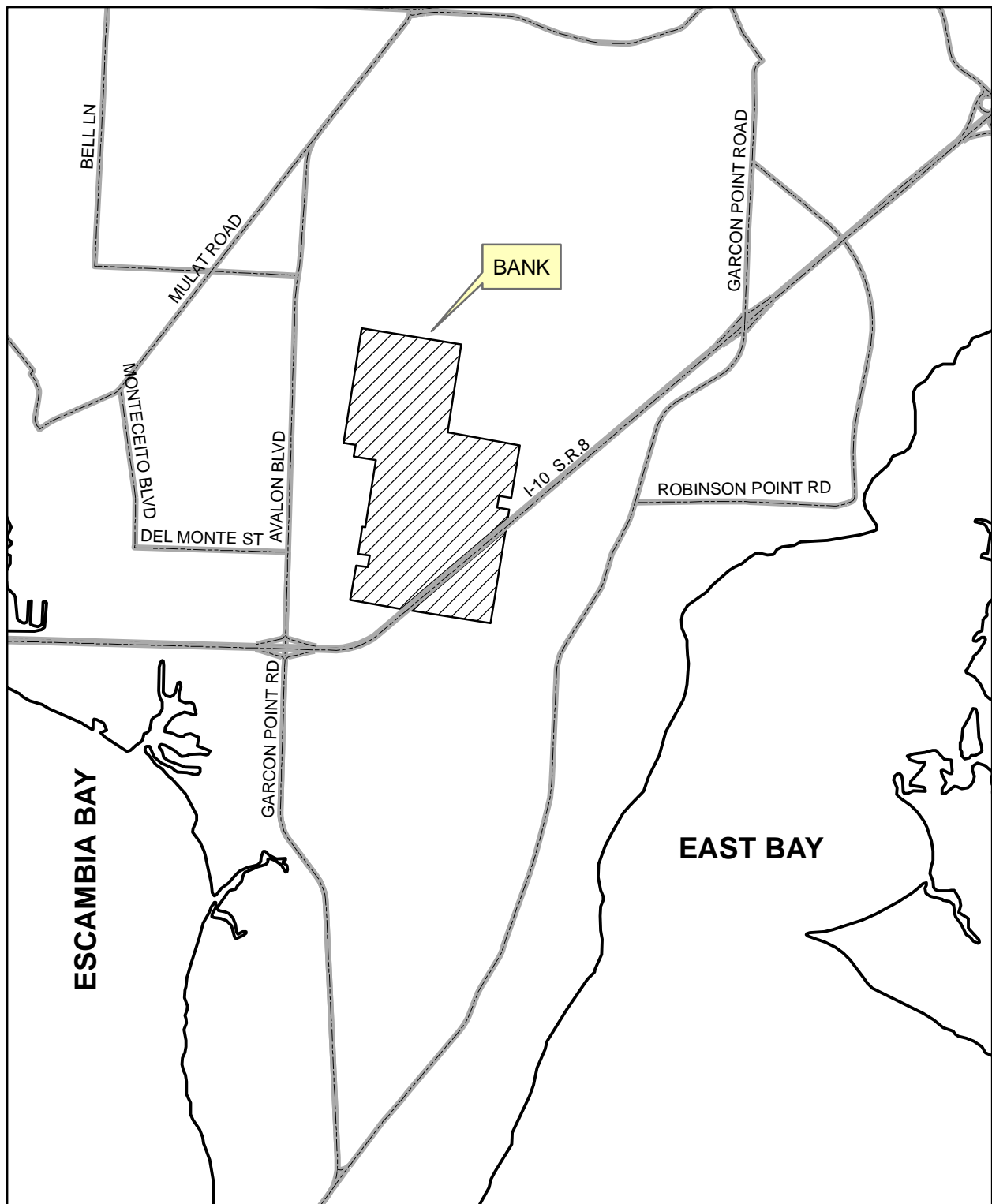
Figure 26 - Management Activities For Unit 15  
 Pensacola Bay Mitigation Bank



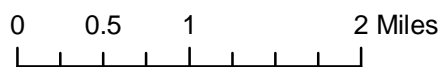
## Exhibits

# Exhibit 1

## Summary Line Drawings



E

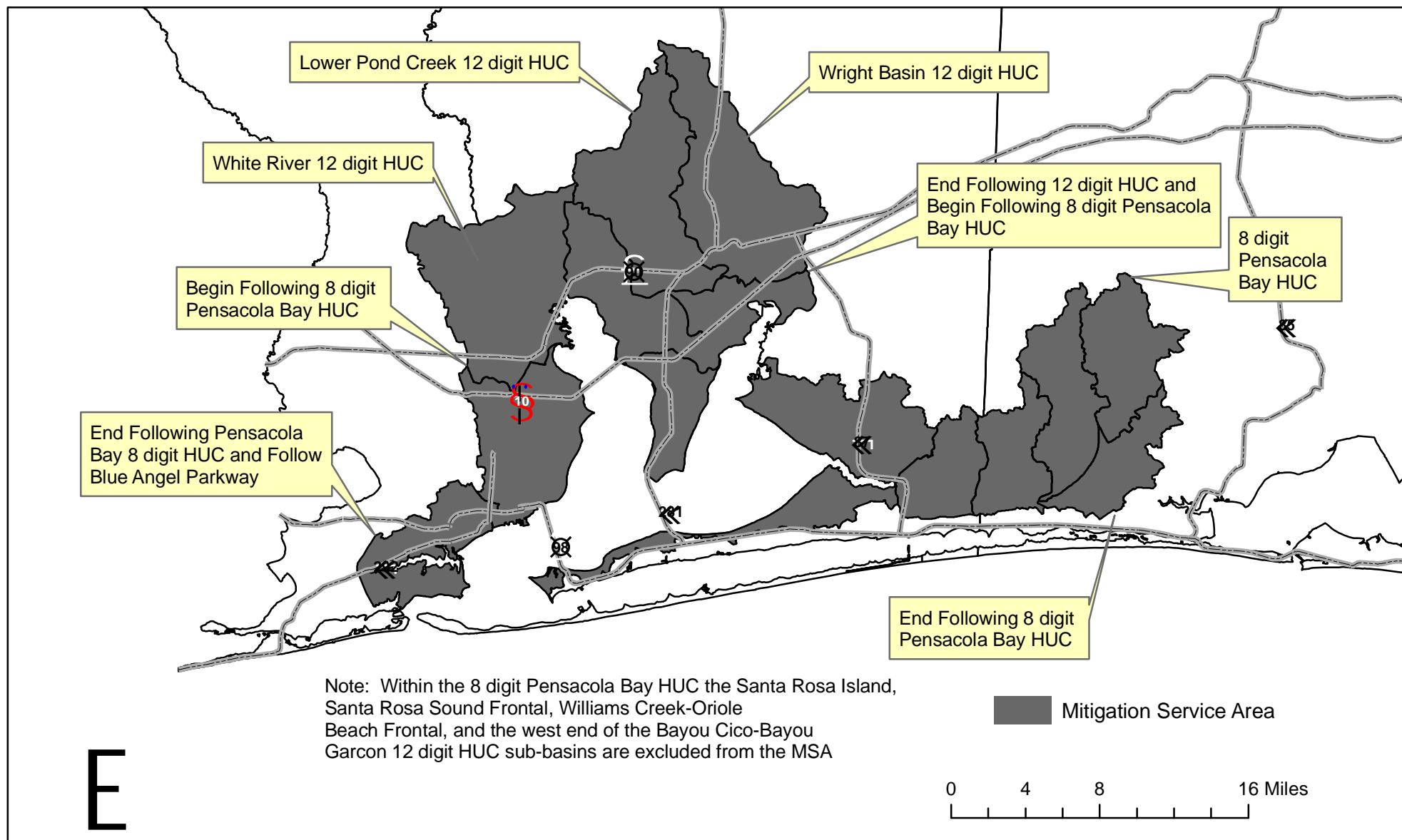


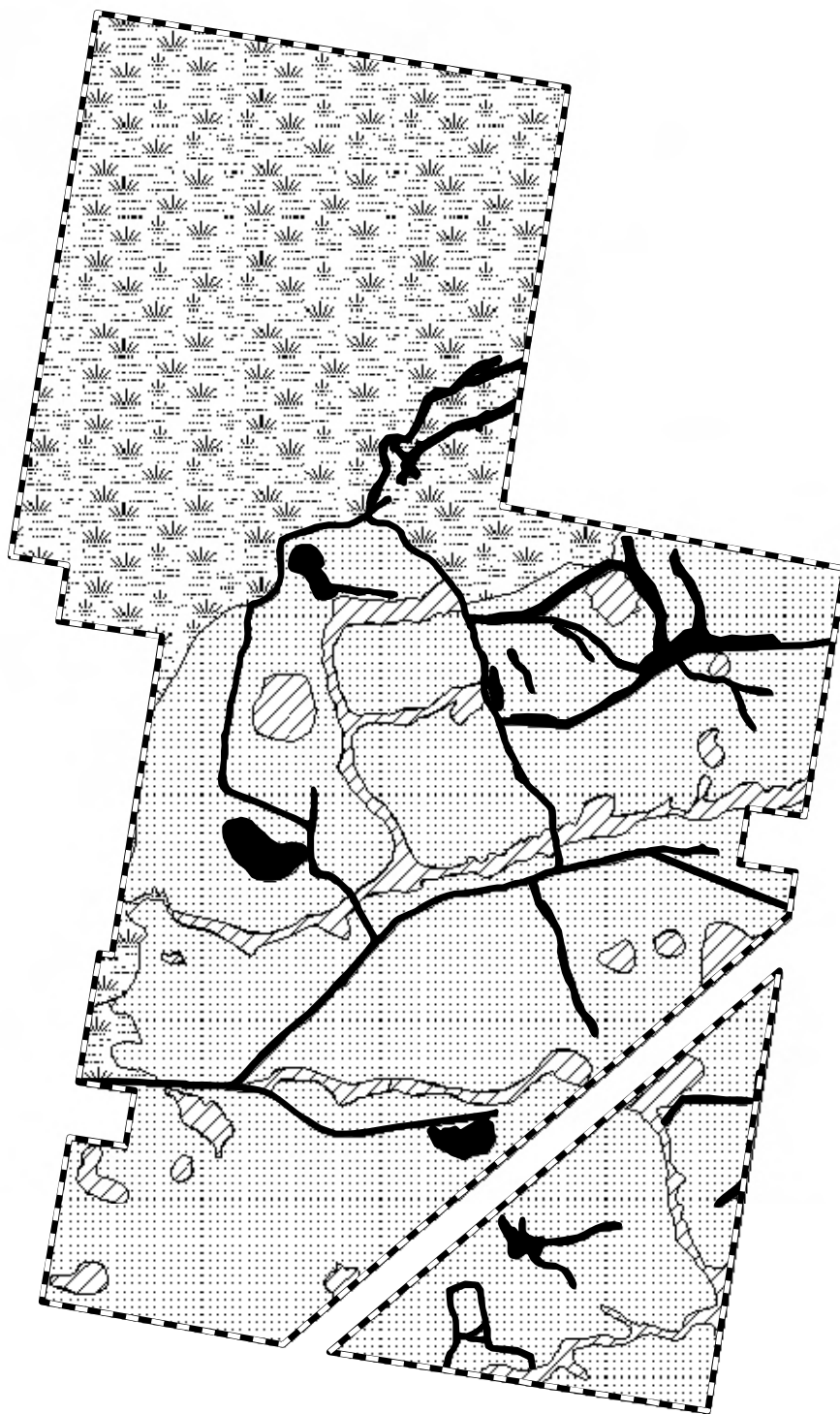
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850-893-7238






Pensacola Bay Mitigation Bank Location









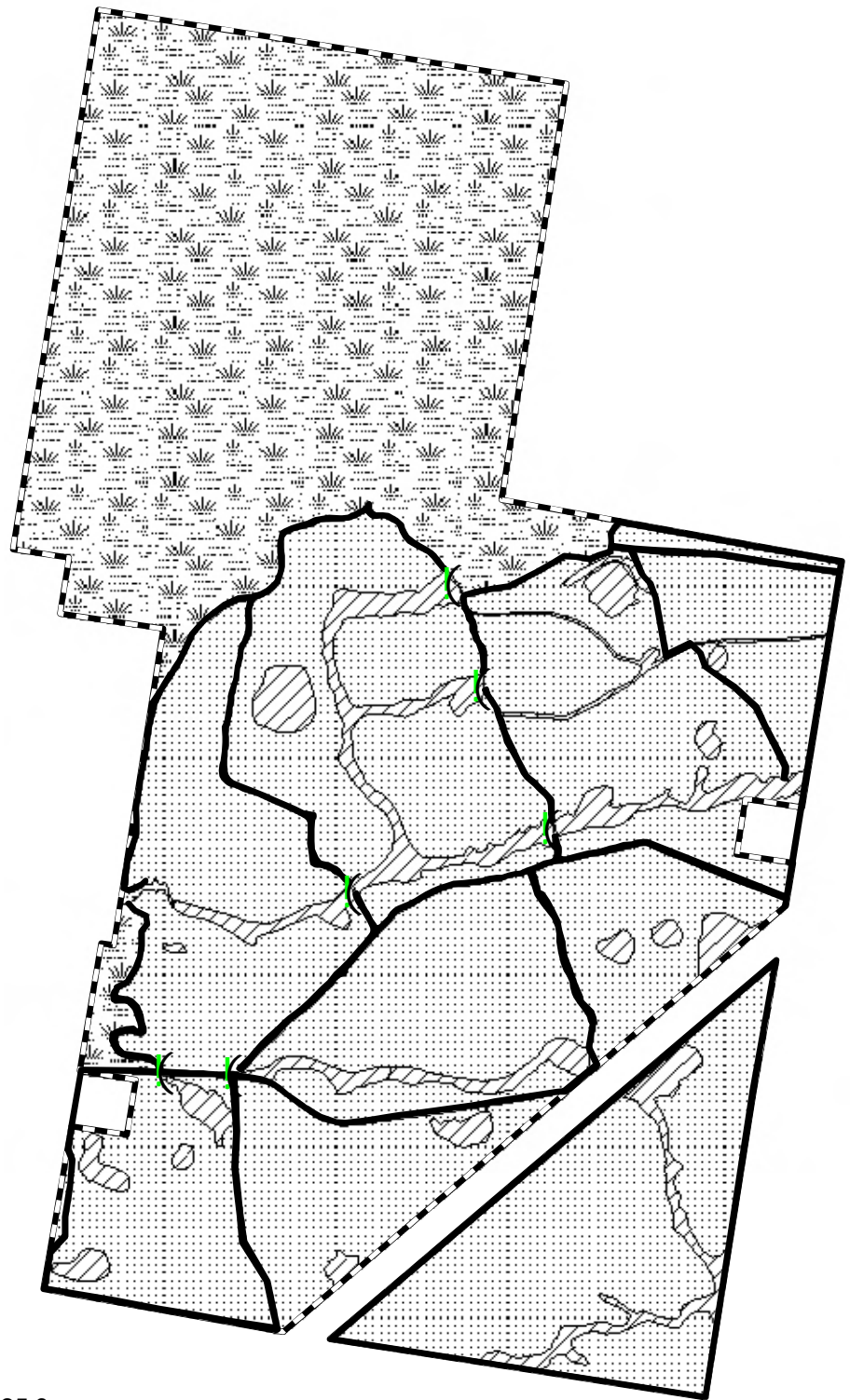
-  Boundary
-  Disturbed Lands (FLUCCS 740/8146) - 50.8 acres
-  Bay and Titi Swamps (FLUCCS 611/614) - 414.9 acres
-  Gum/Cypress Swamps - FLUCCS 613/621 - 75.2 acres
-  Wet Flatwoods (FLUCCS 625/626) - 647.3 acres







0 1,000 2,000 4,000 Feet

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 Tallahassee, FL 32312  
 850-893-7238

Existing FLUCCS Communities  
 Pensacola Bay Mitigation Bank





-  Low Water Crossings -.0.3 acres
-  Trails/Firelines (FLUCCS 8146) - 25.9 acres
-  Boundary
-  Bay/Titi Swamps (FLUCCS 611-614) - 418.7 acres
-  Gum/Cypress Swamps (FLUCCS 613/621) - 84.8 acres
-  Wet Flatwoods (FLUCCS 625/626) - 658.5 acres

0 1,000 2,000 4,000 Feet

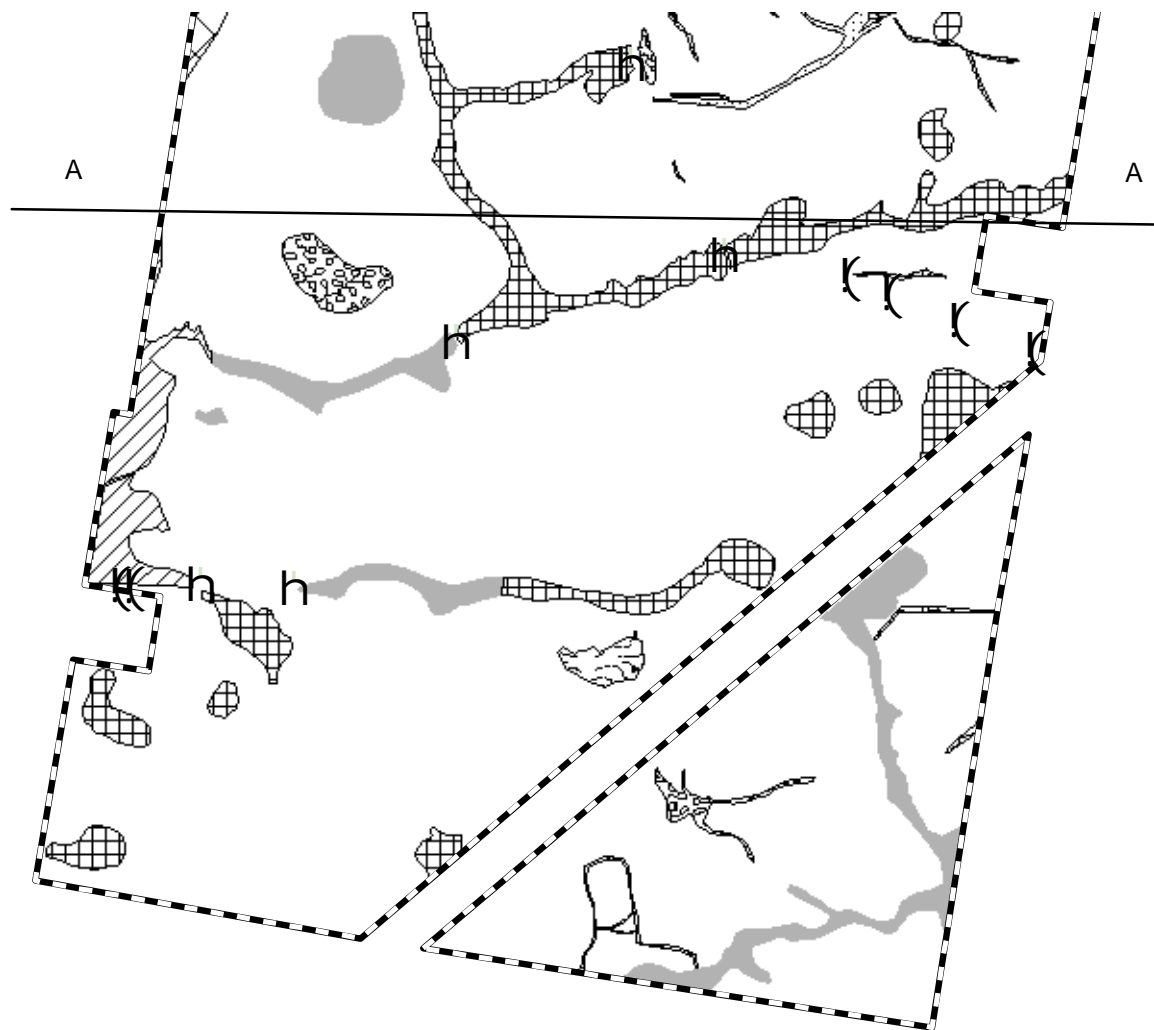
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Tallahassee, FL 32312  
850-893-7238











Proposed FLUCCS Communities  
Pensacola Bay Mitigation Bank









- ( Ditch Blocks
- h Low Water Crossings
-  Preservation; Protection from Logging; Access Control; Exotic Control
-  Preservation; Protection from Logging; Access Control; Exotic Control; Adjacent to Managed Lands
-  Preservation; Cut/Chemical Treat Titi; Plant Hardwoods; Control Access; Exotic Control
-  Excavation; Plant Hardwoods; Prescribed Fire Management; Exotic Control
-  Plant Hardwoods; Exotic Control
-  Shrub Reduction; Prescribed Fire; Exotic Control
-  Supplemental Hardwood Plantings; Low Intensity Fire; Exotic Control
-  Recontour Ruts; Plant Native Herbaceous; Exotic Control
-  Plant Mixed Hardwoods; Exotic Control
-  Shrub Reduction; Prescribed Fire; Exotic Control

0 700 1,400 2,800 Feet

## Exhibit 2 – Summary of Bank Implementation Costs

## Construction Activities Through Final Success

### Year 1

Activity	Cost
Establish baseline monitoring on NFWMD Property to south.	5,000.00
Herbicide application/mechanical cutting of vegetation to facilitate restoration of impacted and flatwoods – 126 acres (\$150/acre)	19,000.00
Access control and installation of signage (3 gates; 44,000 linear feet of boundary marked at 500' intervals)	8,000.00
Initial fireline installation	10,000.00
Prescribed fire management (700 acres at \$45/acre)	31,500.00
Excavation of roads into roadside ditches/ditch plugging	13,500.00
Excavation of 2.2 acres	15,000.00
Initial exotic identification (technician at \$60/hr) – 40 hrs.	2,400.00
Initial exotic eradication (2 technicians at \$60/hr. each) – 80 hrs.	4,800.00
Herbicide purchase	5,000.00
Quarterly onsite inspections for access problems and exotics	6,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Agency reporting on quarterly basis	5,000.00
Planting of wiregrass plugs	8,800.00
Installation of low water crossings	25,000.00
Year 1 contingency fund	10,000.00
Total Year 1 costs estimated	172,000.00

### Year 2

Activity	Cost
Year 1 onsite vegetation monitoring	20,000.00
Exotic treatment with chemicals	4,500.00
Planting Hardwoods	11,200.00
Quarterly onsite inspections for access problems and exotics	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Year 2 contingency fund	10,000.00
Total Year 2 costs estimated	59,700.00

### Year 3

Activity	Cost
Follow-up monitoring	20,000.00
Prescribed fire management	31,500.00
Fireline rehabilitation	2,500.00
Herbicide/mechanical cutting of vegetation to facilitate fire	10,500.00
Exotic Treatment	4,500.00

Quarterly onsite inspections for access problems and exotics	6,000.00
Agency reporting on quarterly basis	5,000.00
Plant longleaf plugs	10,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 3 costs estimated	103,000.00

#### **Year 4**

Activity	Cost
Follow-up monitoring of communities	20,000.00
Exotic treatment	4,500.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 4 costs estimated	48,500.00

#### **Year 5**

Activity	Cost
Follow-up monitoring	20,000.00
Exotic treatment	4,500.00
Quarterly onsite inspections for access problems, etc.	10,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 5 costs estimated	52,500.00

#### **Year 6**

Activity	Cost
Follow-up monitoring	20,000.00
Qualitative monitoring of reference wetland on NFWMD property	5,000.00
Prescribed Fire Management	31,500.00
Additional hardwood plantings	3,000.00
Additional herbaceous plantings	2,500.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 6 costs estimated	86,000.00



**Year 7**

Activity	Cost
Follow-up monitoring.	20,000.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 7 costs estimated	44,000.0

**Year 8**

Activity	Cost
Follow-up monitoring.	20,000.00
Prescribed fire	31,500.00
Quarterly onsite inspections for access problems, etc.	10,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 8 costs estimated	79,500.00

**Year 9**

Activity	Cost
Follow-up monitoring.	20,000.00
Exotic treatment	5,000.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 9 costs estimated	49,000.00

**Year 10**

Activity	Cost
Follow-up monitoring.	20,000.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 10 costs estimated	44,000.00

Actual costs for years 1-10 through success calculated at \$738,200.00. Letter of Credit with Standby Trust to total \$812,020.00

### **Long-term Management Costs**

Activity	Annual Cost
Prescribed fire management (\$31,500/2.5 years)	12,600.00
Quarterly onsite inspections for access problems	6,000.00
Exotic treatment/inspections	2,000.00
Annual inspection by senior scientist to determine trends and issues	1,500.00
Contingency fund	2,000.00
	24,100.00

A long-term management endowment of \$401,700.00 will be established by year 10 or at determination of final success, whichever is sooner. This will be guaranteed with a Letter of Credit and Standby Trust of \$401,700.00. After the sale of each credit from the Bank, \$2,000.00 will be deposited into the long-term management fund account until the total amount has been reached, upon which time the Letter of Credit and Standby Trust will be dissolve.

Exhibit 3  
Potential Listed and Rare Species

<i>Ambystoma bishopi</i>	Recticulated Flatwoods Salamander
<i>Hyla andersonii</i>	Pine Barrents Treefrog
<i>Crotalus adamanteus</i>	Eastern Diamondback Rattlesnake
<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake
<i>Haliaeetus leucocephalus</i>	Bald Eagle
<i>Calamovilfa curtissii</i>	Curtiss' Sandgrass
<i>Drosera intermedia</i>	Spoon-leaved Sundew
<i>Lacnocaulon digynum</i>	<i>Bog Button</i>
<i>Lilium iridollae</i>	Panhandle Lily
<i>Macranthera flammea</i>	Hummingbird Flower
<i>Rhexia parviflora</i>	Small-flowered Meadowbeauty
<i>Sarracenia leucophylla</i>	White-top Pitcherplant
<i>Sarracenia rubra</i>	Sweet Pitcherplant
<i>Xyris scabrifolia</i>	Harper's Yellow-eyed Grass
<i>Xyris stricta</i> var. <i>obscura</i>	Kral's Yellow-eyed Grass

## Exhibit 4

### Management Units and Activities

The initial and perpetual management of the property is defined by existing roads, historic fire breaks, and the need to have a safely implemented prescribed fire management program. A total of fifteen (15) Management Units have been established, and since prescribed fire is driving the unit composition, each unit often includes multiple existing and target natural communities. The following list relates the management units to the UMAM categories, which drive the specific restoration activities proposed.

UMAM Category	Management Unit(s)
1	1
2	1
3	2
4	12
5	6
6	5, 6, 8, 9, 10, 11, 12, 13
7	4, 5, 11, 15
8	3, 5, 6, 7, 8, 15
9	1
10	3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
11	1

### Specific Restoration Activities

Community restoration activities are described below defined by UMAM Category (Figure13). UMAM Categories 1, 2 and 11 (Management Unit 1) are preservation areas that have no mitigation activities other than exotic treatments, maintenance and management.

- a. UMAM Category 3 (Management Unit 2). The existing canopy of black titi and pine will be reduced to represent less than 20% live canopy coverage (i.e.  $\geq 4"$  d.b.h.) through the application of herbicide appropriate for the community. The approximate 6.9 acre area will be underplanted at a density of 275 saplings/acre in the following proportions:

<i>Nyssa sylvatica</i> var. <i>biflora</i>	698 saplings
<i>Magnolia virginiana</i>	1200 saplings.

- b. UMAM Category 4 (within Management Unit 12). Approximately 2.2 acres of fill will be excavated and planted to support a mixed hardwood wetland depression (see attached figure). The area will be excavated to a depth of 18" below the surrounding elevations and planted in the following proportions:

<i>Nyssa sylvatica</i> var. <i>biflora</i>	100 saplings
<i>Taxodium distichum</i>	800 saplings
<i>Ilex myrtifolia</i>	100 saplings.

In addition, the edges of the depression will be planted with approximately 1,000 wiregrass plugs clustered in groups, and seeds collected from appropriate

vegetation onsite will be scattered on bare ground during inspection and monitoring trips to accelerate groundcover establishment for success criteria.

- c. UMAM Category 5 (within Management Unit 6). Within approximately 7.4 acres of ORV rutted intermittent creek or “stringer”, 4,000 saplings will be planted in the following proportions to approximate a density of 500 trees/ac:

<i>Nyssa sylvatica</i> var. <i>biflora</i>	1400 saplings
<i>Taxodium distichum</i>	1400 saplings
<i>Magnolia virginiana</i>	800 saplings
<i>Acer rubrum</i>	400 saplings.

Prescribed fire will be excluded from this area for the first two burn cycles to allow the trees to attain adequate height to avoid adverse impacts from subsequent low intensity fires.

- d. UMAM Category 6 (within Management Units 5, 6, and 8-13). Approximately 50.7 acres of Gum/Cypress depressions and stringers have been disturbed by logging and fire suppression. Within 6 months of permit issuance, the standing shrub component <4” d.b.h., including but not limited to titi, gallberry, fetterbush, slash pine, loblolly pine and wax myrtle, will be reduced to represent no more than 10% cover in the stratum composed of individuals > 1” and < 4” d.b.h. by mechanical cutting near the edges of the systems and hand felling within the interior portions of the communities. This task will allow the reintroduction of fire to these systems to restore transitional zones. Additional seedlings may be planted in areas with few canopy trees.
- e. UMAM Category 7 (within Management Units 4, 5, 11 and 15). Approximately 24.5 acres of Gum/Cypress depressions and stringers have been impacted by severe wildfire. Within this area, 2,500 hardwood saplings will be underplanted in the remaining tree line (variable widths) to increase the total density of trees to approximately 200 trees/ac. The plantings will consist of the following:

<i>Nyssa sylvatica</i> var. <i>biflora</i>	1,123 saplings
<i>Taxodium distichum</i>	781 saplings
<i>Magnolia virginiana</i>	340 saplings
<i>Acer rubrum</i>	156 saplings
<i>Ilex cassine</i>	40 saplings
<i>Ilex myrtifolia</i>	30 saplings
<i>Cephalanthus occidentalis</i>	30 saplings
<i>Gordonia lasianthus</i>	15 saplings

Prescribed fire will be restricted from these planting areas for the first two burns to allow the planted trees to attain vigor and subsequently allow low-intensity fires to restore transitional zones. This will be accomplished by using either mulched or wet firelines.

- f. UMAM Category 8 (within Management Units 3, 5-8 and 15). Within approximately 11.2 acres of flatwoods rutted by ORV and logging, restoration will be completed through the installation of approximately 11,200 wiregrass plugs at a density of 1,000 plugs/acre.

- g. UMAM Category 9 (within Management Unit 1). Approximately 3.8 acres of Bay/Titi area disturbed by ORV and logging will be planted with 1,900 hardwood saplings in the following proportions:

<i>Nyssa sylvatica</i> var. <i>biflora</i>	350 saplings
<i>Taxodium distichum</i>	200 saplings
<i>Magnolia virginiana</i>	1350 saplings

- h. UMAM Category 10 (Management Units 3-15). The largest portion of the site (~646.1 acres) are hydric flatwoods and wet prairie that are fire suppressed and have an abundance of inappropriate pine and woody shrubs. Within this area, the following activities will be completed:

- i. Shrub/Tree Reduction. After the first prescribed fire in each unit, and within 18 months of permit issuance, the living hardwood component  $\geq 1"$  d.b.h., including but not limited to titi, gallberry, fetterbush, wax myrtle and pine, will be treated by cutting and/or herbicide application. Cutting will be utilized within 25' of embedded hardwood systems such as drainages and depressions. Herbicide treatments in all other areas will consist of spot ground applications of Garlon consistent with application guidelines for safety and efficacy.
- ii. In order to replace much of the slash and loblolly pine with longleaf pine over the long-term, regular prescribed fire will be used to hinder slash pine recruitment and favor longleaf pine establishment. Additionally, after the shrub reduction in i. above, and after the second prescribed fire within the flatwoods/prairie management units, container grown "deep" plugs of longleaf pine will be planted at a density of 150 trees/acre, for a total of approximately 97,095 plugs. Slash pine, and, as necessary, longleaf pine will be selectively girdled by hand to attain success criteria.
- iii. Within approximately 1.2 acre strip of flatwoods (UMAM 10) along the western property boundary and west of the existing disturbed fireline (Management Unit 14), mechanical mowing will be used as a surrogate for fire. Frequency will mimic the prescribed fire on the adjacent Management Unit 13.

#### Activities Applicable Over Entire Bank

##### *Exotic and nuisance vegetation control*

Invasive exotic and nuisance vegetation, including but not limited to Chinese tallow, cogon grass and Japanese climbing fern shall be controlled by appropriate measures including herbicide application and/or physical removal. Treatments will be documented in the annual reports to the Corps. Inspections for exotic coverage shall be conducted annually associated with annual monitoring events, as detailed in the monitoring plan in this Exhibit. Plants of concern shall be those Category I and II species listed by the Florida Exotic Pest Plant Council (FLEPPC), 2007.



### *Fire Management Plan*

Prescribed fire shall be implemented to reduce woody vegetation's ability to coppice, and to stimulate native herbaceous cover and seed production to attain the proposed success criteria, and as a long-term management tool to maintain the communities and function. The site has been divided into 15 Management Units of which Units 3-13 & 15 will receive prescribed fire. Each prescribed burn activity will be developed and supervised by a certified burn specialist. Following each prescribed burn activity conducted at the bank, the permittee shall submit documentation to the responsible Corps Project Manager, signed by the certified burn specialist, that a burn was conducted, and provide a summary of the unit(s) and acres treated with assessment of burn success, including photographs. For the purposes of this document, a successful burn shall mean the fire shall carry over a minimum of 70% of the flatwoods and the herbaceous ground cover is regenerating ("greening up") in the burned area. For the hardwoods the goal is to allow the fires to shape the transitional edges with the flatwoods without substantially impacting hardwood survival in the interior. It is the intent to burn all target management units within 18 months of permit issuance. If this target is not met, the permittee shall document the cause(s) to the Corps in writing and propose corrective activities. Prior to the release of credits associated with this activity, the permittee shall arrange a site visit that includes the Corps, the Banker and its representatives, and any Interagency Review Team (IRT) members that are available to review the activities. The Banker or its representatives shall submit a summary of the site visit for the file to facilitate future compliance reviews.

### *Hydrologic Enhancements*

Hydrologic enhancements include the installation of six low water crossings, filling of one ditch, and the installation of six ditch plugs in two additional ditches (Figures 9, 10, 11 and 12 of the MBI).

- a. Within 6 months of permit issuance, six low water crossings will be established in the existing dirt roads. These areas will be excavated to a depth of approximately 6" below the adjacent elevations, lined with filter fabric, and covered with rock to align with adjacent wetland elevations .
- b. Ditch Fill Within Management Unit 15. Within 12 months of permit issuance the ditch will be filled to grade to the extent possible with the onsite spoil cast off from the ditch during the original construction. Because of spoil compaction or vegetation, the entire ditch may not be filled; however, all drainage by the ditch shall be eliminated with strategically placed ditch plugs.
- c. Ditch Plugs Within Management Units 13 and 10. A total of six (6) ditch plugs will be installed to the grade of the adjacent wetlands in a manner that eliminates drainage.
- d. The Banker shall submit a detailed report of the above construction within 60 days of completion work. Prior to the release of credits associated with this activity, the Banker shall arrange a post-construction site visit that includes the Corps and any IRT members that are available to review the activities. The Banker shall submit a summary of the site visit for the file to facilitate future compliance reviews.

## **SUCCESS CRITERIA**

The goal of the mitigation bank is to convert, enhance or preserve the existing communities into the target communities. Descriptions of target communities are as follows:

### **Bay and Titi Swamps (FLUCCS 611/614) / Baygall**

Densely forested, peat-filled depressions at the base of upland sandy slopes. The canopy is dominated by densely packed sweetbay, titi, swamp bay and slash pine. Other typical plants include sweetgum, red maple, blackgum, fetterbush, myrtle-leaved holly, large gallberry, wax myrtle, greenbrier, and ferns. Baygall rarely dry out enough to burn and the normal fire return interval is 50-100 years, or more. Baygalls often require fire protection during droughts, and are vulnerable to logging, peat mining, and conversion to agricultural lands.

### **Gum and Cypress Swamps (FLUCCS 613/614) / Depressional Wetlands; Forested Wetlands**

Characterized by low-lying, closed canopy of hardwoods with either a dense shrubby understory with little ground cover, or an open understory and ground cover of ferns, herbs, and grasses. Typical plants include cypress, blackgum and slash pine. Other typical plants include red maple, sweetgum, loblolly pine, wax myrtle, dahoon holly, swamp bay, sweetbay, titi, St. John's wort, redroot, sphagnum moss, buttonbush, maidencane and ferns. Fire is essential to the maintenance of these systems.

### **Wet Flatwoods (FLUCCS 625/626)**

Flatwoods are characterized by relatively open-canopy forests of scattered pine trees and often grade into savannas with fewer to no trees found on relatively flat and poorly drained terrain. Understory is typically sparse with a dense ground cover. Typical plants include longleaf pine, slash pine, sweetbay, titi, wax myrtle, gallberry, spikerush, beakrush, wiregrass, pitcherplants, sundews, redroot, gay feather, and St. John's wort. Fire is essential to the maintenance of these communities, and in its absence transition to a closed canopy, hardwood dominated forest would occur.

### **Interim Success Criteria**

Progressive environmental enhancement or trending toward success provides environmental lift for which credit may be released incrementally prior to achieving all the final success criteria detailed below. Credits will be released whenever representative monitoring data provided in Annual Reports, as verified by a Corps site inspection, indicate that:

- a. At least one year has transpired since the Specific Restoration Activities described above were completed to the satisfaction of the Corps and stated objectives have been met, including specified reductions in tree/shrub coverages, and/or since the previous interim success attainment;
- b. There is less than 2% exotic and/or nuisance vegetation cover per acre;
- c. Planted vegetation is surviving and growing at a rate necessary to support final success criteria;
- d. Preservation areas are maintaining or improving in function;
- e. Hydric/Wet Flatwoods have attained components of final success criteria or are measurably increasing in herbaceous groundcover and decreasing in woody vegetation cover since the previous interim success attainment;
- f. Hydric /Wet Flatwoods: For the 15% credit release associated with the Shrub/Tree Reduction activities projected for completion within 1-2 years of the date of issuance, the combined canopy (>4" d.b.h.) of slash pine and loblolly pine shall not exceed 45 live trees/acre on average, and in no monitoring quadrat may the combined density of those tree species be greater than 80 trees/acre. The standing shrub component <4" d.b.h., including but not limited to titi, gallberry, fetterbush, slash pine, loblolly pine and wax myrtle, will be reduced to represent no more than 10% cover in the stratum composed of individuals > 1" and < 4" d.b.h.
- g. For the first period attainment of interim success, the wet flatwoods quadrats shall have at least 30% of *number* of species documented in the reference wetland sampling, and at least half of the site's species shall also be found at the reference site.
- h. For the second period attainment of interim success, the wet flatwoods quadrats shall have at least 40% of *number* of species documented in the reference wetland sampling, and at least half of the site's species shall also be found at the reference site.
- i. For the third period attainment of interim success, the wet flatwoods quadrats shall have at least 50% of *number* of species documented in the reference wetland sampling, and at least half of the site's species shall also be found at the reference site.
- j. Prescribed burns have been conducted in accordance with the season and schedule described in Exhibit 5 of the MBI, and in accordance with Section 8.1 of the MBI.
- k. Prescribed burns have not adversely impacted those areas that generate forested credits, or, any adversely impacted areas have been restored or recovered from unintended effects of burning.
- l. The project is in compliance with the MBI and associated permit.

### **Final Success Criteria**

The goal of the mitigation is to convert, enhance or preserve the existing communities shown in Figure 8 into the target communities shown in Figure 9 of the MBI and described above. The bank shall be deemed successful when all of the following criteria, in addition to the community descriptions, have been met for a period of at least one full year without intervention in the form of eradication of undesirable vegetation, pine harvesting or replanting of desirable vegetation. For the purposes of success determination, “woody shrubs” includes those species, typically reduced by fire to coppice, such as titi (*Cyrilla racemifolia*, *Cliftonia monophylla*), gallberry (*Ilex glabra*), fetterbush (*Leucothoe racemosa*, *Lyonia* spp.), yaupon (*Ilex vomitoria*) and wax myrtle (*Myrica cerifera*) that tend to become dominant (weedy) and reduce the diversity of herbaceous species and desirable trees and shrubs (such as those listed for planting) in a fire suppressed system. Slash pine is *Pinus elliotii*, loblolly pine is *Pinus taeda*, and longleaf pine is *Pinus palustris*.

**a. Entire Site (UMAM Categories 1-11).** Invasive exotic and/or nuisance species cover is less than 1% cover in any one acre and not more than a cumulative 2 acres throughout the site.

**b. Hydric Pine Flatwoods/Prairie (UMAM Categories 8 and 10).**

- 1) The average cover of herbaceous groundcover (including graminoids, forbs, and ferns) shall be 75% or greater, with no one monitoring quadrat having less than 50% cover, and the collective cover of pioneer *Andropogon* spp. (except *A. liebmannii*) shall not exceed 10% in any quadrat.
- 2) Each sampling quadrat within UMAM Category 10 shall contain at least 80% of the total *number* of species identified in the reference wetland sampling (described below), and at least 75% of the quadrat's species shall be also be found in the reference wetland sampling. Species not found at the reference site shall be species appropriate to the community as demonstrated by the Banker with a literature citation and/or a third party professional botanist/ecologist opinion and agreed to by the Corps.

**Reference Wetland:** A reference wetland site will be identified on lands in close proximity to the Bank, and on Northwest Florida Water Management District (District) property prior to release of credits beyond the initial “preservation” credit release. This site will be established in association with the District to represent optimal vegetation characteristics of the target community for the Corps’ approval. The Corps must approve the reference wetland site prior to its use. The intent of this reference wetland is to develop a species list to be used to gauge the species diversity success described by this condition. Random vegetation sampling transects within the reference wetland will be completed in the fall and then in the following spring. The reference wetland boundary and transects will be GPS-located and identified on an aerial photograph. This reference wetland will be sampled again in 2014 to generate an additional species list to account for any impacts resulting from weather patterns of the previous approximately 5 years. Although the generation of the species list is important to the species richness success criteria, this site will also serve as example of a highly functioning wetland hydric flatwoods/prairie community from

which comparisons other than just species presence or absence can be made, and as such, may be used in a qualitative manner at the discretion of the Corps to otherwise demonstrate final compliance in this community category.

- 3) Gallberry, yaupon, wax myrtle, fetterbush, titi and other woody shrubs shall be no taller than the coppice sprouts that could have arisen from root crowns following the most recent successful fire. Areas dominated by woody shrubs (i.e. areas with shrubs averaging 1.5 meters in height and a collective canopy coverage of over 50%) shall be limited to random spots of 1 ac. or less where fire did not burn and shall represent an insignificant feature in this community type.
- 4) The combined canopy (>4" d.b.h.) of slash pine and loblolly pine shall not exceed 15 live trees/acre on average, and in no monitoring quadrat may the combined density of those tree species be greater than 20 trees/acre.
- 5) Canopy and subcanopy (>1" d.b.h.) longleaf pine shall average between 5 and 100 trees/acre, with no monitoring plot having more than 110 trees/acres.
- 6) Appropriate vegetation is reproducing naturally, either by normal, healthy vegetative spread or through seedling establishment, growth and survival.
- 7) Prescribed fire routinely carries over a minimum of 70% of the community type.

**c. Cypress/Gum Wetlands and Bay/Titi Enhancement Areas (UMAM Categories 3-7, and 9).**

- 1) Planted and volunteer tree cover is increasing annually, with a minimum of 30% canopy cover (i.e. >4" d.b.h.), excluding titi, and with a species mix consistent with the community descriptions and planting mix described above.
- 2) Total cover of combined tree, shrub and ground strata shall be greater than 70%.
- 3) Non-nuisance, native ground and shrub species are healthy, reproducing naturally and exhibiting the cover and diversity typical of habitat, such as found in Florida Natural Areas Inventory Natural Community Descriptions (FNAI and FDNR. 1990. Guide to the Natural Communities of Florida) or other such literature.
- 4) Titi, gallberry and fetterbush cover shall not exceed 25%.
- 5) Communities have developed so that prescribed fire moves from the flatwoods systems to these target communities without being catastrophic to the existing and recruited hardwoods.

**d. Baygall/Mixed Hardwood Preservation (UMAM Categories 1, 2 and 11).**

- 1) Inspections and monitoring shall indicate that conditions are not exhibiting signs of degradation and the conditions necessary to maintain functions in the long term are exhibited.
- 2) For any areas of restoration from rutting or ORV activity within this community, the desirable tree cover is increasing annually, with a minimum of 50% cover.
- 3) Within these restoration zones the total cover shall be greater than 70% through a combination of canopy, shrubs and ground cover.

**e. Hydrologic Improvements.** All low water crossings and ditch fill areas have been installed to the satisfaction of the Corps, are stabilized and showing no signs of erosion, and have operated as designed, without the need of repairs for a period of at least three years.

**f. Fire and interim success.** Success criteria are being achieved at least one full year after the second successful fire and the attainment of the third level of interim success criteria described above.

## MONITORING

The monitoring plan for the Bank shall include a combination of quantitative, qualitative monitoring and fixed point photography. Monitoring will include:

1. Qualitative Random Pedestrian Transects
2. Quantitative Random Quadrat, with random sub-quadrats
3. Permanent Quantitative Transects of Herbaceous and Shrub Densities.
4. Fixed Point/Fixed Perspective Photographic Stations.

### **Qualitative Pedestrian Transect**

The goal of the Qualitative Pedestrian Transect is to provide the maximum amount of qualitative information over the largest variable area to document the success of the restoration and management activities. A Qualitative Assessment will have the following components:

1. Ten (10) ~ 1,000 linear foot transects completed annually during October (or generally at end of growing season) as shown in the approximate locations depicted in Figure M1, including transections Nos. 1-10. Additional monitoring may also be conducted, but is not required, in April-May to identify spring-flowering species.
2. Once selected the starting points of each will be GPS located and permanently marked. A general compass heading will be established for each transect that will be followed in subsequent monitoring events.
3. Transects will provide comments on listed species, nuisance species, health and reproductive status of vegetation, cover estimates, dominant species, recruitment of new species, hydrologic condition, fuel loads and general condition with respect to target community type.
4. Locations of nuisance species and listed species observed will be GPS located and mapped.
5. For estimates of burn coverage, observations along the entire transect will be used.
6. For estimates concerning herbaceous cover, three (3) points will be systematically selected to estimate herbaceous cover based upon the cover classifications in the attached monitoring form. The area inspected will be approximately 2 m<sup>2</sup>.
7. For estimates concerning shrub cover, the same three (3) points selected above will be used to estimate cover based upon the classifications in the attached monitoring form. The area inspected will be approximately 3m<sup>2</sup>. Shrubs are to include all woody material greater than 1' in height.
8. Each transect will be accompanied by a data sheet (see below).
9. The purpose of the qualitative information is to provide a visual monitoring of the events over a prolonged period. Sites will be evaluated as to how representative they are of the community being measured, and the degree to which the site is attaining community success. Potential problems and appropriate solutions will be identified.



## Qualitative Monitoring Form

Management Unit: \_\_\_\_\_

Community Type: \_\_\_\_\_

Date of Transect: \_\_\_\_\_

Person Completing Monitoring: \_\_\_\_\_

General Condition of Community Type:

Approximate Coverage of Most Recent Burn:

\_\_\_\_\_ 0-35%    \_\_\_\_\_ 36-70%    \_\_\_\_\_ 71-90%    \_\_\_\_\_ 90%+

Species Present:

Dominant Species:

Exotics Present:

Approximate Herbaceous Ground Cover at Three (3) Points along Transect:

Point 1

\_\_\_\_\_ <1%    \_\_\_\_\_ 1-10%    \_\_\_\_\_ 11-30%    \_\_\_\_\_ 31-49%    \_\_\_\_\_ 50-69%    \_\_\_\_\_ 70-90%    > \_\_\_\_\_ 90%

Point 2

\_\_\_\_\_ <1%    \_\_\_\_\_ 1-10%    \_\_\_\_\_ 11-30%    \_\_\_\_\_ 31-49%    \_\_\_\_\_ 50-69%    \_\_\_\_\_ 70-90%    > \_\_\_\_\_ 90%

Point 3

\_\_\_\_\_ <1%    \_\_\_\_\_ 1-10%    \_\_\_\_\_ 11-30%    \_\_\_\_\_ 31-49%    \_\_\_\_\_ 50-69%    \_\_\_\_\_ 70-90%    > \_\_\_\_\_ 90%

Approximate Shrub Cover at Three (3) Points along Transect:

Point 1

\_\_\_\_\_ <1%    \_\_\_\_\_ 1-10%    \_\_\_\_\_ 11-30%    \_\_\_\_\_ 31-49%    \_\_\_\_\_ 50-69%    \_\_\_\_\_ 70-90%    > \_\_\_\_\_ 90%

Point 2

\_\_\_\_\_ <1%    \_\_\_\_\_ 1-10%    \_\_\_\_\_ 11-30%    \_\_\_\_\_ 31-49%    \_\_\_\_\_ 50-69%    \_\_\_\_\_ 70-90%    > \_\_\_\_\_ 90%

Point 3

\_\_\_\_\_ <1%    \_\_\_\_\_ 1-10%    \_\_\_\_\_ 11-30%    \_\_\_\_\_ 31-49%    \_\_\_\_\_ 50-69%    \_\_\_\_\_ 70-90%    > \_\_\_\_\_ 90%

Evidence of Flowering By Heliophytic Species: \_\_\_\_\_ YES    \_\_\_\_\_ NO

Ecological Functions Being Maintained: \_\_\_\_\_ YES    \_\_\_\_\_ NO

Comments:

### **Permanent Quantitative Quadrants**

The Permanent Quantitative Quadrats (PQQ) will consist of the following:

1. Eight (8) permanently marked and GPS located 200 x 100 foot quadrats (Nos. 11 -18) approximately located as depicted in Figure M1.
2. Quadrats will be sampled in April- May.
3. Quadrats will be located to the greatest degree possible to cover a uniform representation of the community being sampled (ie. transitional zones between communities will be avoided).
4. Counting the number of canopy pines, by species, with a d.b.h. greater than 4".
5. Counting the number of subcanopy pines, by species, with a d.b.h. between 1" and 4".
6. List of exotic or nuisance species in overall quadrat and estimation of % cover.
7. List of all species within overall quadrat.
8. Within each quadrat, ten (10) randomly selected 1 meter squared sub-quadrats to determine herbaceous cover and shrub cover. These quadrats will be re-randomized for each sampling event. Percent cover will be determined for the following categories:
  - a. Graminoid
  - b. Herbaceous
  - c. Woody/Shrub
  - d. Wiregrass
  - e. Individual Species of Interest

The interval ranges for cover shall be as follows:

Class	Range of Cover (%)	Mean
7	91-100	95.5
6	70-90	80.0
5	50-69	59.5
4	31-49	40.0
3	11-30	20.5
2	1-10	5.5
1	<1%	0.5

9. List of exotic or nuisance species in each sub-quadrat.
10. Documentation of listed species within overall quadrat.
11. Sampling will be completed between October and November of any given year, to the greatest extent feasible.
12. The boundary of each 60x30 m quadrat will also be used to establish a line-intercept sampling program. The frequency of review will be 1 meter intervals and will be used to demonstrate density to be compared to the estimates of cover generated in the individual sub-quadrats. Recording shall be by species and may be completed in both April-May and October-Novemeber

### **Permanent Photo Points**

Permanent photographic points will be established as follows:

1. Two opposite corners of each permanent 200 x 100 foot quadrat, collected annually.
2. Aerially (to the greatest degree possible) of each 10 m subquadrat, collected annually.
3. The beginning and end of each transect, collected annually.
4. Ten (10) additional locations showing landscape conditions using permanent orientation and perspective that are outside of the above. These stations will be conveniently located along trails and access and will be sampled quarterly.

Exhibit 5  
Fire Management Plan

September 24, 2008



**PRESCRIBED BURNING PROCESS FOR THE PENSACOLA BAY  
MITIGATION BANK**

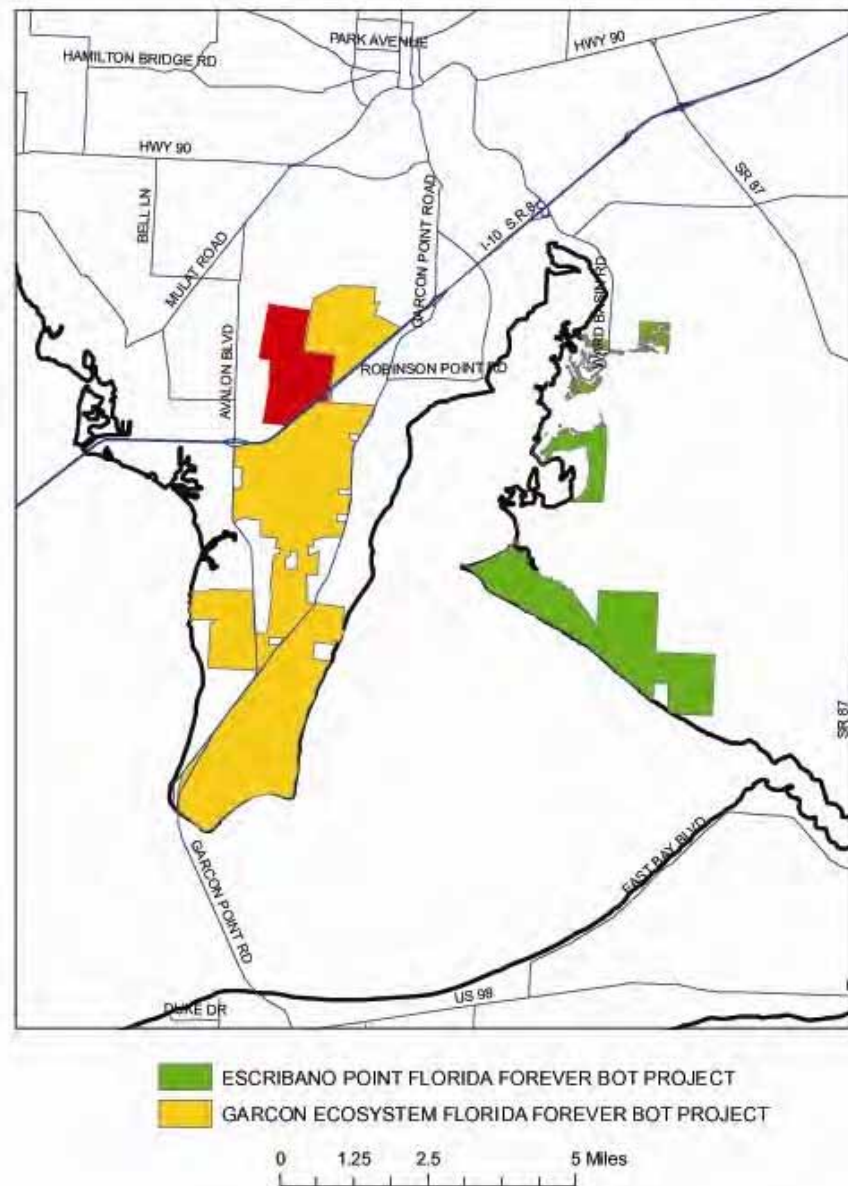
September 24, 2008

Prepared by John P. McGuire

**Site Description:**

The proposed 1200 acre mitigation bank is in Santa Rosa County, FL, approximately 5.5 miles northeast of Pensacola and 5.5 miles southwest of Milton. The property is largely north of I-10, but does include land south of the interstate. Of the whole property, approximately 786 acres will be enrolled in a prescribed burning program.

The property lies virtually contiguous with the Garcon Ecosystem Florida Forever BOT Project. The Garcon Ecosystem project is managed in large part with frequent fire by Northwest Florida Water Management District. **(Figure 1)**



**Figure 1. Landscape position of burn unit (in red).**

**Legal Description:**

E  $\frac{3}{4}$  of S  $\frac{1}{2}$  of Section 42 Township 1N Range 28 W

Section 37 Township 1N Range 28 W

Section 3 Township 1S Range 28 W

**Date of Last Burn:**

In 1999, an approximately 450 acre wildfire ignited off of I-10 blew across the property from the south. Any burning of this location prior to 1999 is unknown. However, local people have indicated that this area has burned “frequently”. Potential fire occurrence is high for much of the area (see **Appendix A**).



**Burning Objectives:**

Objectives will be iterative and follow adaptive management principles. Short term burn objectives will be fuel reduction to minimize wildfire risk and uncontrolled smoke impacts. Long-term goals will be minimizing smoke impacts while restoring historic “open pine [flat] woods” structure and function. Minimizing damage of overstory pine resources is not a driving factor in managing this site. However, minimizing significant mortality to large overstory pine trees is only desired in that these dead trees will contribute to future smoke management issues. Fire-related damage to hardwoods in embedded wetlands should be avoided.

A minimum of 3 prescribed fires will be conducted in the first 8 years of acquiring the property. A 50% reduction in vertical shrub structure and a 30% decline in shrub abundance is desired following the first burn, e.g., average 5’ stature to 2.5’ stature. Likewise a 60% reduction in doghair reproduction of slash pine is desired after the first burn season.

**Current Conditions:**

The current condition of this area is an artifact of 1) clearcutting with little advance regeneration followed by 2) promiscuous burning that did not allow regeneration followed by 3) planting of high density slash pine followed by 4) fire exclusion followed by 5) a significant wildfire that killed most of the planted slash pine. Due to the heterogeneity of the last wildfire, current conditions (including fuel type and loading) vary with each burn unit.

**Vegetation and Soils:**

Most of the remnant pine on the site is slash pine, however, an occasional longleaf pine is found scattered throughout. Likewise the pine regeneration coming up is predominantly slash pine. The dominant native warm season grass is wiregrass whose presence implies that site has never been under agriculture. The site has a number of listed plant species including the white-topped pitcher plant. Midstory shrubs include black and red titi, gall berry, holly and yaupon.

Soils are mostly hydric and mesic comprised of Mulat, Garcon, Pactolus and Albany series. ORV activities have impacted the soil in places and will likely degrade fire movement in localized areas.

**Desire Future Condition**

The long term management goal is restore historic forest structure and function to this location. The historic “open pine woods” of this area likely had an overstory dominated with longleaf and slash pine that ranged anywhere from 5 ft<sup>2</sup>/ac to 150 ft<sup>2</sup>/ac. Overstory structure could have just as easily been dispersed with aggregate islands of meadows or vice versa. Likewise, a diverse herbaceous community dominated by C<sub>4</sub> grasses and acidophilic plants (like pitcher plants) evolved on this pyrogenic landscape (**Figure 2**). Numerous embedded wetlands comprised of sweetbay, cypress, gum and pond pine were found across the landscape yet likely only burned under the driest of conditions. Burning alone may not achieve this desired structure and thus herbicides and/or mechanical shrub control will be used. Fuel loads will be reevaluated and burn plan amended as needed if herbicides and/or mechanical midstory control are used.



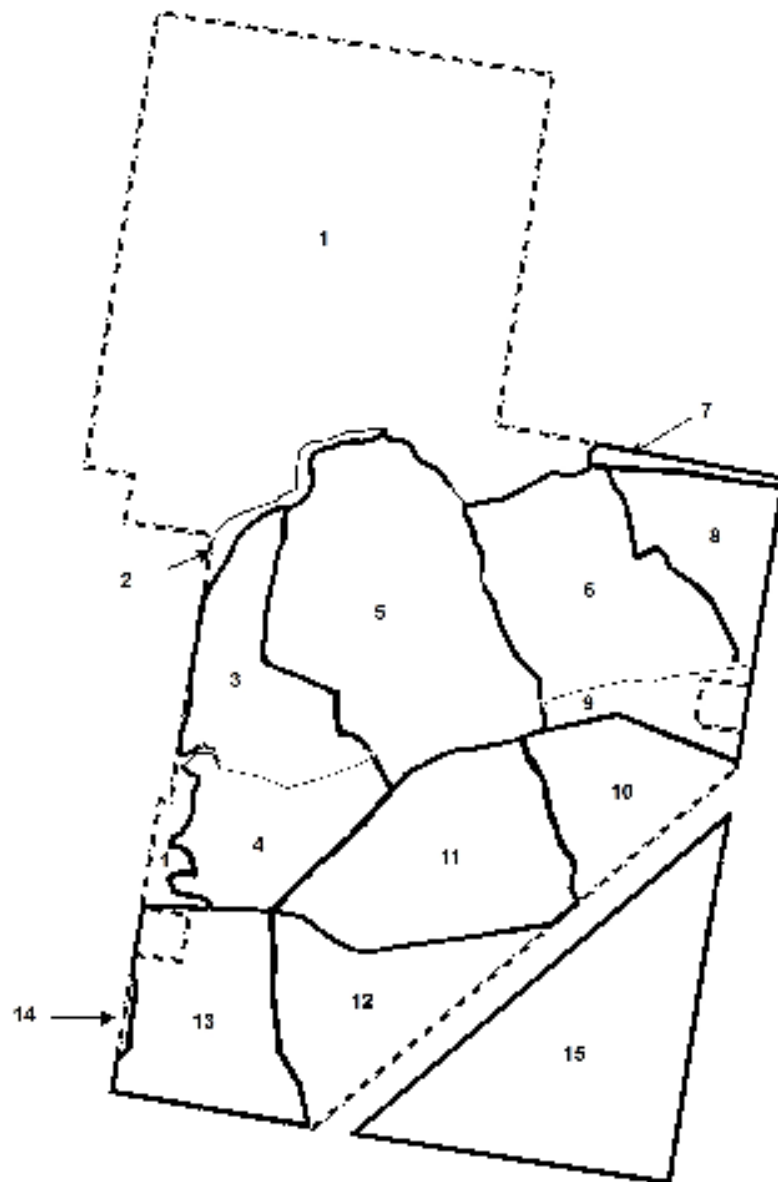
**Figure 2** Desired structure to be achieved predominantly (though not exclusively) through prescribed burning. The overstory pines (longleaf and slash) are present but at reduced densities compared to timber production.

**Burn Units:**

Using existing road systems and fire breaks, the 786 acre fire management area will be broken into 6 burn units (or compartments). The decision to break into smaller units is considered to minimize both potential fire and smoke management issues. Units 1-5 will be north of I-10 and Unit 6 will be south of I-10 (**Figure 3**). The approximate size of each unit is as follows:

Unit 3 = 53 acres	Unit 8 = 38 acres	Unit 13 = 60 acres
Unit 4 = 45 acres	Unit 9 = 18 acres	Unit 14 = 1 acre
Unit 5 = 132 acres	Unit 10 = 45 acres	Unit 15 = 128 acres
Unit 6 = 83 acres	Unit 11 = 86 acres	
Unit 7 = 5 acres	Unit 12 = 59 acres	

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**Figure 3** Representation of burn units for Pensacola Mitigation Bank.

**Fire Lines:**

All external and interior fire lanes will take advantage of any existing roads. External breaks will (at a minimum) be 15 feet wide (as those pushed by an 850 dozer). To meet these criteria, some dozer work will need to be performed on the property. During the years where units will not be burned, firebreaks will be allowed to grow up in native plant species. Immediately prior to any burn, all external and internal breaks will be maintained as bare mineral soil with either a disc/harrow or pull-behind turf blower. All firebreaks will follow criteria outlined by best management practices. In unit 2, a portion of a stream along the north boundary will connect with bare mineral soil breaks. Using this “soft line” fires will be backed off of a year-round stream located on the northern portion. Units 1 and 2 are bisected by several riparian areas. The burn boss can use their discretion to burn off these riparian areas but only after the most leeward side of the unit is secured with black.

All standing snags along burn unit boundaries will be identified in advance of any burning. Snags will be felled into the burn unit and cut into log length or smaller.

**Description of Fuels and Fuel Loading**

The primary drivers of fire spread will be carpet forming bunchgrasses such as wiregrass with occasional runs along waxy leaved mid-story shrubs. Pine straw fuels are localized around remnant trees but are heavier (and in some cases suspended) in the few burn units that have a more dense pine canopy. Midstory fuels are comprised of waxy green fuels such as gallberry, yaupon, holly, black and white titi. In areas with little pine overstory, the midstory shrubs average 5 -15 feet high. In areas with a more dense pine canopy, the shrub layer is lower in stature. **(see Appendix C):** Little coarse woody debris (100 hour fuels) are on site and are not believed to become major influences of fire behavior or residual smoke. If, herbicides are applied to control waxy-leaved midstory shrubs, these dead stalks (10 hour fuels) are expected to contribute to increased fire behavior.

**Prescribed Fire Logistics:**

Much of the prescribed burning logistics will be left up to the discretion of the burn boss. However, the following include parameters include guidelines that will help avoid smoke impacts and fire control issues. Note, that an umbrella smoke management plan can be written well in advance of each burn. However, a written prescribed burn plan must be prepared by the burn boss immediately prior to the burning of each unit such as the one provided in **Appendix C**. Westervelt Ecological Services must sign off on each burn and reserves the right to decline any particular burn plan.

**Weather Parameters:**

Relative Humidity (%)	25-55
Ambient Air Temp (dry bulb)	<70° F
1 Hour Dead Fine Fuel Moisture(%)	5-15
1 Hour Green Fuel Moisture (%)	30%

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10-100 Hour Dead Heavy Fuel Moisture(%)      **20+**  
Surface wind speed (mph)      **5-10**  
Max KBDI:      **350**  
Transport wind speed (mph)      **6-20**  
Surface Wind direction **Away from I 10** (will accept slight diurnal shifts <45°)  
Transport Wind direction **Away from I 10**  
Mixing Height (ft)      **3,000-6,500**  
Atmosphere Stability **Unstable**  
Dispersion index:      **Good 41-60 to Very Good 60-100**

0500 weather predictions reported by NOAA on the day of the burn can be used in the weather report. However, SPOT weather reports should be taken every hour during the burn.

### **BEHAVE Analysis:**

Averaged (above) weather parameters on a strong south wind could result in the following fire behavior:

#### **Fuel Model 7**

ROS = 70-80 chains/hour  
Flame length = 8.5 to 9 feet  
PIG = 20%

#### **Fuel Model 2**

ROS = 80-90 chains/hour  
Flame length = 7.5 feet  
PIG = 30%

#### **Fuel Model 3**

ROS = 220-230 chains/hour  
Flame length = 17 feet  
PIG = 30%

### **Fire Seasonality:**

Favorable winds and dispersion index will be the driving factor in what season this area will be burned in. However, in order to reliably ensure that these areas are burned with strong north or south winds, these areas will be targeted for dormant season fires. Burn season will be dragged into growing season but only to meet target acres burned. Burning in the late growing season/summer will be avoided due to sea breeze/land breeze impacts on smoke and fire behavior.

### **Firing Techniques:**

The following caveats should be considered when choosing a firing technique; 1) flame lengths should be kept below 15 feet in open prairie and 5 feet in timber 2) all ignition should be completed 2 hours prior to anticipated sunset.

### **Order of Firing Operations:**

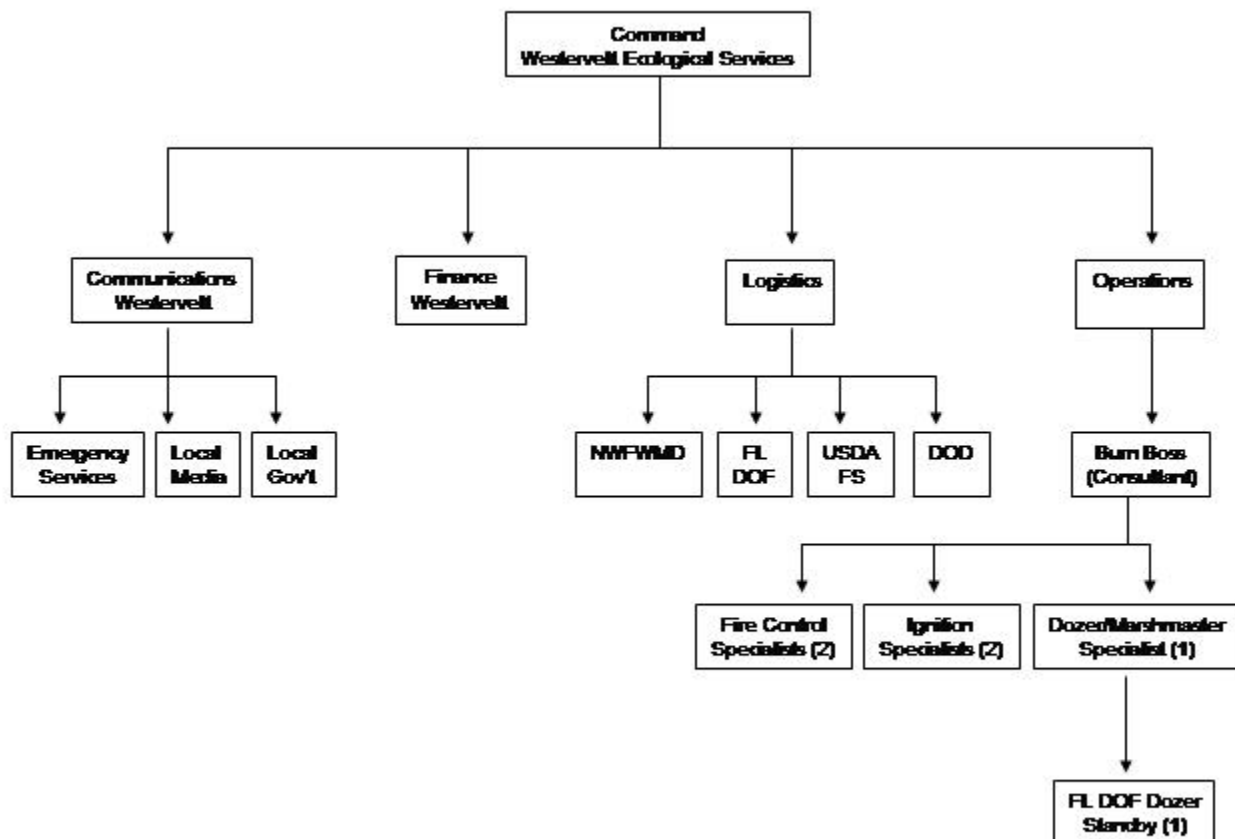
As a general guide, a minimum of 1/2 chain of black will be secured (approximately 1/2 hour of ignition) on leeward side of blocks prior to attempting any internal ignition. On the areas north of I-10 all leeward units will be burned prior to two units adjacent to I-10. As such, the order of units to be burned (north of I-10) is Unit 1, Unit 2, Unit 4, Unit 3 and Unit 5. Other than wind direction (requires north wind) there is no specification as to when Unit 6 will be burned. The possibility will be explored by command that Unit 6 can be folded into the burn plan of NFWMD Garcon Point burning.

### **Personnel Needs:**

Minimum of 1 onsite burn boss, 2 ignition specialists and 3 holders (with 1 trained as heavy equipment operator) is strongly advised for each burn. Burn boss should be trained as minimum FFT2 and Florida Prescribed Burn Manager. All personnel should be certified prescribed fire specialists with a preference for a minimum Florida Prescribed Fire Manager (**Figure 5**).

### **Consultant Burning:**

Terms of services rendered by the prescribed fire consultant and Westervelt Ecological Services can be found in **Appendix D**



**Figure 5** Command System for burning at Pensacola Mitigation Bank

**Equipment Needs:**

Minimum one 450 dozer (or larger) with plow or marsh master with appropriate fire-suppression attachments must be on site during burn.

Fast response fire fighting equipment must be on site such as type 6 engine or smaller equipment such as ATVs with water tank or John Deere gator (or the like) with water pump. If smaller equipment is used, then one water tender or pump and available water supply must be on standby. Hand tools should be available for all personnel.

Radio communication is advisable for everyone on site. Preference is for communications with options to dedicate channels to FL DOF and local weather. Cellular phones or Southern LINC radios are an accepted substitute.

**Safety:**

**PPE:** Minimum PPE will include hardhats, leather gloves, lace up leather boots, long sleeve cotton shirt and pants, and safety glasses. Personnel working around combustion engines without mufflers will be required to wear hearing protection. Any required PPE above these minimum requirements will be at the discretion of the burn boss, i.e., nomex suits, fire shelters, masks, etc.

**Escape Route and Safety Zones:** All fire breaks can be used as both escape routes and safety zones. Likewise, the intersection of any internal roads and previously burned areas can serve as safety zones. Any black-topped roads will not be used as safety zones and extreme care will be exercised when using these areas as escape routes.

**Safety Briefing:** The burn boss will be required to conduct both a pre-fire safety briefing for all on-site personnel to include discussion on a) escape route and safety zone locations b) anticipated fire weather and resultant fire behavior c) local hazards (snags, venomous snakes, stump holes, etc.) d) contingency plans e) location of nearest emergency facility, etc. Changes in on-site weather as the burn is taking place must be reported to the burn crew.

All gates will be shut and “dummy locked” to discourage private citizens from gaining entry onto the property during any burns. FL DOF will be notified that locks will be dummy locked.

**Smoke Management:**

**Smoke Sensitive Areas (Figure 6):**

Bisects: I-10 cuts through the property and presents the most smoke sensitive area.

South of I-10: Pensacola Airport (7.5 miles SW); Pensacola Airport Flight Path (3 miles S); Avelon Blvd. (2 miles SW), Garcon Point Road (0.75 miles SE), few houses (1-1.5 miles W and E).

North of I-10: Houses: Approximately 12 houses and golf course (within 10 chains W/NW) and 16 houses and 2 businesses within ½ miles (W). More than 300 houses within 3 miles (N/NW/NE).



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Santa Rosa Medical Center (5.5 miles NE). Major Roads: I-10 (adjacent), Avalon Blvd. (0.75 miles W), Hwy 90 (3.5 miles Northerly), Intersection of Hwy 90 and Avalon (3.25 miles N) Other: Golf Course (within 10 chains W), 2 businesses (1/2 mile W).

**Downwind Impact Distance:**

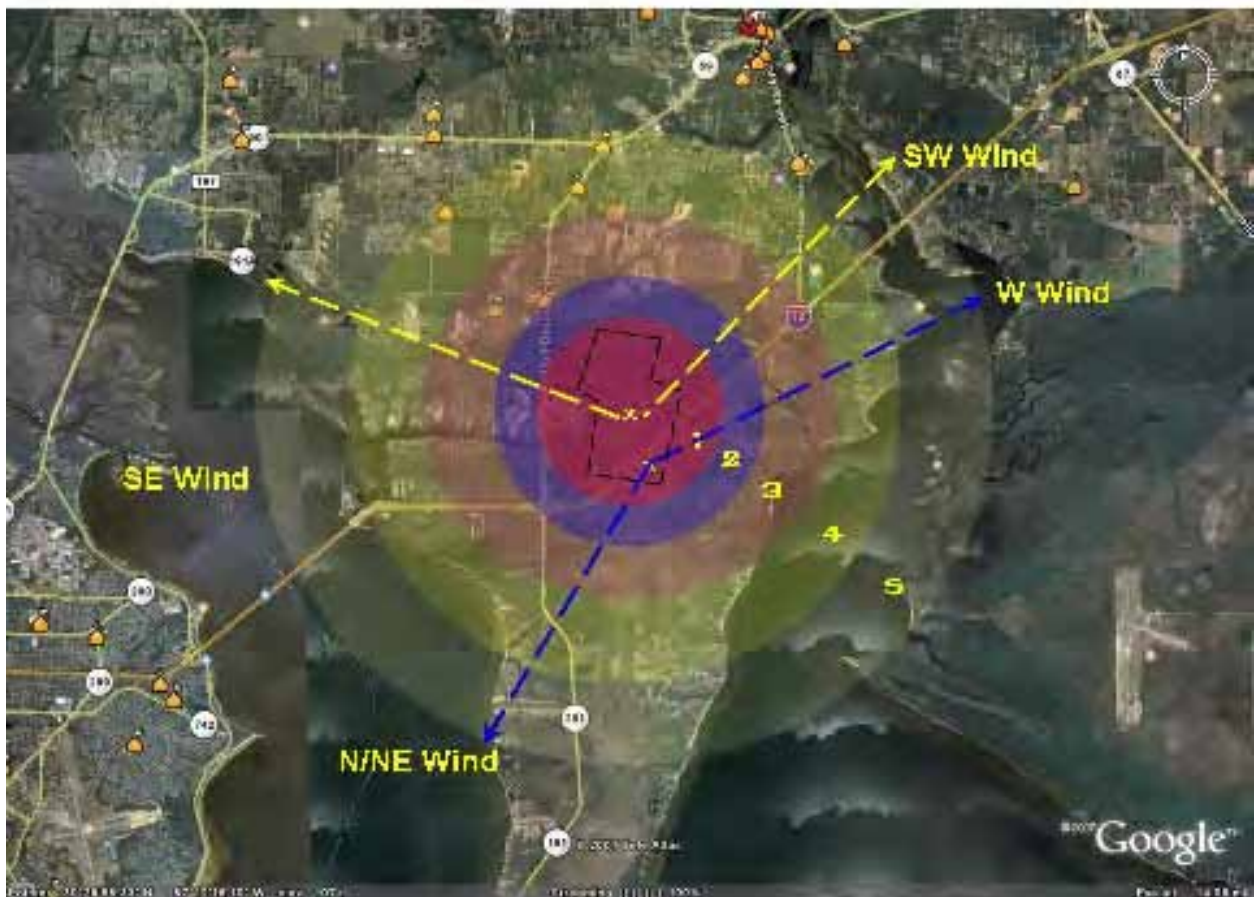
D.I. is 41 - 50 = 4 miles (burn block < 300 acres) #  
D.I. is 51 - 60 = 3 miles (burn block < 300 acres) \*  
D.I. is 61 - 70 = 2 miles (burn block < 300 acres) \*

\* are preferred Dispersion Indexes

# is a suitable Dispersion Index

**LVORI Value:**

If  $RH = < 55$  and D.I. is  $> 40$  then LVORI = 1 (preferred)



**Figure 6** Overview of burn unit potential areas impacted by smoke at 1-5 miles. In addition, ideal wind directions for minimizing smoke impact are represented with a yellow dashed line (those areas north of I-10) and a blue dashed line (those areas south of I-10).

**Smoke Mitigation:** Liability from smoke impacts are the largest concern on this property. Mitigation of smoke impacts will be broken into long-term mitigation (weeks in advance) and short-term mitigation (day of burn).

**Long –term:** All burn units north of I-10 should be burned prior to the passage of cold front with winds that have a strong southerly component to them. The unit south of I-10 can be burned after the passage of the front with steady north winds (**Figures 7 and 8**).

Residual smoke (fog) can potentially be a problem with the proximity of nearby bays and inlets. In response, the property will be divided into 6 smaller burn units of approx. 100 to 140 acre units. Firing of the units will begin no earlier than 0900 and will be completed prior to 2 hours before sunset (approx. 1430). The overall goal is to have complete burnout 1 hour prior to sunset (or sooner).

Any potential involvement of 100 hr fuels will be minimized by burning only when those fuels are at moisture of extinction levels. Post fire mop up will consist of 100% cold trailing within ½ chain of burn unit boundary. All large smoldering debris found within the burn unit interior will be broken into smaller pieces and doused with water.

A communication specialist (Fire Information Officer) will be employed to engage in public relations with local community. This effort will include informing local governments, emergency responders (i.e., volunteer fire department, city fire departments, Sheriff's Department, etc) and also mail out fliers to impacted down-wind residents in advance of burning. Every effort will be made to identify any individual(s) within a ½ mile radius of the burn with respiratory problems. This public relations campaign should be coordinated with local FL DOF for maximum effectiveness.

Department of Transportation will be contacted in to determine feasibility of signs along I-10 warning of potential smoke.

All burning will be conducted during Monday through Friday 8 – 5 to minimize impact on homeowners (who will theoretically be at work). No burning will be conducted during Federal or State holidays when traffic volume is expected to be high.

**Short-term:** The communication specialist will coordinate with either the local Sheriff's Department, Highway Patrol to patrol I-10 and adjacent high volume traffic areas during and after each prescribed burn.

### **Contingency Plans:**

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Escaped fire should be immediately suppressed with fast-response suppression equipment. If escape becomes too large for fast-response equipment, then either a dozer with plow or marsh master with attached suppression equipment will be used.

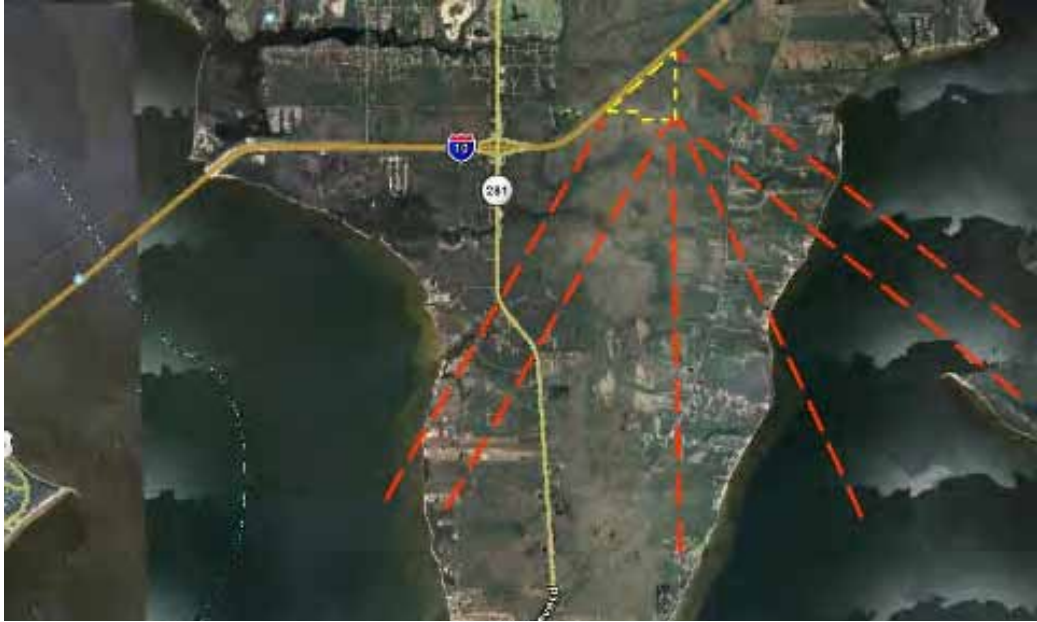
FL DOF should remain on off-site standby. In the event that the dozer or marsh master is used to suppress an escape, FL DOF must be contacted by burn boss.

If, due to unpredicted wind shifts, thick smoke lays across I-10, all firing operations will cease, and local Sheriff's Department contacted immediately.

In the event of significant nighttime smoldering and down-drain sinks of smoke, the burn crew will remain on site, mopping up until smoke problem has significantly decreased.



**Figure 7** Four mile smoke impacts while burning those Units north of I-10. Note, good smoke lift must compensate for SE winds while burning Units 1, 4, and 5. All units north of I-10 could be burned with S (preference) or SW wind.



**Figure 8** Four mile smoke impacts with a Northerly wind while burning Unit 6.

**Monitoring:**

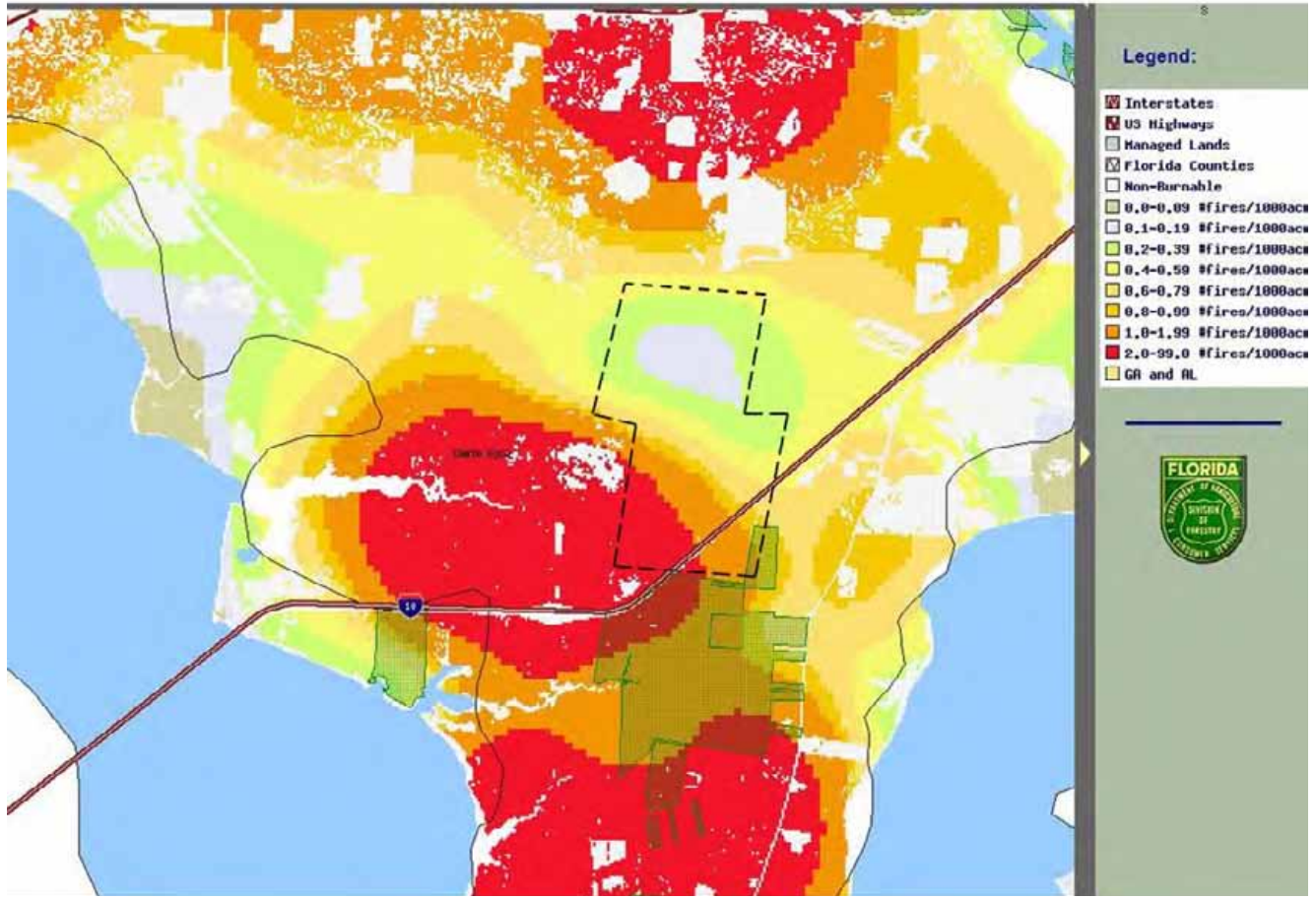
Burn boss will make inspection of unit the morning after ignitions to ensure that no fire has escaped or significant smolder has occurred. Within 24 hours after each burn, the burn boss will be required to conduct a post-burn evaluation with command staff.

Vegetative monitoring of fire-effects will be conducted 1 month, 6 months, and 1 year post-fire and will include variables such as a) burn coverage b) bole scorch c) 100 fuel production d) shrub control, etc.

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## **Appendix A Frequency of Wildfire Occurrence**





The safe reduction of fuels will significantly minimize the threat from catastrophic wildfire that could put both human life and structure at risk. The red color in the SW section of property (dashed black line) predicts just how certain fire will be in this region. Burning under prescription, weather parameters will allow fuels to be reduced in a very predictable, safe manner.

## Appendix B

### Generic Pictures of Site Location and Fuels:

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**Fuel Model 2 and 3**



**Fuel Model 2**



**Fuel Model 3**



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**Appendix B (continued)**



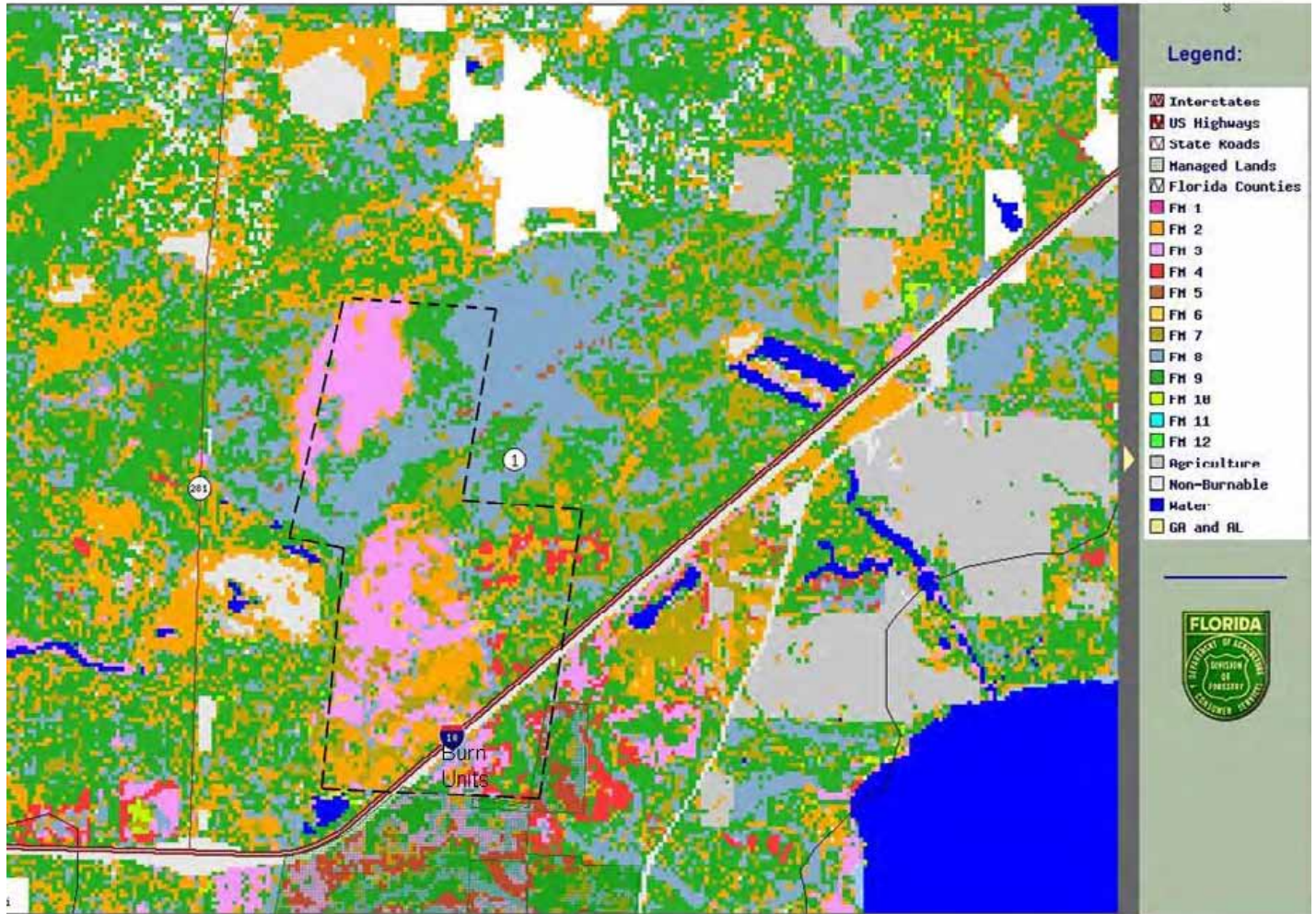
**Fuel Models 2 and 3 degrading into a Fuel Model 7**



**Fuel Model 7**



Appendix B (continued)



General overview of landscape level fuel distribution (Fuel Models listed as FM in Legend).

**Appendix C**



**PRESCRIBED BURN PLAN**

Permit Phone No: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ Permit No: \_\_\_\_\_

Landowner: \_\_\_\_\_ Landowner Phone: (\_\_\_\_) \_\_\_\_\_

Landowner Address: \_\_\_\_\_

**SITE DESCRIPTION**

Legal Description: \_\_\_\_\_ S \_\_\_\_\_ T \_\_\_\_\_ R \_\_\_\_\_

County/State: \_\_\_\_\_

Street and/or billing address: \_\_\_\_\_

Acres to Burn: \_\_\_\_\_ Previous Burn Date: \_\_\_\_\_

Burn Objectives: (short-term): \_\_\_\_\_

\_\_\_\_\_ (long-term): \_\_\_\_\_

Stand Description (overstory, understory, topography): \_\_\_\_\_

\_\_\_\_\_

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\_\_\_\_\_  
(Show on Map)

Fuel Type and Loading: \_\_\_\_\_

Features to Protect: \_\_\_\_\_ (Show on Map)

***PREBURN FACTORS***

Burn manager \_\_\_\_\_ Phone Number: (\_\_\_\_) \_\_\_\_\_

Manager Address \_\_\_\_\_

Emergency Phone Number: (\_\_\_\_) \_\_\_\_\_ Emergency Location: (**Locate on Map**)

Burn Crew: \_\_\_\_\_

\_\_\_\_\_  
(Attach ICS Structure)

Equipment Needs: \_\_\_\_\_

\_\_\_\_\_  
Person in Charge of Equipment: \_\_\_\_\_

Describe Planned Ignition Methods and Order of Ops (**Show on Map**) \_\_\_\_\_

Safety Considerations: \_\_\_\_\_

Contingency Plans: \_\_\_\_\_

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Agency Contact: \_\_\_\_\_

***POST BURN FACTORS***

Mop-up Plans: \_\_\_\_\_% mop up \_\_\_\_\_chains from break Special Instructions: \_\_\_\_\_

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***FIRE WEATHER FORECAST***

	<u>Desired</u>	<u>Predicted</u>	<u>Actual</u>	<u>Acceptable(?)</u>
Relative Humidity (%)	_____	_____	_____	Yes___ No___
Fine Fuel Moisture(%)	_____	_____	_____	Yes___ No___
Heavy Fuel Moisture(%)	_____	_____	_____	Yes___ No___
Surface wind speed (mph)	_____	_____	_____	Yes___ No___
Transport wind speed (mph)	_____	_____	_____	Yes___ No___
Surface Wind direction	_____	_____	_____	Yes___ No___
Transport Wind direction	_____	_____	_____	Yes___ No___
Mixing Height (ft)	_____	_____	_____	Yes___ No___
Atmosphere Stability	_____	_____	_____	Yes___ No___
Ambient temperature (°F)	_____	_____	_____	Yes___ No___
Dispersion index:	<b>Fair 21-40</b>			
	<b>Good 41-60</b>			
	<b>Very Good 60-100</b>	_____	_____	_____ Yes___ No___
Max KBDI:	_____	_____	_____	Yes___ No___

Atmospheric conditions (*circle applicable*):  
Clear / Partly cloudy / Variable clouds / Mostly cloudy / Foggy

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Anticipated Fire Behavior

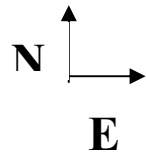
Fuel Model Used : \_\_\_\_\_ Rate of Spread \_\_\_\_\_ Flame Height: \_\_\_\_\_

**Attach Fire Behavior Calculations**

Smoke Screening: (Attach Smoke Screening Form and/or V-Smoke Calculations):

**Pass Smoke Screening:** Yes \_\_\_\_\_ No \_\_\_\_\_

**BURN PLAN (CONTINUED)  
SITE MAP**



**SITE MAP:**

(INCLUDE FIRE BREAKS, PROPOSED IGNITION, SAFETY CONCERNS , ESCAPE ROUTES, SAFETY ZONES AND OTHER SIGNIFICANT AREAS)

Potential Problems: \_\_\_\_\_

\_\_\_\_\_

**BURN PLAN (CONTINUED)**

***Public Relations***

**Potential Public Relations Problems** \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

<b>Affected Neighbors:</b> _____	<b>Notified? Y() N()</b>
_____	<b>Notified? Y() N()</b>
_____	<b>Notified? Y() N()</b>
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Notified? Y( ) N( )  
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**Actions Taken to Minimize PR Problems:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Date Burned:** \_\_\_\_/\_\_\_\_/\_\_\_\_ **Actual Start Time:** \_\_\_\_:\_\_\_\_ **Completed:** \_\_\_\_:\_\_\_\_

Prepared by: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Witnessed: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

***PRESCRIBED FIRE POST-BURN EVALUATION***

Evaluator: \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Accidents or other problems encountered: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Any Escape?: \_\_\_\_\_

Post-Fire Smoke Problems: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_



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**Appendix D Services Agreement between Westervelt Company and Consultant**

THIS SERVICES AGREEMENT (the "Agreement") is made and entered into as of the \_\_\_\_\_ day of \_\_\_\_\_, 200\_ (the "Effective Date"), by and between Westervelt Ecological Services, LLC (hereinafter "WES"), with offices at 1400 Jack Warner Parkway, Tuscaloosa, Alabama 35404 and Prescribed Fire Consultant (hereinafter "Consultant"), with offices at \_\_\_\_\_.

**W I T N E S S E T H:**

WHEREAS, WES owns \_\_\_\_ acres of real estate, located in \_\_\_\_\_ County, Florida (the "Property"), and being more particularly described on Exhibit "A" attached hereto and incorporated herein; and

WHEREAS, WES desires to have a prescribed burn performed upon the Property; and

WHEREAS, Consultant is engaged in the business of performing prescribed burns; and

WHEREAS, Consultant asserts to have the knowledge and expertise necessary to perform and accomplish the prescribed burn which WES desires to have performed; and

WHEREAS, WES desires to retain Consultant to perform the prescribed burn and Consultant desires to perform the prescribed burn on the Property (the "Services").

NOW, THEREFORE, for good and valuable consideration, and intending to be legally bound, WES and Consultant hereby agree as follows:

1. **Scope of Work:** Consultant covenants and agrees to furnish all supervision, labor, tools, equipment, services and materials necessary to complete the performance of the Services.

2. **Payment:** WES agrees to pay Consultant on a monthly basis, and within thirty (30) days following approval of an invoice submitted by Consultant. Said invoice shall be based on the Services properly performed, payable in accordance with a per acre rate of \_\_\_\_\_ dollars (\$\_\_\_\_\_) per acre, for a total amount of \_\_\_\_\_ dollars (\$\_\_\_\_\_). Consultant further agrees to provide, with each

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application for payment, all such information as WES may require evidencing Consultant's right to the payment claimed and the Services performed.

**3. Duties and Responsibilities of Consultant:** Consultant agrees to provide the Services under this Agreement: (1) in accordance with all applicable federal, state and local statutes, laws, ordinances, rules and regulations; (2) in accordance with the standards and practices which are generally accepted in the industry and exercised by other persons engaged in performing similar services; and (3) with duly qualified personnel employed by Consultant, who have all of the necessary and appropriate professional licensure to perform the Services (copies of such licensures shall be provided to WES at least five (5) days prior to Consultant's commencement of the Services).

**4. Professional Standards:** Consultant represents that it has the knowledge and expertise necessary to perform the Services; and that it possesses the ability and skill necessary to competently and properly perform the Services.

**5. Term:** Consultant agrees to perform the Services described herein on the dates and times deemed appropriate by Consultant. Consultant shall have the sole discretion and authority to determine when the Services shall be performed; however, if the Services have not been completed by \_\_\_\_\_, 2008, this Agreement shall automatically terminate.

**6. Termination:** WES may terminate this Agreement at any time and for any reason upon a minimum of ten (10) business day's written notice to Consultant. In the event of such termination, Consultant shall be entitled to receive compensation pursuant to the Section titled "Payment" for Services rendered prior to the date the notice of termination is deemed received by Consultant.

**7. Performance Assurance Process:** WES and Consultant agree to participate in an initial planning meeting (the "Initial Planning Meeting") to discuss the process and procedure which will be implemented by Consultant in performing the Services. A Consultant employee designated as the Performance Assurance Review Representative (the "PAR Representative") during the first ten (10) business days of the engagement will contact the appropriate WES personnel to schedule the Initial Planning Meeting. The Initial Planning Meeting will include a discussion of the results WES expects from the engagement, the scope of the Services and Consultant's approach to the performance of the Services. After the Initial Planning Meeting, the parties shall participate in periodic status meetings (the "Status Meetings") upon the request of either party hereto.

**8. Independent Contractor:** In performing the obligations under this Agreement, Consultant will be acting as an independent contractor and will not be acting as an agent, employee, servant, joint venturer or partner of WES. As an independent contractor, Consultant will be free to exercise discretion and independent judgment as to the method and means of performance of the Services. Consultant will be responsible for reporting and paying its own income and employment taxes. WES will only be responsible for reporting payments made to Consultant on IRS Form 1099. Consultant will not be entitled to any benefits or privileges provided by WES to its employees.

**9. Use of Names:** WES and Consultant, on behalf of themselves and their employees, and agents involved in the performance of the Services, agree that they shall not employ or use the name of the other party in any publication or promotional material without the prior written consent of the other party, except as required by law.

**10. Indemnification:** Consultant agrees to indemnify, defend and hold harmless WES, its officers, directors, employees and agents from and against any and all claims, demands, suits or actions for liability,

losses, damages or expenses arising out of, on account of, or as a result of, directly or indirectly, Consultant's actions, operations, performance or nonperformance of the Services. At WES's request, Consultant shall afford to WES at Consultant's expense, a complete defense of any such claim, demand, cause of action or suit; and (whether or not Consultant undertakes said defense) Consultant shall bear all attorneys' fees, costs of preparation and maintenance of the defense, all court costs and expert, discovery and investigative fees, and any associated appeal costs, to the end that WES shall incur no cost whatsoever as a result of such claim, demand, cause of action or suit, or ensuring compliance with this indemnity provision. WES expressly reserves the right to be represented by counsel of its own selection, at Consultant's expense. The exercise of WES's right to select its own attorneys will in no way detract from or release Consultant from Consultant's obligation to indemnify and hold WES harmless hereunder. As a condition to such indemnification, WES shall notify Consultant within thirty (30) days after the receipt of notice of the claim, demand, suit or action. This paragraph shall survive the termination or expiration of this Agreement.

**11. No Restrictions:** Each of WES and Consultant warrants and represents that it is authorized to enter into this Agreement and that the terms of this Agreement are not inconsistent with or a violation of any contractual or other legal obligation to which it is subject.

**12. Insurance:** In addition to any insurance Consultant deems in its interest to purchase because of risks assumed under this Agreement or otherwise, Consultant shall maintain in force at own expense: (i) all insurance required by any applicable federal, state or local statutes, laws, rules or regulations; and (ii) the forms of insurance coverage specified on Exhibit "B" attached hereto and incorporated herein. Consultant agrees to have WES, its officers and directors named as additional insureds under all insurance policies of Consultant acquired or maintained to fulfill the requirements for insurance imposed by this Agreement. Consultant waives any and all rights of recovery against WES, and its officers and directors, for any loss or damage covered by any insurance acquired or maintained by Consultant or for its benefit (including all rights that might otherwise accrue to any subrogee) where such waiver does not void Consultant's insurance.

Consultant shall maintain, at its own expense, insurance coverage against the loss or destruction of any and all of the equipment, tools, and other property owned or used by it in connection with the Services. Consultant waives subrogation rights against WES.

At least five (5) days prior to the commencement of the Services, Consultant shall furnish WES an insurance certificate specifically stating that all insurance required herein is in force. All policies of insurance herein shall contain an endorsement specifying that cancellation of or any material change in such policies that will or may adversely affect the interests of WES shall not be effective for such period as may be prescribed by the laws of the state of Alabama, but in no event less than thirty (30) days after written notice of said change or cancellation has been received by WES. Consultant shall not begin any portion of the Services until all certificates of insurance have been provided to WES.

**13. Notices:** Any notices sent by the parties to this Agreement shall be in writing and sent by hand delivery, nationally recognized overnight courier service, certified mail, (postage prepaid), facsimile transmission, or electronic mail directed to the street address, facsimile number, or electronic mail address listed below, or to such other address as the parties may designate in writing. For purposes of this Agreement, such notices shall be deemed to have been received as follows: (A) if sent by hand delivery, courier or facsimile, when sent; (B) if by certified mail, upon actual receipt; and, (C) if sent by electronic mail, upon the entrance of such electronic notice in the information processing system designated by the recipient's electronic mailing address. Unless otherwise notified, notices shall be sent as follows:

September 24, 2008

If to Consultant: \_\_\_\_\_

Representative: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Email: \_\_\_\_\_

If to WES: WESTERVELT ECOLOGICAL SERVICES

PO Box 48999

TUSCALOOSA, AL 35404

Representative: \_\_\_\_\_

Fax Number: \_\_\_\_\_

Email: \_\_\_\_\_@westervelt.com

All electronic notices will be deemed to have been sent from the sender's place of business and location described herein, and will be deemed to have been received at the recipient's place of business and location described herein.

14. **Limitation of Liability:** WES's liability hereunder shall not exceed two (2) times the total amount paid for Services rendered by Consultant under this Agreement. WES shall not be liable to Consultant for consequential, incidental, special or indirect damages arising out of or connected to the performance or non-performance of this Agreement.

15. **Entire Agreement:** This Agreement constitutes the entire agreement between WES and Consultant and shall supersede all previous communications, representations, agreements or understandings, whether oral or written, between WES and Consultant with respect to the subject matter of this Agreement.

16. **Governing Law; Consent to Jurisdiction:** This Agreement shall be governed by Alabama law unless otherwise provided. WES and Consultant hereby agree that any claim arising out of this Agreement shall be enforced in the circuit court of Tuscaloosa County, Alabama, or if in federal court, then in the Western Division of the Northern District of the State of Alabama. For the purpose of any action or proceeding instituted with respect to any such claim, WES and Consultant hereby irrevocably submit to the jurisdiction of such courts.

17. **Dispute Resolution:** The parties agree to use good faith efforts to resolve any controversy or claim arising out of or related to this Agreement by negotiation prior to resorting to other remedies. Such negotiation shall (i) include discussion of the issue(s) giving rise to the dispute by appropriate representatives of both parties involved and (ii) if such discussions do not resolve the dispute, then designated personnel of the parties shall meet within ten (10) days to attempt to resolve the dispute.

If such designated personnel do not resolve the matter within thirty (30) days after the matter is referred to them, the parties must mediate the dispute with one (1) mediator, to be selected by WES, in accordance with CPR's Mediation Procedure, as such procedure may be modified by mutual written agreement of the parties. The place of mediation shall be in Tuscaloosa, Alabama. The mediator shall apply the substantive law of the State of Alabama without regard to its conflicts of law principles. Discovery will be limited to no more than ten (10) interrogatories (including subparts or compound requests), no more than ten (10) requests for production (including subparts or compound requests) and one deposition for either party. All discovery shall be concluded within thirty (30) calendar days of service of the notice of mediation, each

September 24, 2008

party shall pay for its own costs and the parties shall share the costs of the mediation, including the fee of the mediator, equally.

If the dispute has not been resolved by mediation to the parties' mutual satisfaction within sixty (60) calendar days after the initiation of such mediation, either party shall have the right to bring suit to resolve the contested assertion.

**18. Attorneys' Fees:** Notwithstanding anything contained herein to the contrary, should WES employ an attorney or attorneys to enforce any of the terms and conditions hereof, or to protect any right, title, or interest created or evidenced hereby, or to recover damages for the breach of the terms and conditions hereof, or to respond to any matter, Consultant and its surety, if any, agree to pay all of WES's reasonable costs, damages, and expenses, including reasonable attorneys' fees.

**19. Assignment:** Neither WES nor Consultant shall assign this Agreement or any rights hereunder or delegate the performance of any duties hereunder without the prior written approval of the other party, which shall not be unreasonably withheld or delayed.

**20. Succession:** Wherever the word Consultant or WES occurs in this Agreement, it shall be held to bind and inure to the benefit of the heirs, legal representatives, successors and the assigns of Consultant or WES, as the case may be.

**21. Confidentiality:** Consultant agrees to maintain the confidentiality of WES's confidential and proprietary information, including the terms of this Agreement, and the details of the transactions entered into under the terms of this Agreement

**22. Amendments:** Only a written instrument signed by each party hereto may amend this Agreement.

**23. Severability:** If any provision of this Agreement is determined to be invalid under applicable law and regulations by a court of competent jurisdiction, such provisions shall be inapplicable and deemed omitted to the extent of such invalidity without impairing the validity of the remaining provisions of this Agreement.

**24. Waiver:** Any waiver by either party of any provision or condition of this Agreement shall not be construed or deemed to be a waiver of any other provision or condition of this Agreement, or a waiver of a subsequent breach of the same provision or condition, unless such waiver is so expressed in writing and signed by the party to be bound.

**25. Captions:** The captions and headings in this Agreement are for convenience only and shall not be construed as a part of this Agreement.

**26. Counterparts:** This Agreement may be executed in two or more counterparts, each of equal dignity, which, when joined, shall constitute one document. Any photocopy or facsimile of this Agreement or of any counterpart shall be deemed to be the equivalent of an original.

September 24, 2008

IN WITNESS WHEREOF, the undersigned have executed this Master Agreement as of the date first above written.

WESTERVELT ECOLOGICAL SERVICES, LLC

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

CONSULTANT

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

**Exhibit "B"**  
**WES Insurance Requirements**

- I. Workmen's Compensation – Statutory
  - a. Employer's Liability \$100,000
  - b. Voluntary Compensation Endorsement
  - c. Broad Form All States Endorsement
  - d. United States Longshoremen and Harbor Workers Act Coverage (when applicable)
- II. Commercial Public Liability without limiting endorsements
  - a. Combined limits of liability for bodily injury and property damage:
    - i. \$1,000,000 each occurrence
    - ii. \$2,000,000 aggregate for this project
  - b. Policy shall include the following types of coverage:
    - i. Premises and Operations
    - ii. Independent Contractors
    - iii. Completed Operations – coverage shall continue for five (5) years following the date of completion of performance by Consultant
    - iv. Broad Form Extended Liability Endorsement
    - v. Contractual Liability covering all contractual agreements, both oral and written, including but not limited to, the hold harmless and indemnification agreements of Consultant contained in this Agreement
    - vi. Personal Injury – extended to include mental injury, mental anguish, humiliation and discrimination (except where coverage is prohibited by law) – coverage to include fellow employees and contractual liability
    - vii. Broad Form Property Damage, including completed operations
    - viii. Employees as Additional Insureds – Fellow Employee Exclusion deleted
    - ix. Extended Bodily Injury (covering intentional acts to protect persons or property)
    - x. Fire Legal Liability – no sublimit
    - xi. Incidental Malpractice – Fellow Employee Exclusion deleted
  - c. Policy shall be written on an occurrence basis.
  - d. Notice of occurrence shall be amended to read "as soon as reasonably possible after Consultant has knowledge of any occurrence".
- III. Comprehensive Automobile Liability Insurance covering the use of all owned, non-owned, and hired automobiles:
  - a. Combined single limits of liability for bodily injury and property damage - \$1,000,000.
  - b. Policy shall be written on an occurrence basis.
  - c. Provide coverage for fellow employees.
- IV. Excess Liability
  - a. This coverage, in an umbrella form, shall be at least as broad as primary and extended limits over Employer's Liability, Comprehensive Public Liability, and Automobile Liability.
  - b. The following limits based on the Payment amount:
    - i. If the Payment amount is less than \$250,000, then Consultant shall carry limits of \$5,000,000.
    - ii. If the Payment amount is greater than \$250,000 and less than \$500,000, then Consultant shall carry limits of \$10,000,000.
    - iii. If the Payment amount is greater than \$500,000 and less than \$1,000,000, then Consultant shall carry limits of \$20,000,000.
    - iv. If the Payment amount is greater than \$1,000,000, then Consultant shall carry limits of \$50,000,000.
  - c. The Self-Insured Retention for covered losses not insured by the primary program will not exceed \$10,000 with first dollar defense applicable.
- V. All policies acquired or maintained to fulfill these requirements shall include the following endorsements:
  - a. WES is named as an additional insured as its interests appear.



September 24, 2008

- b. Not to be cancelled, changed, or permitted to lapse until ninety (90) days after WES has received written notice thereof, and it is agreed further that as to lapsing such notice will not be valid if sent to WES more than ninety-five (95) days prior to the proposed expiration date of the policy.
- c. Insurer hereby waives all rights of subrogation with respect to claims against WES.
- d. Insurer agrees to notify WES within ten (10) days of payment or reserving of any claim or claims which, when combined in the aggregate with all other paid or reserved claims in a policy annual term, total more than \$1,000,000. This condition applies to commercial public liability, employer's liability, and excess liability insurance policies as specified herein.

September 24, 2008

Exhibit 6  
Credit Release Schedule

## Credit Release Schedule

Task	Estimated Completion Date from Date of Permit Issuance by Agencies	% Credit Release	Wet Flatwood/Wet Prairie Credits	Mixed Hardwood Credits	Total Credits
Execution of Conservation Easement; Execution of Financial Assurances; Gating and Signage.	1-3 mos.	15	24.00	5.60	29.6
1 <sup>st</sup> Prescribed Fire in Applicable Units; Mowing in Management Unit 14; Approval of Reference Wetland.	1 year	10	16.00	3.70	19.7
Installation of Low Water Crossings; Ditch Filling/Plugging.	1-6 mos.	10	16.00	3.70	19.7
Shrub/Tree Reduction; Exotic Species Treatment; Hardwood Planting	1-2 years	15	24.00	5.60	29.6
1 <sup>st</sup> Period Attainment of Interim Success	5 years	12.5	20.00	4.80	24.8
2 <sup>nd</sup> Period Attainment of Interim Success	6 years	12.5	20.00	4.80	24.8
3 <sup>rd</sup> Period Attainment of Interim Success	7 years	12.5	20.00	4.80	24.8
Final Success	9 years	~12.5	19.83	4.71	24.54
TOTAL		100	159.83	37.71	197.54

**Exhibit 7**  
**Pensacola Bay Mitigation Bank Ledger**  
**MBI SAJ-2007-04377 (IP-EPS)**  
**Month x, 200x**

Wet Flatwoods/Wet Prairie: Total Potential Credits = 159.82

Release or Impact Permit	Permit Date	Issuing Agency	Ledger Modification	Credits Added	Credits Used	Balance
<b>Credit Release</b>	<b>XXXX</b>	<b>ACOE</b>		<b>24.00</b>		<b>24.00</b>
Project 1	XXXX	ACOE	XXXX		1.00	<b>23.00</b>
Project 2	XXXX	ACOE	XXXX		0.44	<b>22.56</b>
<b>Credit Release</b>	<b>XXXX</b>	<b>ACOE</b>	<b>XXXX</b>	<b>16.00</b>		<b>38.56</b>

Forested Wetlands: Total Potential Credits = 37.72

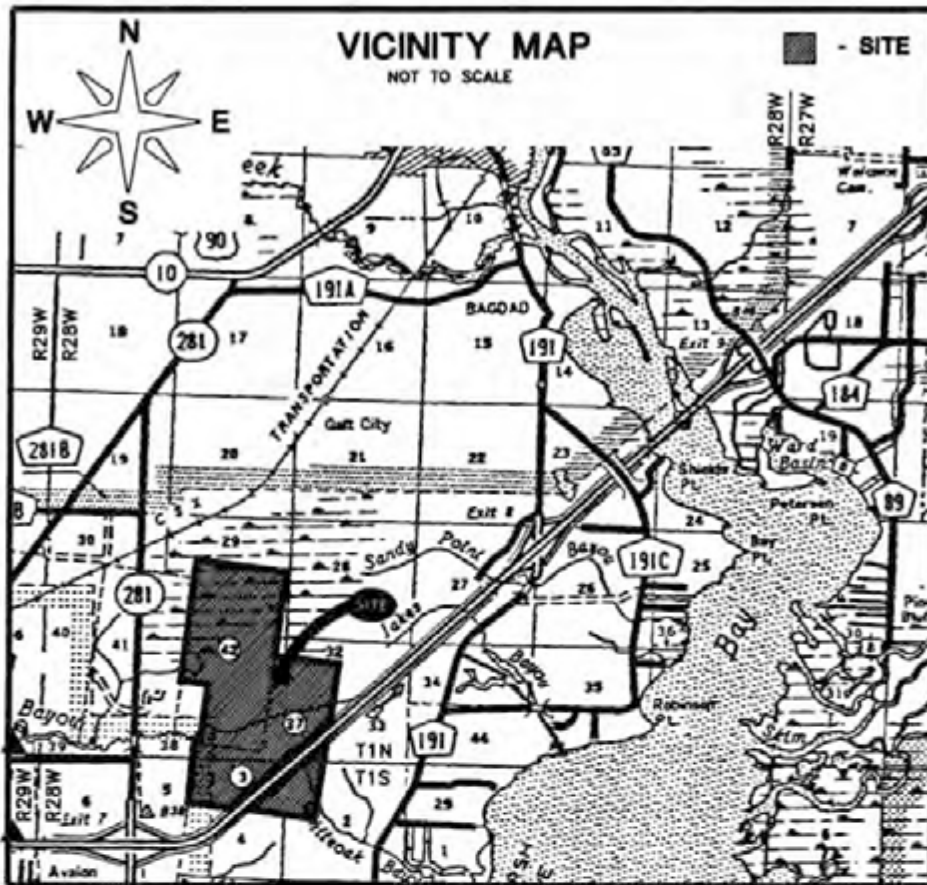
Release or Impact Permit	Permit Date	Issuing Agency	Ledger Modification	Credits Added	Credits Used	Balance
<b>Credit Release</b>	<b>XXXX</b>	<b>ACOE</b>	<b>XXXX</b>	<b>5.60</b>		<b>5.60</b>
Project 3	XXXX	ACOE	XXXX		2.00	<b>3.60</b>
Project 4	XXXX	ACOE	XXXX		3.00	<b>0.60</b>
<b>Credit Release</b>	<b>XXXX</b>	<b>ACOE</b>	<b>XXXX</b>	<b>3.70</b>		<b>4.30</b>

Exhibit 8  
Boundary Survey and  
Mineral Exploration Outparcels

# SANTA ROSA COUNTY, FLORIDA

## BOUNDARY SURVEY

SECTIONS 37 & 42, T1N, R28W,  
& SECTION 3, T1S, R28W,  
SANTA ROSA COUNTY, FLORIDA



**ACREAGE: 1,205.57 AC.± - LEASES 15.00 AC.±=TOTAL 1,190.57 AC.±**

### SURVEYOR'S NOTES:

1. This is a boundary survey. Existing monumentation were held per previous surveys as shown. The less and except parcel was calculated holding deed furnished.
2. The bearings are based on two G.P.S. High Precision Points (SRC-1029-1995 and SRC-1030-1995) being N01°09'23"E.
3. The last day of field work was November 14, 2007.
4. Elevations are based on NOT APPLICABLE
5. No underground installations or improvements or above ground improvements have been located other than those shown.
6. A field traverse closure was performed and all side shots were tied with redundant measurements using a one-second total station. The minimum horizontal accuracy for this survey is one part in 7500. This survey exceeds this accuracy.
7. The undersigned surveyor has not been provided a current title opinion or abstract of matters affecting the title or boundary to the subject property. It is possible there are deeds of record, unrecorded deeds, easements or other instruments which could affect the boundaries.
8. Not valid without the signature and original raised seal of a Florida licensed Surveyor and Mapper.
9. I hereby certify that the survey shown hereon was made in accordance to the "Minimum Technical Standards" set forth by the Florida Board of Professional Land Surveyors in Chapter 61G17-6 F.A.C. pursuant to Section 472.027, Florida Statutes.

TO BE VALID MUST BE  
IMPRINTED WITH EMBOSSED SEAL  
AND SIGNATURE



*Robert A. Bannerman*

BANNERMAN SURVEYORS, INC.  
FL Cert. No. LB5106

ROBERT A. BANNERMAN, PSM  
FL Cert. No. 3214



BANNERMAN  
SURVEYORS

**BANNERMAN  
SURVEYORS**  
INCORPORATED

LICENSED IN:

FLORIDA COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

PHONE (850) 626-4460

FAX (850) 626-4462

TOLL FREE 1-888-626-4460

JOB NO. M08-105173

FILE NAME: M08105173L

SCALE: N/A

DISC NO:

DATE: 11-14-07

DRAWN BY: A. MATHIS

SEC.37/42/3,T1N/1S,R28W

APPROVED BY: R.A.B.

COUNTY: SANTA ROSA

REVISED: 12-15-09

TYPE OF SURVEY: BOUNDARY

CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.

SHEET 1 OF 12

LEGAL DESCRIPTION PER O.R. BOOK 1690, PAGE 1491:

All of the Diego Palmes Grant, being Section Three (3), Township One (1) South, Range Twenty-Eight (28) West, and Section Thirty-Seven (37), Township One (1) North, Range Twenty-Eight (28) West, containing Six Hundred Thirty-Three (633) acres, More or less.

ALSO:

LEGAL DESCRIPTION PER O.R. BOOK 1690, PAGE 1493:

All of the Thomas P. Rioboo Grant, Being Section 42, Township 1 North, Range 28 West, in Santa Rosa County, Florida, less the following portion thereof, to-wit: 80 acres of the Southwest corner of (Thos. P. Rioboo Grant) Section 42, Township 1 North, Range 28 West, more particularly described as follows: Beginning at the Southwest corner of said Grant and running Eastwardly along the Southern boundary line 1320 feet, thence in a Northerly direction along parallel lines with the Western boundary of said Grant 2640 feet, thence in a Westerly direction along parallel lines with Southern boundary of said Grant to the Western boundary line, thence in a Southerly direction along said Western boundary line 2640 feet to point of beginning.

BETTER DESCRIBED AS:

COMMENCE at an existing 4 inch x 4 inch concrete monument with a nail in the top marking the Southeast corner of Section 37, Township 1 North, Range 28 West, Santa Rosa County, Florida, and call this the POINT OF BEGINNING; thence South 08 degrees 43 minutes 56 seconds West a distance of 2558.85 feet to an existing 5 inch oval concrete monument marking the Southeast corner of Section 3, Township 1 South, Range 28 West; thence North 81 degrees 20 minutes 05 seconds West a distance of 1395.78 feet to an existing 4 inch x 4 inch concrete monument marking the Northwest corner of Section 2 and the Northeast corner of Section 4, Township 1 South, Range 28 West; thence North 81 degrees 20 minutes 54 seconds West a distance of 1743.65 feet to an existing 5/8 inch rod with cap stamped LB 6475 on the Southerly right of way of Interstate 10 (State Road 8); thence North 49 degrees 36 minutes 09 seconds East along the Southerly right of way of said Interstate a distance of 4833.81 feet to an existing 5/8 inch iron rod with cap; thence leaving said right of way South 09 degrees 58 minutes 07 seconds West a distance of 1092.61 feet to the POINT OF BEGINNING.

This parcel contains 130.87 acres, more or less, and is located partially in Section 3, Township 1 South, Range 28 West, and partially in Section 37, Township 1 North, Range 28 West, Santa Rosa County, Florida.

ALSO:

COMMENCE at an existing 4 inch x 4 inch concrete monument with a nail in the top marking the Southeast corner of Section 37, Township 1 North, Range 28 West, Santa Rosa County, Florida, and call this the POINT OF COMMENCEMENT; thence North 09 degrees 58 minutes 07 seconds East a distance of 1092.61 feet to an existing 5/8 inch iron rod with cap on the Southerly right of way of Interstate 10 (State Road 8); thence North 09 degrees 08 minutes 17 seconds East a distance of 462.27 feet to an existing 5/8 inch iron rod with cap (can't read) on the Northerly right of way of said Interstate and call this the POINT OF BEGINNING; thence South 49 degrees 36 minutes 09 seconds West along the Northerly right of way of said Interstate a distance of 5434.77 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence leaving said right of way North 80 degrees 07 minutes 12 seconds West a distance of 2010.21 feet to an existing 1/2 inch iron rod with plastic cap stamped NWF ENG. CORP. 4882; thence North 09 degrees 20 minutes 43 seconds East a distance of 2891.47 feet to an existing 1 inch old rusted iron rod; thence South 81 degrees 41 minutes 40 seconds East a distance of 102.87 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 08 degrees 51 minutes 20 seconds East a distance of 2640.00 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 81 degrees 41 minutes 40 seconds West a distance of 1329.66 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 08 degrees 51 minutes 20 seconds East a distance of 4970.58 feet to an existing 4 inch x 4 inch concrete monument stamped SRCW PLS 3454 at the Northwest corner of Section 42, Township 1 North, Range 28 West; thence South 81 degrees 07 minutes 08 seconds East a distance of 3912.66 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northeast corner of Section 42; thence South 08 degrees 44 minutes 15 seconds West a distance of 3467.99 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northwest corner of Section 37, Township 1 North, Range 28 West; thence South 79 degrees 53 minutes 06 seconds East a distance of 2852.63 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northeast corner of Section 37; thence South 09 degrees 06 minutes 12 seconds West a distance of 2876.32 feet to the POINT OF BEGINNING.



## BANNERMAN SURVEYORS INCORPORATED

LICENSED IN:

FLORIDA COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

PHONE (850) 526-4460

FAX (850) 526-4462

TOLL FREE 1-888-526-4460

JOB NO. M08-105173	FILE NAME: M08105173L11
SCALE: N/A	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/1S,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.	
SHEET 2A OF 12	



This parcel contains 1074.70 acres, more or less, and is located partially in Section 3, Township 1 South, Range 28 West, and partially in Section 37 and partially in Section 42, Township 1 North, Range 28 West, Santa Rosa County, Florida.

This is a newly created description.

LEGAL AND EXCEPT:

LEASE AREA (1):

COMMENCE at an existing 1 inch iron rod marking the Northwest corner of Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence South 09 degrees 20 minutes 43 seconds West a distance of 1071.40 feet to a point and call this the POINT OF BEGINNING; thence South 88 degrees 38 minutes 00 seconds East a distance of 466.69 feet to a point; thence South 09 degrees 20 minutes 43 seconds West a distance of 466.69 feet to a point; thence North 88 degrees 38 minutes 00 seconds West a distance of 466.69 feet to a point; thence North 09 degrees 20 minutes 43 seconds East a distance of 466.69 feet to the POINT OF BEGINNING.

This parcel contains 5.00 acres, more or less, and is located in Section 03, Township 01 South, Range 28 West, Santa Rosa County, Florida.

ALSO:

LEASE AREA (3):

COMMENCE at an existing 4 inch x 4 inch concrete monument marking the Southeast corner of Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence North 09 degrees 58 minutes 07 seconds East a distance of 1092.61 feet to an existing 5/8 inch iron rod and cap; thence North 09 degrees 08 minutes 17 seconds East a distance of 462.27 feet to an existing 5/8 inch iron rod and cap (can't read); thence North 09 degrees 06 minutes 12 seconds East a distance of 504.84 feet to a point and call this the POINT OF BEGINNING; thence North 80 degrees 53 minutes 48 seconds West a distance of 466.69 feet to a point; thence North 09 degrees 06 minutes 12 seconds East a distance of 466.69 feet to a point; thence South 80 degrees 53 minutes 48 seconds East a distance of 466.69 feet to a point; thence South 09 degrees 06 minutes 12 seconds West a distance of 466.69 feet to the POINT OF BEGINNING.

This parcel contains 5.00 acres, more or less, and is located in Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida.

AND ALSO:

LEASE AREA (5):

COMMENCE at an existing 4 inch X 4 inch concrete monument marking the Northwest corner of Section 42, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence South 08 degrees 51 minutes 20 seconds West a distance of 450.89 feet to a point and call this the POINT OF BEGINNING; thence South 81 degrees 41 minutes 40 seconds East a distance of 466.69 feet to a point; thence South 08 degrees 51 minutes 20 seconds West a distance of 466.69 feet to a point; thence North 81 degrees 41 minutes 40 seconds West a distance of 466.69 feet to a point; thence North 08 degrees 51 minutes 20 seconds East a distance of 466.69 feet to the POINT OF BEGINNING.

This parcel contains 5.00 acres, more or less, and is located in Section 42, Township 01 North, Range 28 West, Santa Rosa County, Florida.

These are newly created descriptions.



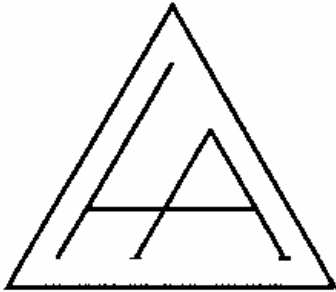
## BANNERMAN SURVEYORS

INCORPORATED  
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PHONE (850) 526-4480 FAX (850) 526-4482  
TOLL FREE 1-888-526-4480

JOB NO. M08-105173	FILE NAME: M08105173L11
SCALE: N/A	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/1S,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westarvelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.	
SHEET 28 OF 12	

# MAP OF BOUNDARY SURVEY



HERNDON, HICKS & ASSOCIATES, INC.

Project Number: 0709-037

## ABBREVIATION

SEC. - SECTION  
T - TOWNSHIP/TANGENT  
R - RANGE/RADIUS  
R/W - RIGHT OF WAY  
ST. - STREET  
D.O.T. - DEPT. OF TRANSPORTATION  
FL. - FLORIDA  
P.O.B. - POINT OF BEGINNING  
P.O.C. - POINT OF COMMENCEMENT  
CONC. - CONCRETE  
MON. - MONUMENT  
ALUM. - ALUMINUM  
REF. - REFERENCE  
LS - LICENSED SURVEYOR  
CL - CENTERLINE  
AVE. - AVENUE  
COR. - CORNER  
N.T.S. - NOT TO SCALE  
~ - LINE NOT TO SCALE  
D - DEED/DESCRIPTION  
PSM - PROFESSIONAL SURVEYOR & MAPPER  
LB - LICENSED BUSINESS

## LEGEND

- ⊙ 5/8" IRON ROD SET DURING SURVEY WITH ALUM. CAP STAMPED BANNERMAN SURVEYORS, INC. LB 5106.
- ⊠ 4"x4" CONC. MON. SET DURING SURVEY WITH ALUM. CAP STAMPED BANNERMAN SURVEYORS, INC. LB 5106.
- △ CONTROL OR TRAVERSE STATION. 1/2" IRON ROD WITH PLASTIC CAP STAMPED LB5106 - UNLESS OTHERWISE NOTED.
- EXISTING IRON PIPE FOUND DURING SURVEY - UNLESS OTHERWISE NOTED.
- EXISTING CONC. MON. FOUND DURING SURVEY - UNLESS OTHERWISE NOTED.



BANNERMAN  
SURVEYORS

**BANNERMAN  
SURVEYORS**

INCORPORATED

LICENSED IN:

FLORIDA

COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

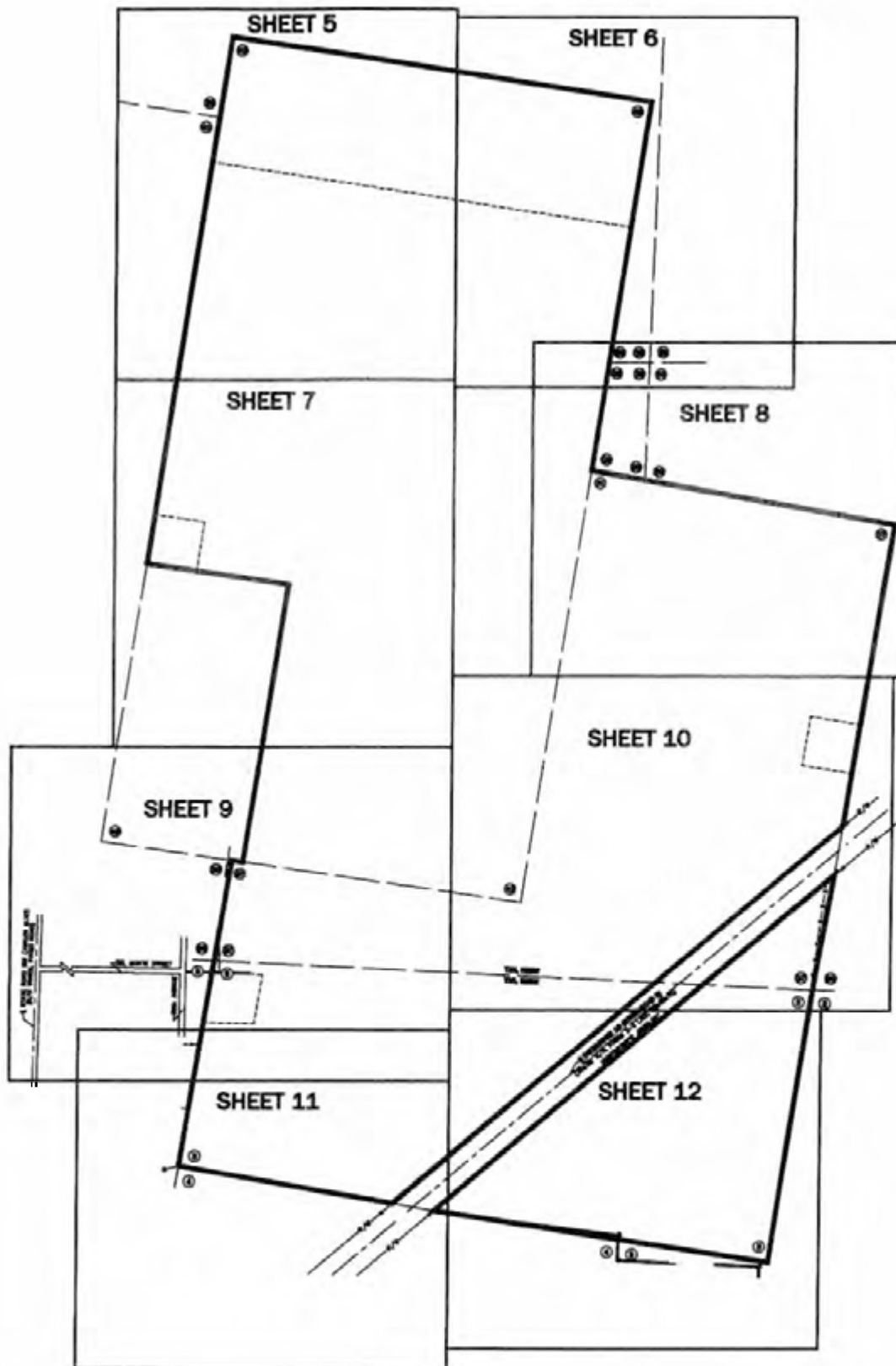
PHONE (850) 526-4460

FAX (850) 526-4462

TOLL FREE 1-888-526-4460

JOB NO. M08-105173	FILE NAME: M08105173L1
SCALE: 1"=400'	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/15,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.	
SHEET 3 OF 12	

# INDEX SHEET



N  
SCALE: 1"=1500'



BANNERMAN  
SURVEYORS

## BANNERMAN SURVEYORS

INCORPORATED

LICENSED IN:

FLORIDA

COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

PHONE (850) 526-4460

FAX (850) 526-4462

TOLL FREE 1-888-526-4460

JOB NO. M08-105173	FILE NAME: M08105173L10
SCALE: 1"=1500'	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/15,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.	
SHEET 4 OF 12	

# MAP OF BOUNDARY SURVEY

## SHEET 5

SECTION 29

EXISTING 4"x4"  
CONC. MON.  
STAMPED SRCE  
PLS 3454  
LEANING EAST  
WITH 4"x4" WHITE  
PAINTED POST  
1.0'± W.

LINE BASED ON  
SURVEY PERFORMED  
BY SANTA ROSA  
COUNTY ENGINEERING  
DATED 02-13-95

EXISTING 4"x4"  
CONC. MON. WITH  
2 1/2" BRASS DISK  
(NO ID) OLD WHITE  
BURNT POST 1.2'± S.

PARCEL TO BE  
USED FOR CREDITS  
CONTAINS 105.74 AC.±  
NO MONUMENTATION SET  
AT PARCEL CORNERS

SECTION 41

N08°51'20"E 4970.58'  
3744.83'

MATCH LINE

SHEET 7

SECTION 42

N81°07'08"W 3915.09'



MATCH LINE  
SHEET 6



BANNERMAN  
SURVEYORS

# BANNERMAN SURVEYORS

INCORPORATED  
LICENSED IN:  
FLORIDA COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

PHONE (850) 526-4460

FAX (850) 526-4462

TOLL FREE 1-888-526-4460

JOB NO. M08-105173	FILE NAME: M08105173L2
SCALE: 1"=400'	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/15,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.	
SHEET 5 OF 12	

# MAP OF BOUNDARY SURVEY

SHEET 7

SHEET 5

MATCH LINE

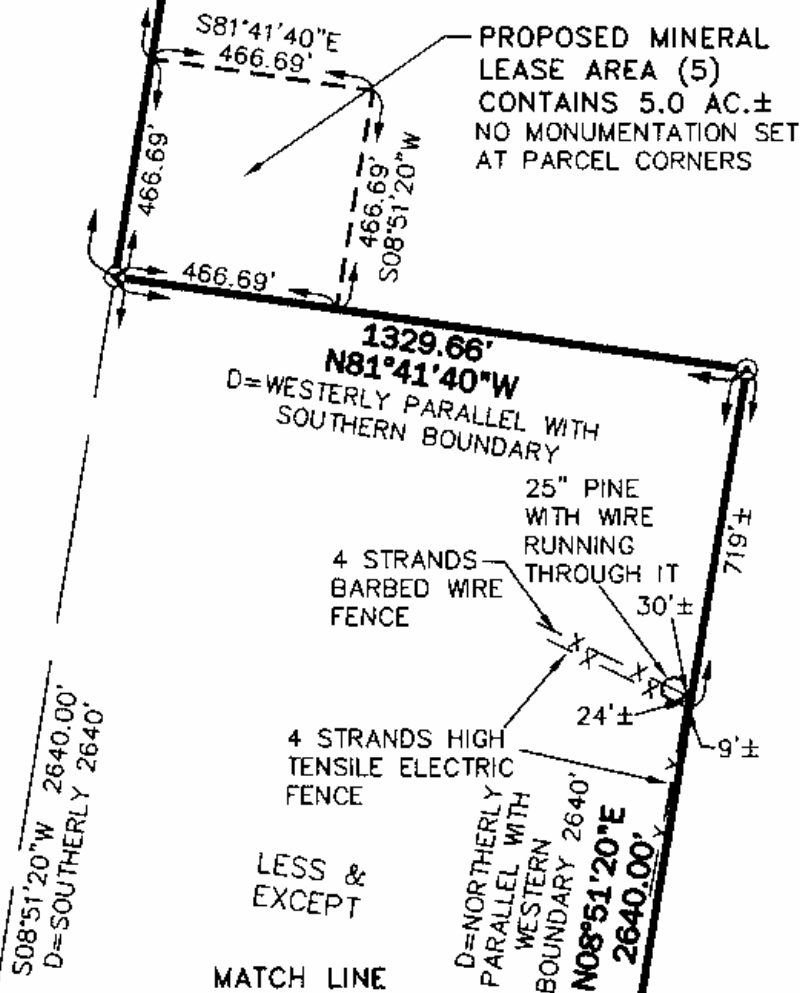
SECTION 42



MATCH LINE

SHEET 8

SECTION 41



SHEET 9



BANNERMAN  
SURVEYORS

**BANNERMAN  
SURVEYORS**  
INCORPORATED

LICENSED IN:

FLORIDA COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

PHONE (850) 526-4460

FAX (850) 526-4462

TOLL FREE 1-888-526-4460

JOB NO. M08-105173	FILE NAME: M08105173L4
SCALE: 1"=400'	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/1S,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	

CLIENT: Westarvelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.

SHEET 7 OF 12

SHEET 7  
MATCH LINE

EXISTING 1/2"  
IRON ROD & CAP  
STAMPED WSM  
LB 4207

SHEET 6  
MATCH LINE

SECTION 32

MAP OF BOUNDARY SURVEY  
SHEET 8

A PORTION OF PROPERTY DESCRIBED  
IN O.R. BOOK 1690, PAGE 1491 AND  
A PORTION OF PROPERTY DESCRIBED  
IN O.R. BOOK 1690, PAGE 1493  
LOCATED PARTIALLY IN SECTION 37,  
& SECTION 42, T1N, R28W, & PARTIALLY  
IN SECTION 3, T1S, R28W, SANTA  
ROSA COUNTY, FLORIDA.

**1,074.70 AC.±**

S79°53'06"E 2852.63'

SECTION 33

SCALE: 1"=400'

EXISTING 1/2"  
IRON ROD & CAP  
STAMPED WSM  
LB 4207

2 TRAIL  
ROAD

S09°06'12"W 2876.32'  
SECTION 33



BANNERMAN  
SURVEYORS

**BANNERMAN  
SURVEYORS**  
INCORPORATED

LICENSED IN:

FLORIDA COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

PHONE (850) 526-4460

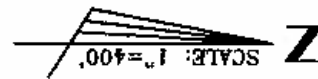
FAX (850) 526-4462

TOLL FREE 1-888-526-4460

JOB NO. M08-105173	FILE NAME: M08105173L5
SCALE: 1"=400'	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/15,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.	
SHEET 8 OF 12	

**SHEET 7**

**SHEET 9**



**TOLL FREE 1-888-526-4460**

JOB NO. M08-105173	FILE NAME: M08105173L6
SCALE: 1"=400'	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/1S,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Tide Partners, LLC; & Chicago Tide Insurance Co.	
SHEET 9 OF 12	

# MAP OF BOUNDARY SURVEY

SHEET 10

MATCH LINE

SHEET 8

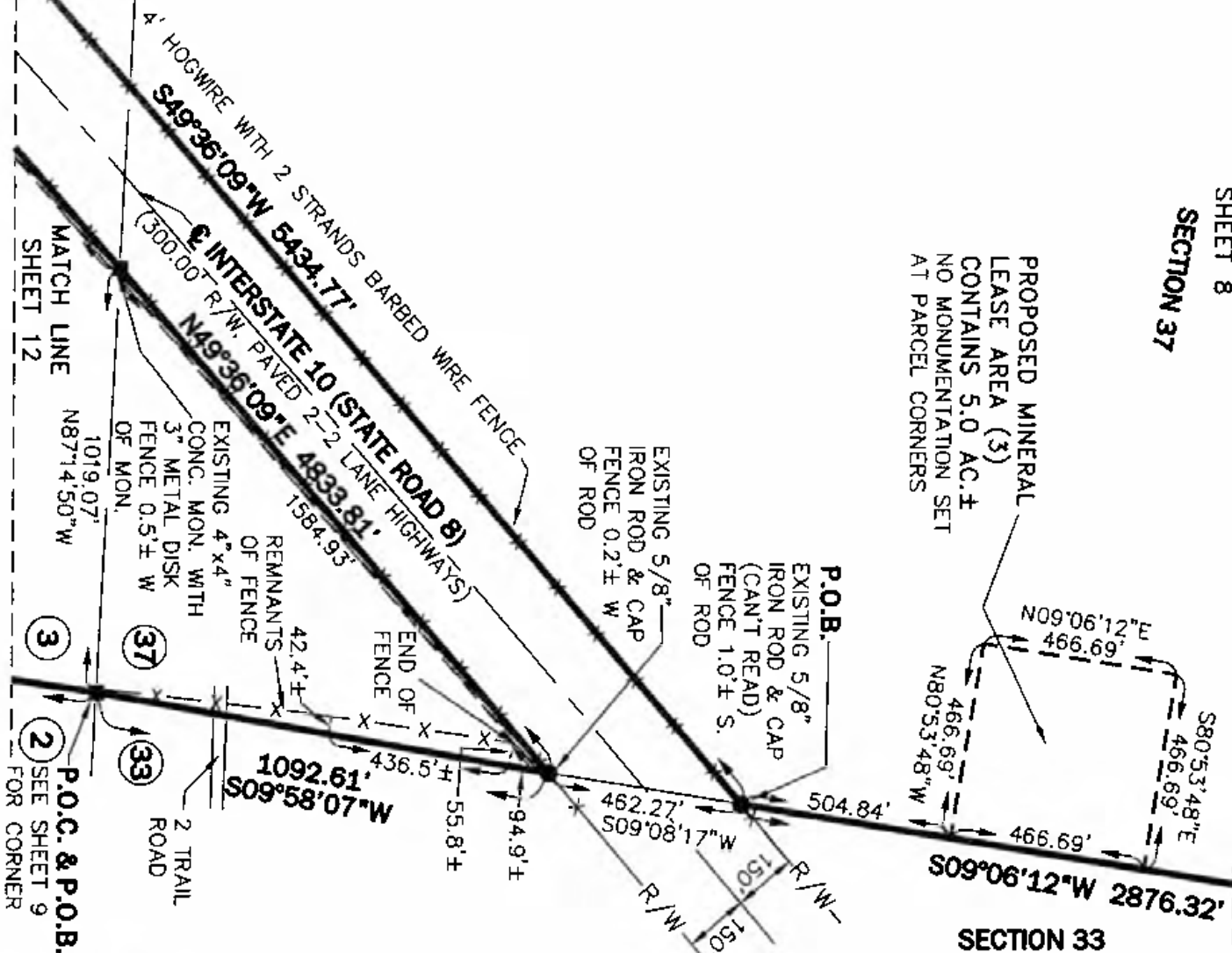
SECTION 37

SCALE: 1"=400'

42

SHEET 9  
MATCH LINE

T1N, R28W  
T1S, R28W



BANNERMAN  
SURVEYORS

**BANNERMAN  
SURVEYORS**

INCORPORATED

LICENSED IN:

FLORIDA

COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

PHONE (850) 526-4460

FAX (850) 526-4462

TOLL FREE 1-888-526-4460

JOB NO. M08-105173 FILE NAME: M08105173L7

SCALE: 1"=400'

DISC NO:

DATE: 11-14-07

DRAWN BY: A. MATHIS

SEC.37/42/3,T1N/1S,R28W

APPROVED BY: R.A.B.

COUNTY: SANTA ROSA

REVISED: 12-15-09

TYPE OF SURVEY: BOUNDARY

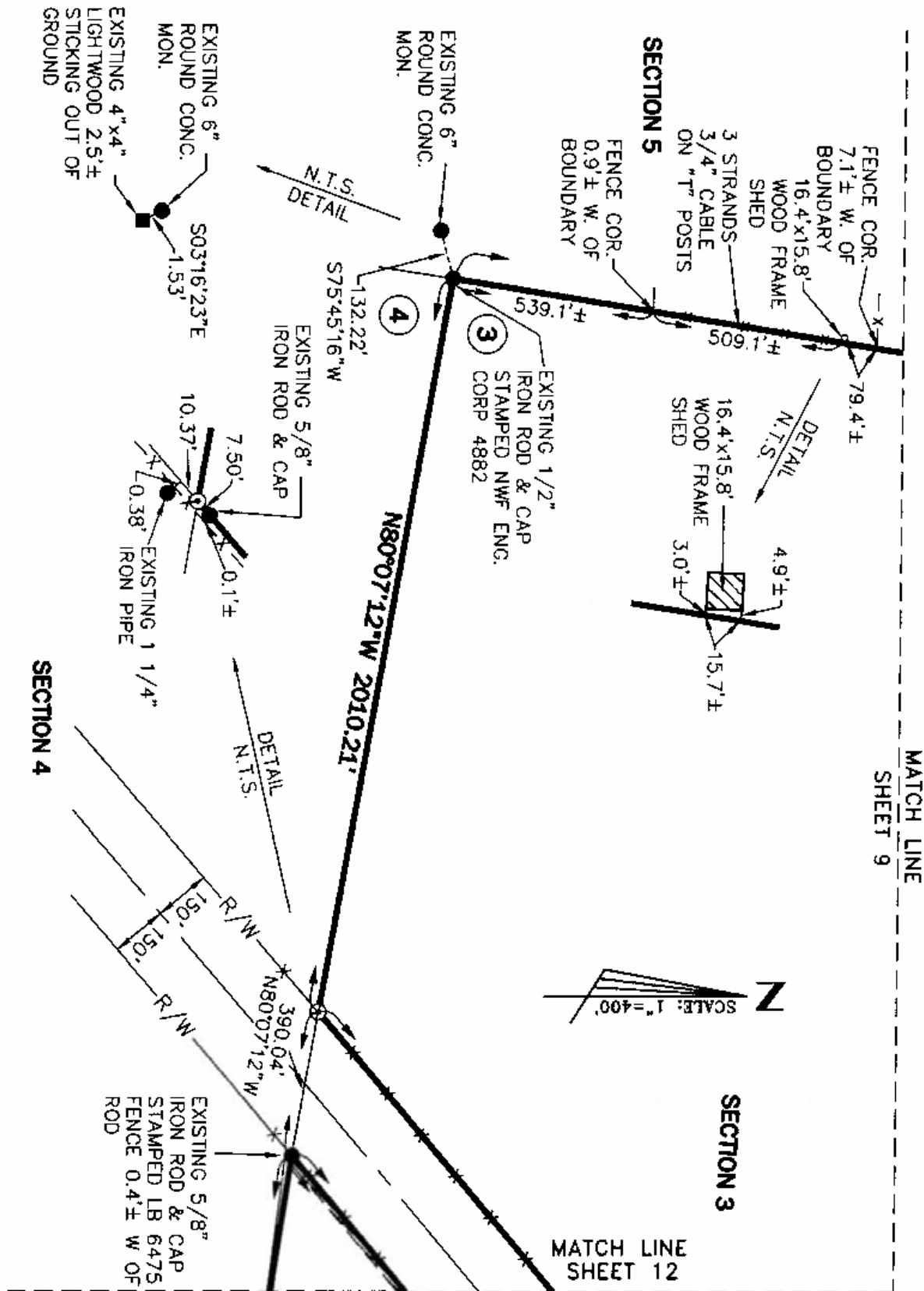
CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.

SHEET 10 OF 12



# MAP OF BOUNDARY SURVEY

## SHEET 11



BANNERMAN  
SURVEYORS

### BANNERMAN SURVEYORS

INCORPORATED  
LICENSED IN:  
FLORIDA COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"  
4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448  
PHONE (850) 526-4460 FAX (850) 526-4462  
TOLL FREE 1-888-526-4460

JOB NO. M08-105173	FILE NAME: M08105173L8
SCALE: 1"=400'	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/1S,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westervelt Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.	

# MAP OF BOUNDARY SURVEY

SHEET 12

MATCH LINE  
SHEET 10

SECTION 3

P.O.C. & P.O.B.  
SE CORNER OF SECTION 37,  
T1N, R28W, SANTA  
ROSA COUNTY, FLORIDA

EXISTING 4"x4"  
CONC. MON. WITH  
NAIL IN TOP  
END OF FENCE  
1.5'± S. & 9.3'±  
W OF MON.

EXISTING 4"x4"  
CONC. MON. WITH  
NAIL IN TOP  
END OF FENCE  
1.5'± S. & 9.3'±  
W OF MON.

130.87 AC.±

A PORTION OF PROPERTY DESCRIBED  
IN O.R. BOOK 1690, PAGE 1491  
LOCATED PARTIALLY IN SECTION 37,  
T1N, R28W, & PARTIALLY IN  
SECTION 3, T1S, R28W, SANTA  
ROSA COUNTY, FLORIDA.

LINES BASED ON  
SURVEY PERFORMED  
BY WEIDENER SURVEYING  
& MAPPING P.A. FOR  
DEPT. OF ENVIRONMENTAL  
PROTECTION (GARCON  
ECOSYSTEM BOUNDARY  
SURVEY)  
DATED 02-27-01

MATCH LINE  
SHEET 11

S08°43'56"W 2558.85'

SECTION 2

SCALE: 1"=400'

37

33

3

2

T1N, R28W  
T1S, R28W 1019.07'  
N87°14'50"W

4' HOGWIRE WITH 2 STRANDS  
BARBED WIRE FENCE  
E INTERSTATE 10 (STATE ROAD 8)  
300.00' R/W. PAVED 2-2 LANE HIGHWAYS)  
S49°36'09"W B434.17'  
N49°36'09"E 4833.81'  
3248.88'  
16.5' HOGWIRE WITH 2 STRANDS BARBED WIRE FENCE  
PER O.R. BOOK 903, PAGE 848, O.R. BOOK 903, PAGE 851  
& O.R. BOOK 903, PAGE 854 CONTAINS 1.82 AC.±  
A STRIP OF LAND 16.5' IN WIDTH LYING SOUTH OF  
ADJACENT TO. & PARALLEL TO I-10 SYSTEM R/W  
BOUNDARY

15'± 2 TRAIL  
ROAD

1743.65'  
N81°20'54"W

EXISTING 4"x4"  
CONC. MON.  
(DISTURBED)

187.38'  
S02°22'05"W

EXISTING 4"x5"  
OVAL MON. WITH  
8" WOOD POSTS  
FLUSH WITH S.  
SIDE

EXISTING 6"  
TERRA COTTA

N01°49'52"E  
46.18'

1324.75'  
N81°20'05"W

15'± 2 TRAIL  
ROAD

EXISTING 4"x4"  
CONC. MON. WITH  
1" BEDRAL S.  
71.03'

EXISTING 5" OVAL  
CONC. MON. WITH  
2 1/2"x6" METAL  
POST NW OF MON.  
41.17'  
S02°35'36"W

**BANNERMAN  
SURVEYORS**  
INCORPORATED

LICENSED IN:

FLORIDA COLORADO

"OLDEST SURVEYING FIRM IN JACKSON COUNTY, FLORIDA"

4997 HIGHWAY 90 - MARIANNA, FLORIDA 32448

PHONE (850) 526-4460

FAX (850) 526-4462

TOLL FREE 1-888-526-4460

JOB NO. M08-105173	FILE NAME: M08105173L9
SCALE: 1"=400'	DISC NO:
DATE: 11-14-07	DRAWN BY: A. MATHIS
SEC.37/42/3,T1N/1S,R28W	APPROVED BY: R.A.B.
COUNTY: SANTA ROSA	REVISED: 12-15-09
TYPE OF SURVEY: BOUNDARY	
CLIENT: Westarvek Ecological Services, LLC, a Delaware limited liability Co.; State of Florida Department of Environmental Protection; Gulf Coast Title Partners, LLC; & Chicago Title Insurance Co.	
SHEET 12 OF 12	



BANNERMAN  
SURVEYORS

Exhibit 9  
Financial Documentation

STATE OF FLORIDA

MITIGATION BANK STANDBY TRUST FUND AGREEMENT TO DEMONSTRATE  
CONSTRUCTION AND IMPLEMENTATION FINANCIAL ASSURANCE

THIS TRUST AGREEMENT (the "Agreement") entered into as of December 29, 2009 by and between Westervelt Ecological Services, LLC, a Delaware limited liability company ("Grantor"), and Wells Fargo Bank, N.A. (the "Trustee").

WHEREAS, Grantor is the owner of certain real property in Santa Rosa County, Florida, and has received from the State of Florida Department of Environmental Protection (the "Department") that certain permit number 0284438-001 (the "Permit") and has received from the United States Army Corps of Engineers ("Corps") that certain Mitigation Banking Instrument number SAJ-2007-04377 (the "Federal MBI"); and

WHEREAS, the Permit and Federal MBI authorize the construction implementation and perpetual management of the Pensacola Bay Mitigation Bank ("PBMB"); and

WHEREAS, the Department, has established certain regulations applicable to Grantor, which require Grantor to provide assurance that funds will be available when needed for corrective action if Grantor fails to construct and implement the PBMB; and

WHEREAS, the Permit and the Federal MBI requirements for the construction and implementation of the PBMB overlap but are not identical; and

WHEREAS, Grantor has elected to establish an Irrevocable Letter of Credit to provide all or part of such financial assurance for the PBMB identified herein and is required to establish a standby trust fund able to accept payments from that instrument; and

WHEREAS, Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

- (a) The term "Grantor" means Westervelt Ecological Services, LLC who enters into this Agreement and any successors or assigns of Westervelt Ecological Services, LLC.
- (b) The term "Trustee" means Wells Fargo Bank, N.A., the trustee who enters into this Agreement and any successor trustee.
- (c) The term "Department" means the State of Florida Department of Environmental Protection or any successor thereof.
- (d) The term "Investment Obligations" means:

(i) United States of America Treasury and Federal agency securities or other obligations issued or unconditionally guaranteed as to principal and interest by the United States of America, in each case with maturities of not more than one year from the date acquired;

(ii) Demand deposits, certificates of deposit, bankers acceptances and time deposits of any bank organized or licensed to conduct a banking business under the laws of the United States of America or any state thereof having capital, surplus and undivided profits of not less than \$100,000,000, and whose deposits are insured by the Federal Deposit Insurance Corporation or any successor thereof;

(iii) Securities of entities incorporated under the laws of the United States of America or any State thereof commonly known as "commercial paper" that at the time of purchase have been rated and the ratings for which are not less than "P1" if rated by Moody's Investors Services, Inc., and not less than "A1" if rated by Standard and Poor's Corporation, in each case with maturities of not more than one year from the date acquired;

(iv) State or local government securities, which debt obligations at the time of purchase are rated investment grade by one or more nationally recognized rating agencies, in each case with maturities of not more than one year from the date acquired;

(v) Repurchase obligations with any banking or financial institution described in clause (ii) above which are fully collateralized at all times by any of the foregoing obligations;

(vi) Corporate fixed income securities whose ratings at the time of purchase are rated not less than "A-" if rated by Standard and Poor's Corporation and "A3" if rated by Moody's Investors Services, Inc. in each case with maturities of not more than one year from the date acquired; and

(vii) Investments in any one or more professionally managed money market funds generally regarded as investment grade with a portfolio size of not less than \$100,000,000.

(e) The term "Corps" means the United States Department of Defense, Army Corps of Engineers (Jacksonville District, Regulatory Division), or any successor thereof.

(f) The term "Permit" means the State of Florida Department of Environmental Protection permit, and all conditions and modifications thereof, for the construction and implementation of the PBMB.

(g) The term "Federal MBI" means the U.S. Army Corps of Engineers Mitigation Banking Instrument and all conditions and modifications thereof for the construction and implementation of the PBMB.

(h) The term "Corps Representative" shall mean the Corps' District Engineer (Jacksonville District, Regulatory Division).

(i) The term "Department Representative" shall mean the Department's Secretary or designee.

Section 2. Identification of Cost Estimates. This Agreement pertains to the cost estimate for construction and implementation of the PBMB identified in the Permit and as amended from time to time in accordance with the Permit.

Section 3. Standby Trust. This trust shall remain dormant until funded with the proceeds from the letter of credit identified in Attachment A hereto (the "Letter of Credit"). The Trustee shall have no duties or responsibilities beyond safekeeping this Agreement. Upon funding this trust shall become active and be administered pursuant to the terms of this Agreement.

Section 4. Establishment of Fund. Grantor and the Trustee hereby establish a trust fund (the Fund), for the benefit of the Department. Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as a standby to receive payments and shall not consist of any property. Payments made by Grantor pursuant to the Department's or the Corps' instructions are transferred to the Trustee and referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST for the benefit of the Department, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from Grantor, any payments necessary to discharge any liabilities of Grantor established by the Department.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee and shall consist initially of proceeds from the Letter of Credit.

Section 6. Payment for Completing Construction and Implementation. The Trustee shall make payments from the Fund as the Department shall direct in writing to provide for the payment of the costs of completing construction and implementation of the PBMB pursuant to the requirements of the Permit. The Trustee shall reimburse persons specified by the Department from the Fund for construction and implementation expenditures in such amounts as the Department shall direct in writing. In addition, the Trustee shall refund to Grantor such amounts as the Department specifies in writing as unnecessary or excessive corpus for purposes of the trust. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

The Fund may not be drawn upon to cover any of the following:

- (a) Any obligation of Grantor under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
- (b) Bodily injury to an employee of Grantor arising from, and in the course of employment by Grantor;
- (c) Bodily injury or non-realty property damage arising from the ownership, maintenance, use, or entrustment to others by Grantor of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by Grantor that is not the direct result of the construction and implementation of the PBMB; or

(e) Bodily injury or property damage for which Grantor is obligated to pay damages by reason of the assumption of liability in a contract or agreement.

Section 7. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund in one or more Investment Obligations and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge its duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

- (a) Securities or other obligations of Grantor, or any other owner or operator of the PBMB, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a state government;
- (b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or a state government; and
- (c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 8. Commingling and Investment. The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 9. Express Power of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the



purchase money or to inquire into the validity or expediency of any such sale or other disposition;

- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or a State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 10. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by the Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 11. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to Grantor and to the Department a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the fund. The failure of Grantor or the Department to object in writing to the Trustee within 90 days after the statement has been furnished to Grantor and the Department shall constitute a conclusively binding assent by Grantor, barring Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.

Section 12. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 13. Trustee Compensation. Grantor shall pay the Trustee any necessary fees for services rendered. Where Grantor is no longer in existence, the Trustee is authorized to charge against the Trust



its published Trust fee schedule in effect at the time services are rendered. However, all Trustee compensation charged against the Trust shall be paid from trust income, unless the Department authorize in writing payment from the trust principal.

Section 14. Successor Trustee. The Trustee may resign or Grantor may replace the Trustee, but such resignation or replacement shall not be effective until Grantor has appointed a successor Trustee, the successor is approved by the Department, and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason Grantor cannot or does not act in the event of the resignation of the Trustee, the Department may nominate a successor. If the Department does not act, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to Grantor, the Department, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 13.

Section 15. Instructions to the Trustee. All orders, requests, and instructions by Grantor to the Trustee shall be in writing, signed by a representative of Grantor. The Trustee shall be fully protected in acting without inquiry in accordance with Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Department to the Trustee shall be in writing, signed by the Department or the Department's Representative, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of Grantor or the Department hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from Grantor and/or the Department, except as provided for herein.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by Grantor, the Trustee, and the Department, or by the Trustee and the Department if Grantor is administratively or judicially dissolved or otherwise ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of Grantor, the Trustee, and the Department, or by the Trustee and the Department, if Grantor is administratively or judicially dissolved or otherwise ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration expenses, shall be delivered pursuant to the written agreement terminating the trust or, where Grantor has ceased to exist, then to the Department. The Corps shall be notified in writing at least 120 days in advance of any termination or revocation of this Agreement.

Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by Grantor or the Department issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by Grantor or from the Trust Fund, or both, from

and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Florida.

Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written.

WESTERVELT ECOLOGICAL SERVICES, LLC

By: 

Name:

Marc Hamilton

Title:

Treasurer

Attest:

  
Title Secretary

Seal

WELLS FARGO BANK, N.A.

By: 

Name:

Michael C. Jenkins

Title:

Relationship Manager / AVP

Attest: 

  
Title Relationship Specialist

Seal

STATE OF ALABAMA  
COUNTY OF TUSCALOOSA

The foregoing instrument was acknowledged before me this 29th day of December, 2009, by Narc Hamilton, the Treasurer of Westervelt Ecological Services, a Delaware limited liability company, on behalf of the corporation. Such person did not take an oath and:

X is/are personally known to me  
\_\_\_\_ produced a current Florida driver's license as identification  
\_\_\_\_ produced \_\_\_\_\_ as identification

April Coleman  
Signature of Notary

(Notary Seal)

April Coleman  
Name of Notary (typed, printed or stamped)  
Commission number (if not legible on seal) \_\_\_\_\_  
My commission expires: (if not legible on seal) \_\_\_\_\_

NOTARY PUBLIC STATE OF ALABAMA AT LARGE  
MY COMMISSION EXPIRES: Aug 24, 2013  
~~NOTARY PUBLIC UNDERWRITERS~~

STATE OF FLORIDA  
COUNTY OF Duval

The foregoing instrument was acknowledged before me this 29th day of December, 2009, by Michael Jenkins, the ARP of Wells Fargo Bank, on behalf of the corporation. Such person did not take an oath and:

X is/are personally known to me  
\_\_\_\_ produced a current Florida driver's license as identification  
\_\_\_\_ produced \_\_\_\_\_ as identification

Gigi M. Cadieux  
Signature of Notary

(Notary Seal)

Gigi M. Cadieux  
Name of Notary (typed, printed or stamped)  
Commission number (if not legible on seal) \_\_\_\_\_  
My commission expires: (if not legible on seal) \_\_\_\_\_



ATTACHMENT A

[NAME OF SURETY BOND OR LETTER OF CREDIT]

ATTACHMENT A

[NAME OF SURETY BOND OR LETTER OF CREDIT]



WELLS FARGO BANK, N.A.  
TRADE SERVICES DIVISION, NORTHERN CALIFORNIA  
ONE FRONT STREET, 21<sup>ST</sup> FLOOR  
SAN FRANCISCO, CALIFORNIA 94111  
Contact Phone: 1(800) 798-2815 (Option 1)  
Email : [sftrade@wellsfargo.com](mailto:sftrade@wellsfargo.com)

IRREVOCABLE LETTER OF CREDIT FOR CONSTRUCTION AND IMPLEMENTATION

State of Florida Department of Environmental Protection  
Office of Submerged Lands and Environmental Resources  
Division of Water Management  
Mail Station 2500  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

**RECEIVED**

**DEC 31 2009**

**OFFICE OF SUBMERGED LANDS  
AND ENVIRONMENTAL RESOURCES**

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No.NZ5653306 in your favor, at the request and for the account of: Westervelt Ecological Services, LLC, a Delaware limited liability company, ("Westervelt"), whose address is 1400 Jack Warner Parkway, Tuscaloosa, AL 35404, up to the aggregate amount of Eight Hundred Twelve Thousand Twenty and No/100 U.S. dollars (\$812,020.00), available upon presentation of

- (1) your sight draft, bearing reference to this letter of credit No.NZ5653306, and either:
- (2) a Certificate issued by the Florida Department of Environmental Protection (the "Department") in the form of Certificate I attached hereto and made a part hereof; or
- (3) a Certificate issued by the Florida Department of Environmental Protection (the "Department") in the form of Certificate II attached hereto and made a part hereof.

This letter of credit may be drawn on to cover construction and implementation activities of the Pensacola Bay mitigation Bank ("PBMB") Bank as authorized and required by Department permit number 0284438-001 ("Department Permit") as such permit may be amended and including all plans approved by such permit.

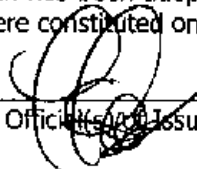
This letter of credit may not be drawn on to cover any of the following:

- a) Any obligation of Westervelt under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
- b) Bodily injury to an employee of Westervelt arising from, and in the course of employment by Westervelt;
- c) Bodily injury or non-realty property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;
- d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by Westervelt that is not the direct result of the construction or implementation of the PBMB pursuant to the Department Permit.
- e) Bodily injury or property damage for which Westervelt is obligated to pay damages by reason of the assumption of liability in a contract or agreement.

This letter of credit is effective as of December 29, 2009 and shall expire on December 28, 2010 thereafter but such expiration date shall be automatically extended without amendment for additional periods of one year from the present or future expiration date unless, at least 120 days before an expiration date, we notify both you and Westervelt by certified mail or receipted express courier that we have decided not to extend this letter of credit for any such additional period. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and Westervelt as shown on the signed return receipts of certified mail or the delivery records of the express courier service.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the Mitigation Bank Standby Trust Fund Agreement to Demonstrate Construction and Implementation, Financial Assurance, for the benefit of the Department in accordance with your instructions.

We certify that the wording of this letter of credit is substantially similar to the wording specified in Form No. 62-342.900(2) which has been adopted by reference in Section 62-342.900, Florida Administrative Code, as such regulations were constituted on the date shown immediately below.

 EISA CHAU  
Signature(s), Title(s) of Official(s) Issuing Document ASSISTANT VICE PRESIDENT

12/29/09 Date

Assistant Vice President

This credit is subject to the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce.

CERTIFICATE I  
TO  
WELLS FARGO BANK, N.A.  
IRREVOCABLE LETTER OF CREDIT NO.NZS653306

Wells Fargo Bank, N.A.  
Trade Services Division, Northern California  
One Front Street, 21<sup>st</sup> Floor  
San Francisco, CA 94111

Date: \_\_\_\_\_, 20\_\_

Westervelt Ecological Services, LLC, a Delaware limited liability company  
1400 Jack Warner Parkway NE  
Tuscaloosa, AL 35404

Ladies and Gentlemen:

The undersigned \_\_\_\_\_, the Secretary of the Florida Department of Environmental Protection (the "Department"), hereby certifies to Wells Fargo Bank, N.A. (the "Bank") and Westervelt Ecological Services, LLC ("Westervelt"), with reference to Irrevocable Letter of Credit No. NZS653306 (the "Letter of Credit"), dated December 29, 2009, (the "Letter of Credit"), issued by the Bank in favor of the Department as follows:

1. The Department has heretofore provided written notice by U.S. Mail to Westervelt of the Department's present right to draw upon the Letter of Credit in accordance with the provisions of Department Permit Number #0284438-001 ("Department Permit"),
2. Westervelt has failed to comply with the terms and conditions of the Department Permit.

Funds paid pursuant to the provisions of the Letter of Credit shall be transferred to \_\_\_\_\_ Bank, as Trustee (the "Trustee") under the certain Mitigation Bank Standby Trust Fund Agreement to Demonstrate Construction/Implementation Financial Assurance, dated as of \_\_\_\_\_, between Westervelt and the Trustee for the benefit of the Department in accordance with the following instructions:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IN WITNESS WHEREOF, this Certificate has been duly executed and delivered on behalf of the Department as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

By: \_\_\_\_\_  
Name:



CERTIFICATE II  
TO  
WELLS FARGO BANK, N.A.  
IRREVOCABLE NONTRANSFERABLE STANDBY  
LETTER OF CREDIT NO.NZS653306

Wells Fargo Bank, N.A.  
Trade Services Division, Northern California  
One Front Street, 21<sup>st</sup> Floor  
San Francisco, CA 94111

Date: \_\_\_\_\_, 20\_\_

Westervelt Ecological Services, LLC, a Delaware limited liability company  
1400 Jack Warner Parkway NE  
Tuscaloosa, AL 35404

Ladies and Gentlemen:

The undersigned \_\_\_\_\_, the Secretary of the Florida Department of Environmental Protection ("the Department"), hereby certifies to Wells Fargo Bank, N.A. (the "Bank"), and Westervelt Ecological Services, LLC ("Westervelt"), with reference to Irrevocable Letter of Credit No.NZS653306, dated December 29, 2009, (the "Letter of Credit"), issued by the Bank in favor of the Department, as follows:

1. The Bank has heretofore provided written notice to the Department and Westervelt of the Bank's intent not to renew the Letter of Credit following the present Expiration Date thereof.
2. The Department has provided prior written notice by U.S. Mail to Westervelt of the requirement that Westervelt provide the Department with substitute Financial Assurance in compliance with the provisions of that certain Mitigation Bank Permit # 02B4438-001 ("Department Permit").
3. Westervelt has failed to provide the Department with substitute Financial Assurance in compliance with the provisions of the Department Permit within the ninety (90) days of receipt of the notice described in paragraph 1 above.

Funds paid pursuant to the provisions of the Letter of Credit shall be transferred to \_\_\_\_\_ Bank, as Trustee (the "Trustee") under that certain Mitigation Bank Standby Trust Fund Agreement to Demonstrate Financial Assurance for Construction and Implementation, dated as of \_\_\_\_\_, between Westervelt and the Trustee for the benefit of the Department, in accordance with the following instructions:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IN WITNESS WHEREOF, this Certificate has been duly executed and delivered on behalf of the Department as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

By: \_\_\_\_\_  
Name:

STATE OF FLORIDA

MITIGATION BANK STANDBY TRUST FUND AGREEMENT  
TO DEMONSTRATE PERPETUAL MANAGEMENT FINANCIAL ASSURANCE

THIS TRUST AGREEMENT (the "Agreement") entered into as of December 29, 2009 by and Between Westervelt Ecological Services, a Delaware limited liability company ("Grantor"), and Wells Fargo Bank, N.A. (the "Trustee").

WHEREAS, Grantor is the owner of certain real property in Santa Rosa County, Florida, and has received from the State of Florida Department of Environmental Protection (the "Department") that certain permit number 0284438-001 (the "Permit") and has received from the United States Army Corps of Engineers ("Corps") that certain Mitigation Banking Instrument number SAJ-2007-04377 (the "Federal MBI"); and

WHEREAS, the Permit and Federal MBI authorize the construction implementation and perpetual management of the Pensacola Bay Mitigation Bank ("PBMB"); and

WHEREAS, the Department and Corps have established certain regulations applicable to Grantor, which require Grantor to provide assurance that funds will be available when needed for corrective action if Grantor fails to demonstrate perpetual management; and

WHEREAS, the Permit and the Federal MBI requirements for the perpetual management of the PBMB overlap but are not identical; and

WHEREAS, Grantor has elected to establish an Irrevocable Letter of Credit to provide all or part of such financial assurance for the PBMB identified herein and is required to establish a standby trust fund able to accept payments from that instrument; and

WHEREAS, Grantor, acting through its duly authorized officers, has selected the Trustee to be the trustee under this agreement, and the Trustee is willing to act as trustee,

NOW, THEREFORE, Grantor and the Trustee agree as follows:

Section 1. Definitions. As used in this Agreement:

- (a) The term "Grantor" means Westervelt Ecological Services, LLC, who enters into this Agreement and any successors or assigns of Westervelt Ecological Services, LLC.
- (b) The term "Trustee" means Wells Fargo Bank, N.A., the trustee who enters into this Agreement and any successor trustee.
- (c) The term "Department" means the State of Florida Department of Environmental Protection or any successor thereof.
- (d) The term "Investment Obligations" means:

(i) United States of America Treasury and Federal agency securities or other obligations issued or unconditionally guaranteed as to principal and interest by the United States of America, in each case with maturities of not more than one year from the date acquired;

(ii) Demand deposits, certificates of deposit, bankers acceptances and time deposits of any bank organized or licensed to conduct a banking business under the laws of the United States of America or any state thereof having capital, surplus and undivided profits of not less than \$100,000,000, and whose deposits are insured by the Federal Deposit Insurance Corporation or any successor thereof;

(iii) Securities of entities incorporated under the laws of the United States of America or any State thereof commonly known as "commercial paper" that at the time of purchase have been rated and the ratings for which are not less than "P1" if rated by Moody's Investors Services, Inc., and not less than "A1" if rated by Standard and Poor's Corporation, in each case with maturities of not more than one year from the date acquired;

(iv) State or local government securities, which debt obligations at the time of purchase are rated investment grade by one or more nationally recognized rating agencies, in each case with maturities of not more than one year from the date acquired;

(v) Repurchase obligations with any banking or financial institution described in clause (ii) above which are fully collateralized at all times by any of the foregoing obligations;

(vi) Corporate fixed income securities whose ratings at the time of purchase are rated not less than "A-" if rated by Standard and Poor's Corporation and "A3" if rated by Moody's Investors Services, Inc. in each case with maturities of not more than one year from the date acquired; and

(vii) Investments in any one or more professionally managed money market funds generally regarded as investment grade with a portfolio size of not less than \$100,000,000.

(e) The term "Corps" means the United States Department of Defense, Army Corps of Engineers (Jacksonville District, Regulatory Division), or any successor thereof.

(f) The term "Permit" means the Florida Department of Environmental Protection permit, and all conditions and modifications thereof, for the construction, implementation and perpetual management of the PBMB.

(g) The term "Federal MBI" means the U.S. Army Corps of Engineers Mitigation Banking Instrument and all conditions and modifications thereof for the construction, implementation and perpetual management of the PBMB.

(h) The term "Corps Representative" shall mean the Corps' District Engineer (Jacksonville District, Regulatory Division).

- (i) The term "Department Representative" shall mean the Department's Secretary or designee.

Section 2. Identification of Cost Estimates. This Agreement pertains to the cost estimate for perpetual management of the PBMB identified in the Permit, and as updated from time to time in accordance with the Permit.

Section 3. Standby Trust. This trust shall remain dormant until funded with the proceeds from the letter of credit identified in Attachment "A" hereto (the "Letter of Credit"). The Trustee shall have no duties or responsibilities beyond safekeeping this Agreement. Upon funding this trust shall become active and be administered pursuant to the terms of this Agreement.

Section 4. Establishment of Fund. Grantor and the Trustee hereby establish a trust fund (the Fund), for the benefit of the Department. Grantor and the Trustee intend that no third party have access to the Fund except as herein provided. The Fund is established initially as a standby to receive payments and shall not consist of any property. Payments made by Grantor pursuant to the Department's or the Corps' instructions are transferred to the Trustee and referred to as the Fund, together with all earnings and profits thereon, less any payments or distributions made by the Trustee pursuant to this Agreement. The Fund shall be held by the Trustee, IN TRUST for the benefit of the Department, as hereinafter provided. The Trustee shall not be responsible nor shall it undertake any responsibility for the amount or adequacy of, nor any duty to collect from Grantor, any payments necessary to discharge any liabilities of Grantor established by the Department or the Corps.

Section 5. Payments Comprising the Fund. Payments made to the Trustee for the Fund shall consist of cash or securities acceptable to the Trustee and shall consist initially of proceeds from the Letter of Credit. After the initial deposit of principal into the Fund, Grantor shall increase the principal if so required by the Department's permit, the Corps permit or the Federal MBI.

Section 6. Payment for Undertaking Perpetual Management Activities. The Trustee shall make payments from the Fund as follows to provide for the payment of the costs of undertaking activities to provide for the perpetual management of PBMB covered by this Agreement pursuant to the requirements of the Permit. With the written consent of the Secretary of the Department, or the Secretary's designee, the Trustee shall reimburse persons as directed in writing by the Grantor or the Department or the Corps Representative from the income from the Fund for perpetual management expenditures. The Trustee shall not make any payments from the principal of the Fund without proof of thirty (30) days written notice to the Grantor and Corps Representative and written consent from the Secretary of the Department or Director of the Division of Water Resource Management. In addition, the Trustee shall refund to the Grantor such amounts as the Department specifies in writing as unnecessary or excessive corpus for purposes of the trust. Upon refund, such funds shall no longer constitute part of the Fund as defined herein.

The Fund may not be drawn upon to cover any of the following:

- (a) Any obligation of Grantor under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;

(b) Bodily injury to an employee of Grantor arising from, and in the course of employment by Grantor;

(c) Bodily injury or non-realty property damage arising from the ownership, maintenance, use, or entrustment to others by Grantor of any aircraft, motor vehicle, or watercraft;

(d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by Grantor that is not the direct result of the construction and implementation of the PBMB; or

(e) Bodily injury or property damage for which Grantor is obligated to pay damages by reason of the assumption of liability in a contract or agreement.

Section 7. Trustee Management. The Trustee shall invest and reinvest the principal and income of the Fund in one or more Investment Obligations and keep the Fund invested as a single fund, without distinction between principal and income, in accordance with general investment policies and guidelines. In investing, reinvesting, exchanging, selling, and managing the Fund, the Trustee shall discharge its duties with respect to the trust fund solely in the interest of the beneficiary and with the care, skill, prudence, and diligence under the circumstances then prevailing which persons of prudence, acting in a like capacity and familiar with such matters, would use in the conduct of an enterprise of a like character and with like aims; except that:

- (a) Securities or other obligations of Grantor, or any other owner or operator of the PBMB, or any of their affiliates as defined in the Investment Company Act of 1940, as amended, 15 U.S.C. 80a-2.(a), shall not be acquired or held, unless they are securities or other obligations of the Federal or a state government;
- (b) The Trustee is authorized to invest the Fund in time or demand deposits of the Trustee, to the extent insured by an agency of the Federal or a state government; and
- (c) The Trustee is authorized to hold cash awaiting investment or distribution uninvested for a reasonable time and without liability for the payment of interest thereon.

Section 8. Commingling and Investment. The Trustee is expressly authorized in its discretion:

- (a) To transfer from time to time any or all of the assets of the Fund to any common, commingled, or collective trust fund created by the Trustee in which the Fund is eligible to participate, subject to all of the provisions thereof, to be commingled with the assets of other trusts participating therein; and
- (b) To purchase shares in any investment company registered under the Investment Company Act of 1940, 15 U.S.C. 80a-1 et seq., including one which may be created, managed, underwritten, or to which investment advice is rendered or the shares of which are sold by the Trustee. The Trustee may vote such shares in its discretion.

Section 9. Express Power of Trustee. Without in any way limiting the powers and discretion conferred upon the Trustee by the other provisions of this Agreement or by law, the Trustee is expressly authorized and empowered:

- (a) To sell, exchange, convey, transfer, or otherwise dispose of any property held by it, by public or private sale. No person dealing with the Trustee shall be bound to see to the application of the purchase money or to inquire into the validity or expediency of any such sale or other disposition;
- (b) To make, execute, acknowledge, and deliver any and all documents of transfer and conveyance and any and all other instruments that may be necessary or appropriate to carry out the powers herein granted;
- (c) To register any securities held in the Fund in its own name or in the name of a nominee and to hold any security in bearer form or in book entry, or to combine certificates representing such securities with certificates of the same issue held by the Trustee in other fiduciary capacities, or to deposit or arrange for the deposit of such securities in a qualified central depository even though, when so deposited, such securities may be merged and held in bulk in the name of the nominee of such depository with other securities deposited therein by another person, or to deposit or arrange for the deposit of any securities issued by the United States Government, or any agency or instrumentality thereof, with a Federal Reserve bank, but the books and records of the Trustee shall at all times show that all such securities are part of the Fund;
- (d) To deposit any cash in the Fund in interest-bearing accounts maintained or savings certificates issued by the Trustee, in its separate corporate capacity, or in any other banking institution affiliated with the Trustee, to the extent insured by an agency of the Federal or a State government; and
- (e) To compromise or otherwise adjust all claims in favor of or against the Fund.

Section 10. Taxes and Expenses. All taxes of any kind that may be assessed or levied against or in respect of the Fund and all brokerage commissions incurred by the Fund shall be paid from the Fund. All other expenses incurred by the Trustee in connection with the administration of this Trust, including fees for legal services rendered to the Trustee, the compensation of the Trustee to the extent not paid directly by Grantor, and all other proper charges and disbursements of the Trustee shall be paid from the Fund.

Section 11. Annual Valuation. The Trustee shall annually, at least 30 days prior to the anniversary date of establishment of the Fund, furnish to Grantor and to the Department a statement confirming the value of the Trust. Any securities in the Fund shall be valued at market value as of no more than 60 days prior to the anniversary date of establishment of the fund. The failure of Grantor or the Department to object in writing to the Trustee within 90 days after the statement has been furnished to Grantor and the Department shall constitute a conclusively binding assent by Grantor, barring Grantor from asserting any claim or liability against the Trustee with respect to matters disclosed in the statement.



Section 12. Advice of Counsel. The Trustee may from time to time consult with counsel, who may be counsel to Grantor, with respect to any question arising as to the construction of this Agreement or any action to be taken hereunder. The Trustee shall be fully protected, to the extent permitted by law, in acting upon the advice of counsel.

Section 13. Trustee Compensation. Grantor shall pay the Trustee any necessary fees for services rendered. Where Grantor is no longer in existence, the Trustee is authorized to charge against the Trust its published Trust fee schedule in effect at the time services are rendered. However, all Trustee compensation charged against the Trust shall be paid from trust income, unless the Department authorizes in writing payment from the trust principal.

Section 14. Successor Trustee. The Trustee may resign or Grantor may replace the Trustee, but such resignation or replacement shall not be effective until Grantor has appointed a successor Trustee, the successor is approved by the Department, and this successor accepts the appointment. The successor trustee shall have the same powers and duties as those conferred upon the Trustee hereunder. Upon the successor trustee's acceptance of the appointment, the Trustee shall assign, transfer, and pay over to the successor trustee the funds and properties then constituting the Fund. If for any reason Grantor cannot or does not act in the event of the resignation of the Trustee, the Department may nominate a successor. If the Department does not act, the Trustee may apply to a court of competent jurisdiction for the appointment of a successor trustee or for instructions. The successor trustee shall specify the date on which it assumes administration of the trust in a writing sent to Grantor, the Department, and the present Trustee by certified mail 10 days before such change becomes effective. Any expenses incurred by the Trustee as a result of any of the acts contemplated by this Section shall be paid as provided in Section 13.

Section 15. Instructions to the Trustee. All orders, requests, and instructions by Grantor to the Trustee shall be in writing, signed by a representative of Grantor. The Trustee shall be fully protected in acting without inquiry in accordance with Grantor's orders, requests, and instructions. All orders, requests, and instructions by the Department to the Trustee shall be in writing, signed by the Department or the Department's Representative, and the Trustee shall act and shall be fully protected in acting in accordance with such orders, requests, and instructions. The Trustee shall have the right to assume, in the absence of written notice to the contrary, that no event constituting a change or a termination of the authority of any person to act on behalf of Grantor or the Department, or the Corps hereunder has occurred. The Trustee shall have no duty to act in the absence of such orders, requests, and instructions from Grantor, and/or the Department, and/or the Corps, except as provided for herein.

Section 16. Amendment of Agreement. This Agreement may be amended by an instrument in writing executed by Grantor, the Trustee, and the Department, or by the Trustee and the Department if Grantor is administratively or judicially dissolved or otherwise ceases to exist.

Section 17. Irrevocability and Termination. Subject to the right of the parties to amend this Agreement as provided in Section 16, this Trust shall be irrevocable and shall continue until terminated at the written agreement of Grantor, the Trustee, and the Department, or by the Trustee and the Department, if Grantor is administratively or judicially dissolved or otherwise ceases to exist. Upon termination of the Trust, all remaining trust property, less final trust administration

expenses, shall be delivered pursuant to the written agreement terminating the trust or, where Grantor has ceased to exist, then to the Department. The Corps Representative shall be notified in writing at least 120 days in advance of any termination or revocation of this Agreement.

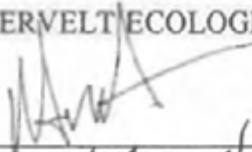
Section 18. Immunity and Indemnification. The Trustee shall not incur personal liability of any nature in connection with any act or omission, made in good faith, in the administration of this Trust, or in carrying out any directions by Grantor or the Department issued in accordance with this Agreement. The Trustee shall be indemnified and saved harmless by Grantor or from the Trust Fund, or both, from and against any personal liability to which the Trustee may be subjected by reason of any act or conduct in its official capacity, including all expenses reasonably incurred in its defense in the event Grantor fails to provide such defense.

Section 19. Choice of Law. This Agreement shall be administered, construed, and enforced according to the laws of the State of Florida.

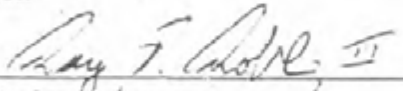
Section 20. Interpretation. As used in this Agreement, words in the singular include the plural and words in the plural include the singular. The descriptive headings for each Section of this Agreement shall not affect the interpretation or the legal efficacy of this Agreement.

IN WITNESS WHEREOF the parties have caused this Agreement to be executed by their respective officers duly authorized and their corporate seals to be hereunto affixed and attested as of the date first above written.

WESTERVELT ECOLOGICAL SERVICES, LLC

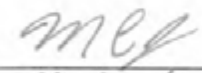
By:   
Name: MARC HAMILTON  
Title: TREASURER

Attest:

  
Title: Secretary

Seal

WELLS FARGO BANK, N.A.

By:   
Name: Michael C. Jenkins  
Title: Relationship Manager /AVP



Attest: *Barbara Williams*  
*Relationship Specialist*  
Title

Seal

STATE OF ALABAMA  
COUNTY OF TUSCALOOSA

The foregoing instrument was acknowledged before me this 29th day of December 2009, by Marc Hamilton, the Treasurer of Westervelt Ecological Services, a Delaware limited liability company, on behalf of the corporation. Such person did not take an oath and:

X is/are personally known to me  
\_\_\_\_\_ produced a current Florida driver's license as identification  
\_\_\_\_\_ produced \_\_\_\_\_ as identification

April Coleman  
Signature of Notary

(Notary Seal)

April Coleman  
Name of Notary (typed, printed or stamped) NOTARY PUBLIC STATE OF ALABAMA AT LARGE  
Commission number (if not legible on seal) MY COMMISSION EXPIRES: Aug 24, 2013  
My commission expires: (if not legible on seal) BONDED THRU NOTARY PUBLIC UNDERWRITERS

STATE OF FLORIDA  
COUNTY OF Duval

The foregoing instrument was acknowledged before me this 29th day of December 2009, by Michael Jenkins, the AVP of Wells Fargo Bank, on behalf of the corporation. Such person did not take an oath and :

X is/are personally known to me  
\_\_\_\_\_ produced a current Florida driver's license as identification  
\_\_\_\_\_ produced \_\_\_\_\_ as identification

Gigi M. Cadieux  
Signature of Notary

(Notary Seal)

Gigi M. Cadieux  
Name of Notary (typed, printed or stamped)  
Commission number (if not legible on seal) \_\_\_\_\_  
My commission expires: (if not legible on seal) \_\_\_\_\_



ATTACHMENT A

[NAME OF SURETY BOND OR LETTER OF CREDIT]



WELLS FARGO BANK, N.A.  
TRADE SERVICES DIVISION, NORTHERN CALIFORNIA  
ONE FRONT STREET, 21<sup>ST</sup> FLOOR  
SAN FRANCISCO, CALIFORNIA 94111  
Contact Phone: 1(800) 798-2815 (Option 1)  
Email : [sftrade@wellsfargo.com](mailto:sftrade@wellsfargo.com)

IRREVOCABLE LETTER OF CREDIT FOR PERPETUAL MANAGEMENT

State of Florida Department of Environmental Protection  
Office of Submerged lands and Environmental Resources  
Division of Water Management  
Mail Station 2500  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

RECEIVED

DEC 31 2009

OFFICE OF SUBMERGED LANDS  
AND ENVIRONMENTAL RESOURCES

Dear Sir or Madam:

We hereby establish our Irrevocable Standby Letter of Credit No. NZS653309 in your favor, at the request and for the account of: Westervelt Ecological Services, LLC, a Delaware limited liability company, ("Westervelt"), whose address is 1400 Jack Warner Parkway, Tuscaloosa, AL 35404, up to the aggregate amount of Four Hundred One Thousand Seven Hundred and No/100 U.S. dollars (\$401,700.00), available upon presentation of

- (1) your sight draft, bearing reference to this letter of credit No. NZS653309, and either:
- (2) a Certificate issued by the Florida Department of Environmental Protection ("Department") in the form of Certificate I attached hereto and made a part hereof; or
- (3) a Certificate issued by the Florida Department of Environmental Protection ("Department") in the form of Certificate II attached hereto and made a part hereof.

This letter of credit may be drawn on to cover perpetual management activities of the Pensacola Bay mitigation Bank ("PBMB") Bank as authorized and required by Department permit number 0284438-001 ("Department Permit") as such permit may be amended and including all plans approved by such permit.

This letter of credit may not be drawn on to cover any of the following:

- a) Any obligation of Westervelt under a workers' compensation, disability benefits, or unemployment compensation law or other similar law;
- b) Bodily injury to an employee of Westervelt arising from, and in the course of employment by Westervelt;
- c) Bodily injury or non-realty property damage arising from the ownership, maintenance, use, or entrustment to others of any aircraft, motor vehicle, or watercraft;
- d) Property damage to any property owned, rented, loaned to, in the care, custody, or control of, or occupied by Westervelt that is not the direct result of the construction or implementation of the PBMB pursuant to the Department Permit.
- e) Bodily injury or property damage for which Westervelt is obligated to pay damages by reason of the assumption of liability in a contract or agreement.

This letter of credit is effective as of December 29, 2009 and shall expire December 28, 2010 thereafter but such expiration date shall be automatically extended without amendment for additional periods of one year from the present or future expiration date unless, at least 120 days before an expiration date, we notify both you and Westervelt by certified mail or receipted express courier that we have decided not to extend this letter of credit for any such additional period. In the event you are so notified, any unused portion of the credit shall be available upon presentation of your sight draft for 120 days after the date of receipt by both you and Westervelt as shown on the signed return receipts of certified mail or the delivery records of the express courier service.

Whenever this letter of credit is drawn on under and in compliance with the terms of this credit, we shall duly honor such draft upon presentation to us, and we shall deposit the amount of the draft directly into the Mitigation Bank Standby Trust Fund Agreement to Demonstrate Perpetual Management Financial Assurance, to benefit the Department in accordance with your instructions.

We certify that the wording of this letter of credit is substantially similar to the wording specified in Form No. 62-342.900(2) which has been adopted by reference in Section 62-342.900, Florida Administrative Code, as such regulations were constituted on the date shown immediately below.

Signature(s), Title(s) of Official(s) of Issuing Institution

  
EISA CHAU

ASSISTANT VICE PRESIDENT

12/29/09 Date

Assistant Vice President

This credit is subject to the most recent edition of the Uniform Customs and Practice for Documentary Credits, published by the International Chamber of Commerce.

CERTIFICATE I  
TO  
WELLS FARGO BANK, N.A.  
IRREVOCABLE LETTER OF CREDIT NO.NZS653309

Wells Fargo Bank, N.A.  
Trade Services Division, Northern California  
One Front Street, 21<sup>st</sup> Floor  
San Francisco, CA 94111

Date: \_\_\_\_\_, 20\_\_

Westervelt Ecological Services, LLC, a Delaware limited liability company  
1400 Jack Warner Parkway NE  
Tuscaloosa, AL 35404

Ladies and Gentlemen:

The undersigned \_\_\_\_\_, the Secretary of the Florida Department of Environmental Protection (the "Department"), hereby certifies to Wells Fargo Bank, N.A. (the "Bank") and Westervelt Ecological Services, LLC ("Westervelt"), with reference to Irrevocable Letter of Credit No.NZS653309, dated December 29, 2009, (the "Letter of Credit"), issued by the Bank in favor of the Department as follows:

1. The Department has heretofore provided written notice by U.S. Mail to Westervelt of the Department's present right to draw upon the Letter of Credit in accordance with the provisions of Department Permit Number #0284438-001 ("Department Permit"),
2. Westervelt has failed to comply with the terms and conditions of the Department Permit.

Funds paid pursuant to the provisions of the Letter of Credit shall be transferred to Wells Fargo Bank, N.A., as Trustee (the "Trustee") under the certain Mitigation Bank Standby Trust Fund Agreement to Demonstrate Perpetual Management Financial Assurance, dated as of \_\_\_\_\_, between Westervelt and the Trustee for the benefit of the Department in accordance with the following instructions:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IN WITNESS WHEREOF, this Certificate has been duly executed and delivered on behalf of the Department as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

By: \_\_\_\_\_  
Name:

CERTIFICATE II  
TO  
WELLS FARGO BANK, N.A.  
IRREVOCABLE NONTRANSFERABLE STANDBY  
LETTER OF CREDIT NO.NZS653309

Wells Fargo Bank, N.A.  
Trade Services Division, Northern California  
One Front Street, 21<sup>st</sup> Floor  
San Francisco, CA 94111

Date: \_\_\_\_\_, 20\_\_

Westervelt Ecological Services, LLC, a Delaware limited liability company  
1400 Jack Warner Parkway NE  
Tuscaloosa, AL 35404

Ladies and Gentlemen:

The undersigned \_\_\_\_\_, the Secretary of the Florida Department of Environmental Protection ("the Department"), hereby certifies to Wells Fargo Bank, N.A. (the "Bank"), and Westervelt Ecological Services, LLC ("Westervelt"), with reference to Irrevocable Letter of Credit No. NZS653309, dated December 29, 2009 (the "Letter of Credit"), issued by the Bank in favor of the Department, as follows:

1. The Bank has heretofore provided written notice to the Department and Westervelt of the Bank's intent not to renew the Letter of Credit following the present Expiration Date thereof.
2. The Department has provided prior written notice by U.S. Mail to Westervelt of the requirement that Westervelt provide the Department with substitute Financial Assurance in compliance with the provisions of that certain Mitigation Bank Permit # 0284438-001 ("Department Permit").
3. Westervelt has failed to provide the Department with substitute Financial Assurance in compliance with the provisions of the Department Permit within the ninety (90) days of receipt of the notice described in paragraph 1 above.

Funds paid pursuant to the provisions of the Letter of Credit shall be transferred to Wells Fargo Bank, N.A., as Trustee (the "Trustee") under that certain Mitigation Bank Standby Trust Fund Agreement to Demonstrate Financial Assurance for Perpetual Management, dated as of \_\_\_\_\_, between Westervelt and the Trustee for the benefit of the Department, in accordance with the following instructions:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

IN WITNESS WHEREOF, this Certificate has been duly executed and delivered on behalf of the Department as of this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

By: \_\_\_\_\_  
Name:

Prepared To:  
Ray F. Robbins, III  
The Westervelt Company, Inc.  
P.O. Box 48999  
Tuscaloosa, AL 35404-8999

**CONSERVATION EASEMENT**

THIS CONSERVATION EASEMENT is given this 21st day of December, 2009, by WESTERVELT ECOLOGICAL SERVICES, LLC, having an address at 1400 Jack Warner Parkway NE, Tuscaloosa, AL 35404 (Grantor) to the STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEPARTMENT), whose address is Department of Environmental Protection, Division of Water Resource Management, 2600 Blair Stone Road, Mail Station 2500, Tallahassee, Florida 32399-2400 (Grantee). As used herein, the term Grantor shall include any and all heirs, successors or assigns of the Grantor, and all subsequent owners of the Property (as hereinafter defined) and the term Grantee(s) shall include any successor or assignee of Grantee(s).

**WITNESSETH**

WHEREAS, the Grantor is the sole owner in fee simple of certain lands situated in Santa Rosa County, Florida, more specifically described in Exhibit A attached hereto and incorporated herein (Property); and

WHEREAS, the Grantor desires to implement Pensacola Bay Mitigation Bank (Project) on the Property, which is subject to the regulatory jurisdiction of the Department under the provisions of Part IV of Chapter 373 of the Florida Statutes; and

WHEREAS, Department Permit Number 0284438-001 (Permit), as modified from time to time, authorizes certain activities which affect waters in or of the State of Florida; and

WHEREAS, the U.S. Army Corps of Engineers (Army Corps) authorizes certain activities in the waters of the United States and requires this Conservation Easement over the Property as part of the Mitigation Bank Instrument SAJ-2007-04377 (Federal MBI); and

WHEREAS the Army Corps is not authorized to hold conservation easements and the Department has agreed to hold this Conservation Easement on behalf of the Army Corps as well as on its own behalf; and

WHEREAS, the Grantor grants this Conservation Easement to offset and prevent adverse impacts to water quality and natural resources, such as fish, wildlife, and wetland or other surface water functions. Specifically, this Conservation Easement is intended to protect the Property and ensure its management toward and long-term maintenance of the target natural conditions set forth in the Permit.

NOW, THEREFORE, to achieve these purposes, and in consideration of the above and the mutual covenants, terms, conditions and restrictions contained herein, together with other good and valuable consideration, the adequacy and receipt of which is hereby acknowledged, Grantor hereby voluntarily grants and conveys a perpetual conservation easement, as defined in Section 704.06, Florida Statutes, for and in favor of the Grantee upon the Property which shall run with the land and be binding upon the Grantor, and shall remain in full force and effect forever.



CERTIFIED TRUE AND CORRECT COPY  
CLERK OF CIRCUIT COURT  
MARY M. JOHNSON  
BY George Pace  
DEPUTY CLERK  
DATE 12/30/09



The scope, nature and character of this Conservation Easement shall be as follows:

1. Purpose. The purpose of this Conservation Easement is to retain land and water areas in their natural, vegetative, hydrologic, scenic, open, or wooded condition and to retain such areas as suitable habitat for fish, plants or wildlife. Those wetland or upland areas included in the Conservation Easement that are to be enhanced or created pursuant to the Permit shall be retained and maintained in the enhanced or created conditions required by the Permit. The Permit, as modified from time to time, is incorporated in this Conservation Easement by reference as though fully set forth herein. A copy of the Permit is available from the Department at the address given above on request.

2. Rights of Grantee. To carry out this purpose, the following rights are conveyed to Grantee by this Conservation Easement:

- a. The right to take action to preserve and protect the environmental value of the Property;
- b. The right to prevent any activity on or use of the Property that is inconsistent with the purpose of this Conservation Easement, and to require the restoration of areas or features of the Property that may be damaged by any inconsistent activity or use;
- c. The right to enter upon and inspect the Property in a reasonable manner and at reasonable times, including the right to use vehicles and all necessary equipment to determine if Grantor is complying with the provisions of this Conservation Easement; and
- d. The right to enforce this Conservation Easement by injunction or proceed at law or in equity to enforce the provisions of this Conservation Easement and the covenants set forth herein, to prevent the occurrence of any of the prohibited activities hereinafter set forth, and the right to require Grantor to restore such areas or features of the Property that may be damaged by any inconsistent activity or use.

3. Prohibited Uses. Any activity on or use of the Property inconsistent with the purpose of this Conservation Easement is prohibited. Without limiting the foregoing, the following activities and uses are expressly prohibited, *except as authorized in the Permit* for restoration, creation, enhancement, maintenance, and monitoring activities:

- a. Construction or placing of structures on, above, or below the ground, including but not limited to: buildings, roads, docks, piers, billboards or other advertising; utilities, signs (other than those marking the Conservation Easement), or other structures;
- b. Dumping or placing of soil or other substances as land fill, or dumping or placing of trash, waste, or unsightly or offensive materials;
- c. Removal or destruction of trees, shrubs, or other vegetation, except nuisance, invasive, exotic, or nonnative species;
- d. Planting or seeding of exotic or nuisance species or other plants that are outside their natural range or zone of dispersal and have or are able to form self-sustaining, expanding, and free-living populations in a natural community with which they have not previously associated;

e. Exploration for or extraction of oil or gas, and excavation, dredging, or removal of loam, peat, gravel, soil, rock, or other material substance in such manner as to affect the surface;

f. Surface use except for purposes that allow the land or water area to remain in its natural or created, restored or enhanced condition under the provisions of the Permit;

g. Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation including, but not limited to, ditching, diking, dredging, consumptive water use and fencing;

h. Acts or uses detrimental to such aforementioned retention and maintenance of land or water areas;

i. Acts or uses detrimental to the preservation of the structural integrity or physical appearance of sites, or properties of historical, architectural, archaeological, or cultural significance;

j. The use of all-terrain vehicles.

4. Reserved Rights. Subject to the provisions of the Permit, as modified from time to time, the rights granted to the Grantee herein and the prohibited activities defined in this Conservation Easement, the Grantor reserves all rights as owner of the Property, including the right to engage in uses of the Property that are not inconsistent with the provisions of the Permit, Department rules, Federal MBI or the intent and purposes of this Conservation Easement.

5. Public Access. No right of access by the general public to any portion of the Property is conveyed by this Conservation Easement.

6. Responsibilities of Parties. Grantor hereby agrees to bear all costs or liabilities related to the operation, upkeep or maintenance of the Property. In addition, Grantee shall have no responsibility for any costs or liabilities related to the operation, upkeep or maintenance of the Property.

7. Taxes. Grantor shall pay before delinquency any and all taxes, assessments, fees, and charges of whatever description levied on or assessed by competent authority on the Property, and shall furnish Grantee with satisfactory evidence of payment upon request.

8. Liability. Grantor shall be responsible for any and all liability for any loss, damage, expense, judgment or claim (including a claim of attorney fees) arising out of any negligent or willful action or activities resulting from Grantor's use and ownership of or activities on the Property or the use or activities by the Grantor's agents, guests, lessees, or invitees, and shall indemnify and hold the Grantee harmless from the same. Furthermore, the Grantor shall indemnify and hold harmless the Grantee from all liability, any injury or damage to the person or property of third parties which may occur on the Property.

9. Hazardous Waste. Grantor covenants and represents that no hazardous substance or toxic waste exists nor has been generated, treated, stored, used, disposed of, or deposited in or on the Property, and that there are not now any underground storage tanks located on the Property. In the event such material is discovered, Grantor shall be responsible for bringing the Property into compliance with all laws regulating hazardous substances and toxic wastes.

10. Enforcement Discretion. Enforcement of the terms, provisions and restrictions of this Conservation Easement shall be at the reasonable discretion of Grantee, and any forbearance on behalf of Grantee to exercise its rights hereunder in the event of any breach by Grantor, shall not be deemed or construed to be a waiver of Grantee's rights.

11. Rights of U.S. Army Corps of Engineers. The Corps shall have all the rights of Grantee under this Conservation Easement. The Corps shall be a party to any modification, alteration, release, or revocation of this Conservation Easement, and shall review, approve as necessary, or deny any additional structures or activities that require approval by the Grantee.

12. Enforcement Costs. If Grantee prevails in an enforcement action, it shall be entitled to recover costs, including expert witness fees, as well as the reasonable cost of restoring the Property to the natural vegetative and hydrologic condition existing at the time of execution of this Conservation Easement or to the vegetative and hydrologic condition required by the Permit. These remedies are in addition to any other remedy, fine or penalty which may be applicable under Chapters 373 and 403, Florida Statutes, or available at law or in equity.

13. Assignment of Rights. Grantee agrees to hold this Conservation Easement exclusively for conservation purposes and it will not assign its rights and obligations under this Conservation Easement except to another organization qualified to hold such interests under applicable state laws and approved by Grantor.

14. Recording in Land Records. Grantor shall record this Conservation Easement and any amendments hereto in a timely fashion in the Official Records of Santa Rosa County, Florida. Grantor shall pay all recording costs and taxes necessary to record this Conservation Easement in the public records.

15. Successors. The covenants, terms, conditions and restrictions of this conservation easement shall be binding upon, and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property.

16. Notices. All notices, consents, approvals or other communications hereunder shall be in writing and shall be deemed properly given if sent by United States certified mail, return receipt requested, addressed to the appropriate party or successor-in-interest, and referencing the Permit Name and Number.

17. Subsequent Deeds. Grantor shall insert the terms and restrictions of this Conservation Easement in any subsequent deed or other legal instrument by which Grantor divests itself of any interest in the Property. Grantor further agrees to give written notice to Grantee of the transfer of any interest at least sixty days prior to the date of such transfer. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this Conservation Easement or limit its enforceability in any way.

18. Severability. If any provision of this Conservation Easement or the application thereof to any person or circumstances is found to be invalid, the remainder of the provisions of this Conservation Easement shall not be affected thereby, as long as the purpose of the Conservation Easement is preserved.

19. Alteration or Revocation. This Conservation Easement may be amended, altered, released or revoked only by permit modification as necessary and written agreement between the parties hereto or their heirs, assigns or successors-in-interest, executed in the nature of a deed, which shall be filed in the public records in Santa Rosa County, Florida.

20. Controlling Law. The interpretation and performance of this Conservation Easement shall be governed by the laws of the State of Florida.

21. Baseline Documentation Report. The specific conservation values of the Property are documented in the Baseline Documentation Report associated with this Conservation Easement. The Baseline Documentation Report consists of reports, maps, photographs, and other documentation that the parties agree provide, collectively, an accurate representation of the Property at the time of this grant, and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant. The Baseline Documentation Report is maintained in the offices of the Department and is incorporated herein by this reference. A copy of the Baseline Documentation Report is available from the Department at the address given above on request.

22. Conflict. To the extent any of the provisions of this Conservation Easement conflict with that certain Conservation Easement recorded at Official Records Book 2871, Page 1928 of the Official Records of Santa Rosa County, Florida, then the terms and conditions of this Conservation Easement shall control.

TO HAVE AND TO HOLD unto Grantee forever. The covenants, terms, conditions, restrictions and purpose imposed with this Conservation Easement shall be binding upon Grantor, and shall continue as a servitude running in perpetuity with the Property.

Grantor hereby covenants with said Grantee that Grantor is lawfully seized of said Property in fee simple; that the Property is free and clear of all encumbrances that are inconsistent with the terms of this Conservation Easement and all mortgages have been joined or subordinated; that Grantor has good right and lawful authority to convey this Conservation Easement; and that it hereby fully warrants and defends the title to the Conservation Easement hereby conveyed against the lawful claims of all person whomsoever.

IN WITNESS WHEREOF, the Grantor executes this Conservation Easement on the day and year first above written.

Signed, sealed and delivered  
in our presence as witnesses:

Kristie Ellis  
Signature of Witness

Kristie Ellis  
Printed/Typed Name

Ray F. Robbins, II  
Signature of Witness

Ray F. Robbins, III  
Printed/Typed Name

WESTERVELT ECOLOGICAL SERVICES, LLC

By: Michael E. Case  
Print Name: Michael E. Case  
Its Vice President

**STATE OF ALABAMA  
COUNTY OF TUSCALOOSA**

The foregoing instrument was acknowledged before me this 21<sup>st</sup> day of December, 2009, by Michael E. Case, Vice President of Westervelt Ecological Services, LLC, on behalf of the company. He is personally known to me.

(SEAL)  
Teresa Daylock  
Notary Public Signature

Teresa Daylock  
Printed/Typed Name of Notary

Commission No. \_\_\_\_\_ MY COMMISSION EXPIRES FEB. 28, 2016  
Commission Expires \_\_\_\_\_

## EXHIBIT "A"

LEGAL DESCRIPTION PER O.R. BOOK 1690, PAGE 1491:

All of the Diego Palmes Grant, being Section Three (3), Township One (1) South, Range Twenty-Eight (28) West, and Section Thirty-Seven (37), Township One (1) North, Range Twenty-Eight (28) West, containing Six Hundred Thirty-Three (633) acres, More or less.

ALSO:

LEGAL DESCRIPTION PER O.R. BOOK 1690, PAGE 1493:

All of the Thomas P. Rioboo Grant, Being Section 42, Township 1 North, Range 28 West, in Santa Rosa County, Florida, less the following portion thereof, to-wit: 80 acres of the Southwest corner of (Thos. P. Rioboo Grant) Section 42, Township 1 North, Range 28 West, more particularly described as follows: Beginning at the Southwest corner of said Grant and running Eastwardly along the Southern boundary line 1320 feet, thence in a Northerly direction along parallel lines with the Western boundary of said Grant 2640 feet, thence in a Westerly direction along parallel lines with Southern boundary of said Grant to the Western boundary line, thence in a Southerly direction along said Western boundary line 2640 feet to point of beginning.

BETTER DESCRIBED AS:

COMMENCE at an existing 4 inch x 4 inch concrete monument with a nail in the top marking the Southeast corner of Section 37, Township 1 North, Range 28 West, Santa Rosa County, Florida, and call this the POINT OF BEGINNING; thence South 08 degrees 43 minutes 56 seconds West a distance of 2558.85 feet to an existing 5 inch oval concrete monument marking the Southeast corner of Section 3, Township 1 South, Range 28 West; thence North 81 degrees 20 minutes 05 seconds West a distance of 1395.78 feet to an existing 4 inch x 4 inch concrete monument marking the Northwest corner of Section 2 and the Northeast corner of Section 4, Township 1 South, Range 28 West; thence North 81 degrees 20 minutes 54 seconds West a distance of 1743.65 feet to an existing 5/8 inch rod with cap stamped LB 6475 on the Southerly right of way of Interstate 10 (State Road 8); thence North 49 degrees 36 minutes 09 seconds East along the Southerly right of way of said Interstate a distance of 4833.81 feet to an existing 5/8 inch iron rod with cap; thence leaving said right of way South 09 degrees 58 minutes 07 seconds West a distance of 1092.61 feet to the POINT OF BEGINNING.

This parcel contains 130.87 acres, more or less, and is located partially in Section 3, Township 1 South, Range 28 West, and partially in Section 37, Township 1 North, Range 28 West, Santa Rosa County, Florida.

ALSO:

COMMENCE at an existing 4 inch x 4 inch concrete monument with a nail in the top marking the Southeast corner of Section 37, Township 1 North, Range 28 West, Santa

Rosa County, Florida, and call this the POINT OF COMMENCEMENT; thence North 09 degrees 58 minutes 07 seconds East a distance of 1092.61 feet to an existing 5/8 inch iron rod with cap on the Southerly right of way of Interstate 10 (State Road 8); thence North 09 degrees 08 minutes 17 seconds East a distance of 462.27 feet to an existing 5/8 inch iron rod with cap (can't read) on the Northerly right of way of said Interstate and call this the POINT OF BEGINNING; thence South 49 degrees 36 minutes 09 seconds West along the Northerly right of way of said Interstate a distance of 5434.77 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence leaving said right of way North 80 degrees 07 minutes 12 seconds West a distance of 2010.21 feet to an existing 1/2 inch iron rod with plastic cap stamped NWP ENG. CORP. 4882; thence North 09 degrees 20 minutes 43 seconds East a distance of 2891.47 feet to an existing 1 inch old rusted iron rod; thence South 81 degrees 41 minutes 40 seconds East a distance of 102.87 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 08 degrees 51 minutes 20 seconds East a distance of 2640.00 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 81 degrees 41 minutes 40 seconds West a distance of 1329.66 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 08 degrees 51 minutes 20 seconds East a distance of 4970.58 feet to an existing 4 inch x 4 inch concrete monument stamped SRCW PLS 3454 at the Northwest corner of Section 42, Township 1 North, Range 28 West; thence South 81 degrees 07 minutes 08 seconds East a distance of 3912.66 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northeast corner of Section 42; thence South 08 degrees 44 minutes 15 seconds West a distance of 3467.99 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northwest corner of Section 37, Township 1 North, Range 28 West; thence South 79 degrees 53 minutes 06 seconds East a distance of 2852.63 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northeast corner of Section 37; thence South 09 degrees 06 minutes 12 seconds West a distance of 2876.32 feet to the POINT OF BEGINNING.

This parcel contains 1074.70 acres, more or less, and is located partially in Section 3, Township 1 South, Range 28 West, and partially in Section 37 and partially in Section 42, Township 1 North, Range 28 West, Santa Rosa County, Florida.

This is a newly created description.

#### LESS AND EXCEPT:

#### LEASE AREA (1):

COMMENCE at an existing 1 inch iron rod marking the Northwest corner of Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence South 09 degrees 20 minutes 43 seconds West a distance of 1071.40 feet to a point and call this the POINT OF BEGINNING; thence South 88 degrees 38 minutes 00 seconds East a distance of 466.69 feet to a point; thence South 09 degrees 20 minutes 43 seconds West a distance of 466.69 feet to a point; thence

North 88 degrees 38 minutes 00 seconds West a distance of 466.69 feet to a point; thence North 09 degrees 20 minutes 43 seconds East a distance of 466.69 feet to the POINT OF BEGINNING.

This parcel contains 5.00 acres, more or less, and is located in Section 03, Township 01 South, Range 28 West, Santa Rosa County, Florida.

ALSO:

LEASE AREA (3):

COMMENCE at an existing 4 inch x 4 inch concrete monument marking the Southeast corner of Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence North 09 degrees 58 minutes 07 seconds East a distance of 1092.61 feet to an existing 5/8 inch iron rod and cap; thence North 09 degrees 08 minutes 17 seconds East a distance of 462.27 feet to an existing 5/8 inch iron rod and cap (can't read); thence North 09 degrees 06 minutes 12 seconds East a distance of 504.84 feet to a point and call this the POINT OF BEGINNING; thence North 80 degrees 53 minutes 48 seconds West a distance of 466.69 feet to a point; thence North 09 degrees 06 minutes 12 seconds East a distance of 466.69 feet to a point; thence South 80 degrees 53 minutes 48 seconds East a distance of 466.69 feet to a point; thence South 09 degrees 06 minutes 12 seconds West a distance of 466.69 feet to the POINT OF BEGINNING.

This parcel contains 5.00 acres, more or less, and is located in Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida.

AND ALSO:

LEASE AREA (5):

COMMENCE at an existing 4 inch X 4 inch concrete monument marking the Northwest corner of Section 42, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence South 08 degrees 51 minutes 20 seconds West a distance of 450.89 feet to a point and call this the POINT OF BEGINNING; thence South 81 degrees 41 minutes 40 seconds East a distance of 466.69 feet to a point; thence South 08 degrees 51 minutes 20 seconds West a distance of 466.69 feet to a point; thence North 81 degrees 41 minutes 40 seconds West a distance of 466.69 feet to a point; thence North 08 degrees 51 minutes 20 seconds East a distance of 466.69 feet to the POINT OF BEGINNING.

This parcel contains 5.00 acres, more or less, and is located in Section 42, Township 01 North, Range 28 West, Santa Rosa County, Florida.

These are newly created descriptions.



**Form CE-10**  
**Baseline Documentation Report**  
**Pensacola Bay Mitigation Bank**

**Latitude/Longitude:** 30° 33' 08.34" / -87°04' 20.02"

**County:** Santa Rosa

**Section-Township-Range:** 42, 37, 32 – 1N – 28W; 03 – 1S – 28W

**General Location Description:** Travel north on Hwy 281 (Avalon Blvd) towards Avalon. Keep going north of Interstate 10, turn right onto Del Monte Street. Enter through yellow gate at end of road.

**Approximate acreage of parcel:** 1190 acres

**A. Description of General Project Area**

**1. *The waterbody***

**a. Waterbody name:** Unnamed. Flows southwest into Mulatto Bayou which flows into Escambia Bay.

**b. Water classification:** Class III

**c. Proximity to or classification as a special waterbody:** 1.5 miles from the Yellow River Marsh Aquatic Preserve, and approximately 2 miles from the Blackwater River. Both are considered Outstanding Florida Waters.

**2. *Adjacent areas***

**a. Natural or disturbed:**

North, northeast and northwest: These areas are in a relatively natural state. Logging trails and skidders appear to have been cut through portions of this area in the past and have been allowed to become overgrown.

Southeast: The area to the southeast is in a nearly natural state. The eastern portion appears to have been cut into roads for a subdivision at one time, but these areas have been allowed to grow over. Interstate 10 runs through the southeast portion of the property.

Southwest: A large commercial warehouse parcel is adjacent to the southwest corner of the property. The land on this parcel has been significantly disturbed.

West: Low density single family residential and a golf course are adjacent to the west.

**b. Type and degree of development in the area:**

Development in the area includes low density single family residential, a golf course and several dirt and paved roads. The degree of development in the area is low to moderate.

**c. General habitat types:** Habitat types in the surrounding areas include wetland hardwood forests, titi swamp, wet flatwoods, flatwoods and bottomland forest.

### **3. Historical information (for the area and the specific site)**

**a. Dates of previous disturbances:** The attached 1940 aerial photograph shows the site and surrounding area as being largely undisturbed with the exception of a few logging trails throughout the area. The 1955 aerial shows the subdivision roads in the area beginning to be constructed, as well as the addition of more logging trails. Significant disturbance appears to have begun in the area between 1940 and 1955.

**b. Issued permits:** None

**c. Enforcement actions:** None

**d. Existing structures onsite:** There are no structures onsite.

**e. Periodic work in the area:** Ongoing work will occur on the mitigation site. Prescribed fire, mowing and maintenance of access roads will be undertaken. The surrounding area is likely to experience more residential development; however, the extent of development will be limited by the large percentage of wetlands that surround the property.

## **B. Biophysical Characteristics of the Conservation Easement**

### **1. Site description**

**a. Natural or disturbed:** The majority of the site is in a relatively natural state. Approximately 41.8 acres (3.5%) of the site contains dirt roads, trails and other disturbances. Historically, fires probably burned regularly into the area from adjacent upland flatwoods areas and wet prairie/wet flatwoods onsite and in the general vicinity. Large wildfires affected portions of the site in 1997 and 2005, but fire has not been regularly allowed into the area since anthropogenic fire suppression began in or before the mid 1900's.

#### **b. Floral and faunal species present at the site:**

The proposed mitigation bank contains several different habitat types. Each habitat type exhibits a different combination of floral and faunal species that do or may utilize the site. These habitat types and their related floral and faunal species are summarized below:

#### **Bay/Titi Swamps**

Approximately 414.9 acres of the site is classified as bay/titi swamps. Canopy species include red titi (*Cyrilla racemiflora*), black titi (*Cliftonia monophylla*) black gum (*Nyssa sylvatica*), sweetbay (*Magnolia virginiana*), red maple (*Acer rubrum*), bald cypress (*Taxodium distichum*) and slash pine (*Pinus elliotii*). Understory is dominated by red and black titi (*Cyrilla racemiflora*, *Cliftonia monophylla*) and also contains fetterbush (*Lyonia lucida*), tall gallberry (*Ilex coriacea*), gallberry (*Ilex glabra*), myrtle leaved holly (*Ilex myrtifolia*) and dahoun holly (*Ilex cassiene*). Groundcover is sparse but includes bushy bluestem (*Andropogon glomeratus*), cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regalis*) and netted chain fern (*Woodwardia aereolata*). Fauna that may utilize this area according to FNAI include marbled salamander, mole salamander, two-toed amphiuma, Alabama waterdog, southern dusky salamander, two-lined salamander, three-lined salamander, dwarf salamander, slimy salamander, rusty mud

salamander, sirens, southern toad, cricket frog, bird-voiced treefrog, gray treefrog, bullfrog, river frog, southern leopard frog, alligator, river cooter, stinkpot, southeastern five-lined skink, broadhead skink, mud snake, rainbow snake, redbelly watersnake, brown water snake, glossy crayfish snake, black swamp snake, cottonmouth, yellow-crowned night-heron, wood duck, Mississippi kite, swallowtail kits, red-shouldered hawk, woodcock, barred owl, chimney swift, hairy woodpecker, pileated woodpecker, Acadian flycatcher, Carolina wren, veery, white-eyed vireo, red-eyed vireo, parula warbler, prothonotary warbler, swainson's warbler, hooded warbler, cardinal, towhee, opossum, southeastern shrew, short-tailed shrew, beaver, wood rats, rice rats, cotton mouse, golden mouse, bear and raccoon.

### Gum and Cypress Swamps

Approximately 75.5 acres is classified as gum and cypress swamps. Canopy species include swamp bay (*Persea palustris*), red maple (*Acer rubrum*), sweetbay (*Magnolia virginiana*), slash pine (*Pinus elliotii*), bald cypress (*Taxodium distichum*), black gum (*Nyssa sylvatica*), and laurel oak (*Quercus laurifolia*). Understory includes sweet gallberry, (*Ilex coriacea*), gallberry (*Ilex glabra*), myrtle-leaved holly (*Ilex myrtifolia*), wax myrtle (*Myrica cerifera*) and fetterbush (*Lyonia lucida*). Groundcover includes blackberry (*Rubus spp.*), hatpins (*Eriocaulon spp.*), wetland sunflower (*Helianthus heterophyllus*), toothache grass (*Ctenium aromaticum*), sundews (*Drosera spp.*), redroot (*Lachnanthes caroliniana*), meadowbeauties (*Rhexia spp.*), white-top pitcher plant (*Sarracenia leucophylla*), bog buttons (*Lachnocaulon spp.*), sedges (*Carex spp.*), needlerush (*Juncus spp.*), beakrush (*Rhynchospora spp.*) and cinnamon fern (*Osmunda cinnamomea*). Fauna that may utilize these areas according to FNAI include southern dusky salamander, cricket frog, little grass frog, chicken turtle striped mud turtle, ringneck snake, scarlet kingsnake, crayfish snake, cottonmouth, wood duck, hawks, turkey, great horned owl, barred owl, pileated woodpecker, songbirds, gray squirrel, black bear, raccoon, mink, river otter, bobcat, and white-tailed deer.

### Wet Flatwoods

The remaining 657.8 acres is classified as wet flatwoods. Canopy species include slash pine (*Pinus elliotii*), sweet bay (*Magnolia virginiana*), black gum (*Nyssa sylvatica*) and red maple (*Acer rubrum*). Understory includes red titi (*Cyrilla racemiflora*), wax myrtle (*Myrica cerifera*), gallberry (*Ilex glabra*), red chokeberry (*Aronia arbutifolia*), Mosier's huckleberry (*Gaylussacia mosieri*) and dahoun holly (*Ilex cassiense*). Groundcover contains wiregrass (*Aristida stricta*), Curtis's sandgrass (*Calamovilfa curtissii*), beakrush (*Rhynchospora spp.*), red root (*Lachnanthes caroliniana*), hat pins (*Eriocaulon spp.*), bog buttons (*Lachnocaulon spp.*), brackenfern (*Pteridium aquilinum*), cinnamon fern (*Osmunda cinnamomea*), royal fern (*Osmunda regalis*), *Panicum spp.*, caric sedge (*Carex glaucescens*), *Lobelia spp.* and *Paspalum spp.* Fauna that may utilize the area according to FNAI include oak toad, cricket frog, chorus frog, black racer, yellow rat snake, diamondback rattlesnake, pygmy rattlesnake, red-shouldered hawk, bobwhite, opossum, cottontail rabbit, cotton rat, cotton mouse, raccoon, striped skunk, bobcat and white-tailed deer.

### **c. Relative abundance of flora and fauna present**

The different vegetative community types onsite are in good health. All areas except those that have been disturbed by off-road vehicles or the access trails are thickly vegetated. Evidence of fauna onsite include turkey tracks, raccoon tracks, bird

sightings (many species, including cardinals and pileated woodpeckers), snakes, turtles, spiders and other insects, frogs, toads, bobcat, deer, deer tracks, bobcat tracks and scat. Evidence indicates that a large number of animals are present on or utilize the property.

## **2. System's role in the overall trophic structure of the general area**

### **a. The use of the site by mobile fauna**

Frogs, salamanders and toads likely use the areas of standing water as a spawning ground. Birds nest in the trees. Raccoons and turkeys likely use the area for foraging. Bobcats, snakes, birds and deer have been observed onsite. Raccoon tracks are common.

**b. The use of the site by humans:** A few old deer stands exist on the site and evidence of ATV usage appears in some areas. These stands are no longer being used and "No Trespassing" signs have been hung at site entrances and along the property boundary. No other anthropogenic use has been observed.

## **3. Existing water quality**

Hydrology onsite has been altered through ditching along the access roads. There are many natural low areas with seasonal standing water located throughout the site. Stream branches and seepage wetlands which flow into Mulatto Bayou exist in several areas onsite. Standing water onsite is clear and sometimes stained light brown by plant tannins. The streams also contain clear light brown water. The ditches along the edges of the site contain dark clear stained water year-round. The water in the ditches becomes turbid immediately after rain events.

## **4. System's health**

**a. Current hydrologic health of the system (normal, stressed, over drained, impounded):** Normal.

**b. Site invasion by or infestation with nuisance, exotic or upland pioneering species:** Chinese tallow can be found in some areas along the access road onsite. The largest number of Chinese tallow can be found immediately adjacent to the main access point on Del Monte Street.

**c. Soil oxidation:** Soil oxidation can be observed in the drier wetland areas onsite.

**d. Tidal influence:** The site is not tidally influenced.

**e. Fire history:** Two wildfires swept through portions of the site in 1997 and 2005. Fire probably came into the area every few years before anthropogenic development and fire suppression began in this area in the mid 1900's.

**f. Site erosion or accretion:** Mild gully erosion can be seen on the dirt access road.

## **5. Jurisdiction and hydrology**

**a. An overview of the jurisdictional status of the property:** Wetlands onsite are jurisdictional for both the US Army Corps of Engineers and the Florida Department of Environmental Protection.

**b. Presence or absence of water:** Both seasonal and permanently standing water are located throughout the site. Standing water appears to occur with a normal to

high water table and is approximately a few inches to 2 feet deep. Streams and ditches contain water year-round. Ephemeral stream beds which flow only after storm events can be found throughout the site.

**c. Historic indicators:** Adventitious roots are a common sight. Thick, black, mucky soils have accumulated after years of saturation and inundation. In some areas, such as the cypress depressions, water marks can be seen on tree trunks.

**d. Stagnant vs. flowing water:** Both stagnant and flowing water exist onsite.

**e. Presence of swift currents (in terms of erosion potential):** Swift currents occur in the permanent streams and roadside ditches after major rain events. Some areas of the access road experience swift overland movement which can lead to gullying.

### **C. Additional Information**

***1. List any state or federal endangered, threatened, and/or species of special concern known to occur on this property.***

Curtis's Sandgrass (*Calamovilfa curtissii*)  
White-top Pitcher Plant (*Sarracenia leucophylla*)

***2. Are there any buildings, roads, signs, billboards or other advertising, utilities, power lines or other structures on, under or above ground?***

A few small deer stands can be found onsite. Also, Interstate 10 runs through the southeast portion of the property.

***3. Has any dumping of trash, other wastes or soil occurred onsite?***

Anthropogenic debris such as work buckets and old tires are found onsite. No large dumping area has been observed.

***4. Has removal or destruction of trees, shrubs, or other vegetation occurred in the conservation easement area?***

Yes. Firelines were mowed to prepare for a prescribed burn. Some parts of the property were historically logged.

***5. Has soil, rock, peat gravel or other material substance been removed from the conservation area?***

Soil appears to have been excavated from the roadside ditches and used to construct the access road.

***6. Are there existing ditches, canals, ponds or other water structures on the property?***

Yes, deep ditches occur in areas on both sides of the access road onsite.

***7. Is there off-road vehicle (ORV), grazing animal, or other damage to the property?***

Yes, a relatively small portion of the site was damaged in late 2006 by off-road vehicles. This area is proposed to be replanted as part of the mitigation project.

**8. Please describe the current uses of the properties adjacent to the conservation area. Are you aware of plans for other uses for these properties in the future?**

Northwest, northeast and north boundaries are surrounded by wetlands. The area adjacent to the east is also surrounded by wetlands. The southeast and south boundaries are adjoined by more wetlands. A large warehouse property is adjacent to the southwest corner. Single family residential and a golf course property are adjacent to the west. Interstate 10 runs through the southeast portion of the proposed mitigation bank property.

Many of these adjacent areas are wetlands, which limits the possibilities for their use. We are not aware of plans for other uses of these properties in the future.

**D. Supplemental Information**

**1. Photographs:** Attachment 1

**2. Outside Resources:**

- Figure A: 2004 DOQQ Aerial Photograph
- Figure B: 7.5 Min USGS Topographic Map
- Figure C: 2006 NRCS Soils Map
- Figure D: 1940 Aerial Photograph
- Figure E: 1955 Aerial Photograph
- Figure F: Photo Location Points

**Attachment 1: Site Photographs**



Wet Flatwoods 1



Wet Flatwoods 1





Wet Flatwoods 2



Wet Flatwoods 3





Wet Flatwoods 4



Bay/Titi Swamp 1



Gum/Cypress Swamp Canopy





Gum/Cypress Swamp



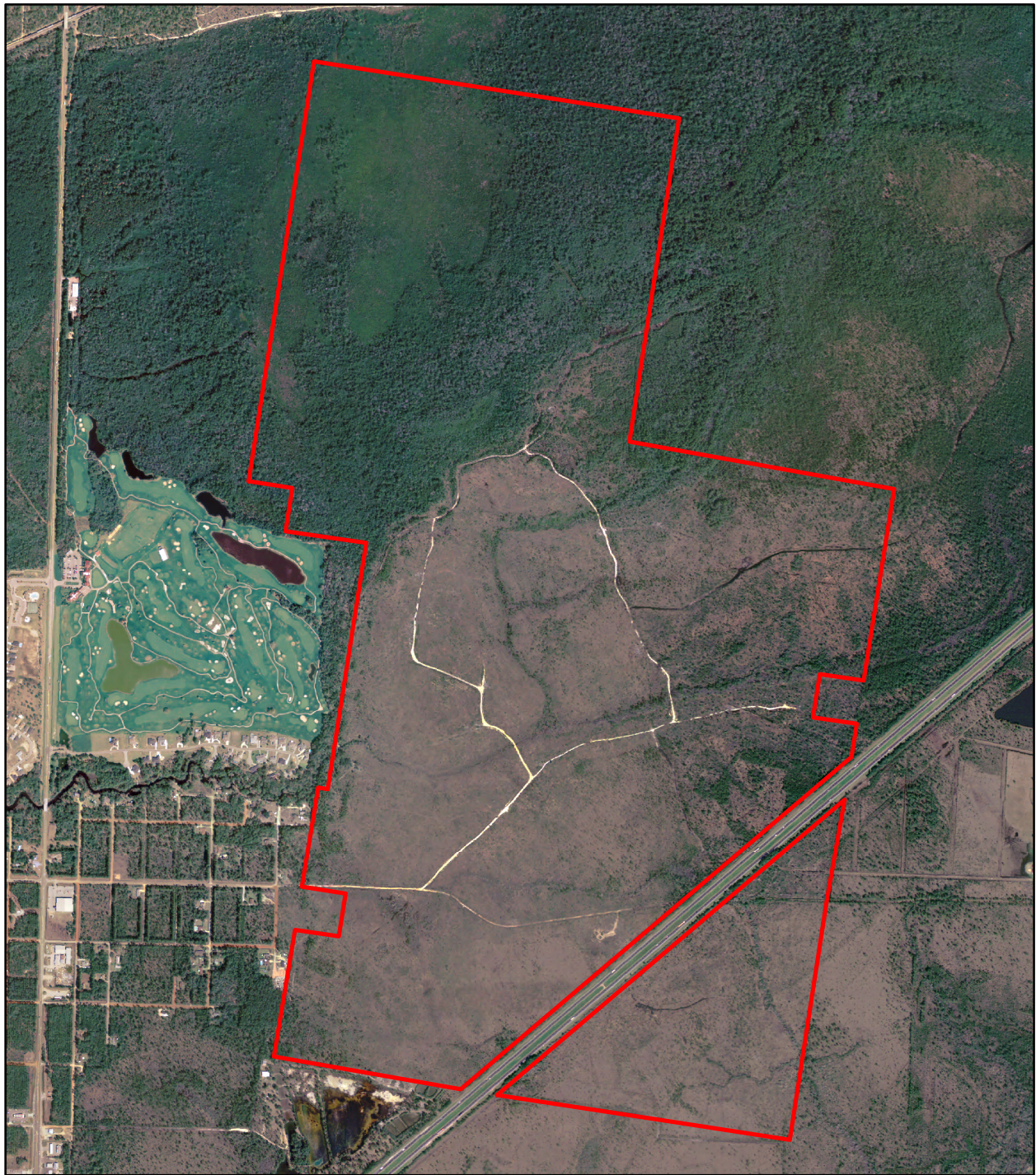


Gum/Cypress Swamp Interior



Gum/Cypress Swamp Interior





## Legend

Bank Boundary

0 875 1,750 3,500 Feet

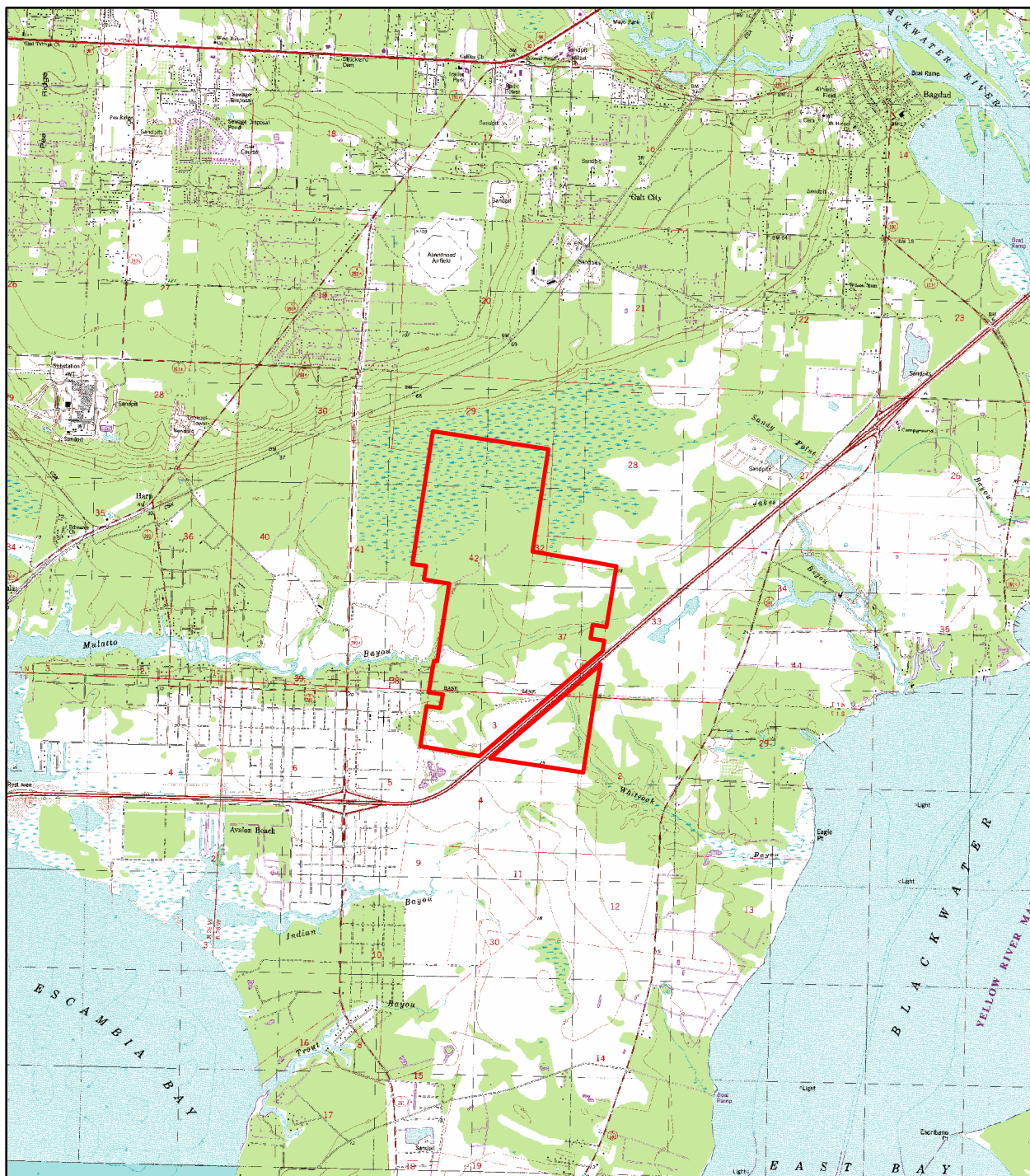
F

Bosso, Dentzau & Imhof, Inc.  
1882 Log Ridge Trail  
Tallahassee, FL 32312  
850-893-7238

**Pensacola Bay Mitigation Bank  
Baseline Documentation Report  
Figure A: 2004 DOQQ Aerial**







## Legend

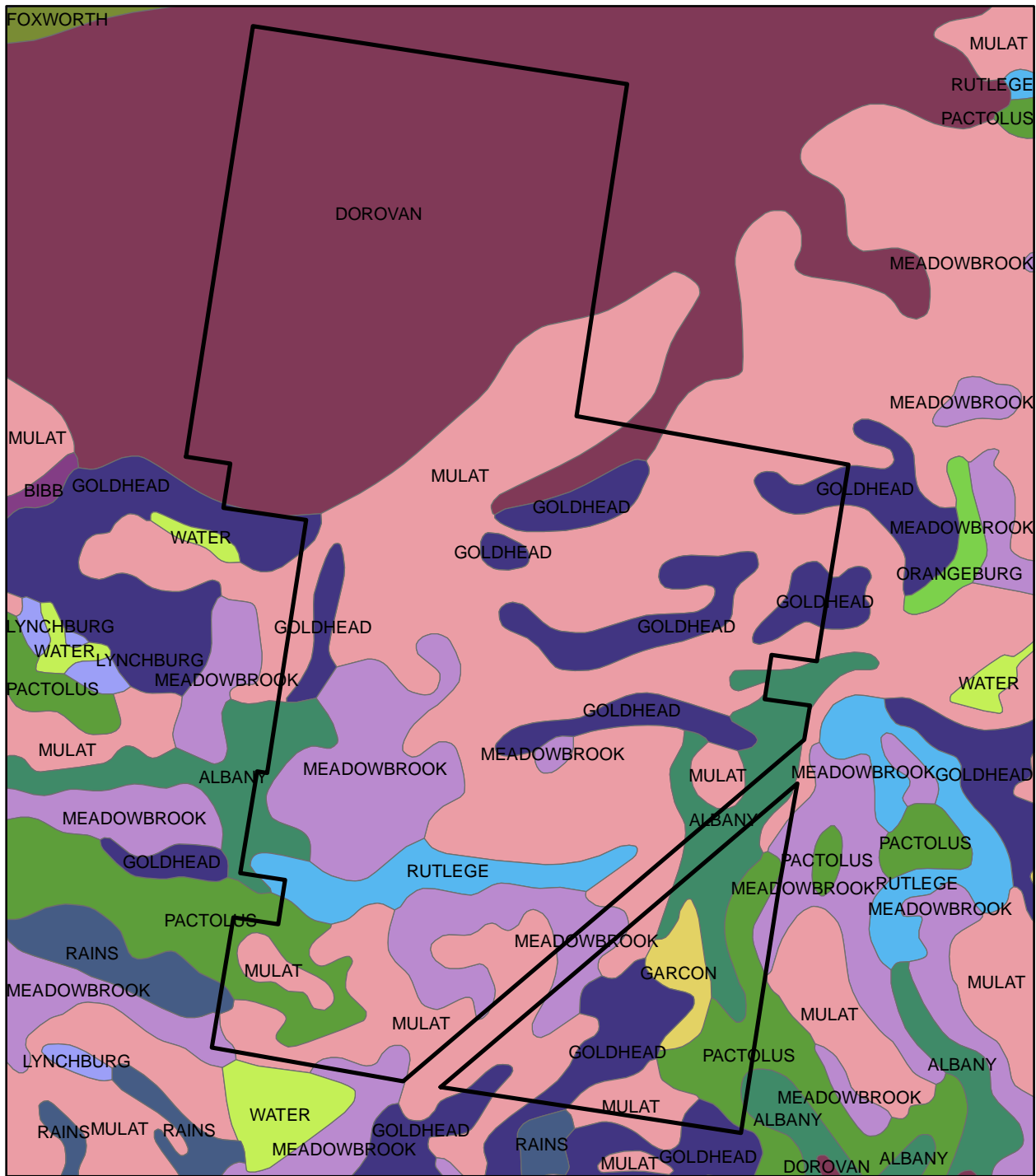
Bank Boundary

0 2,500 5,000 10,000 Feet


Bosso, Dentzau & Imhof, Inc.  
1882 Log Ridge Trail  
Tallahassee, FL 32312  
850-893-7238

## Pensacola Bay Mitigation Bank Baseline Documentation Report Figure B: 7.5 Min USGS Topo Map






### Legend

 Bank Boundary

0 750 1,500 3,000 Feet

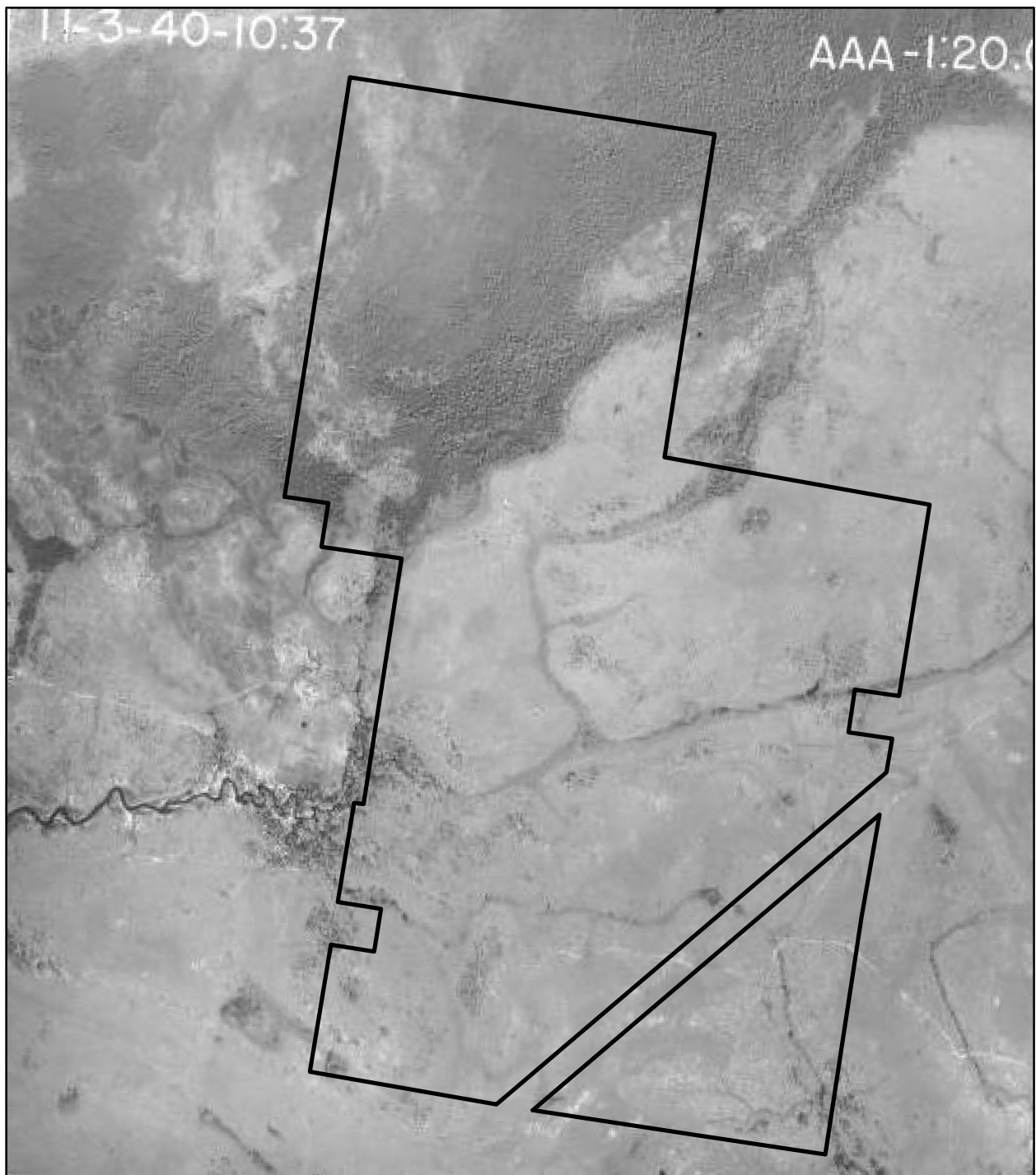


F


Bosso, Dentzau & Imhof, Inc.  
1882 Log Ridge Trail  
Tallahassee, FL 32312  
850-893-7238

**Pensacola Bay Mitigation Bank  
Baseline Documentation Report  
Figure C: 2006 NRCS Soils Map**






### Legend

 Bank Boundary

0 875 1,750 3,500 Feet



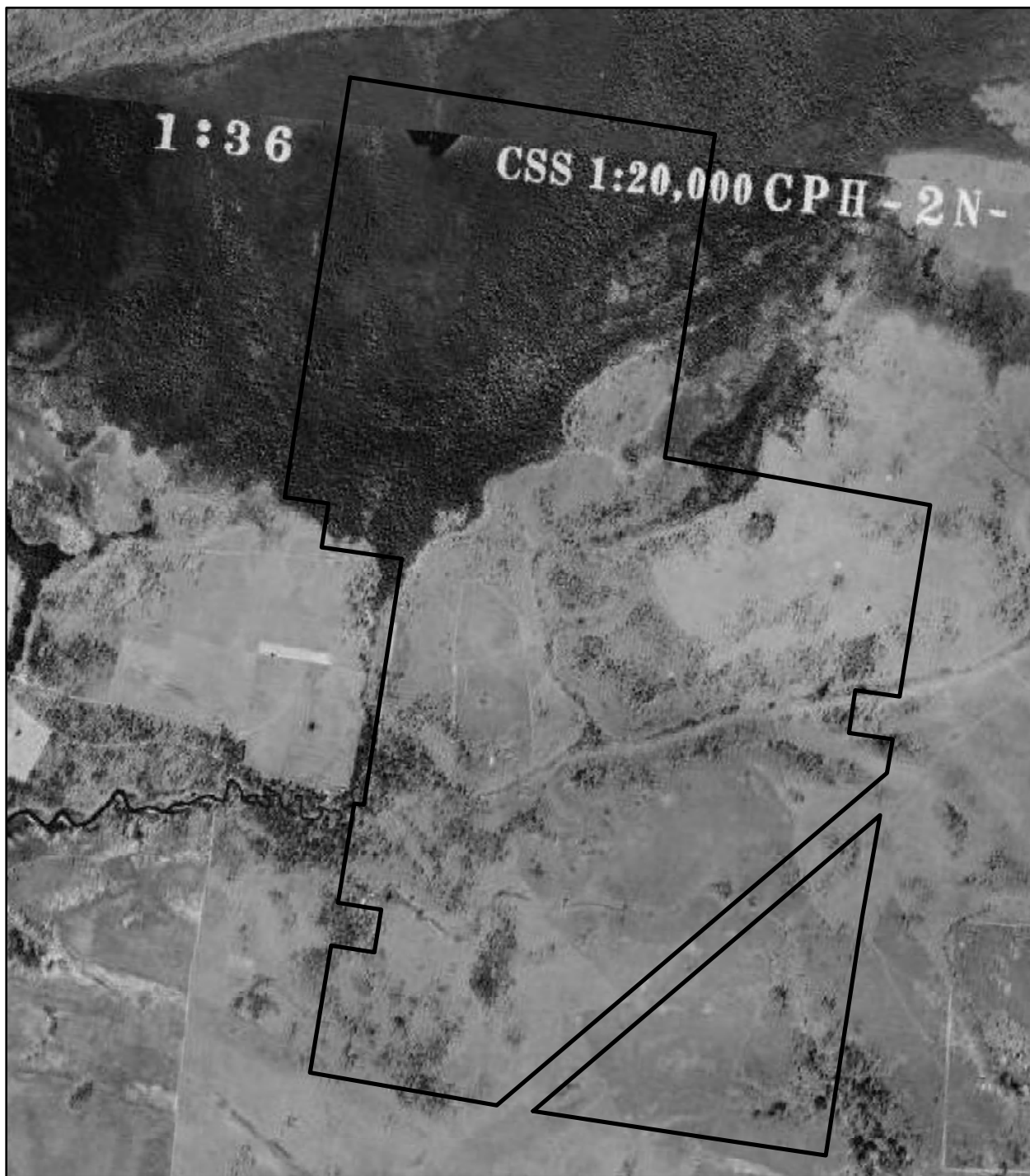
F

Bosso, Dentzau & Imhof, Inc.  
1882 Log Ridge Trail  
Tallahassee, FL 32312  
850-893-7238


**Pensacola Bay Mitigation Bank  
Baseline Documentation Report  
Figure D: 1940 Aerial Photograph**








### Legend

 Bank Boundary

0 875 1,750 3,500 Feet

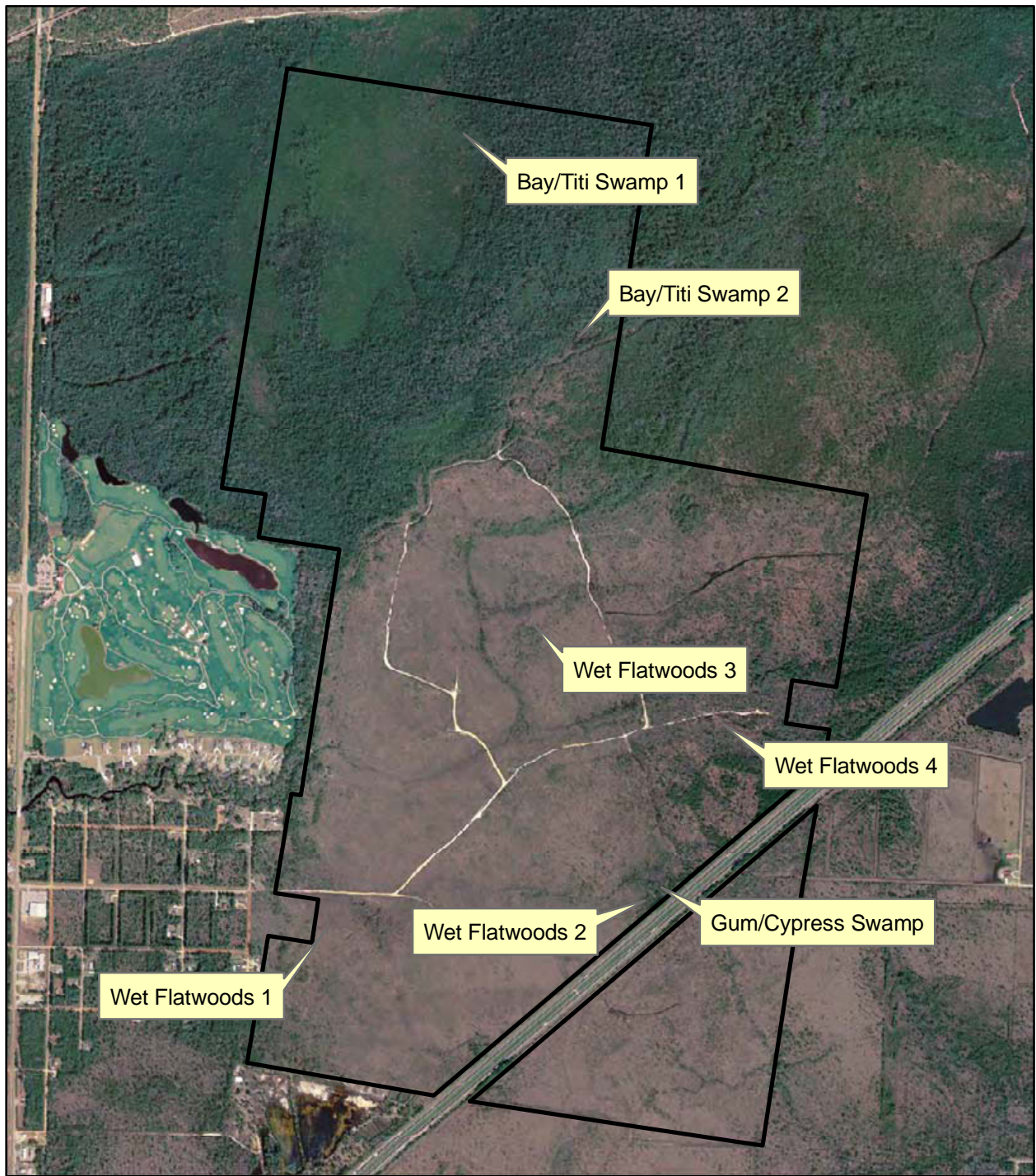


F


Bosso, Dentzau & Imhof, Inc.  
1882 Log Ridge Trail  
Tallahassee, FL 32312  
850-893-7238

**Pensacola Bay Mitigation Bank  
Baseline Documentation Report  
Figure E: 1955 Aerial Photograph**





### Legend

 Bank Boundary

0 875 1,750 3,500 Feet

F

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1882 Log Ridge Trail  
Tallahassee, FL 32312  
850-893-7238

**Pensacola Bay Mitigation Bank  
Baseline Documentation Report  
Figure F: Photo Location Map**





AMERICAN LAND TITLE ASSOCIATION  
OWNER'S POLICY  
(10-17-92)

Policy No. FL3679-46-P-09-211-2010.7210609-79623555

CHICAGO TITLE INSURANCE COMPANY

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS, AND STIPULATIONS, CHICAGO TITLE INSURANCE COMPANY, a Nebraska corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land.

The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title, as insured, but only to the extent provided in the Conditions and Stipulations.

In Witness Whereof, CHICAGO TITLE INSURANCE COMPANY has caused this policy to be signed and sealed as of Date of Policy shown in Schedule A, the policy to become valid when countersigned by an authorized signatory

CHICAGO TITLE INSURANCE COMPANY

By:



*[Signature]*  
ATTEST

President

*[Signature]*

Secretary

FL3679 P-09-211  
Gulf Coast Title Partners, LLC  
100 S Alcaniz St  
Pensacola, FL 32502  
Tel: (850) 202-6938  
Fax: (850) 202-6946

*[Signature]*

Authorized Signature  
Kimberly M. Biggs

## SCHEDULE A

Policy No.: 7210609-79623555

Amount of Insurance: \$ 2,657,833.50

Agent Order/File No.: P-09-211/610901041

Date of Policy: December 30, 2009 at 01:16 PM

1. Name of Insured:

State of Florida Department of Environmental Protection

2. The estate or interest in the land which is covered by this policy is:


Easement

3. Title to the estate or interest in the land is vested in:

State of Florida Department of Environmental Protection

4. The land referred to in this policy is described as follows:

SEE EXHIBIT A ATTACHED HERETO AND MADE A PART HEREOF

  
Gulf Coast Title Partners, LLC




Chicago Title Insurance Company

By:

ATTEST

  
President

  
Secretary

THIS POLICY VALID ONLY IF SCHEDULE B IS ATTACHED

ALTA Owner's Policy (10/17/92)  
With Florida Modifications

## SCHEDULE B

### EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Standard Exceptions

- A. Rights or claims of parties in possession not shown by the Public Records.
- B. Encroachments, overlaps, boundary lines disputes, and other matters which would be disclosed by an accurate survey and inspection of the premises.
- C. Easements or claims of easements not shown by the Public Records.
- D. Any lien or right to a lien for services, labor or materials now or hereafter furnished, imposed by law and not shown by the Public Records.
- E. Taxes or special assessments which are not shown as existing liens by the Public Records.
- F. Any claim that any portion of said lands are sovereign lands of the State of Florida, including submerged, filled or artificially exposed lands accreted to such lands.
- G. Taxes and assessments for the year 2010 and subsequent years. Parcel ID #'s 37-1N-28-0000-00100-0000, 03-1S-28-0000-00100-0000, and 42-1N-28-0000-00100-0000

NOTE: STANDARD EXCEPTIONS A THROUGH F ARE HEREBY DELETED.

- 2. Oil, gas and mineral reservations set forth in Mineral Deed from Florida Pulp and Paper Company to Florida Oil & Gas Company recorded in Deed Book 70, Page 27, as conveyed in Special Warranty Deed in Official Records Book 225, Page 628 and with Notice of Claim recorded in Official Records Book 2660, Page 232, of the public records of Santa Rosa County, Florida. Note: The Notice of Claim does not include our legal description within Exhibit B.
- 3. Oil, gas and mineral reservations set forth in Deed Book 120, Page 101, with Surface Use Restrictions Agreement in Official Records Book 1895, Page 186, Mineral and Royalty Deeds recorded in Official Records Book 1889, Page 113, Official Records Book 2324, Page 874 and Official Records Book 2324, page 926, of the public records of Santa Rosa County, Florida.
- 4. Communications Systems Right-of Ways and Easements recorded in Official Records Book 859, Page 219, Official Records Book 903, Page 848, Official Records Book 903, Page 851 and Official Records Book 903, Page 854, of the public records of Santa Rosa County, Florida.
- 5. Conservation Easement recorded in Official Records Book 2871, Page 1928, Public Records of Santa Rosa County, Florida.
- 6. Actual acreage content is neither insured nor guaranteed.
- 7. Encroachment of various fencing and posts as shown on survey furnished by Bannerman Surveyors, Inc., dated December 15, 2009, Project #MOB-105173.

NOTE: Property insured herein being the same property conveyed to State of Florida Department of Environmental Protection, by Conservation Easement from Westervelt Ecological Services, LLC, dated December 21, 2009, and recorded December 30, 2009, in Santa Rosa County Official Records Book 2950, Page 825.

END OF SCHEDULE B

KB

## EXHIBIT A

LEGAL DESCRIPTION PER O.R. BOOK 1690, PAGE 1491:

All of the Diego Palines Grant, being Section Three (3), Township One (1) South, Range Twenty-Eight (28) West, and Section Thirty-Seven (37), Township One (1) North, Range Twenty-Eight (28) West, containing Six Hundred Thirty- Three (633) acres, More or less.

ALSO:

LEGAL DESCRIPTION PER O.R. BOOK 1690, PAGE 1493:

All of the Thomas P. Rioboo Grant, Being Section 42, Township 1 North, Range 28 West, in Santa Rosa County, Florida, less the following portion thereof, to-wit: 80 acres of the Southwest corner of (Thos. P. Rioboo Grant) Section 42, Township 1 North, Range 28 West, more particularly described as follows: Beginning at the Southwest corner of said Grant and running Eastwardly along the Southern boundary line 1320 feet, thence in a Northerly direction along parallel lines with the Western boundary of said Grant 2640 feet, thence in a Westerly direction along parallel lines with Southern boundary of said Grant to the Western boundary line, thence in a Southerly direction along said Western boundary line 2640 feet to point of beginning.

BETTER DESCRIBED AS:

COMMENCE at an existing 4 inch x 4 inch concrete monument with a nail in the top marking the Southeast corner of Section 37, Township 1 North, Range 28 West, Santa Rosa County, Florida, and call this the POINT OF BEGINNING; thence South 08 degrees 43 minutes 50 seconds West a distance of 2558.83 feet to an existing 5 inch oval concrete monument marking the Southeast corner of Section 3, Township 1 South, Range 28 West; thence North 81 degrees 20 minutes 05 seconds West a distance of 1395.78 feet to an existing 4 inch x 4 inch concrete monument marking the Northwest corner of Section 2 and the Northeast corner of Section 4, Township 1 South, Range 28 West; thence North 81 degrees 20 minutes 54 seconds West a distance of 1743.65 feet to an existing 5/8 inch rod with cap stamped LB 6475 on the Southerly right of way of Interstate 10 (State Road 8); thence North 49 degrees 36 minutes 09 seconds East along the Southerly right of way of said Interstate a distance of 4833.81 feet to an existing 5/8 inch iron rod with cap; thence leaving said right of way South 09 degrees 58 minutes 07 seconds West a distance of 1092.61 feet to the POINT OF BEGINNING.

This parcel contains 130.87 acres, more or less, and is located partially in Section 3, Township 1 South, Range 28 West, and partially in Section 37, Township 1 North, Range 28 West, Santa Rosa County, Florida.

ALSO:

COMMENCE at an existing 4 inch x 4 inch concrete monument with a nail in the top marking the Southeast corner of Section 37, Township 1 North, Range 28 West, Santa

KB

## EXHIBIT A (cont'd.)

Rosa County, Florida, and call this the POINT OF COMMENCEMENT; thence North 09 degrees 58 minutes 07 seconds East a distance of 1092.61 feet to an existing 5/8 inch iron rod with cap on the Southerly right of way of Interstate 10 (State Road 8); thence North 09 degrees 08 minutes 17 seconds East a distance of 462.27 feet to an existing 5/8 inch iron rod with cap (can't read) on the Northerly right of way of said Interstate and call this the POINT OF BEGINNING; thence South 49 degrees 36 minutes 09 seconds West along the Northerly right of way of said Interstate a distance of 5434.77 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence leaving said right of way North 80 degrees 07 minutes 12 seconds West a distance of 2010.21 feet to an existing 1/2 inch iron rod with plastic cap stamped NWF ENG. CORP. 4882; thence North 09 degrees 20 minutes 43 seconds East a distance of 2891.47 feet to an existing 1 inch old rusted iron rod; thence South 81 degrees 41 minutes 40 seconds East a distance of 102.87 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 08 degrees 51 minutes 20 seconds East a distance of 2640.00 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 81 degrees 41 minutes 40 seconds West a distance of 1329.66 feet to a 5/8 inch iron rod with an aluminum cap stamped Bannerman Surveyors, Inc. (LB 5106) set; thence North 08 degrees 51 minutes 20 seconds East a distance of 4970.58 feet to an existing 4 inch x 4 inch concrete monument stamped SRCW PLS 3454 at the Northwest corner of Section 42, Township 1 North, Range 28 West; thence South 81 degrees 07 minutes 08 seconds East a distance of 3912.66 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northeast corner of Section 42; thence South 08 degrees 44 minutes 15 seconds West a distance of 3467.99 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northwest corner of Section 37, Township 1 North, Range 28 West; thence South 79 degrees 53 minutes 06 seconds East a distance of 2852.63 feet to an existing 1/2 inch iron rod with cap stamped WSM LB 4207 at the Northeast corner of Section 37; thence South 09 degrees 20 minutes 43 seconds West a distance of 2876.32 feet to the POINT OF BEGINNING.

This parcel contains 1074.70 acres, more or less, and is located partially in Section 3, Township 1 South, Range 28 West, and partially in Section 37 and partially in Section 42, Township 1 North, Range 28 West, Santa Rosa County, Florida.

This is a newly created description.

LESS AND EXCEPT:

LEASE AREA (1):

COMMENCE at an existing 1 inch iron rod marking the Northwest corner of Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence South 09 degrees 20 minutes 43 seconds West a distance of 1071.40 feet to a point and call this the POINT OF BEGINNING; thence South 88 degrees 38 minutes 00 seconds East a distance of 466.69 feet to a point; thence South 09 degrees 20 minutes 43 seconds West a distance of 466.69 feet to a point; thence

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## EXHIBIT A (cont'd.)

North 88 degrees 38 minutes 00 seconds West a distance of 466.69 feet to a point; thence North 09 degrees 20 minutes 43 seconds East a distance of 466.69 feet to the POINT OF BEGINNING

This parcel contains 5.00 acres, more or less, and is located in Section 03, Township 01 South, Range 28 West, Santa Rosa County, Florida

ALSO:

### LEASE AREA (3):

COMMENCE at an existing 4 inch x 4 inch concrete monument marking the Southeast corner of Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence North 09 degrees 58 minutes 07 seconds East a distance of 1092.61 feet to an existing 5/8 inch iron rod and cap; thence North 09 degrees 08 minutes 17 seconds East a distance of 462.27 feet to an existing 5/8 inch iron rod and cap (can't read); thence North 09 degrees 06 minutes 12 seconds East a distance of 504.84 feet to a point and call this the POINT OF BEGINNING; thence North 80 degrees 53 minutes 48 seconds West a distance of 466.69 feet to a point; thence North 09 degrees 06 minutes 12 seconds East a distance of 466.69 feet to a point; thence South 80 degrees 53 minutes 48 seconds East a distance of 466.69 feet to a point; thence South 09 degrees 06 minutes 12 seconds West a distance of 466.69 feet to the POINT OF BEGINNING.

This parcel contains 5.00 acres, more or less, and is located in Section 37, Township 01 North, Range 28 West, Santa Rosa County, Florida.

AND ALSO:

### LEASE AREA (5)

COMMENCE at an existing 4 inch X 4 inch concrete monument marking the Northwest corner of Section 42, Township 01 North, Range 28 West, Santa Rosa County, Florida and call this the POINT OF COMMENCEMENT; thence South 08 degrees 51 minutes 20 seconds West a distance of 450.89 feet to a point and call this the POINT OF BEGINNING; thence South 81 degrees 41 minutes 40 seconds East a distance of 466.69 feet to a point; thence South 08 degrees 51 minutes 20 seconds West a distance of 466.69 feet to a point; thence North 81 degrees 41 minutes 40 seconds West a distance of 466.69 feet to a point; thence North 08 degrees 51 minutes 20 seconds East a distance of 466.69 feet to the POINT OF BEGINNING.

This parcel contains 5.00 acres, more or less, and is located in Section 42, Township 01 North, Range 28 West, Santa Rosa County, Florida

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## EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy;
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters;
  - (a) created, suffered, assumed or agreed to by the insured claimant;
  - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
  - (c) resulting in no loss or damage to the insured claimant;
  - (d) attaching or created subsequent to Date of Policy, or
  - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
  - (i) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
  - (ii) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:
    - (a) to timely record the instrument of transfer; or
    - (b) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

## CONDITIONS AND STIPULATIONS

### 1. DEFINITION OF TERMS

The following terms when used in this policy mean:

(a) "insured" the insured named in Schedule A, and, subject to any rights or defenses the Company would have had against the named insured, those who succeed to the interest of the named insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors

(b) "insured claimant" an insured claiming loss or damage.

(c) "knowledge" or "known": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of the public records as defined in this policy or any other records which impart constructive notice of matters affecting the land.

(d) "land" the land described, or referred to in Schedule A, and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy.

(e) "mortgage" mortgage, deed of trust, trust deed, or other security instrument.

(f) "public records": records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge. With respect to Section 1(a)(iv) of the Exclusions From Coverage, "public records" shall also include environmental protection liens filed in the records of the clerk of the United States district court for the district in which the land is located.

(g) "unmarketability of the title", an alleged or apparent matter affecting the title to the land, not excluded or excepted from coverage, which would entitle a purchaser of the estate or interest described in Schedule A to be released from the obligation to purchase by virtue of a contractual condition requiring the delivery of marketable title.

### 2. CONTINUATION OF INSURANCE AFTER CONVEYANCE OF TITLE

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured only so long as the insured retains an estate or interest in the land, or holds an indebtedness secured by a purchase money mortgage given by a purchaser from the insured, or only so long as the insured shall have liability by reason of covenants of warranty made by the insured in any transfer or conveyance of the estate or interest. This policy shall not continue in force in favor of any purchaser from the insured of either (i) an estate or interest in the land, or (ii) an indebtedness secured by a purchase money mortgage given to the insured.

### 3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT

The insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 4(a) below; (ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy; or (iii) if title to the estate or interest, as insured, is rejected as unmarketable. If prompt notice shall not be given to the Company, then as to the insured all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any insured under this policy unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

### 4. DEFENSE AND PROSECUTION OF ACTIONS: DUTY OF INSURED CLAIMANT TO COOPERATE.

(a) Upon written request by the insured and subject to the options contained in Section 6 of these Conditions and Stipulations, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an insured in litigation in which any third party asserts a claim adverse to the title or interest as insured, but only as to those stated causes of action alleging a defect, lien or encumbrance or other matter insured against by this policy. The Company shall have the right to select counsel of its own choice (subject to the right of the insured to object for reasonable cause) to represent the insured as to those stated causes of action and shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs or expenses incurred by the insured in the defense of those causes of action which allege matters not insured against by this policy.

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to the insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company, shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

### 5. PROOF OF LOSS OR DAMAGE

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the insured claimant provided to the company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in the above paragraph, unless prohibited by law or governmental regulation, shall terminate any liability of the Company under this policy as to that claim.

### 6. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS: TERMINATION OF LIABILITY.

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the amount of insurance under this policy together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay.

Upon the exercise by the Company of this option, all liability and obligations to the insured under this policy, other than to make the payment required, shall terminate including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

(b) To Pay or Otherwise Settle With Parties Other than the Insured or With the Insured Claimant.

(i) to pay or otherwise settle with other parties for or in the name of an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and

expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b)(i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute or continue any litigation.

#### 7. DETERMINATION, EXTENT OF LIABILITY AND COINSURANCE.

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

(a) The liability of the Company under this policy shall not exceed the least of  
(i) the Amount of Insurance stated in Schedule A; or  
(ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.

(b) This paragraph removed in Florida policies.

(c) The Company will pay only those costs, attorney's fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations.

#### 8. APPORTIONMENT.

If the land described in Schedule A consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

#### 9. LIMITATION OF LIABILITY.

(a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim or unmarketability of title or otherwise establishes the lien of the insured mortgage, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

(c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

#### 10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY.

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto.

#### 11. LIABILITY NONCUMULATIVE.

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring a mortgage to which exception is taken in Schedule B or to which the insured has agreed, assumed, or taken subject, or which is hereafter executed by an insured and which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy to the insured owner.

#### 12. PAYMENT OF LOSS.

(a) No payment shall be made without producing this policy for endorsement of the payment unless the policy has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

(b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within 30 days thereafter.

#### 13. SUBROGATION UPON PAYMENT OR SETTLEMENT.

(a) **The Company's Right of Subrogation.**

Whenever the Company shall have settled and paid a claim under this policy, all right of subrogation shall vest in the Company unaffected by any act of the insured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the insured claimant would have had against any person or property in respect to the claim had this policy not been issued. If requested by the Company, the insured claimant shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The insured claimant shall permit the Company to sue, compromise or settle in the name of the insured claimant and to use the name of the insured claimant in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the insured claimant, the Company shall be subrogated to these rights and remedies

in the proportion which the Company's payment bears to the whole amount of the loss.

If loss should result from any act of the insured claimant, as stated above, that act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against by this policy which shall exceed the amount, if any, lost to the Company by reason of the impairment by the insured claimant of the Company's right of subrogation.

(b) **The Company's Rights Against Non-insured Obligors.**

The Company's right of subrogation against non-insured obligors shall exist and shall include, without limitation, the rights of the insured to indemnities, guaranties, other policies of insurance or bonds, notwithstanding any terms or conditions contained in those instruments which provide for subrogation rights by reason of this policy.

#### 14. ARBITRATION.

Unless prohibited by applicable law, arbitration pursuant to the Title Insurance Arbitration Rules of the American Arbitration Association may be demanded if agreed to by both the company and the insured. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to the policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. Arbitration pursuant to this policy and under the Rules in effect on the date the demand for arbitration is made or, at the option of the insured, the Rules in effect at Date of Policy shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permit a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules.

A copy of the Rules may be obtained from the Company upon request.

#### 15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT.

(a) This policy together with all endorsements, if any, attached hereto by the Company is the entire policy and contract between the insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.

(b) Any claim of loss or damage, whether or not based on negligence, and which arises out of the status of the title to the estate or interest covered hereby or by any action asserting such claim, shall be restricted to this policy.

(c) No amendment of or endorsement to this policy can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validation officer or authorized signatory of the Company.

#### 16. SEVERABILITY.

In the event any provision of the policy is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

#### 17. NOTICES, WHERE SENT.

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this policy and shall be addressed to the Company at the issuing office or to

Claims Department  
P.O. Box 45023  
Jacksonville, FL 32232-5023

STATE OF FLORIDA  
COUNTY OF SANTA ROSA

CORPORATE SELLER'S LIEN AFFIDAVIT

BEFORE ME, the undersigned authority, personally appeared (the "Affiant"), as of Westervelt Ecological Services, LLC ("Company"), who after being duly sworn, deposes and says that:

1. Corporation is the owner of that certain parcel of land located in Santa Rosa County, Florida, described as follows (the "Property"):

See Exhibit "A" attached hereto and incorporated herein by this reference.

2. If the above stated owner is an entity other than an individual:

a. it is duly formed and in existence in the state of formation, and if in a state other than Florida, it is duly qualified to do business in the state of Florida;

b. all proper action has been taken so as to authorize owner to sell the Property;

c. the individual executing this Affidavit and executing all documents in connection with this real estate transaction has full knowledge of the matters set forth herein and is duly authorized so as to fully and firmly bind the owner to this Affidavit and such documents.

3. No "Notice of Commencement", as contemplated by Chapter 713, Florida Statutes (the "Construction Lien Law"), has been recorded or posted as to the Property, which is now in existence or which otherwise affects the Property, nor has the Affiant received a "Notice to Owner" as contemplated by the Construction Lien Law, and there are no outstanding or unpaid bills or charges for any labor or services for improvements that remain unpaid to any materialman, mechanic, laborer, supplier, subcontractor, surveyor, engineer, architect or otherwise that would result in a lien against the Property, except the following: NONE

4. Affiant knows of no unpaid assessments made by or due to any governmental authority or other authority for improvements on the Property, including but not limited to, water charges, sanitary sewer charges, property taxes or homeowner or condominium association assessments; and that no notice of any hearing regarding such assessments, or other claims against the Property have been received by the Affiant.

5. Except as otherwise set forth in Commitment #610901041 issued by Chicago Title Insurance Company, a copy of which the Affiant has reviewed this date, Affiant knows of:

a. no person or entity in actual or constructive possession of the Property other than the owner;

b. no lease, contracts for sale or contracts for deed or other contractual rights affecting the Property;

c. no judgments, liens, mortgages, claims or other encumbrances, recorded or unrecorded, affecting the Property;

d. no unrecorded easements or right-of-way for users and no adverse interest as to the Property;

c. no other owner of the Property, and no claims or liens whatsoever of any kind or description against, the furniture, furnishings, fixtures, equipment and other personal property located on the Property;

f. no violations of any (i) covenants or restrictions, or (ii) county or municipal or state or federal ordinances or regulations, zoning and/or land use regulations or otherwise, pertaining to or affecting the Property;

g. no improvements belonging to the Property which encroach upon adjoining property nor improvements belonging to adjoining property that encroach upon the Property; except the following: NONE.

6. There are no other matters, in addition to those specified herein, that are pending against the Affiant which could result in a lien that would attach to the Property between the disbursement of funds for this transaction and the recording of the instruments creating the title or interest to be insured by the title company in this transaction. NONE

7. Affiant has done or suffered nothing to be done to otherwise encumber the Property, except: NONE.

8. This Affidavit is made for the purpose of inducing:

a. Gulf Power Company, a Florida corporation to purchase the property;

b. Gulf Coast Title Partners, LLC as agents for Chicago Title Insurance Company to issue title insurance to Gulf Power Company, a Florida corporation.

9. The undersigned, jointly and severally, hereby agree to indemnify and hold Gulf Coast Title Partners, LLC and those parties named in Paragraph 8 harmless for any and all loss, damage, cost and expense, including reasonable attorney's fees, which either Gulf Coast Title Partners, LLC or the other parties named in this paragraph may sustain or incur acting in reliance upon this Affidavit, including but not limited to issuing title insurance on the Property, or disbursing funds for this transaction.

10. There are no proceedings intended to liquidate or rehabilitate Company's estate, and the Company is not (i) insolvent within the meaning of the federal Bankruptcy Code, (ii) subject to any pending bankruptcy proceeding or the jurisdiction of any court in bankruptcy, or (iii) considering filing bankruptcy. Affiant is not aware of any attempts or stated intentions by any person within the past three years, written or oral, to file involuntary bankruptcy against Company.

11. Affiant is familiar with the nature of an oath, and with the penalties as provided by the laws of the state aforesaid for falsely swearing to statements made in an instrument of this nature. Affiant further certifies that Affiant has read or has had read to Affiant this Affidavit, and understands its content.

12. As used in this Affidavit, the masculine, feminine, or neuter gender, and singular or plural, individual, corporation, or otherwise, shall each be deemed to include the other whenever the context so indicates. If more than one party is named as maker, the obligations hereunder of each party is joint and several.

Westervelt Ecological Services, LLC

By: MICHAEL E. CASE

Name: Michael E. Case

Title: Vice President

STATE OF Alabama  
COUNTY OF Tucalee

The foregoing instrument was sworn to, subscribed to and acknowledged before me this 21<sup>st</sup> day of December, 2009, by Michael E. Case, as Vice President, of Westervelt Ecological Services, LLC, a Delaware limited liability company, on behalf of the company, who did take an oath and who:

☒ is personally known to me.

☐ produced current \_\_\_\_\_ driver's license as identification.

☐ produced \_\_\_\_\_ as identification.

(Notary Seal Must Be Affixed)

Teresa Blaylock  
Notary Public

Name of Notary Printed

My Commission Expires: \_\_\_\_\_

Commission Number: \_\_\_\_\_ MY COMMISSION EXPIRES FEB. 23, 2010





# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

## WETLAND RESOURCE/MITIGATION BANK PERMIT

### PERMITTEE:

Westervelt Ecological Services  
c/o Bosso, Dentzau & Imhof, Inc.  
Michael Dentzau  
1882 Log Ridge Trail  
Tallahassee, FL 32312

### PROJECT:

Pensacola Bay Mitigation Bank  
Permit Number: 0284438-001  
Date of Issue: March 26, 2009  
Expiration Date: Perpetual  
County: Santa Rosa

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This permit is issued under the authority of Part IV of Chapter 373, F.S., and Chapter 62-342, Florida Administrative Code (F.A.C.). The activity is not exempt from the requirement to obtain this mitigation bank/wetland resource permit. Pursuant to operating agreements executed between the Department and the Water Management Districts, as referenced in Chapter 62-113, F.A.C., the Department is responsible for reviewing and taking final agency action on this activity.

This permit also constitutes certification of compliance with water quality standards under Section 401 of the Clean Water Act, 33 U.S.C. 1341, and a finding of consistency with Florida's Coastal Zone Management Program, as required by Section 307 of the Coastal Management Act.

A copy of this authorization also has been sent to the U.S. Army Corps of Engineers (USACOE) for review. The USACOE may require a separate permit. Failure to obtain this authorization prior to construction could subject you to enforcement action by that agency. You are hereby advised that authorizations also may be required by other federal, state, and local entities. This authorization does not relieve you from the requirements to obtain all other required permits and authorizations.

The above named permittee is hereby authorized to construct the work shown on the application and approved drawing(s), plans, and other documents attached hereto or on file with the Department and made a part hereof. This permit is subject to the limits, conditions, and locations of work shown in the attached drawings, and is also subject to the attached General Conditions and Specific Conditions, which are a binding part of this permit. You are advised to read and understand these drawings and conditions prior to commencing the authorized activities, and to ensure the work is conducted in conformance with all the terms, conditions, and drawings. If you are utilizing a

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contractor, the contractor also should read and understand these drawings and conditions prior to commencing the authorized activities. Failure to comply with all drawings and conditions shall constitute grounds for revocation of the permit and appropriate enforcement action. Operation of the facility is not authorized except when determined to be in conformance with all applicable rules and with the general and specific conditions of this permit, as specifically described below.

### **PROJECT DESCRIPTION:**

On November 30, 2007, the Department of Environmental Protection (DEP) received an application to establish the Pensacola Bay Mitigation Bank (PBMB) on a 1,188 acre site. The mitigation bank includes a 105 acre parcel previously preserved as mitigation for DEP Permit 274773-001 (Figure 1). It is included for the purposes of treatment and long-term management, but not for credit generation. The mitigation bank project includes the preservation of the site and the restoration or enhancement of a mosaic of habitats including hydric flatwoods, wet prairie, cypress-gum depressions and drainage systems, and baygall communities, and is intended to be used as mitigation for future unavoidable impacts to wetlands typical of these historic or disturbed systems within the service area. Enhancement will be accomplished by the reduction of woody shrubs and slash pine with fire, mechanical and chemical treatments, planting of longleaf pine, hardwoods and wiregrass in appropriate habitats, establishment of low-water crossings and ditch plugs, excavation of fill to restore native communities, and repair of rutting from off-road vehicle (ORV) use. Management of the site includes a controlled access security program, frequent prescribed burning and control of exotic or nuisance species. The mitigation was assessed by the Uniform Mitigation Assessment Method (UMAM) (Chapter 62-345, F.A.C.) as having a potential of 197.54 freshwater credits (159.83 as hydric flatwoods/prairie credits and 37.7 as mixed hardwood credits).

### **PROJECT LOCATION:**

The proposed bank site is in Sections 32, 37 and 42, Township 1 North, Range 28 West, and Section 03, Township 1 South, Range 28 West, Santa Rosa County east of Avalon Boulevard and both north and south of I-10 Walton County (Figure 1), Class III waters, and has a service area that includes portions of Santa Rosa, Okaloosa and Escambia Counties (Figure 2). The PBMB is bordered by conservation properties along the south and portions of the eastern boundary and forms a linkage in the Garcon Ecosystem Florida Forever Project (Figure 3).



**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

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7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonable necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. A description of and cause of noncompliance; and
- b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any



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non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes Certification of Compliance with State Water Quality Standards (Section 401, PL 92-500).

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
  1. the date, exact place, and time of sampling or measurements;
  2. the person responsible for performing the sampling or measurements;
  3. the dates analyses were performed;
  4. the person responsible for performing the analyses;
  5. the analytical techniques or methods used; and
  6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

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**SPECIFIC CONDITIONS:** Please note that some specific conditions may further define or substitute for some of the requirements of the general conditions listed above.

1. The permittee is hereby advised that Florida law states: "No person shall commence any excavation, construction, or other activity involving the use of sovereign or other lands of the state, title to which is vested in the Board of Trustees of the Internal Improvement Trust Fund or the Department of Environmental Protection under Chapter 253, until such person has received from the Board of Trustees of the Internal Improvement Trust Fund the required lease, license, easement, or other form of consent authorizing the proposed use." Pursuant to Florida Administrative Code Rule 18-14, if such work is done without consent, or if a person otherwise damages state land or products of state land, the Board of Trustees may levy administrative fines of up to \$10,000 per offense.
2. If cultural resources, historical or archaeological artifacts are discovered at any time within the project site the permittee shall immediately discontinue any soil disturbance or other activities that could harm or displace the resource in question and notify the Department and the Bureau of Historic Preservation, Division of Historical Resources, at (800) 847-7278, R. A. Gray Building, 500 S. Bronough St., Tallahassee, Florida 32399-0250. Additional inspection and avoidance measures may be required.

**Commencement requirements**

3. At least 48 hours prior to commencement of work authorized by this permit, the permittee shall notify the Department of Environmental Protection, Office of Submerged Lands and Environmental Resources, MS 2500, 2600 Blair Stone Road, Tallahassee, Florida 32399, and the Northwest District Office, Submerged Lands and Environmental Resource Permitting, 160 Governmental Center, Pensacola, FL 32502 in writing of this commencement.
4. Unless otherwise specified, all reports and other information required for this permit shall be submitted to the Florida Department of Environmental Protection, Office of Submerged Lands and Environmental Resources, MS 2500, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.
5. No credits may be released until the following requirements are completed:
  - a. A qualified mitigation supervisor (QMS) is retained as required in Specific Condition 7;
  - b. The site has been protected in accordance with Specific Condition 8; and
  - c. The applicant is in compliance with Specific Condition 9 regarding documentation of financial assurance.



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6. This mitigation bank permit shall automatically expire five years from the date of issuance if the permittee has not recorded a conservation easement in accordance with the permit and Rule 62-342.750 (2) F.A.C. Except as provided above, this mitigation bank permit shall be perpetual unless revoked or modified.

7. Project Oversight. Prior to commencement of mitigation activities authorized in Specific Conditions 10-13 of this permit, the permittee shall retain a qualified mitigation supervisor (QMS) to oversee all aspects of mitigation bank site implementation, management, monitoring, and corrective actions in this permit until final success criteria are met and a long-term management entity is established.

a. The QMS will serve as the principle contact and manager regarding mitigation activities, including reporting; however, the permittee shall have ultimate responsibility to ensure that the mitigation bank requirements are conducted in accordance with the permit.

b. Within 30 days of issuance of this permit the permittee shall submit the name of the QMS retained to oversee the mitigation work and provide supporting documentation demonstrating that the QMS is authorized and qualified to oversee this work. The QMS must be approved by the Department prior to commencement of the mitigation activities.

c. Within 30 days of the discharge of any approved QMS, the permittee shall submit the name and supporting documentation of a new QMS to the Department for its review and approval.

d. The permittee shall have the approved QMS review the conditions of this permit that pertain to environmental improvement. The purpose of this review is to ascertain whether any criteria need to be modified to ensure ecological success. If the Department concurs that any proposed modifications would improve the likelihood of mitigation success, these changes shall be incorporated into this permit as a minor modification.

8. Protection and Preservation. A 105.74 acre parcel in the northern portion of the bank has been preserved in a conservation easement granted to the Department as mitigation for DEP Permit 274773-001 (Gulf Power), recorded on pp. 1926-1935 of OR Book 2871, Santa Rosa County records. Prior to release of credits, the remaining property on which the PBMB is to be implemented shall be preserved and protected in accordance with an approved executed conservation easement granted to the Department of Environmental Protection (Rule 62-342.650, F.A.C.), a draft copy of which was submitted and is contained in the permit application file.



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The permittee shall also provide the following with the recorded conservation easement:

- a. A title insurance policy for the easement updated to the date of conveyance.
- b. Subordination, release, or joinder agreements for any lien on the property, as identified by the Title Commitment, unless the Department determines that such lien does not adversely affect the ecological viability of the Bank.
- c. Legal descriptions and boundary of the conservation easement certified by a Florida registered land surveyor.
- d. A clerk-of-the-court certified copy of the conservation easement.

In addition, the installation of locked gates and fencing as necessary to restrict trespassing, the installation of signage identifying the Bank, and trespass monitoring shall be implemented no later than 30 days after permit issuance.

9. Financial Assurance. Prior to the release of credits, the permittee shall provide the Department with the financial responsibility mechanisms required by Rule 62-342.700 F.A.C. Cost Estimates are provided in Attachment A. Draft document, submitted by the permittee, are contained in the permit file. The permittee shall secure financial assurance for implementation (construction activities, monitoring, maintenance, and reporting), and for long-term management activities as follows:

- a. The permittee shall establish the financial assurance for implementation (Rule 62-342.700 (4), F.A.C.) in the form of a Department-approved standby trust secured with a letter of credit for \$812,020.00. The permittee may request a partial reduction in the amount of the letter of credit after the successful completion of significant mitigation activities, and based upon a revised cost estimate. The permittee may request a release from its implementation financial assurance obligation upon the determination that the bank has attained final success criteria and the long-term management has been properly funded.
- b. The permittee shall establish the financial assurance for perpetual management prior to the release of credits (Rule 62-342.700(9), F.A.C.) in the form of a Department-approved standby trust secured with a letter of credit for \$401,700.00. Within the first 5 years and prior to the determination of final success in accordance with Specific Condition 22, the long-term management trust fund shall be fully funded in cash. The permittee may request a reduction in the letter of credit as the trust becomes funded in cash.
- c. All cost-estimates shall be reviewed, and appropriate financial responsibility adjustments shall be conducted by the banker on a minimum of two-year intervals, in accordance with Rule 62-342.700 (11) F.A.C. and prior to the final credit release.



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- d. The Department may draw upon the financial mechanisms required for the bank when the permittee has materially failed to comply with the terms and conditions of the permit and continues to be in noncompliance after thirty (30) days written notice has been provided to and received by the permittee.
- e. The interest earned from the principal deposited in the perpetual management trust may be withdrawn for use by the permittee or Department-authorized operating entity for long-term management purposes once the mitigation bank has been determined to have attained success criteria and received the final credit release. Disbursement shall be made by the trustee at the written direction of the Department in accordance with the trust agreement.

**Mitigation Activities:** Figure 4 shows the existing community types and configuration. The goals of the mitigation activities, schematically represented in Figures 5-7 and defined in Specific Conditions 10-13, 19, 22, and 23, are to establish a mosaic of native wetland habitats in the existing impacted property resulting in the community configuration shown in Figure 8, and described in Attachment B – Target Natural Community Descriptions. The mitigation activities are to be implemented by management units as represented in Figure 9 which have been determined based upon the existing trail network and the need to maintain long-term fire breaks. Mitigation activities include shrub reduction in flatwoods, shrub reduction in transitional zones of hardwoods, restoration and planting of off-road vehicle (ORV) impact areas, installation of low water crossings, the filling or plugging of ditches, excavation of upland fill, planting of hardwoods within areas of disturbance, and exotic treatment as necessary. For the purposes of this permit “woody shrubs” for shrub reduction includes those species, typically reduced by fire to coppice, such as titi (*Cyrilla racemifolia*, *Cliftonia monophylla*), gallberry (*Ilex glabra*), fetterbush (*Leucothoe racemosa*, *Lyonia* spp.), yaupon (*Ilex vomitoria*) and wax myrtle (*Myrica cerifera*) that tend to become dominant (weedy) and reduce the diversity of herbaceous species and desirable trees and shrubs (such as those listed for planting below) in a fire suppressed system. Slash pine is *Pinus elliottii*, loblolly pine is *Pinus taeda*, and longleaf pine is *Pinus palustris*.

10. Community restoration activities are described below defined by UMAM Category (Figures 5 and 6) and Management Unit (Figure 9). UMAM Categories 1, 2 and 11 (Management Unit 1) are preservation areas have no mitigation activities other than exotic treatments, maintenance and management.

- a. UMAM Category 3 (Management Unit 2). The existing canopy of black titi and pine will be reduced to represent less than 20% live canopy coverage (i.e.  $\geq 4"$  d.b.h.) through the application of herbicide appropriate for the community. The approximate 6.9 acre area will be underplanted at a density of 275 saplings/acre in the following proportions:

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<i>Nyssa sylvatica</i> var. <i>biflora</i>	698 saplings
<i>Magnolia virginiana</i>	1200 saplings.

- b. UMAM Category 4 (within Management Unit 12). Approximately 2.2 acres of fill will be excavated and planted to support a mixed hardwood wetland depression (Figure 10). The area will be excavated to a depth of 18" below the surrounding elevations and planted in the following proportions:

<i>Nyssa sylvatica</i> var. <i>biflora</i>	100 saplings
<i>Taxodium distichum</i>	800 saplings
<i>Ilex myrtifolia</i>	100 saplings.

In addition, the edges of the depression will be planted with approximately 1,000 wiregrass plugs clustered in groups, and seeds collected from appropriate vegetation onsite will be scattered on bare ground during inspection and monitoring trips to accelerate groundcover establishment for success criteria.

- c. UMAM Category 5 (within Management Unit 6). Within approximately 7.4 acres of ORV rutted intermittent creek or "stringer", 4,000 saplings will be planted in the following proportions to approximate a density of 500 trees/ac:

<i>Nyssa sylvatica</i> var. <i>biflora</i>	1400 saplings
<i>Taxodium distichum</i>	1400 saplings
<i>Magnolia virginiana</i>	800 saplings
<i>Acer rubrum</i>	400 saplings.

Prescribed fire will be excluded from this area for the first two burn cycles to allow the trees to attain adequate height to avoid adverse impacts from subsequent low intensity fires.

- d. UMAM Category 6 (within Management Units 5, 6, and 8-13). Approximately 50.7 acres of Gum/Cypress depressions and stringers have been disturbed by logging and fire suppression. Within 6 months of permit issuance, the standing shrub component <4" d.b.h., including but not limited to titi, gallberry, fetterbush, slash pine, loblolly pine and wax myrtle, will be reduced to represent no more than 10% cover in the stratum composed of individuals > 1" and < 4" d.b.h. by mechanical cutting near the edges of the systems and hand felling within the interior portions of the communities. This task will allow the reintroduction of fire to these systems to restore transitional zones. Additional seedlings may be planted in areas with few canopy trees.



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- e. UMAM Category 7 (within Management Units 4, 5, 11 and 15). Approximately 24.5 acres of Gum/Cypress depressions and stringers have been impacted by severe wildfire. Within this area, 2,500 hardwood saplings will be underplanted in the remaining tree line (variable widths) to increase the total density of trees to approximately 200 trees/ac. The plantings will consist of the following:

<i>Nyssa sylvatica var. biflora</i>	1,123 saplings
<i>Taxodium distichum</i>	781 saplings
<i>Magnolia virginiana</i>	340 saplings
<i>Acer rubrum</i>	156 saplings
<i>Ilex cassine</i>	40 saplings
<i>Ilex myrtifolia</i>	30 saplings
<i>Cephalanthus occidentalis</i>	30 saplings
<i>Gordonia lasianthus</i>	15 saplings

Prescribed fire will be restricted from these planting areas for the first two burns to allow the planted trees to attain vigor and subsequently allow low-intensity fires to restore transitional zones. This will be accomplished by using either mulched or wet firelines.

- f. UMAM Category 8 (within Management Units 3, 5-8 and 15). Within approximately 11.2 acres of flatwoods rutted by ORV and logging, restoration will be completed through the installation of approximately 11,200 wiregrass plugs at a density of 1,000 plugs acre.
- g. UMAM Category 9 (within Management Unit 1). Approximately 3.8 acres of Bay/Titi area disturbed by ORV and logging will be planted with 1,900 hardwood saplings in the following proportions:

<i>Nyssa sylvatica var. biflora</i>	350 saplings
<i>Taxodium distichum</i>	200 saplings
<i>Magnolia virginiana</i>	1350 saplings

- h. UMAM Category 10 (Management Units 3-13 and 15). The largest portion of the site (~646.1 acres) are hydric flatwoods and wet prairie that are fire suppressed and have an abundance of inappropriate pine and woody shrubs. Within this area, the following activities will be completed:

- i. Shrub/Tree Reduction. After the first prescribed fire in each unit (Specific Condition 12), and within 18 months of permit issuance, the living hardwood component  $\geq 1"$  d.b.h., including but not limited to

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- titi, gallberry, fetterbush, wax myrtle and pine, will be treated by cutting and/or herbicide application. Cutting will be utilized within 25' of embedded hardwood systems such as drainages and depressions. Herbicide treatments in all other areas will consist of spot ground applications of Garlon consistent with application guidelines for safety and efficacy.
- ii. In order to replace much of the slash and loblolly pine with longleaf pine over the long-term, regular prescribed fire will be used to hinder slash pine recruitment and favor longleaf pine establishment. Additionally, after the shrub reduction in 1. above, and after the second prescribed fire within the flatwoods/prairie management units, container grown "deep" plugs of longleaf pine will be planted at a density of 150 trees/acre, for a total of approximately 97,095 plugs. Slash pine, and, as necessary, longleaf pine will be selectively girdled by hand to attain success criteria in Specific Condition 22.
  - iii. Within approximately 1.2 acre strip of flatwoods (UMAM 10) along the western property boundary and west of the existing disturbed fireline (Management Unit 14), mechanical mowing will be used as a surrogate for fire. Frequency will mimic the prescribed fire on the adjacent Management Unit 13

11. Exotic and nuisance vegetation control. Invasive exotic and nuisance vegetation, including but not limited to Chinese tallow, cogon grass and Japanese climbing fern shall be controlled by appropriate measures including herbicide application and/or physical removal. Exotic and nuisance species control will be conducted under the direction of the QMS. Treatments will be documented in the status reports detailed in Specific Condition 26. Inspections for exotic coverage shall be conducted annually associated with annual monitoring events, as detailed in the monitoring plan in Attachment F. Plants of concern shall be those Category I and II species listed by the Florida Exotic Pest Plant Council (FLEPPC), 2007.

12. Fire Management Plan. Prescribed fire shall be implemented to reduce woody vegetation to coppice and stimulate native herbaceous cover and seed production to attain the proposed success criteria, and as a long-term management tool to maintain the communities and function. The site has been divided into 15 Management Units of which Units 3-13 & 15 will receive prescribed fire (Figure 9). All burning will be in accordance with Westervelt's December 16, 2008 Prescribed Burning Process report contained in the file, an excerpt of which is Attachment C - Fire Management Plan. A conceptual fire prescription is included in the report; however, each prescribed burn activity will be developed and supervised by a certified burn specialist. Following each prescribed burn activity conducted at the bank, the permittee shall submit



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documentation, signed by the QMS and certified burn specialist, that a burn was conducted, and provide a summary of the unit(s) and acres treated with assessment of burn success, including photographs. For the purposes of this permit, a successful burn shall mean the fire shall carry over a minimum of 70% of the flatwoods and the herbaceous ground cover is regenerating ("greening up") in the burned area. For the hardwoods the goal is to allow the fires to shape the transitional edges with the flatwoods without substantially impacting hardwood survival in the interior. It is the intent to burn all target management units within 18 months of permit issuance. If this target is not met, the permittee shall document the cause(s) to the Department in writing and propose corrective activities. Prior to the release of credits associated with this activity, the permittee shall arrange a site visit that includes the Department, QMS, and any Interagency Review Team (IRT) members that are available to review the activities. The permittee shall submit a summary of the site visit for the file to facilitate future compliance reviews.

The activities described in Specific Conditions 10, 11 and 12 above are summarized in the table below.

UMAM Categories	Management Activity Summary
1 and 2	Exotic species control; access control.
3	Cutting and chemical treatment of titi and pine; underplanting with 1,898 mixed hardwood saplings; exotic species control; access control.
4	Excavation of previous fill impacts to target elevation; planning with 1,000 mixed hardwood saplings and 1,000 wiregrass plugs; exotic species control; access control; suppression of fire until hardwoods have attained adequate height with soft firelines; ultimately allowing prescribed fire to shape the transitional zone with flatwoods.
5	Planting of impact areas with 4,000 hardwood saplings; exotic species control; access control; suppression of fire until hardwoods have attained adequate height with soft firelines; ultimately allowing prescribed fire to shape the transitional zone with flatwoods.
6	Controlled prescribed fire; review to determine coverage of shrubs after fire; reduction in shrub component by cutting and herbicide as necessary; exotic species control; access control.
7	Planting of 2,500 hardwood saplings; suppression of fire until hardwoods have attained adequate height with soft firelines; reintroduction of controlled prescribed fire; exotic species control; access control.
8	Planting of 11,200 wiregrass plugs; prescribed fire; exotic species control; access control.
9	Planting of 1,900 hardwood saplings; exotic species control; access control.
10	Fireline installation; prescribed fire; tree/shrub reduction by mechanical and chemical means as necessary; underplanting with 97,095 longleaf pine; exotic species control; access control.
11	Exotic species control; access control.

13. Hydrologic Enhancements. Hydrologic enhancements include the installation of six low water crossings, filling of one ditch, and the installation of six ditch plugs in two additional ditches (Figure 7 and 11).

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- a. Within 6 months of permit issuance, six low water crossings will be established in the existing dirt roads. These areas will be excavated to a depth of approximately 6" below the adjacent elevations, lined with filter fabric, and covered with rock to align with adjacent wetland elevations (Figure 11).
- b. Ditch Fill Within Management Unit 15. Within 12 months of permit issuance the ditch will be filled to grade to the extent possible with the onsite spoil cast off from the ditch during the original construction. Because of spoil compaction or vegetation, the entire ditch may not be filled; however, all drainage by the ditch shall be eliminated with strategically placed ditch plugs.
- c. Ditch Plugs Within Management Units 13 and 10. A total of six (6) ditch plugs will be installed to the grade of the adjacent wetlands in a manner that eliminates drainage.
- d. The permittee shall submit a detailed report of the above construction within 60 days of completion work. Prior to the release of credits associated with this activity, the permittee shall arrange a post-construction site visit that includes the Department, QMS, and any IRT members that are available to review the activities. The permittee shall submit a summary of the site visit for the file to facilitate future compliance reviews.

14. Turbidity Controls. Earthwork will be implemented when there is no standing (except within ditches) and no flowing water. Best Management Practices for the control of turbidity and erosion shall be implemented during all work on site. Erosion and turbidity control measures shall be inspected regularly. All graded areas shall be stabilized within 48 hours of attaining final grades and at any other time necessary to prevent erosion, siltation and turbid discharges in violation of state water quality standards.

15. Work schedule. Bank activities are expected to occur within 10 years of permit issuance. The sequence of activities and dates given below are relative estimates to be used as guidelines. Variation in this schedule may be authorized with concurrence of the Department upon written request from the permittee.

Activity	Estimated Completion Date From Date of Permit Issuance By Agencies
Execution of Conservation Easement (SC #8), fencing & security	1-3 mo.
Identification of Reference Wetland (SC #5.d.)	1-3 mo.
Selection/approval of QMS (SC #7)	1-3 mo.
Demonstration of Financial Assurances(SC #9)	1-3 mo.
Establishment of reference wetland (SC #22.b.)	1 yr.
Installation of Low Water Crossings (SC #13a)	1-6 mo.
First Prescribed Fire (SC #12)	1 yr.
Exotic and Nuisance Species Control (SC #11)	Ongoing
Titi & Pine Reduction;Hardwood Underplanting -Mgmt Unit 2 (SC #10a)	1 yr.



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Fill Excavation; hardwood planting Management Unit 12 (SC #10b)	1 yr.
Hardwood Plantings w/in ORV Impacts in Management Unit 6 (SC #10c)	1 yr.
Shrub Reduction in Management Units 5, 6 and 8-13 (SC #10d).	2 yr.
Planting in Cypress-Gum Management Units 4, 5, 11 and 15 (SC #10e)	1 yr.
Planting Wiregrass in Management Units 3, 5-8 and 15 (SC #10f)	1 yr.
Planting in Bay/Titi in Management Unit 1 (SC #10g)	1 yr.
Shrub/Tree Reduction in Flatwoods-Mgmt Units 3-13 and 15 (SC #10h1)	1-2 yr.
Mowing in Management Unit 14 (SC #10i)	1 yr.
Monitoring Year 1 / Initial Annual Report Preparation (SC #25)	1 yr.
Ditch Plugs and Filling in Management Units 13, 910 and 15 (SC #13b &c)	1-2 yr.
Monitoring Year 2 / Annual Report Preparation (SC #25)	2 yr.
Second Prescribed Fire (SC #12)	4 yr.
Plant Longleaf in Hydric Flatwoods (SC #10h2)	5 yr.
Monitoring Year 3 / Annual Report Preparation (SC #25)	3 yr.
Monitoring Year 4 / Annual Report Preparation (SC #25)	4 yr.
Monitoring Year 5 / Annual Report Preparation (SC #25)	5 yr.
Monitoring Year 6 / Annual Report Preparation (SC #25)	6 yr.
Third Prescribed Fire (SC #12)	7 yr.
Monitoring Year 7 / Annual Report Preparation (SC #25)	7 yr.
Monitoring Year 8 / Annual Report Preparation (SC #25)	8 yr.
Monitoring Year 9 / Annual Report Preparation (SC #25)	9 yr.
Monitoring Year 10 / Annual Report Preparation / Final Success (SC #25)	10yr.
Perpetual Management (SC #6)	Ongoing

## Banking Operations

16. As specified in Rule 62-342.470(6) F.A.C., if at any time the bank is not in material compliance with the terms of this permit, no mitigation credits may be released or withdrawn. Mitigation credits shall again be available if the permittee comes back into compliance.

17. Assessment of Credits: As a result of mitigation activities, the Pensacola Bay Mitigation Bank has the potential to provide for a total of 159.83 Hydric Flatwood/Prairie credits (approximately 81%) and 37.70 Mixed Harwood credits (approximately 19%) following final bank wide success. Credits were assessed using the Uniform Mitigation Assessment Method (UMAM), Chapter 62-345, F.A.C., and a summary of the credit assessment is included in Attachment D. These credits will be released incrementally and in the same proportion as the overall credit type, as detailed in Specific Condition 19.

18. Ledger: In order to track credit releases and withdrawals, a ledger shall be kept indicating all potential, released, withdrawn and available credits. The format for the ledger, indicating potential credits, is Attachment E.

## Final Permit

Pensacola Bay Mitigation Bank

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19. Credit Release Schedule. Mitigation credits will be released for use according to the following Credit Release Schedule table based on the timeframes anticipated in Specific Condition 15. The actual credit release will be determined by when the specified activity is completed or criteria achieved, which may be before or after the estimated date in Specific Condition 15. All credit releases shall be in accordance with the following table.

Task	Specific Conditions	% Credit Release	Flatwood/Wet Prairie Credits	Mixed Hardwoods Credits	Total Credits
Conservation Easement; Financial Assurances; Security; QMS.	5, 7-9	15	24.0	5.6	29.6
<i>No further credits may be released prior to establishment of reference wetland (Specific Condition 22. b.)</i>					
First Prescribed Fire; Mowing in Management Unit 14	12	10	16.0	3.7	19.7
Installation of Low Water Crossings; Ditch Filling/Plugging.	13	10	16.0	3.7	19.7
Shrub/Tree Reduction; Exotic Species Treatment; Hardwood Planting	10, 11	15	24.0	5.6	29.6
1 <sup>st</sup> period attainment of interim success criteria	23	12.5	20.0	4.7	24.7
2 <sup>nd</sup> period attainment of interim success criteria; planting of longleaf pine	23	12.5	20.0	4.7	24.7
3 <sup>rd</sup> period attainment of interim success criteria	23	12.5	20.0	4.7	24.7
Final Success	22	~12.5	19.83	5.0	24.83
TOTALS		100	159.83	37.7	197.54

Upon completion of a credit release activity, the permittee may submit a minor modification request (with fee), along with supporting documentation, for the release of the appropriate number of credits. This request shall be made in writing to the Office of Submerged Lands and Environmental Resources. The Department shall review the minor modification, in accordance with Ch. 120, F.S., for release criteria documentation, conduct a site visit to determine if the documentation is representative of on-site conditions, and perform a compliance review of the permit, prior to the issuance or denial of the minor modification to release credits. An updated ledger indicating the additional available credits shall be attached to the minor modification.

20. Mitigation Credit Withdrawal: Withdrawal of the mitigation bank credits as mitigation for wetland impacts shall be accomplished through a minor modification of this permit. Modification requests for credit withdrawal shall not require a modification fee. Modification requests shall be made in writing to the Office of Submerged Lands and Environmental Resources in Tallahassee. Minor modification requests shall only be submitted by the bank permittee or by a designated agent, provided an updated agent authorization is submitted with each request. The modification request shall include:

- a list of all Department or Water Management District permits (or other applicable regulatory actions) that require mitigation credits from the PBMB,
- the permit number, issue date, as available, and permit processor/reviewer,



## Final Permit

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File No. 0284438-001, Santa Rosa County

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- c. an identification of the number and type of wetland credits required under each of these permits.

Minor modification approvals for credit withdrawal shall be issued only to the bank permittee within 30 days of submittal of request. An updated mitigation bank credit ledger sheet shall be included by the Department as an attachment to each minor modification approval for credit withdrawal.

21. Mitigation Service Area: The mitigation service area (MSA) is the geographic area within which adverse impacts may be offset by the bank. The MSA for the Pensacola Bay Mitigation Bank is depicted in Figure 2. The MSA includes lands within Santa Rosa, Okaloosa and Escambia Counties. Regardless of whether a project lies within the MSA, determination of the applicability of PBMB for mitigation, as well as the number and type of required mitigation credits, is made on a case-by-case basis by the impact permit reviewing agency.

## Success Criteria

22. Final Success. The goal of the mitigation is to convert, enhance or preserve the existing communities shown in Figure 4 into the target communities shown in Figure 8 and as described in Attachment B. The bank shall be deemed successful when all of the following criteria, in addition to the community descriptions, have been met for a period of at least one full year without intervention in the form of eradication of undesirable vegetation, pine harvesting or replanting of desirable vegetation. For the purposes of success determination, "woody shrubs" includes those species, typically reduced by fire to coppice, such as titi (*Cyrilla racemifolia*, *Cliftonia monophylla*), gallberry (*Ilex glabra*), fetterbush (*Leucothoe racemosa*, *Lyonia* spp.), yaupon (*Ilex vomitoria*) and wax myrtle (*Myrica cerifera*) that tend to become dominant (weedy) and reduce the diversity of herbaceous species and desirable trees and shrubs (such as those listed for planting in Specific Condition 10) in a fire suppressed system. Slash pine is *Pinus elliottii*, loblolly pine is *Pinus taeda*, and longleaf pine is *Pinus palustris*.

a. **Entire Site (UMAM Categories 1-11).** Invasive exotic species cover is less than 1% cover in any one acre and not more than a cumulative 2 acres throughout the site.

b. **Hydric Pine Flatwoods/Prairie (UMAM Categories 8 and 10).**

- 1) The average cover of herbaceous groundcover (including graminoids, forbs, and ferns) shall be 75% or greater, with no one monitoring quadrat having less than 50% cover, and the collective cover of pioneer *Andropogon* spp. (except *A. liebmannii*) shall not exceed 10% in any quadrat.



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- 2) Each sampling quadrat within UMAM Category 10 shall contain at least 80% of the total *number* of species identified in the reference wetland sampling (described below), and at least 75% of the quadrat's species shall be also be found in the reference wetland sampling. Species not found at the reference site shall be species appropriate to the community as demonstrated by the Banker with a literature citation and/or a third party professional botanist/ecologist opinion and agreed to by the Department.

*Reference site.* The reference wetland site will be identified on lands in close proximity to PBMB on Northwest Florida Water Management District (District) property prior to release of credits beyond the initial "preservation" credit release. This site will be established in association with the District to represent optimal vegetation characteristics of the target community for the Department's approval. The intent of this reference wetland is to develop a species list to be used to gauge the species diversity success described by this condition. Random vegetation sampling transects within the reference wetland will be completed in April/May and September/ October, 2009. The reference wetland boundary and transects will be GPS-located and identified on an aerial photograph. This reference wetland will be sampled again in 2014 to generate an additional species list to account for any impacts resulting from weather patterns of the previous 5 years. Although the generation of the species list is important to the species richness success criteria, this site will also serve as example of a highly functioning wetland hydric flatwoods/prairie community from which comparisons other than just species presence or absence can be made, and as such, may be used in a qualitative manner at the discretion of the Department to otherwise demonstrate final compliance in this community category.

- 3) Gallberry, yaupon, wax myrtle, fetterbush, titi and other woody shrubs shall be no taller than the coppice sprouts that could have arisen from root crowns following the most recent successful fire. Areas dominated by woody shrubs (i.e. areas with shrubs averaging 1.5 meters in height and a collective canopy coverage of over 50%) shall be limited to random spots of 1 ac. or less where fire did not burn and shall represent an insignificant feature in this community type.
- 4) The combined canopy (>4" d.b.h.) of slash pine and loblolly pine shall not exceed 15 live trees/acre on average, and in no monitoring quadrat should the tree density be greater than 20 trees/acre.
- 5) Canopy and subcanopy (>1" d.b.h.) longleaf pine shall average between 5 and 100 trees/acre, with no monitoring plot having more than 110 trees/acres.
- 6) Appropriate vegetation is reproducing naturally, either by normal, healthy vegetative spread or through seedling establishment, growth and survival.
- 7) Prescribed fire routinely carries over a minimum of 70% of the community type.



**c. Cypress/Gum Wetlands and Bay/Titi Enhancement Areas (UMAM Categories 3-7, and 9).**

- 1) Planted and volunteer tree cover is increasing annually, with a minimum of 30% canopy cover (i.e. >4" d.b.h.), excluding titi, and with a species mix consistent with the community descriptions in Attachment B and the planting mix described in Specific Condition 10.
- 2) Total cover of combined tree, shrub and ground strata shall be greater than 70%.
- 3) Non-nuisance, native ground and shrub species are healthy, reproducing naturally and exhibiting the cover and diversity typical of habitat, such as found in Florida Natural Areas Inventory Natural Community Descriptions (FNAI and FDNR. 1990. Guide to the Natural Communities of Florida) or other such literature and Attachment B.
- 4) Titi, gallberry and fetterbush cover shall not exceed 25%.
- 5) Communities have developed so that prescribed fire moves from the flatwoods systems to these target communities without being catastrophic to the existing and recruited hardwoods.

**d. Baygall/Mixed Hardwood Preservation (UMAM Categories 1, 2 and 11).**

- 1) Inspections and monitoring shall indicate that conditions are not exhibiting signs of degradation and the conditions necessary to maintain functions in the long term are exhibited.
- 2) For any areas of restoration from rutting or ORV activity within this community, the desirable tree cover is increasing annually, with a minimum of 50% cover.
- 3) Within these restoration zones the total cover shall be greater than 70% through a combination of canopy, shrubs and ground cover.

**e. Hydrologic Improvements.** All low water crossings and ditch fill areas have been installed to the satisfaction of the Department, are stabilized and showing no signs of erosion, and have operated as designed, without the need of repairs for a period of at least three years.

**f. Fire and interim success.** Success criteria are being achieved at least one full year after the second successful fire and the attainment of the third level of interim success criteria described in Specific Condition 23.

23. Interim release criteria. Progressive environmental enhancement or trending toward success provides environmental lift for which credit may be released incrementally prior to achieving all the final success criteria delineated in Specific

Condition 22. Credits will be released whenever representative monitoring data provided in Annual Reports, as verified by a Department site inspection, indicate that:

- a. At least one year has transpired since the activities described in Specific Conditions 10-11 and 13 were completed to the satisfaction of the Department or since the previous interim success attainment;
- b. There is less than 2% exotic vegetation cover per acre;
- c. Planted vegetation is surviving at a rate necessary to support final success criteria;
- d. Preservation areas are maintaining or improving in function;
- e. Hydric/Wet Flatwoods are attaining success criteria or are measurably increasing in herbaceous groundcover and decreasing in woody vegetation cover;
- f. For the first level of interim success, the wet flatwoods quadrat's shall have at least 30% of *number* of species documented in the reference wetland sampling, and at least half of the site's species shall also be found at the reference site.
- g. For the second level of interim success, the wet flatwoods quadrat's shall have at least 40% of *number* of species documented in the reference wetland sampling, and at least half of the site's species shall also be found at the reference site.
- h. For the third level of interim success, the wet flatwoods quadrat's shall have at least 50% of *number* of species documented in the reference wetland sampling, and at least half of the site's species shall also be found at the reference site.
- i. Prescribed burns have been conducted in accordance with the season and schedule described in Attachment C.
- j. The project is in compliance with this permit.

24. Management and Maintenance. Monitoring data, observation and the QMS's professional judgment will dictate the type and frequency of management activities. In addition to the activities required by Specific Conditions 10-13, the following management activities shall also be required to achieve success and in the long term and to ensure that success criteria are maintained:

- a. Replanting as necessary to achieve interim and final success criteria.
- b. Conducting prescribed burns in accordance with Specific Condition 13 and Attachment C at a frequency and season optimal to promote desirable vegetation and wildlife, with a minimum of one growing season burn every 10 years;
- c. Conducting exotic and nuisance plant control, as necessary, to avoid infestation of these species. At no time shall the cover of these species exceed 5% in any one acre prior to remedial eradication activities;



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- d. Quarterly inspection of the property for signs of trespassing, poaching or dumping and to ensure that the structures and security features are in good working order;
- e. Reporting and timely maintenance, restoration, stabilization or repair of any damaged structures, fencing, equipment, roads or erosion areas identified in the quarterly inspection;
- f. Removing feral/exotic animals that threaten the mitigation activities or success, such as feral hogs; and
- g. Other management activities deemed necessary by the QMS to achieve success.

25. Monitoring. Qualitative and quantitative monitoring of vegetation and community structure shall be required annually until the bank is determined to have achieved the success criteria in Specific Condition 22. The Department has reviewed the proposed monitoring plan in Attachment F. This plan has been determined to be substantively adequate to evaluate progress toward restoration goals, identify potential roadblocks or impacts that may hamper attaining those goals, provide opportunities for scientific assessment of wetland functions and processes, and ultimately demonstrate that the Bank's success criteria have been met. However, in order to accommodate any changes necessitated by permitting conditions and/or operational restrictions, the permittee shall submit, for the Department's written approval, a final monitoring plan 60 days prior to conducting the first year monitoring for this permit. The Department shall complete such review within 60 days of receipt of a written submittal of the final monitoring plan. This plan shall include the following attributes:

- a. a figure showing all sampling locations;
- b. a table indicating all sampling frequencies and/or dates;
- c. a detailed description of all sampling methodologies to be utilized;
- d. samples of field and data tables;
- e. photographic information.

In addition, this monitoring plan shall include a section detailing the proposed analyses and reporting that will be conducted utilizing the collected data. This section shall include:

- f. proposed reporting format;
- g. sample data summary tables and graphs;
- h. proposed analytical assessments and discussion contents; and
- i. a success/progress assessment.

26. Progress Reports. Beginning the first June or December after permit issuance and every 6 months thereafter, the permittee shall submit semi-annual status reports or letters containing the following information regarding the project:

- a. Date permitted activities were begun or are anticipated to begin;

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- b. Brief description and extent of construction or management activities completed since the previous report or since permit was issued;
- c. Copies of permit drawings indicating areas where work has been completed;
- d. A description of problems encountered and solutions undertaken;
- e. A brief description of the work and/or site management the permittee anticipates commencing, continuing or completing in the next six months; and
- f. Site management undertaken, including type of management and dates each type was undertaken.

27. Annual Reports. The Annual Report is a summary of the yearly monitoring for success and an assessment of the degree to which the bank is attaining success. This report shall be submitted after completion of the end-of-growing-season vegetation monitoring and shall be prepared according to the format required and approved in accordance with Specific Condition 25. This report is due by January 30 and shall be submitted annually until the Bank site has been determined to be successful. The permittee may synchronize the reporting required in Specific Condition 26 such that alternate progress reports may be included as a section in the Annual Report. The Annual Report that requests a determination of final success in accordance with Specific Condition 22 shall also include the following information:

- a. a summary of all previous Annual Reports, including, as appropriate, timeline graphics;
- b. a list of each success criterion and documentation of how and when it was attained;
- c. a notation of problems encountered in attaining the success criteria and how the problems were solved, and a notation of any exceptionally successful management activity;
- d. a summary of compliance and/or enforcement submittals or actions during the implementation of the bank; and
- e. any other information helpful for the continued success of the mitigation.

The Report requesting the final success determination shall be submitted to both the Department and the long-term manager.

28. Compliance: Prior to the initial credit release, the permittee shall prepare a checklist showing all compliance activities required in this permit, and the actual or relative dates for these activities. This checklist, with appropriate items "checked", shall be included with each annual monitoring report submittal or credit release modification request.



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**List of Attachments:**

Figures 1-11

Attachment A - Cost Estimate

Attachment B - Target Community Descriptions

Attachment C - Fire Management Plan

Attachment D - UMAM Summary

Attachment E - Ledger

Attachment F - Monitoring Plan

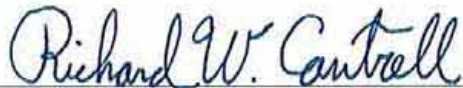
FLEPPC species list

Recommended by:



RWC/TR/CA/VT/vt

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

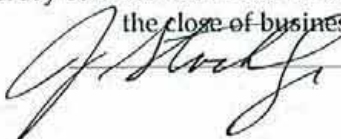


Richard W. Cantrell, Deputy Director  
Division of Water Resource Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk  
hereby certifies this PERMIT was mailed before

the close of business on

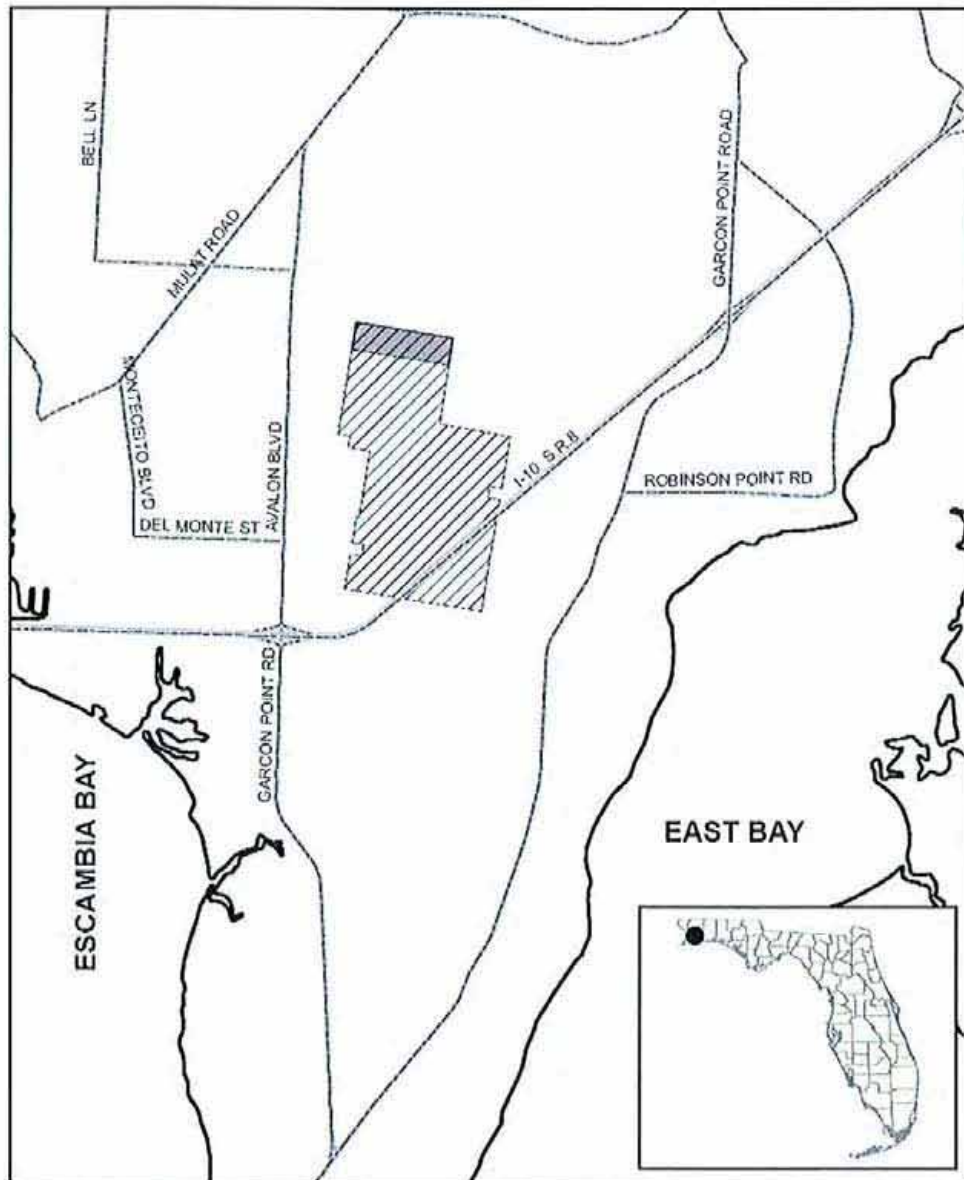
 (date) 3/25/09

FILING AND ACKNOWLEDGMENT

FILED, on this date, pursuant to 120.52(7) F. S.,  
with the designated Department Clerk, receipt  
of which is hereby acknowledged.


Clerk

Date



### Legend

 Bank

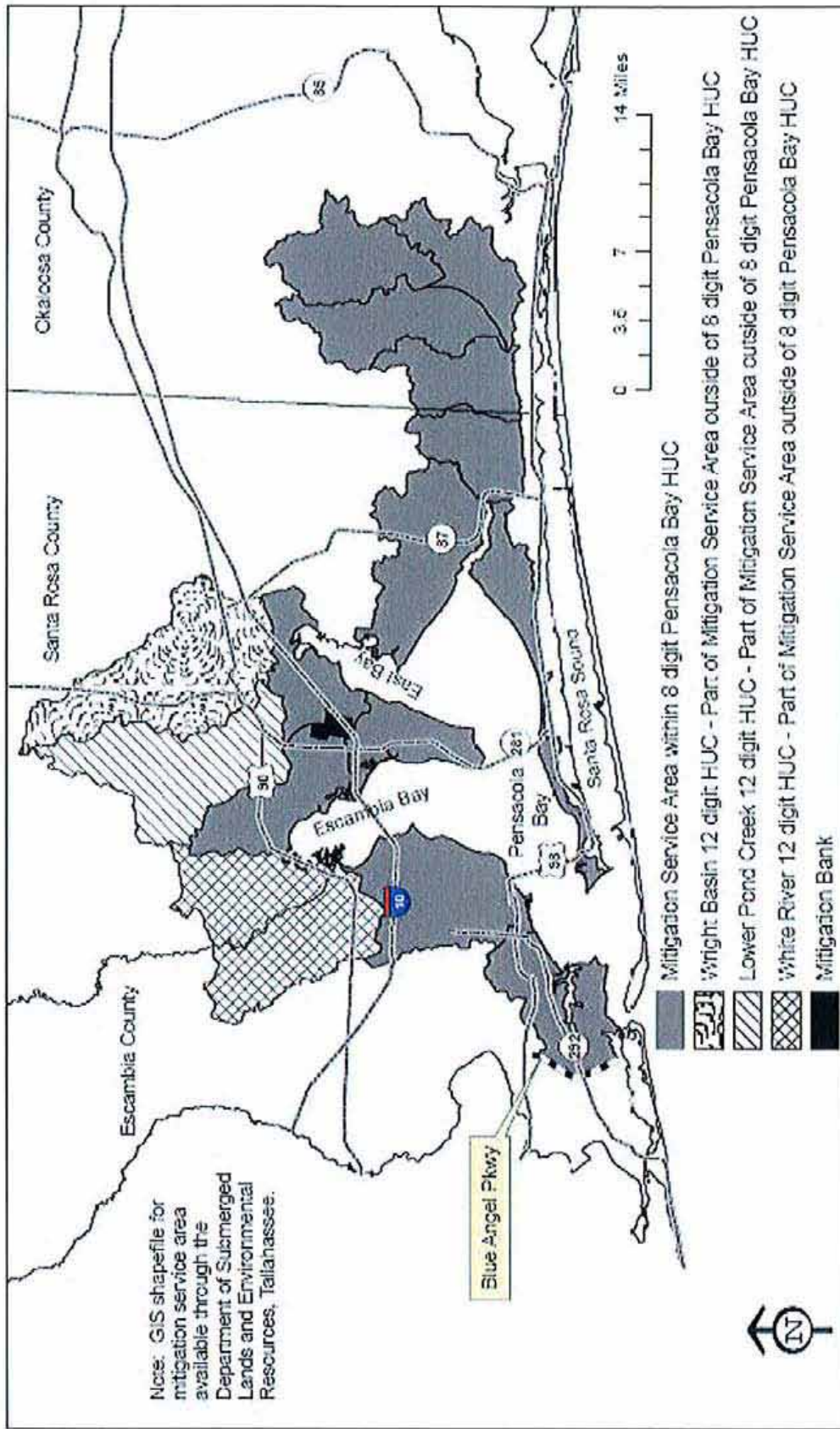
 Portion of Bank Preserved for DEP Permit No. 274773-001

0 0.5 1 2 Miles

Bosso, Dentzau & Imhof, Inc.  
1882 Log Ridge Trail  
Tallahassee, FL 32312  
850-893-7238

Figure 1 - Pensacola Bay Mitigation Bank Location



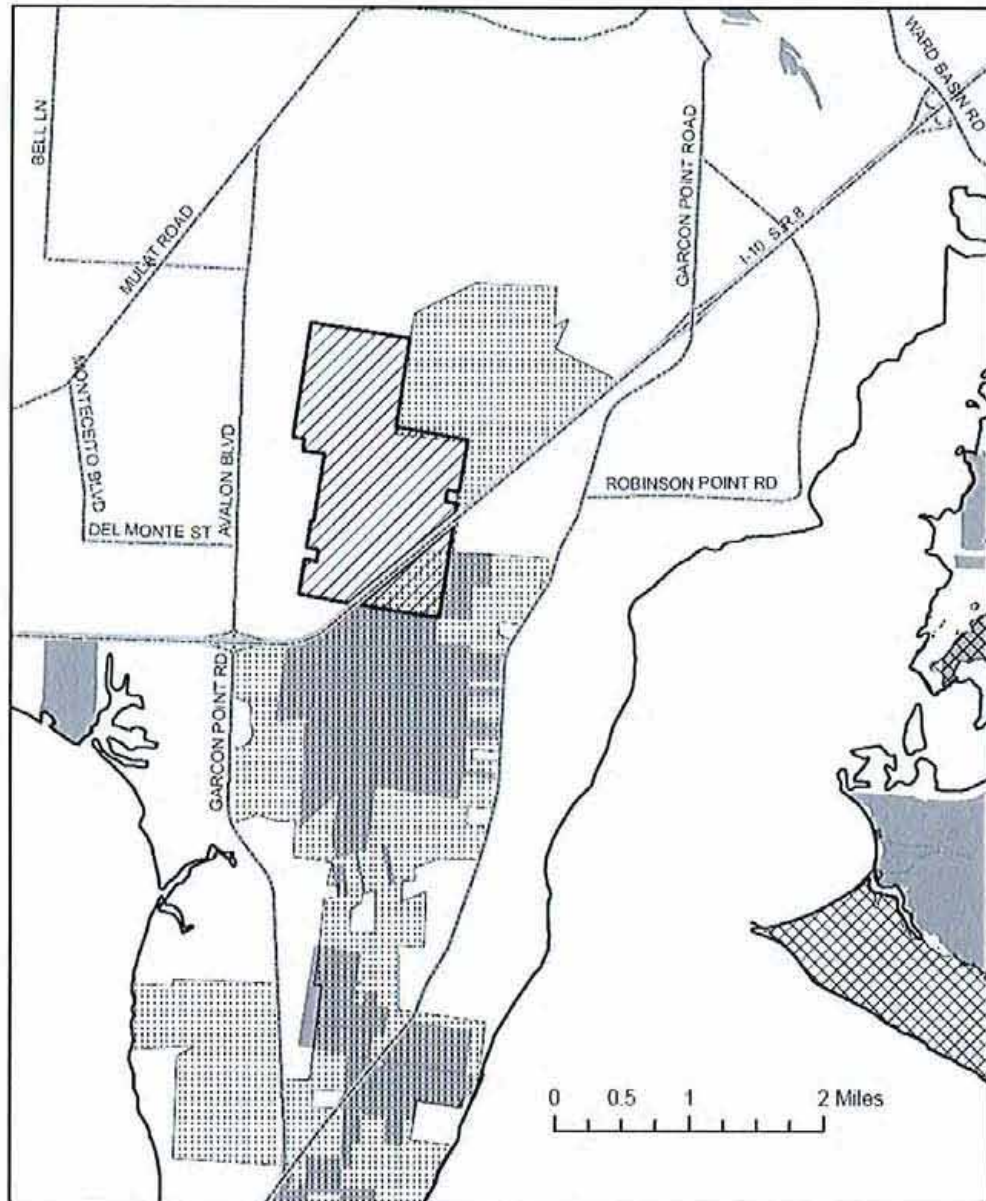


Bosco, Dertau & Imhof, Inc.  
 1362 Log Ridge Trail  
 Tallahassee, FL 32312  
 850-893-7236

Figure 2 - Mitigation Service Area







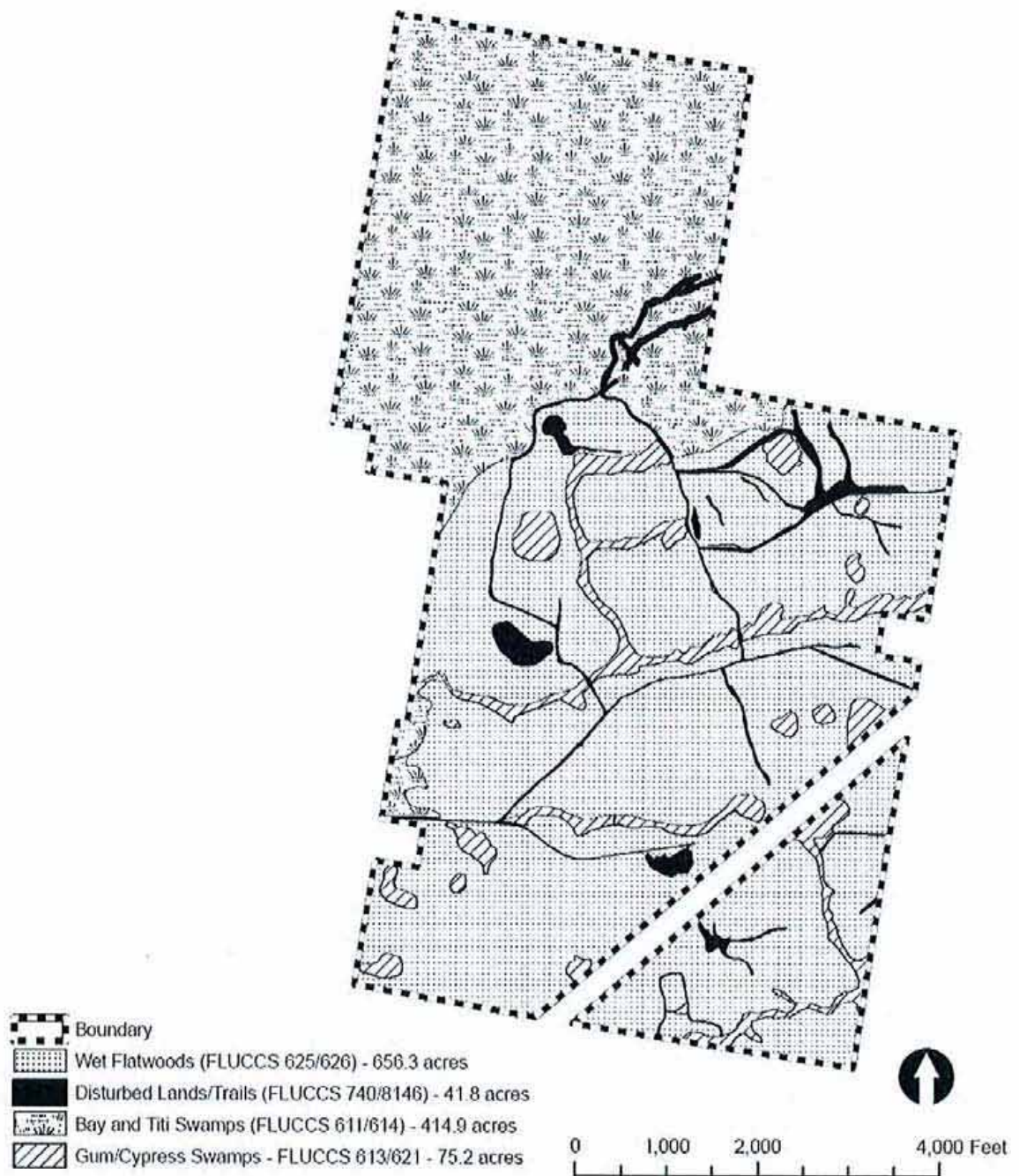
-  PENSACOLA BAY MITIGATION BANK
-  OTHER BOT PROJECTS
-  GARCON ECOSYSTEM FLORIDA FOREVER DESIRED LAND
-  FLORIDA MANAGED LANDS

Bosso, Dentzau & Imhof, Inc.  
 1882 Log Ridge Trail  
 Tallahassee, FL 32312  
 850-893-7238

Figure 3 - Bank Location with Respect  
 to Other Conservation Lands



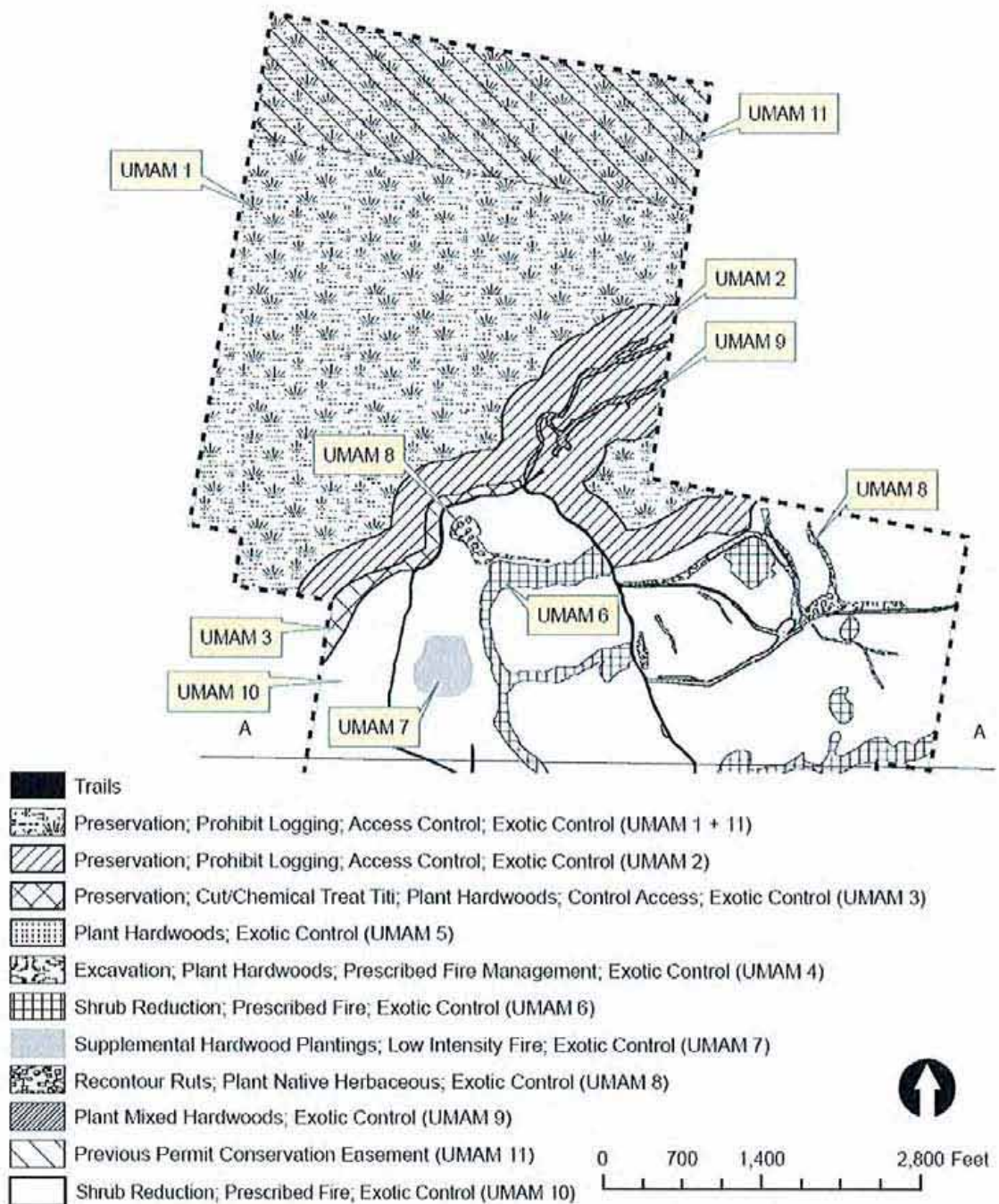




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Figure 4 - Existing FLUCCS Communities  
 Pensacola Bay Mitigation Bank



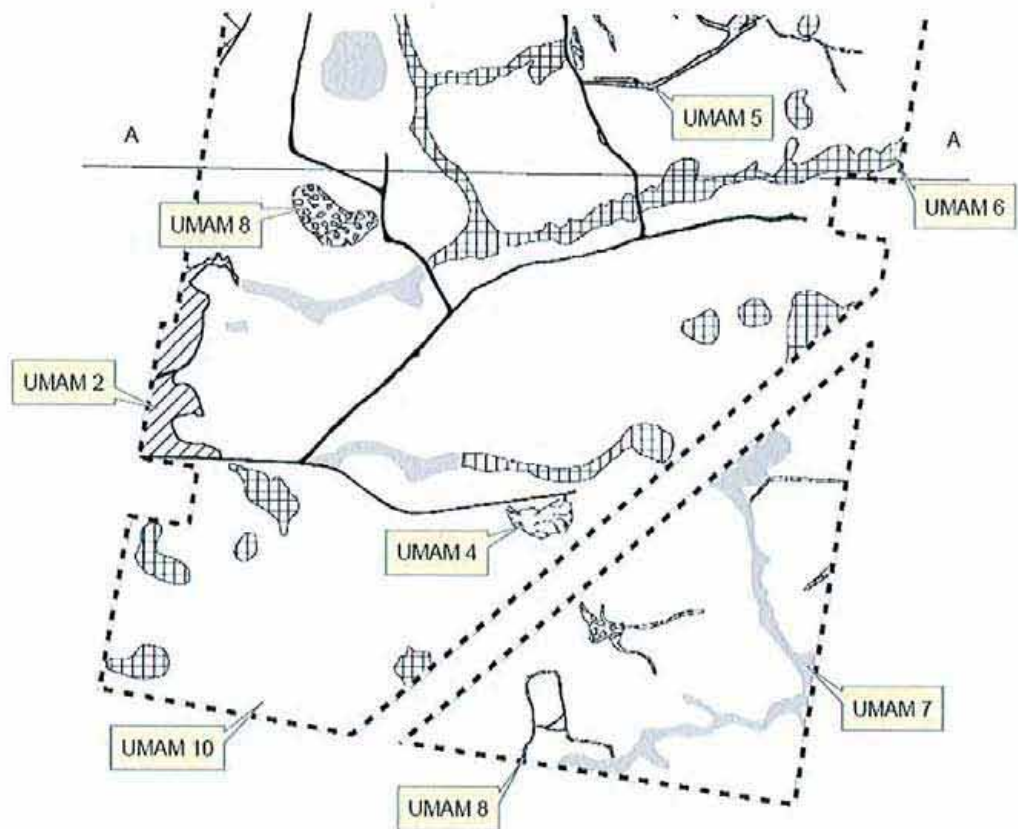


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Figure 5 - Mitigation Activities North  
Pensacola Bay Mitigation Bank







- Trails
- Preservation; Prohibit Logging; Access Control; Exotic Control (UMAM 1 + 11)
- Preservation; Prohibit Logging; Access Control; Exotic Control (UMAM 2)
- Preservation; Cut/Chemical Treat Titi; Plant Hardwoods; Control Access; Exotic Control (UMAM 3)
- Plant Hardwoods; Exotic Control (UMAM 5)
- Excavation; Plant Hardwoods; Prescribed Fire Management; Exotic Control (UMAM 4)
- Shrub Reduction; Prescribed Fire; Exotic Control (UMAM 6)
- Supplemental Hardwood Plantings; Low Intensity Fire; Exotic Control (UMAM 7)
- Recontour Ruts; Plant Native Herbaceous; Exotic Control (UMAM 8)
- Plant Mixed Hardwoods; Exotic Control (UMAM 9)
- Shrub Reduction; Prescribed Fire; Exotic Control (UMAM 10)

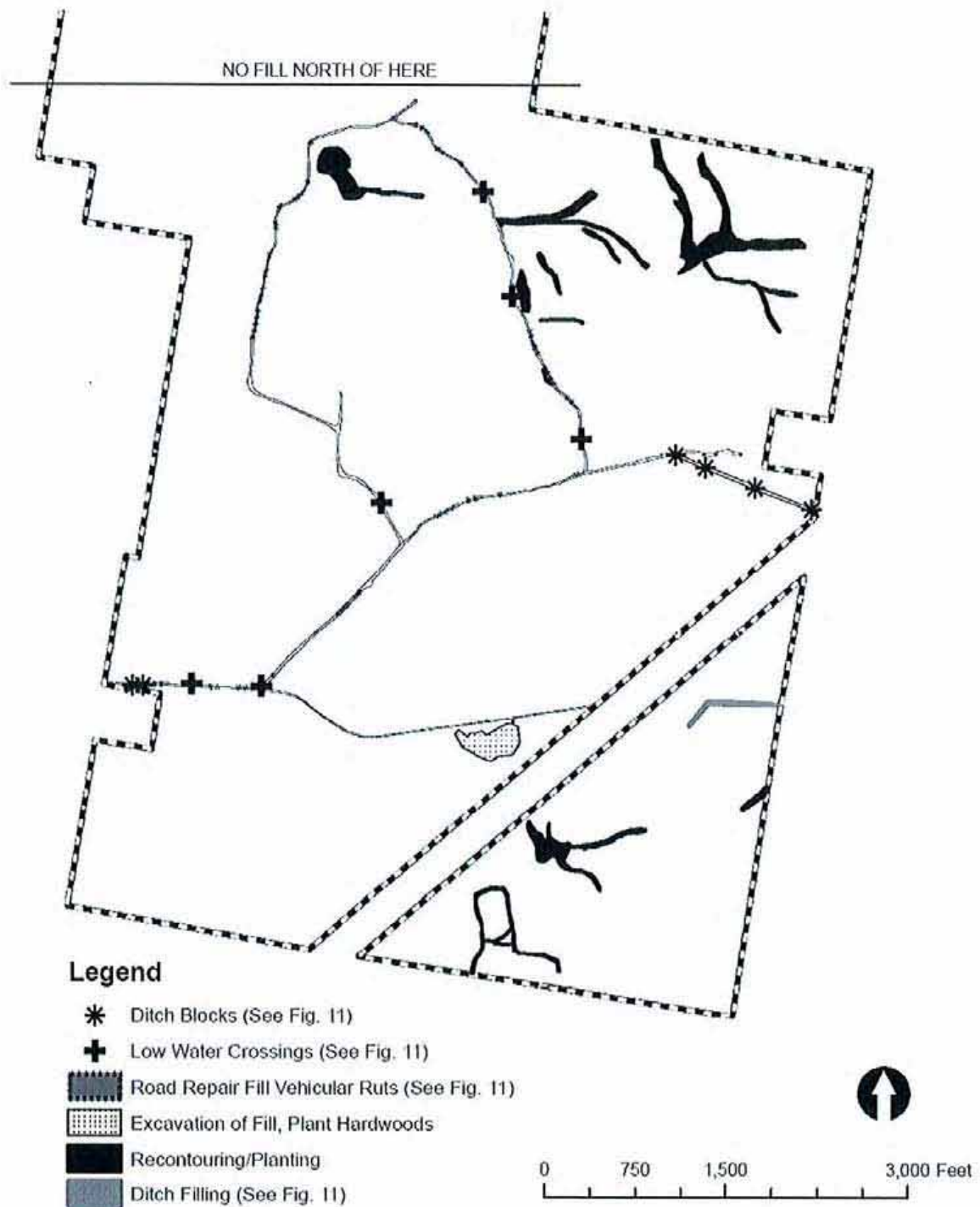
0 700 1,400 2,800 Feet



Bosso, Dentzau & Imhof, Inc.  
1882 Log Ridge Trail  
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Figure 6 - Mitigation Activities South  
Pensacola Bay Mitigation Bank

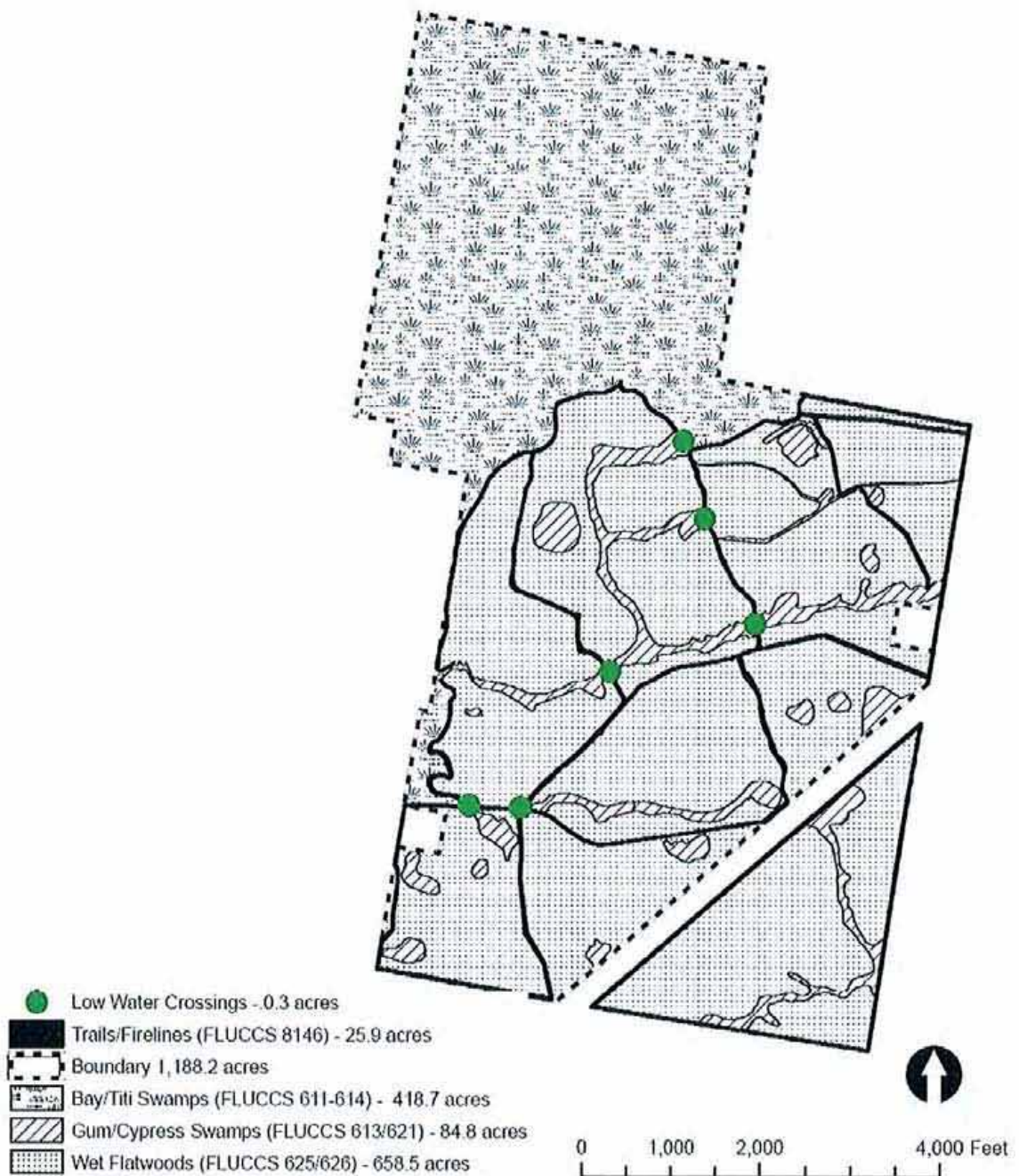




Bosso, Dentzau & Imhof, Inc.  
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Figure 7 - Plan View Excavation/Filling Activities  
Pensacola Bay Mitigation Bank  
\*Excavation/Filling Occurs Only in South Portion of Property

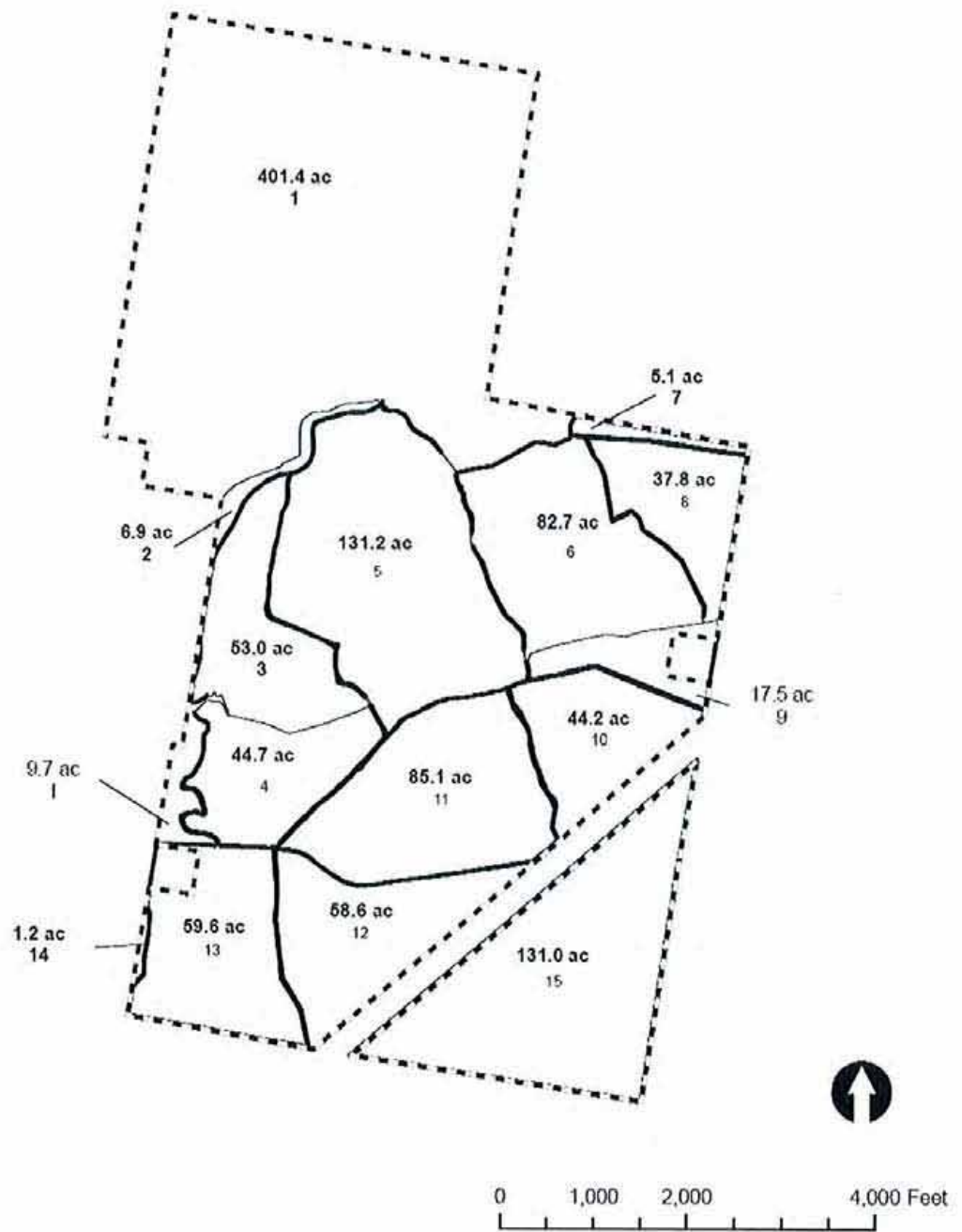




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Figure 8 - Proposed FLUCCS Communities  
 Pensacola Bay Mitigation Bank



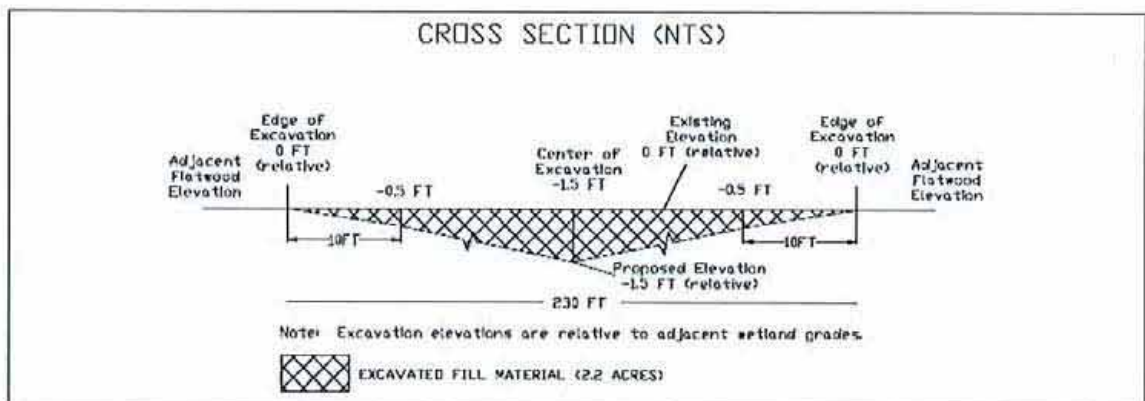
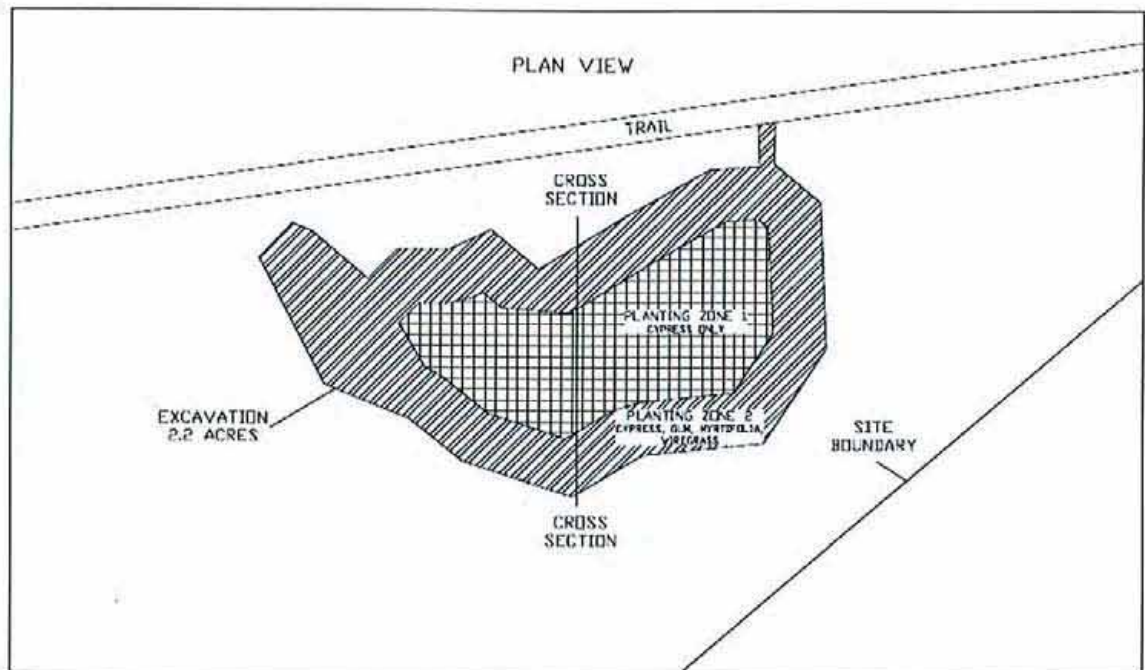


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Figure 9 - Management Units 1-15  
 Pensacola Bay Mitigation Bank







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850-893-7238

Figure 10 - Hardwood Creation  
from Filled Wetlands

Pensacola Bay Mitigation Bank

Scale (top only) 1 Inch = 150 feet  
1/27/2009

# TYPICAL HARDENED LOW WATER CROSSING DETAIL

(NOT TO SCALE)

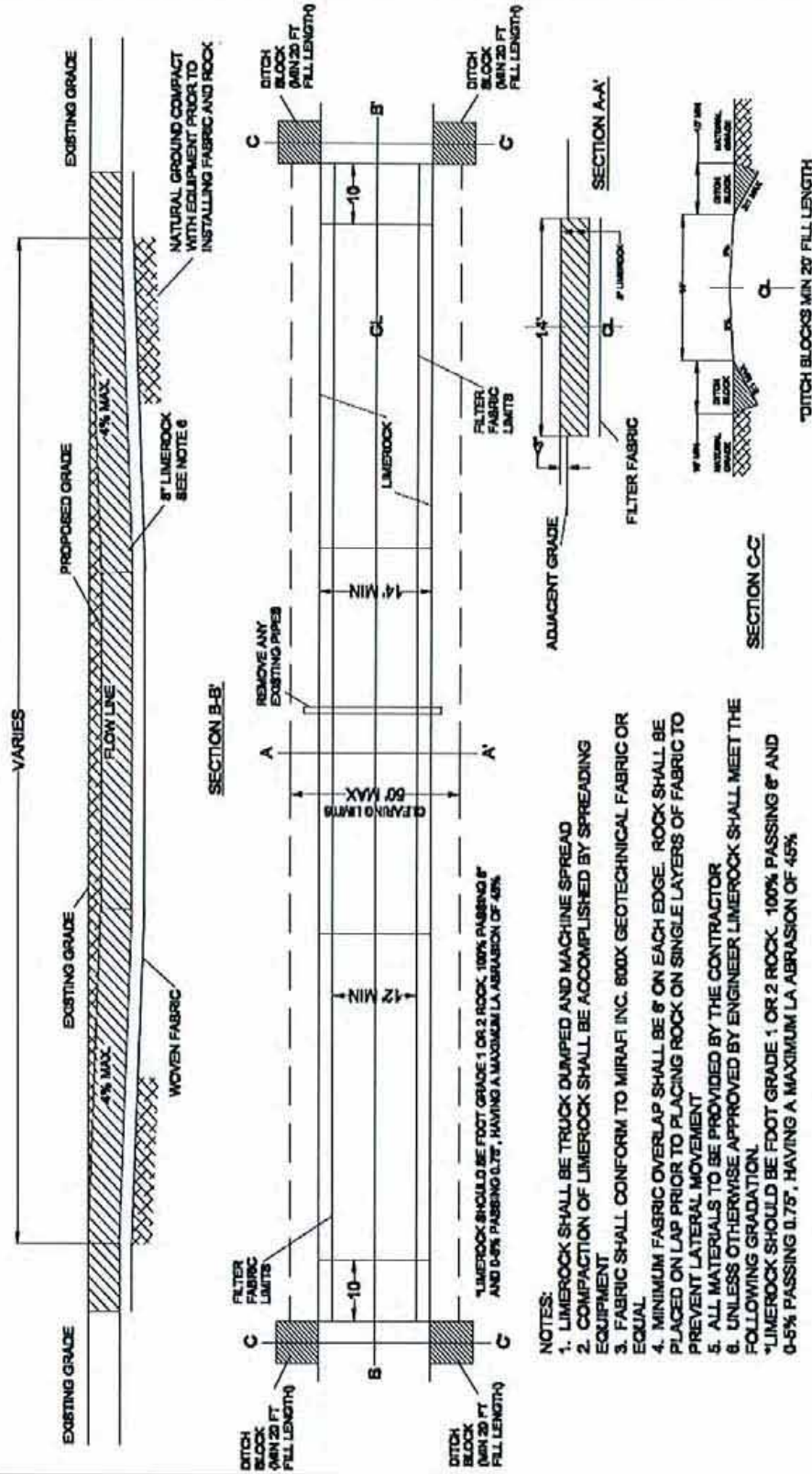


FIGURE 11

## ATTACHMENT A – Cost Estimates

### Construction Activities through Final Success

#### Year 1

Activity	Cost
Establish baseline monitoring on NFWMD Property to south.	5,000.00
Herbicide application/mechanical cutting of vegetation to facilitate restoration of impacted and flatwoods – 126 acres (\$150/acre)	19,000.00
Access control and installation of signage (3 gates; 44,000 linear feet of boundary marked at 500' intervals)	8,000.00
Initial fireline installation	10,000.00
Prescribed fire management (700 acres at \$45/acre)	31,500.00
Excavation of roads into roadside ditches/ditch plugging	13,500.00
Excavation of 2.2 acres	15,000.00
Initial exotic identification (technician at \$60/hr) – 40 hrs.	2,400.00
Initial exotic eradication (2 technicians at \$60/hr. each) – 80 hrs.	4,800.00
Herbicide purchase	5,000.00
Quarterly onsite inspections for access problems and exotics	6,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Agency reporting on quarterly basis	5,000.00
Planting of wiregrass plugs	8,800.00
Installation of low water crossings	25,000.00
Year 1 contingency fund	10,000.00
Total Year 1 costs estimated	172,000.00

#### Year 2

Activity	Cost
Year 1 onsite vegetation monitoring	20,000.00
Exotic treatment with chemicals	4,500.00
Planting Hardwoods	11,200.00
Quarterly onsite inspections for access problems and exotics	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Year 2 contingency fund	10,000.00
Total Year 2 costs estimated	59,700.00

#### Year 3

Activity	Cost
Follow-up monitoring	20,000.00
Prescribed fire management	31,500.00
Fireline rehabilitation	2,500.00
Herbicide/mechanical cutting of vegetation to facilitate fire	10,500.00
Exotic Treatment	4,500.00
Quarterly onsite inspections for access problems and exotics	6,000.00
Agency reporting on quarterly basis	5,000.00
Plant longleaf plugs	10,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 3 costs estimated	103,000.00



**Year 4**

Activity	Cost
Follow-up monitoring of communities	20,000.00
Exotic treatment	4,500.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 4 costs estimated	48,500.00

**Year 5**

Activity	Cost
Follow-up monitoring	20,000.00
Exotic treatment	4,500.00
Quarterly onsite inspections for access problems, etc.	10,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 5 costs estimated	52,500.00

**Year 6**

Activity	Cost
Follow-up monitoring	20,000.00
Qualitative monitoring of reference wetland on NFWFMD property	5,000.00
Prescribed Fire Management	31,500.00
Additional hardwood plantings	3,000.00
Additional herbaceous plantings	2,500.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 6 costs estimated	86,000.00

**Year 7**

Activity	Cost
Follow-up monitoring.	20,000.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 7 costs estimated	44,000.00

**Year 8**

Activity	Cost
Follow-up monitoring.	20,000.00
Prescribed fire	31,500.00
Quarterly onsite inspections for access problems, etc.	10,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 8 costs estimated	79,500.00

**Year 9**

Activity	Cost
Follow-up monitoring.	20,000.00
Exotic treatment	5,000.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 9 costs estimated	49,000.00

**Year 10**

Activity	Cost
Follow-up monitoring.	20,000.00
Quarterly onsite inspections for access problems, etc.	6,000.00
Agency reporting on quarterly basis	5,000.00
Biannual inspection by senior scientist to determine trends and issues	3,000.00
Contingency fund	10,000.00
Total Year 10 costs estimated	44,000.00

Actual costs for years 1-10 through success calculated at \$738,200. Letter of Credit with Standby Trust to total \$812,020.00



### Long-term Management Costs

Activity	Annual Cost
Prescribed fire management (\$31,500/2.5 years)	12,600.00
Quarterly onsite inspections for access problems	6,000.00
Exotic treatment/inspections	2,000.00
Annual inspection by senior scientist to determine trends and issues	1,500.00
Contingency fund	2,000.00
	24,100.00

A long-term management endowment of \$401,700.00 will be established by year 5 and adjusted, as necessary, at determination of final success. This will be guaranteed with a Letter of Credit and Standby Trust of \$401,700.00. After the sale of each credit from the Bank, at least \$2,000.00 will be deposited into the Perpetual Management Trust Fund account until the total amount has been reached, upon which time the Letter of Credit will be dissolved.

## **Attachment B – Target Natural Community Descriptions**

The goal of the mitigation is to convert, enhance or preserve the existing communities shown in the permit's Figure 4 into the target communities shown in Figure 8. Qualitative descriptions of onsite target communities are as follows:

### **Bay and Titi Swamps (FLUCCS 611/614) / Baygall**

This area is currently densely forested and has predominantly peat soils, and its preservation and natural succession is the goal. A principle source of hydrology is the seepage along base of adjacent upland sandy slopes. This community is not fire dominated and the relative infrequency of fire (>100 year return) promotes a densely packed canopy and subcanopy of shrubs, hardwoods and pines. The canopy is dominated by sweetbay, black titi, swamp bay, blackgum, sweetgum, red maple, slash pine and loblolly pine. In areas that were subject to a severe wildfire, the dominant canopy will be black titi for the near future but will transition to a mixed hardwood composition over time. The subcanopy consists of saplings of the canopy species interspersed with other species that will typically not attain canopy status in this community. These species include fetterbush, myrtle-leaved holly, gallberry, tall gallberry, wax myrtle, greenbrier and scattered ferns. Some areas of open canopy along the community edge or internally from tree falls or other minor disturbances will have periods of herbaceous coverage, with species including rushes, wiregrass, bluestem, meadow beauty, and yellow-eyed grass.

### **Gum and Cypress Swamps (FLUCCS 613/614) / Depressional Wetlands; Forested Wetlands**

There are two distinct forms associated with this community assemblage onsite. The first is a depressional system within the matrix of wet flatwoods and prairie, with hydroperiods tied to vertical variations in ground-water levels. These areas are characterized by a canopy of cypress and gum, with scattered slash and loblolly pines along the perimeters. In the restored form these central hardwoods will grade up to the slightly higher flatwoods with a shrub and herbaceous transitional zone. Typical canopy species include cypress, blackgum, slash pine, loblolly pine, sweetbay, swampbay, red maple and dahoon holly. Typical transitional species include bluestem, wiregrass, pitcherplants, yellow-eyed grass, Curtiss' sandgrass, meadow beauty, redroot, blazing star, St. John's wort, wax myrtle, gallberry, tall gallberry, myrtle-leaved holly, dahoon holly and pines. The shrub representation will vary depending upon the fire return interval with the largest density achieved 3 years or more after the last prescribed fire. Fire will generally extend into the edges of these systems on a regular basis, and may burn completely through in some conditions, as these depressions are frequently not inundated. The fire would, however, be low and



not impact the canopy. However, the frequency of fire will tend to keep the shrub and tree canopy relatively open, with canopy coverage having a maximum of about 50% cover.

The second form of cypress-gum swamp is the forested wetland stringers or drains that contain flowing water at certain periods of the year. These systems are characterized by low-lying, closed canopy of hardwoods with either a dense shrubby understory with little ground cover, or an open understory and groundcover of ferns, herbs, and grasses. The defining factor in the vegetation composition depends on the ability of fire to reach into these systems from the adjacent flatwoods. In wet periods, the fire will largely be excluded from the bulk of the community, except the extreme edges, and hardwoods and shrubs will dominate. In very dry periods, or in portions of the drains that have little standing water, the fire may work deeper into the systems allowing a greater representation of herbaceous species. Typical canopy species include cypress, blackgum, slash pine, loblolly pine, sweetbay, swampbay, red maple and dahoon holly. Typical subcanopy species include saplings of the above species and also include myrtle-leaved holly, buttonbush, wax myrtle, St. John's wort, gallberry, tall gallberry, fetterbush and greenbrier. Herbaceous representation includes redroot, sphagnum moss, bluestem, wiregrass, pitcherplants, Curtiss' sandgrass and ferns. Fire is essential to the maintenance of the edges and transitional zones of these systems.

#### **Hydric Flatwoods/Wet Prairie (FLUCCS 625/626)**

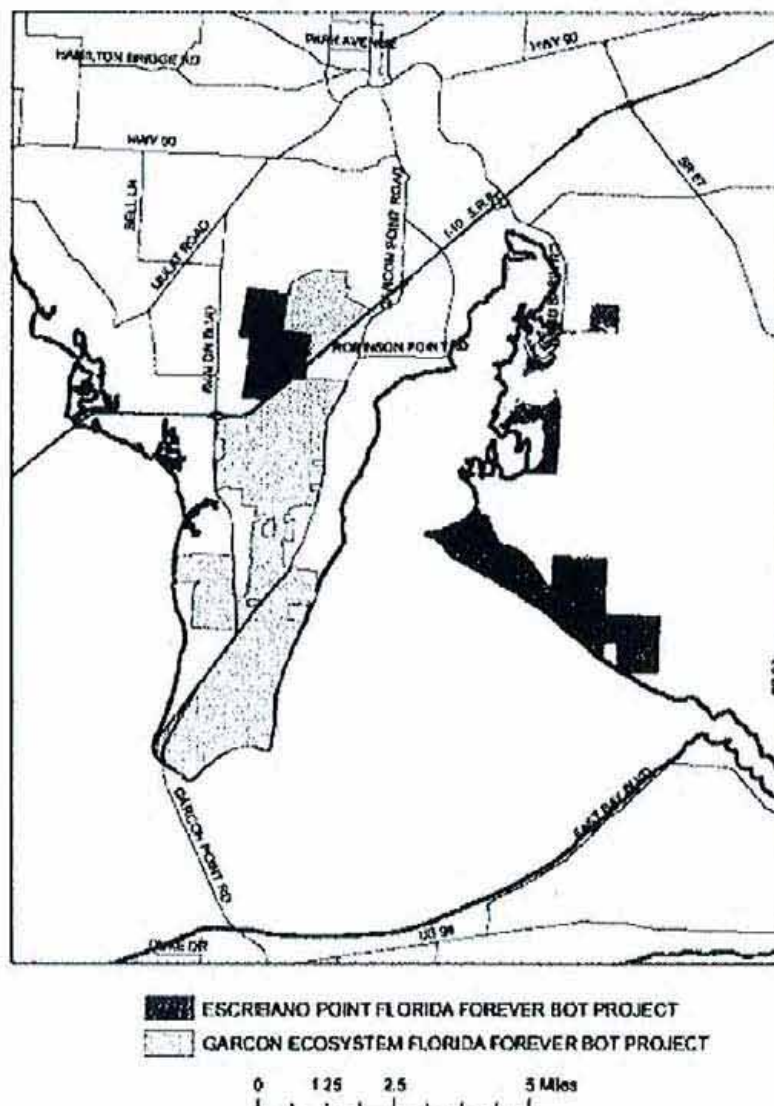
Flatwoods are characterized by relatively flat and poorly drained soils with a high water table, but seasonally, may have quite dry, sandy soil. The flats are characterized by a lush and diverse groundcover dominated by grasses and herbaceous forbs that provide 80-100% cover. Above this savanna is an open-canopy forest of scattered pine trees that grade into wet prairie/savanna with few to no trees. Understory shrubs are controlled by frequent fire and is typically low and open in structure or altogether sparse. The community is characterized by a dense and diverse ground cover with typical plants including spikerush, beakrush, wiregrass, pitcherplants, sundews, redroot, gay feather, St. John's wort, yellow-eyed grass, Curtis' sandgrass, bluestem, and rushes. Canopy is longleaf pine, slash pine, sweetbay, titi, wax myrtle, gallberry. Fire is essential to the maintenance of these communities, and in its absence, transition to a closed canopy, hardwood dominated forest would occur.

## ATTACHMENT C – Fire Management Plan

**Site Description:**

The proposed 1200 acre mitigation bank is in Santa Rosa County, FL, approximately 5.5 mil northeast of Pensacola and 5.5 miles southwest of Milton. The property is largely north of I but does include land south of the interstate. Of the whole property, approximately 786 acr be enrolled in a prescribed burning program.

The property lies virtually contiguous with the Garcon Ecosystem Florida Forever BOT Proj. The Garcon Ecosystem project is managed in large part with frequent fire by Northwest Florida Water Management District. (Figure 1)



**Figure 1. Landscape position of burn unit (in red).**



**Legal Description:**

E ¼ of S ½ of Section 42 Township 1N Range 28 W  
Section 37 Township 1N Range 28 W  
Section 3 Township 1S Range 28 W

**Date of Last Burn:**

In 1999, an approximately 450 acre wildfire ignited off of I-10 blew across the property from the south. Any burning of this location prior to 1999 is unknown. However, local people have indicated that this area has burned "frequently". Potential fire occurrence is high for much of the area (see Appendix A).

**Burning Objectives:**

Objectives will be iterative and follow adaptive management principles. Short term burn objectives will be fuel reduction to minimize wildfire risk and uncontrolled smoke impacts. Long-term goals will be minimizing smoke impacts while restoring historic "open pine [flat] woods" structure and function. Minimizing damage of overstory pine resources is not a driving factor in managing this site. However, minimizing significant mortality to large overstory pine trees is only desired in that these dead trees will contribute to future smoke management issues. Fire-related damage to hardwoods in embedded wetlands should be avoided.

A minimum of 3 prescribed fires will be conducted in the first 8 years of acquiring the property. A 50% reduction in vertical shrub structure and a 30% decline in shrub abundance is desired following the first burn, e.g., average 5' stature to 2.5' stature. Likewise a 60% reduction in doghair reproduction of slash pine is desired after the first burn season.

**Current Conditions:**

The current condition of this area is an artifact of 1) clearcutting with little advance regeneration followed by 2) promiscuous burning that did not allow regeneration followed by 3) planting of high density slash pine followed by 4) fire exclusion followed by 5) a significant wildfire that killed most of the planted slash pine. Due to the heterogeneity of the last wildfire, current conditions (including fuel type and loading) vary with each burn unit.

**Vegetation and Soils:**

Most of the remnant pine on the site is slash pine, however, an occasional longleaf pine is found scattered throughout. Likewise the pine regeneration coming up is predominantly slash pine. The dominant native warm season grass is wiregrass whose presence implies that site has never been under agriculture. The site has a number of listed plant species including the white-topped pitcher plant. Midstory shrubs include black and red titi, gall berry, holly and yaupon.

Soils are mostly hydric and mesic comprised of Mulat, Garcon, Pactolus and Albany series. ORV activities have impacted the soil in places and will likely degrade fire movement in localized areas.

**Desire Future Condition**

The long term management goal is restore historic forest structure and function to this location. The historic "open pine woods" of this area likely had an overstory dominated with longleaf and slash pine that ranged anywhere from 5 ft<sup>2</sup>/ac to 150 ft<sup>2</sup>/ac. Overstory structure could have just as



easily been dispersed with aggregate islands of meadows or vice versa. Likewise, a diverse herbaceous community dominated by C<sub>4</sub> grasses and acidophilic plants (like pitcher plants) evolved on this pyrogenic landscape (**Figure 2**). Numerous embedded wetlands comprised of sweetbay, cypress, gum and pond pine were found across the landscape yet likely only burned under the driest of conditions. Burning alone may not achieve this desired structure and thus herbicides and/or mechanical shrub control will be used. Fuel loads will be reevaluated and burn plan amended as needed if herbicides and/or mechanical midstory control are used.

**Burn Units:**

Using existing road systems and fire breaks, the 748 acre fire management area will be broken into 15 burn units (or compartments). No burning is proposed in Units 1, 2 and 14. The decision to break into smaller units is considered to minimize both potential fire and smoke management issues (**Figure 3**). The approximate size of each unit is as follows:

Unit 3 = 53 acres	Unit 8 = 38 acres	Unit 13 = 60 acres
Unit 4 = 45 acres	Unit 9 = 17 acres	Unit 5 = 131 acres
Unit 10 = 44 acres	Unit 15 = 128 acres	
Unit 6 = 83 acres	Unit 11 = 85 acres	
Unit 7 = 5 acres	Unit 12 = 59 acres	



**Figure 2 – structure Pine-Savanna**

## ATTACHMENT D

**Credit Assessment - DEP UMAM Summary**  
(Part I & II's provided in file)

Pensacola Bay Mitigation Bank - UMAM Assessment Summary Sheet														
Assessment Area - UMAM Category	AREA (acres)	SCORE						UMAM W/OUT MIT.	UMAM WITH MIT.	PAF	TIME LAG	RISK	RFG	CREDIT
		LOCATION AND LANDSCAPE		WATER ENVIRONMENT		COMMUNITY STRUCTURE								
		W/OUT or CTR.	WITH MIT.	W/OUT or CTR.	WITH MIT.	W/OUT or CTR.	WITH MIT.							
#1 Bay/Titi north 360° mgmt	230.36	7.0	8.0	9.0	9.0	7.0	8.0	0.77	0.83	0.067	0.7	1.00	0.947	10.75
#2 Bay/Titi w/in 360° mgmt	71.90	7.0	9.0	9.0	9.0	7.0	9.0	0.77	0.90	0.133	0.8	1.00	0.107	7.67
#3 Bay/Titi - Planted	6.90	7.0	9.0	8.0	9.0	7.0	9.0	0.73	0.90	0.167		1.00	0.140	1.01
#4 Cypress/Gum in FRI Area	2.20	0.0	9.0	0.0	9.0	0.0	9.0	0.00	0.90	0.900		1.46	0.616	1.36
#5 Cypress/Gum-ORV area	7.40	5.0	9.0	2.0	9.0	0.0	9.0	0.23	0.90	0.667		1.46	0.457	3.38
#6 Cypress/Gum-Fire Suppld	50.70	7.0	9.0	8.0	9.0	7.0	9.0	0.73	0.90	0.167		1.00	0.167	8.45
#7 Cypress/Gum-Wildfire	24.50	7.0	9.0	9.0	9.0	5.0	9.0	0.70	0.90	0.200		1.46	0.137	3.36
#8 Rotted Hardie Flatwoods	11.20	7.0	9.0	3.00	9.00	2.00	9.00	0.40	0.90	0.500		1.00	0.400	4.48
#9 Rotted Bay/Titi	3.80	5.0	9.0	2.0	9.0	0.0	9.0	0.23	0.90	0.667		1.46	0.457	1.74
#10 Flatwoods Wet Prairie	647.30	6.0	9.0	7.0	9.0	6.0	10.0	0.63	0.93	0.300		1.00	0.240	155.35
#11 Previous Permit Area*	105.74	7.0	8.0	9.0	9.0	7.0	8.0	0.77	0.83	0.067	0.7	1.00	0.947	0*
TOTALS**		1162.0						0.83		0.7		1.00		197.54
Forested Freshwater credits from Bay/Titi and Cypress/Gum = 37.7    Freshwater Flatwoods/Wet Prairie credits from flatwoods/wet prairie = 150.83														
* Bay / Titi area previously preserved as mitigation for DLP permit 27-773-001, included in acreage of bank, but not for credit generation														
** The site also contains about 26 acres of trails and firelines from which no credit is assessed.														



Pensacola Bay Mitigation Bank Ledger  
Permit No. 0284438-001  
March 2009

## ATTACHMENT E: LEDGER

Freshwater Wet Flatwoods/Wet Prairie Credits: Total Potential Credits = 159.83

<u>Release Mod./</u> <u>Impact Permit</u>	<u>Permit</u> <u>Date</u>	<u>Issuing</u> <u>Agency</u>	<u>Ledger</u> <u>Modification</u>	<u>Credits</u> <u>Added</u>	<u>Credits</u> <u>Used</u>	<u>Balance</u>
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Freshwater Forested Wetlands Credits: Total Potential Credits = 37.7

<u>Release Mod./</u> <u>Impact Permit</u>	<u>Permit</u> <u>Date</u>	<u>Issuing</u> <u>Agency</u>	<u>Ledger</u> <u>Modification</u>	<u>Credits</u> <u>Added</u>	<u>Credits</u> <u>Used</u>	<u>Balance</u>
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## **ATTACHMENT F – Monitoring Plan**

The monitoring plan for the Bank shall include a combination of quantitative, qualitative monitoring and fixed point photography. Monitoring will be conducted annually during October (or generally at end of growing season). Additional monitoring may also be conducted in April-May to identify spring-flowering species. Monitoring will include:

1. Qualitative Random Pedestrian Transects
2. Quantitative Permanent Quadrats, with random sub-quadrats
3. Quantitative Permanent Transects
4. Fixed Point/Fixed Perspective Photographic Stations.

### **Qualitative Pedestrian Transect**

The goal of the Qualitative Pedestrian Transect is to provide the maximum amount of qualitative or semi-quantitative information over the largest variable area to document the success of the restoration and management activities, conduct surveillance for problems, and determine whether the quantitative sampling is representative of the overall site. Ten (10) random GPS points will be chosen prior to sampling. Then, a few points may be moved such that at least one point will originate in each of these community types: bay-titi; hydric flatwoods/prairie; cypress-gum stringers; cypress-gum depressions. From these points, a ~ 1,000 linear foot transect will be walked in a random direction (but remaining within the bank), as represented in Figure M1, transects Nos. 1-10.

For each community type (as defined by the permit figures) encountered within a particular transect, the Qualitative Assessment will include:

1. Community type as is apparent in the field;
2. Comments on listed species, nuisance species, health and reproductive status of vegetation, cover estimates as described below, dominant species, recruitment of new species, hydrologic condition, fuel loads and general condition with respect to target community type.
3. GPS location of any observed exotic, nuisance species or listed species.
4. Estimates of burn coverage.

Three equidistant areas of approximately 2 square meters will be selected along each transect for herbaceous cover estimates using the cover classifications in the attached monitoring form. Shrub cover (woody material greater than 1' in height) will be estimated from three square meter area at the same points.

To provide a record of the qualitative observations, the following field sheet will be filled out for each transect. This information will provide a visual assessment over a prolonged period, and to identify potential problems and appropriate solutions.

## Qualitative Monitoring Form

Management Unit: \_\_\_\_\_ Start point (GPS) and direction: \_\_\_\_\_

Date: \_\_\_\_\_ Inspector: \_\_\_\_\_

Community type(s) and proportion in transect:

General Condition of each community crossed by transect: (vegetation health, reproductive status, hydrologic condition, fuel loads, etc.)

Approximate Coverage of Most Recent Burn:

\_\_\_\_\_ 0-35% \_\_\_\_\_ 36-70% \_\_\_\_\_ 71-90% \_\_\_\_\_ 90%+

Observed Species in each community:

Dominant Species in each community:

Exotic or listed species present/location:

Herbaceous Ground Cover at 3 Points along Transect (note community):

Point 1

\_\_\_\_\_ <1% \_\_\_\_\_ 1-10% \_\_\_\_\_ 11-30% \_\_\_\_\_ 31-49% \_\_\_\_\_ 50-69% \_\_\_\_\_ 70-90% > \_\_\_\_\_ 90%

Point 2

\_\_\_\_\_ <1% \_\_\_\_\_ 1-10% \_\_\_\_\_ 11-30% \_\_\_\_\_ 31-49% \_\_\_\_\_ 50-69% \_\_\_\_\_ 70-90% > \_\_\_\_\_ 90%

Point 3

\_\_\_\_\_ <1% \_\_\_\_\_ 1-10% \_\_\_\_\_ 11-30% \_\_\_\_\_ 31-49% \_\_\_\_\_ 50-69% \_\_\_\_\_ 70-90% > \_\_\_\_\_ 90%

Shrub Cover at 3 Points along Transect (note community):

Point 1

\_\_\_\_\_ <1% \_\_\_\_\_ 1-10% \_\_\_\_\_ 11-30% \_\_\_\_\_ 31-49% \_\_\_\_\_ 50-69% \_\_\_\_\_ 70-90% > \_\_\_\_\_ 90%

Point 2

\_\_\_\_\_ <1% \_\_\_\_\_ 1-10% \_\_\_\_\_ 11-30% \_\_\_\_\_ 31-49% \_\_\_\_\_ 50-69% \_\_\_\_\_ 70-90% > \_\_\_\_\_ 90%

Point 3

\_\_\_\_\_ <1% \_\_\_\_\_ 1-10% \_\_\_\_\_ 11-30% \_\_\_\_\_ 31-49% \_\_\_\_\_ 50-69% \_\_\_\_\_ 70-90% > \_\_\_\_\_ 90%

Evidence of Flowering By Helio-phytic Species: \_\_\_\_\_ YES \_\_\_\_\_ NO

Ecological Functions Being Maintained: \_\_\_\_\_ YES \_\_\_\_\_ NO

Comments:



### **Permanent Quantitative Quadrats**

Eight (8) 200 x 100 foot Permanent Quantitative Quadrats (PQQ) will be GPS located as depicted in Figure M1 (Quadrats 11 -18). Quadrats will be located to be representative of the community and to avoid transitional zones between communities. Quadrats will be sampled in October (or generally at end of growing season). Data sampled will include:

1. Number of canopy pines, by species, with a d.b.h. greater than 4".
2. Number of subcanopy pines, by species, with a d.b.h. > 1" and <4".
3. Exotic, nuisance or listed species observed with % cover estimate.
4. Listing all species observed within overall quadrat,

Within each quadrat, ten (10) randomly selected 1 square meter sub-quadrats will be sampled to determine herbaceous and shrub cover. These sub-quadrats will be randomized for each sampling event. Percent cover will be determined for the following categories: Graminoid; Herbaceous; Woody/Shrub; Wiregrass; Individual Species of Interest. The interval ranges for cover shall be as follows:

Class	Range of Cover (%)	Mean
7	91-100	95.5
6	70-90	80.0
5	50-69	59.5
4	31-49	40.0
3	11-30	20.5
2	1-10	5.5
1	<1%	0.5

The boundary of each 200 X100 quadrat will also be used as a line-intercept transect. Intercept points will be at 1 meter at intervals. All species intercepting the point will be recorded to demonstrate density and to compare to cover estimates generated from individual sub-quadrats.

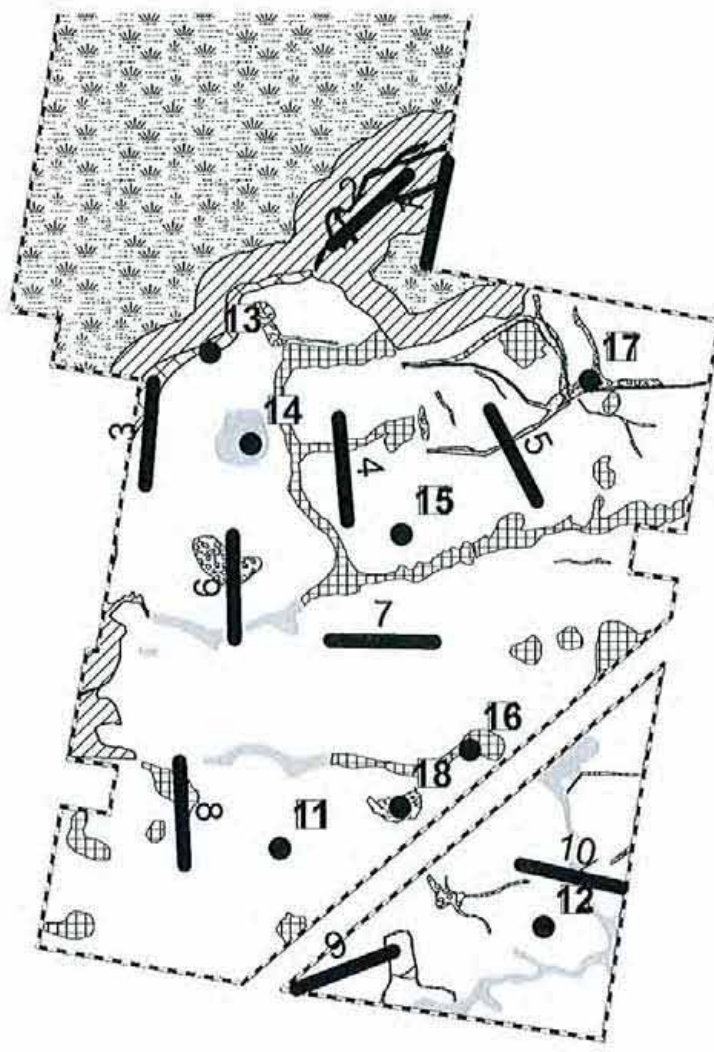
### **Permanent Photo Points**

Permanent photographic points will be established as follows and taken annually:

1. The 4 corners of each permanent 200 x 100 foot quadrat, facing center.
2. The 4 corners of each permanent 200 x 100 foot quadrat, facing out.
3. Aerially (to the greatest degree possible) of each 10 m subquadrat.

Ten additional locations will be established to show landscape conditions using permanent orientation and perspective. These stations will be located along trails and access and will be sampled quarterly.

Additionally, the most recent aerial photo of the entire bank site will be provided annually.



● 200' X 100' Quadrats  
 — 1,000' LF Transects



0 600 1,200 2,400 Feet

Bosso, Dentzau & Imhof, Inc.  
 1882 Log Ridge Trail  
 Tallahassee, FL 32312  
 850-893-7238

Figure M1 - Proposed Location of Monitoring Stations  
 Pensacola Bay Mitigation Bank



(1000-foot transect locations are representative; locations will vary during each sampling event)



# Florida Exotic Pest Plant Council's 2007 List of Invasive Plant Species

## Purpose of the List: To focus attention on —

- ▶ the adverse effects exotic pest plants have on Florida's biodiversity and plant communities,
- ▶ the habitat losses from exotic pest plant infestations,
- ▶ the impacts on endangered species via habitat loss and alteration,
- ▶ the need to prevent habitat losses through pest-plant management,
- ▶ the socio-economic impacts of these plants (e.g., increased wildfires in certain areas),
- ▶ changes in the seriousness of different pest plants over time,
- ▶ the need to provide information that helps managers set priorities for control programs.

## CATEGORY I

Invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.

Scientific Name	Common Name	FLEPPC Cat.	Gov. List	Reg. Dist.
<i>Abrus precatorius</i>	rosary pea	1	N	C, S
<i>Acacia auriculiformis</i>	earleaf acacia	1		C, S
<i>Albizia julibrissin</i>	mimosa, silk tree	1		N, C
<i>Albizia lebbek</i>	woman's tongue	1		C, S
<i>Ardisia crenata</i> (= <i>A. crenulata</i> misapplied)	coral ardisia	1		N, C, S
<i>Ardisia elliptica</i> (= <i>A. humilis</i> misapplied)	shoebutton ardisia	1	N	C, S
<i>Asparagus aethiopicus</i> (= <i>A. sprengeri</i> ; <i>A. densiflorus</i> misapplied)	asparagus-fern	1		N, C, S
<i>Bauhinia variegata</i>	orchid tree	1		C, S
<i>Bischofia javanica</i>	bishopwood	1		C, S
<i>Calophyllum antillanum</i> (= <i>C. calaba</i> and <i>C. inophyllum</i> misapplied)	santa maria (names "mast wood," "Alexandrian laurel" used in cultivation)	1		S
<i>Casuarina equisetifolia</i>	Australian-pine, beach sheoak	1	P, N	N, C, S
<i>Casuarina glauca</i>	suckering Australian-pine, gray sheoak	1	P, N	C, S
<i>Cinnamomum camphora</i>	camphor tree	1		N, C, S
<i>Colocasia esculenta</i>	wild taro	1		N, C, S
<i>Colubrina asiatica</i>	lather leaf	1	N	S
<i>Cupaniopsis anacardioides</i>	carrotwood	1	N	C, S
<i>Dioscorea alata</i>	winged yam	1	N	N, C, S
<i>Dioscorea bulbifera</i>	air-potato	1	N	N, C, S
<i>Eichhornia crassipes</i>	water-hyacinth	1	P	N, C, S
<i>Eugenia uniflora</i>	Surinam cherry	1		C, S
<i>Ficus microcarpa</i> ( <i>F. nitida</i> and <i>F. retusa</i> var. <i>nitida</i> misapplied)	laurel fig	1		C, S
<i>Hydrilla verticillata</i>	hydrilla	1	P, U	N, C, S
<i>Hygrophila polysperma</i>	green hygro	1	P, U	N, C, S
<i>Hymenachne amplexicaulis</i>	West Indian marsh grass	1		C, S
<i>Imperata cylindrica</i> ( <i>I. brasiliensis</i> misapplied)	cogon grass	1	N, U	N, C, S
<i>Ipomoea aquatica</i>	waterspinach	1	P, U	C
<i>Jasminum dichotomum</i>	Gold Coast jasmine	1		C, S
<i>Jasminum fluminense</i>	Brazilian jasmine	1		C, S
<i>Lantana camara</i>	lantana, shrub verbena	1		N, C, S
<i>Ligustrum lucidum</i>	glossy privet	1		N, C
<i>Ligustrum sinense</i>	Chinese privet, hedge privet	1		N, C, S

## FLEPPC List Definitions:

**Exotic** – a species introduced to Florida, purposefully or accidentally, from a natural range outside of Florida.

**Native** – a species whose natural range included Florida at the time of European contact (1500 AD).

**Naturalized exotic** – an exotic that sustains itself outside cultivation (it is still exotic; it has not "become" native).

**Invasive exotic** – an exotic that not only has naturalized, but is expanding on its own in Florida native plant communities.

## Abbreviations:

Government List (Gov. List):

P = Prohibited by Florida

Department of Environmental Protection;

N = Noxious weed listed by Florida Department of Agriculture & Consumer Services;

U = Noxious weed listed by U.S. Department of Agriculture.

Regional Distribution (Reg. Dist.):  
N = north, C = central,  
S = south, referring to each species' current distribution in general regions of Florida (not its potential range in the state). Please refer to the map below.





## Changes to the 2007 List:

### *Ludwigia peruviana*

added to list as Category I

Peruvian primrose willow (*Ludwigia peruviana*) is a shrub known from at least 48 Florida counties, from the Panhandle to the Keys. It is also known in the United States from North Carolina, Georgia, Alabama, Mississippi, and Texas. While always known as an aggressive weed in wetlands in Florida, there has been debate about its nativity. After an evaluation of available data, the Committee now agrees that this species was introduced into Florida, probably from South America, by the late 1800s, and has subsequently spread throughout the state and to other states. It can form monospecific stands in both disturbed and undisturbed wetlands, especially river and lake edges, and dramatically change ecosystem structure.

*Tradescantia spathacea* moved from Category I to Category II

Oyster plant (*Tradescantia spathacea*) is an herb known from at least 12 counties in southern Florida, although many populations have not been documented. A native of tropical America, this species was a very common ornamental plant decades ago, and is still grown occasionally for its green and purple foliage. The species spreads readily, both by vegetation offshoots and by seed. In urban areas, plants often appear on rooftops or on rock walls. It does spread into natural areas, but Committee members are unaware of sites where it has invaded natural areas and displaced native species to the extent of other Category I species. It has been moved to Category II.

Scientific Name	Common Name	FLEPPC Cat.	Gov. List	Reg. Dist.
<i>Lonicera japonica</i>	Japanese honeysuckle	I		N, C, S
<i>Ludwigia peruviana</i>	Peruvian primrosewillow	I		N, C, S
<i>Lygodium japonicum</i>	Japanese climbing fern	I	N	N, C, S
<i>Lygodium microphyllum</i>	Old World climbing fern	I	N	C, S
<i>Macfadyena unguis-cati</i>	cat's claw vine	I		N, C, S
<i>Manilkara zapota</i>	sapodilla	I		S
<i>Melaleuca quinquenervia</i>	melaleuca, paper bark	I	P, N, U	C, S
<i>Mimosa pigra</i>	catclaw mimosa	I	P, N, U	C, S
<i>Nandina domestica</i>	nandina, heavenly bamboo	I		N, C
<i>Nephrolepis cordifolia</i>	sword fern	I		N, C, S
<i>Nephrolepis multiflora</i>	Asian sword fern	I		C, S
<i>Neyraudia reynaudiana</i>	Burma reed, cane grass	I	N	S
<i>Paederia cruddasiana</i>	sewer vine, onion vine	I	N	S
<i>Paederia foetida</i>	skunk vine	I	N	N, C, S
<i>Panicum repens</i>	torpedo grass	I		N, C, S
<i>Pennisetum purpureum</i>	Napier grass	I		N, C, S
<i>Pistia stratiotes</i>	waterlettuce	I	P	N, C, S
<i>Psidium cattleianum</i> (=P. littorale)	strawberry guava	I		C, S
<i>Psidium guajava</i>	guava	I		C, S
<i>Pueraria montana</i> var. <i>lobata</i> (=P. lobata)	kudzu	I	N	N, C, S
<i>Rhodomyrtus tomentosa</i>	downy rose-myrtle	I	N	C, S
<i>Rhynchelytrum repens</i> (=Melinis repens)	Natal grass	I		N, C, S
<i>Ruellia tweediana</i> (=R. brittoniana, R. coerulea)	Mexican petunia	I		N, C, S
<i>Sapientia sebiferum</i> (=Triadica sebifera)	popcorn tree, Chinese tallow tree	I	N	N, C, S
<i>Scaevola taccada</i> (=Scaevola sericea, S. frutescens)	scaevola, half-flower, beach naupaka	I	N	C, S
<i>Schefflera actinophylla</i> (=Brassaia actinophylla)	schefflera, Queensland umbrella tree	I		C, S
<i>Schinus terebinthifolius</i>	Brazilian pepper	I	P, N	N, C, S
<i>Senna pendula</i> var. <i>glabrata</i> (=Cassia coluteoides)	climbing cassia, Christmas cassia, Christmas senna	I		C, S
<i>Solanum tampicense</i> (=S. houstonii)	wetland nightshade, aquatic soda apple	I	N, U	C, S
<i>Solanum viarum</i>	tropical soda apple	I	N, U	N, C, S
<i>Syngonium podophyllum</i>	arrowhead vine	I		N, C, S
<i>Syzygium cumini</i>	jambolan plum, Java plum	I		C, S
<i>Tectaria incisa</i>	incised halberd fern	I		S
<i>Thespesia populnea</i>	seaside mahoe	I		C, S
<i>Tradescantia fluminensis</i>	white-flowered wandering jew	I		N, C
<i>Urochloa mutica</i> (=Brachiaria mutica)	Para grass	I		C, S

## CATEGORY II

Invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species. These species may become ranked Category I, if ecological damage is demonstrated.

Scientific Name	Common Name	FLEPPC Cat.	Gov. List	Reg. Dist.
<i>Adenanthera pavonina</i>	red sandalwood	II		S
<i>Agave sisalana</i>	sisal hemp	II		C, S
<i>Aleurites fordii</i> (=Vernicia fordii)	tung oil tree	II		N, C
<i>Alstonia macrophylla</i>	devil tree	II		S
<i>Alternanthera philoxeroides</i>	alligator weed	II	P	N, C, S
<i>Antigonon leptopus</i>	coral vine	II		N, C, S
<i>Aristolochia littoralis</i>	calico flower	II		N, C, S



Scientific Name	Common Name	FLEPPC Cat.	Gov. List	Reg. Dist.
<i>Asystasia gangetica</i>	Ganges primrose	II		C, S
<i>Begonia cucullata</i>	wax begonia	II		N, C, S
<i>Blechnum pyramidatum</i>	green shrimp plant, Browne's blechnum	II		N, C, S
<i>Broussonetia papyrifera</i>	paper mulberry	II		N, C, S
<i>Callisia fragrans</i>	inch plant, spironema	II		C, S
<i>Casuarina cunninghamiana</i>	river sheoak, Australian-pine	II	P	C, S
<i>Cecropia palmata</i>	trumpet tree	II		S
<i>Cestrum diurnum</i>	day jessamine	II		C, S
<i>Chamaedorea seifrizii</i>	bamboo palm	II		S
<i>Clematis terniflora</i>	Japanese clematis	II		N, C
<i>Cryptostegia madagascariensis</i>	rubber vine	II		C, S
<i>Cyperus involucratus</i> ( <i>C. alternifolius</i> misapplied)	umbrella plant	II		C, S
<i>Cyperus prolifer</i>	dwarf papyrus	II		C, S
<i>Dalbergia sissoo</i>	Indian rosewood, sissoo	II		C, S
<i>Elacagnus pungens</i>	silverthorn, thorny olive	II		N, C
<i>Epipremnum pinnatum</i> cv. Aureum	pothos	II		C, S
<i>Ficus altissima</i>	false banyan, council tree	II		S
<i>Flacourtia indica</i>	governor's plum	II		S
<i>Hemarthria altissima</i>	limpo grass	II		C, S
<i>Hibiscus tiliaceus</i> (= <i>Talipariti tiliaceum</i> )	mahoe, sea hibiscus	II		C, S
<i>Ipomoea fistulosa</i> (= <i>I. carnea</i> ssp. <i>fistulosa</i> )	shrub morning-glory	II	P	C, S
<i>Jasminum sambac</i>	Arabian jasmine	II		S
<i>Kalanchoe pinnata</i>	life plant	II		C, S
<i>Koeleruteria elegans</i> ssp. <i>formosana</i> (= <i>K. formosana</i> ; <i>K. paniculata</i> misapplied)	flamegold tree	II		C, S
<i>Leucaena leucocephala</i>	lead tree	II	N	N, C, S
<i>Limonophila sessiliflora</i>	Asian marshweed	II	P, U	N, C, S
<i>Livistona chinensis</i>	Chinese fan palm	II		C, S
<i>Melia azedarach</i>	Chinaberry	II		N, C, S
<i>Melinis minutiflora</i>	Molassesgrass	II		C, S
<i>Merremia tuberosa</i>	wood-rose	II		S
<i>Murraya paniculata</i>	orange-jessamine	II		S
<i>Myriophyllum spicatum</i>	Eurasian water-milfoil	II	P	N, C, S
<i>Nymphoides cristata</i>	snowflake	II		C, S
<i>Panicum maximum</i>	Guinea grass	II		N, C, S
<i>Passiflora biflora</i>	two-flowered passion vine	II		S
<i>Pennisetum setaceum</i>	green fountain grass	II		S
<i>Phoenix reclinata</i>	Senegal date palm	II		C, S
<i>Phyllostachys aurea</i>	golden bamboo	II		N, C
<i>Pittosporum pentandrum</i>	Philippine pittosporum, Taiwanese cheesewood	II		S
<i>Pteris vittata</i>	Chinese brake fern	II		N, C, S
<i>Ptychosperma elegans</i>	solitaire palm	II		S
<i>Rhoeo spathacea</i> (see <i>Tradescantia spathacea</i> )				
<i>Ricinus communis</i>	castor bean	II		N, C, S
<i>Rotala rotundifolia</i>	roundleaf toothcup, dwarf Rotala,	II		S
<i>Sansevieria hyacinthoides</i>	bowstring hemp	II		C, S
<i>Scleria lacustris</i>	Wright's nutrush	II		C, S
<i>Sesbania punicea</i>	purple sesban, rattlebox	II		N, C, S
<i>Solanum diphyllum</i>	two-leaf nightshade	II		N, C, S
<i>Solanum jamatense</i>	Jamaica nightshade	II		C
<i>Solanum torvum</i>	susumber, turkey berry	II	N, U	N, C, S

## Changes to the 2007 List:

### *Melinis minutiflora*

added to list as Category II

Molasses grass (*Melinis minutiflora*) is a grass known from at least 6 Florida counties, mostly along the lower eastern coast. It is native to Africa and western Asia and was originally introduced as a forage grass in southern Florida. While it has been known to be established for some time, its populations have been expanding recently into undisturbed natural areas, especially pine rocklands in Miami-Dade County. Once established, it forms locally dense stands and excludes other herbs and graminoids. The strong molasses smell given off by the plants makes it especially easy to identify, particularly when it is stepped on.

### *Rotala rotundifolia*

added to list as Category II

Roundleaf toothcup (*Rotala rotundifolia*) is an aquatic herb known from at least three Florida counties in southern Florida (Broward, Lee, and Palm Beach). It is also introduced in Alabama. It is native to India and Southeast Asia. The species is commonly grown as an aquarium plant and has been introduced after aquarium grown plants were discarded into Florida wetlands. It has become established in canals and along rivers. It reproduces readily through sexual and asexual means and is expected to spread within the state. It is also known as dwarf rotala.



## Use of the FLEPPC List

FLEPPC encourages use of the Invasive Species List for prioritizing and implementing management efforts in natural areas, for educating lay audiences about environmental issues, and for supporting voluntary invasive plant removal programs. When a non-native plant species is to be restricted in some way by law, FLEPPC encourages use of the List as a first step in identifying species worth considering for particular types of restriction. For more information on using the FLEPPC List of Invasive Plant Species, see *Wildland Weeds* Summer 2002 issue (Vol. 5, No. 3), pp. 16-17.

**NOTE:** Not all exotic plants brought into Florida become pest plants in natural areas. The FLEPPC List of Invasive Plant Species represents only about 10% of the 1,300+ exotic species that have been introduced into Florida and subsequently established outside of cultivation. Most escaped exotics usually present only minor problems in highly disturbed areas (such as roadsides). And there are other exotics cultivated in Florida that are "well-behaved" — that is, they don't escape cultivation at all.



[www.fleppc.org](http://www.fleppc.org)

Scientific Name	Common Name	FLEPPC Cat.	Gov. List	Reg. Dist.
<i>Sphagneticola trilobata</i> (= <i>Wedelia trilobata</i> )	wedelia	II		N, C, S
<i>Stachytarpheta cayennensis</i> (= <i>S. urticifolia</i> )	nettle-leaf porterweed	II		S
<i>Syagrus romanzoffiana</i> (= <i>Arecastrum romanzoffianum</i> )	queen palm	II		C, S
<i>Syzygium jambos</i>	rose-apple	II		C, S
<i>Terminalia catappa</i>	tropical-almond	II		C, S
<i>Terminalia muelleri</i>	Australian-almond	II		C, S
<i>Tradescantia spathacea</i> (= <i>Rhoeo spathacea</i> , <i>Rhoeo discolor</i> )	oyster plant	II		S
<i>Tribulus cistoides</i>	puncture vine, burr-nut	II		N, C, S
<i>Urena lobata</i>	Caesar's weed	II		N, C, S
<i>Vitex trifolia</i>	simple-leaf chaste tree	II		C, S
<i>Washingtonia robusta</i>	Washington fan palm	II		C, S
<i>Wedelia</i> (see <i>Sphagneticola</i> above)				
<i>Wisteria sinensis</i>	Chinese wisteria	II		N, C
<i>Xanthosoma sagittifolium</i>	malanga, elephant ear	II		N, C, S

### Citation example:

FLEPPC. 2007. List of Florida's Invasive Plant Species. Florida Exotic Pest Plant Council. Internet: <http://www.fleppc.org/07list.htm> or *Wildland Weeds* Vol. 10(4), Fall 2007.

The 2007 list was prepared by the FLEPPC Plant List Committee:

Keith A. Bradley – Chair (2006-present), The Institute for Regional Conservation, 22601 S.W. 152<sup>nd</sup> Ave., Miami, FL 33170

Kathy Craddock Burks – Chair (2001-2006)

Nancy Craft Cole, Botanist Emerita, Division of Plant Industry, Florida Department of Agriculture and Consumer Services, 22804 N.W. County Road 2054, Alachua, FL 32615

Janice A. Duquesnel, Florida Park Service, Florida Department of Environmental Protection, P.O. Box 1052, Islamorada, FL 33036

David W. Hall, Private Consulting Botanist, 3666 N.W. 13<sup>th</sup> Place, Gainesville, FL 32605

Roger L. Hammer, Miami-Dade Parks Department, Castellow Hammock Nature Center, 22301 S.W. 162<sup>nd</sup> Ave., Miami, FL 33030

Patricia L. Howell, Broward County Parks, Environmental Section, 950 NW 38<sup>th</sup> Street, Oakland Park, FL 33309

Colette C. Jacono, U. S. Geological Survey, Center for Aquatic Resources Studies, 7920 NW 71st Street, Gainesville, FL 32653

Kenneth A. Langeland, Center for Aquatic and Invasive Plants, IFAS, University of Florida, 7922 N.W. 71st St., Gainesville, FL 32606

Chris Lockhart, Florida Natural Areas Inventory, c/o P.O. Box 243116, Boynton Beach, FL 33424-3116

Gil Nelson, Gil Nelson Associates, 157 Leonard's Drive, Thomasville, GA 31792

Robert W. Pemberton, Invasive Plants Research Lab, U.S. Dept. of Agriculture, 3225 College Ave., Ft. Lauderdale, FL 33312

Jimi L. Saddle, Everglades National Park, 40001 State Road 9336, Homestead, FL 33034

Robert W. Simons, 1122 S.W. 11th Avenue, Gainesville, FL 32601-7816

Sandra M. Yardaman, Alachua County Forever Land Conservation Program, Alachua County Environmental Protection Dept., 201 SE 2nd Avenue, Suite 201, Gainesville, Florida 32601

Daniel B. Ward, Department of Botany, University of Florida, 220 Bartram Hall, Gainesville, FL 32611

Richard P. Wunderlin, Institute for Systematic Botany, Dept. of Biological Sciences, University of South Florida, Tampa, FL 33620

**FLEPPC Database** – The Florida Exotic Pest Plant Database contains over 6,000 sight records of infestations of FLEPPC Category I and Category II species in Florida public lands and waters. 360 species are recorded. Nearly all of the records are from local, state, and federal parks and preserves; a few records document infestations in regularly disturbed public lands such as highway or utility rights-of-way. Natural area managers and other veteran observers of Florida's natural landscapes submit these records, with many supported further by voucher specimens housed in local or regional herbaria for future reference and verification. New and updated observations can be submitted online at [www.fleppc.org/EDDMapS/](http://www.fleppc.org/EDDMapS/). This database, along with other plant-data resources such as the University of South Florida Atlas of Florida Vascular Plants at [www.plantatlas.usf.edu](http://www.plantatlas.usf.edu), the Florida Natural Areas Inventory database at [www.fnai.org](http://www.fnai.org), and The Institute for Regional Conservation Floristic Inventory of South Florida database at [www.regionalconservation.org](http://www.regionalconservation.org), provides important basic supporting information for the FLEPPC List of Invasive Plant Species.

Images of FLEPPC-listed species may be found at one or more of the following websites: University of South Florida Atlas of Florida Vascular Plants, [www.plantatlas.usf.edu](http://www.plantatlas.usf.edu); the "Introduced Species" page on the University of Florida Herbarium website, [www.flmnh.ufl.edu/herbarium/cat/digitalimagingprojects.htm](http://www.flmnh.ufl.edu/herbarium/cat/digitalimagingprojects.htm); at Fairchild Tropical Garden's Virtual Herbarium, [www.virtualherbarium.org/vhportal.html](http://www.virtualherbarium.org/vhportal.html); The Robert K. Godfrey Herbarium at FSU, <http://herbarium.bio.fsu.edu/index.php>; and at the University of Florida's Center for Aquatic and Invasive Plants, <http://plants.ifas.ufl.edu>. Please note that greater success and accuracy in searching for plant images is likely if you search by scientific name rather than a common name. Common names often vary in cultivation and across regions. For additional information on plants included in this list, see related links and pages at [www.fleppc.org](http://www.fleppc.org).





REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
JACKSONVILLE DISTRICT CORPS OF ENGINEERS  
PENSACOLA REGULATORY OFFICE  
41 NORTH JEFFERSON STREET, SUITE 111  
PENSACOLA, FLORIDA 32502

Regulatory Division  
North Permits Branch  
SAJ-2007-04377-IP-EPS

15 March 2010

Westervelt Ecological Services, LLC  
c/o John Wigginton  
2128 Moores Mill Rd, Suite B  
Auburn, AL 36830

Dear Mr. Wigginton:

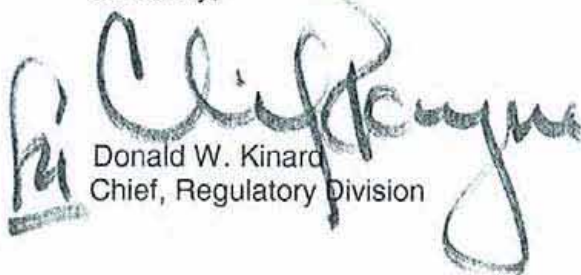
The U.S. Army Corps of Engineers (Corps) is pleased to enclose the Department of the Army permit, which should be available at the construction site. Work may begin immediately but the Corps must be notified of:

- a. The date of commencement of the work,
- b. The dates of work suspensions and resumptions of work, if suspended over a week, and
- c. The date of final completion.

This information should be mailed to the Enforcement Section of the Regulatory Division of the Jacksonville District at 41 N. Jefferson Street, Suite 111, Pensacola FL 32502. The Enforcement Section is also responsible for inspections to determine whether Permittees have strictly adhered to permit conditions.

IT IS NOT LAWFUL TO DEVIATE FROM  
THE APPROVED PLANS ENCLOSED.

Sincerely,



Donald W. Kinard  
Chief, Regulatory Division

Enclosures

Copies Furnished:

NMFS HCD, Mark Thompson, Panama City  
FDEP, Vicki Tauxe  
FWS, Panama City  
CESAJ-RD-P



## NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

Applicant: Westervelt Ecological Services, LLC		File Number: SAJ-2007-04377-IP-EPS	Date: 03/15/10
Attached is:		See Section below	
	INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission)	A	
X	PROFFERED PERMIT (Standard Permit or Letter of permission)	B	
	PERMIT DENIAL	C	
	APPROVED JURISDICTIONAL DETERMINATION	D	
	PRELIMINARY JURISDICTIONAL DETERMINATION	E	

**SECTION I -** The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at <http://usace.army.mil/jnet/functions/cw/cecwo/reg> or Corps regulations at 33 CFR Part 331.

**A INITIAL PROFFERED PERMIT:** You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

**B: PROFFERED PERMIT:** You may accept or appeal the permit

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**C: PERMIT DENIAL:** You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**D: APPROVED JURISDICTIONAL DETERMINATION:** You may accept or appeal the approved JD or provide new information.

- **ACCEPT:** You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice, means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD.
- **APPEAL:** If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

**E: PRELIMINARY JURISDICTIONAL DETERMINATION:** You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.



**SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT**

**REASONS FOR APPEAL OR OBJECTIONS:** (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)

**ADDITIONAL INFORMATION:** The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.

**POINT OF CONTACT FOR QUESTIONS OR INFORMATION:**

If you have questions regarding this decision and/or the appeal process you may contact:

Ed Sarfert,  
Pensacola Regulatory Office

If you only have questions regarding the appeal process you may also contact:

for process:  
Stuart Santos 904-232-2018  
for JD:  
Jason Steele 404-562-5137

**RIGHT OF ENTRY:** Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.

\_\_\_\_\_  
Signature of appellant or agent.

Date:

Telephone number:



# ***DEPARTMENT OF THE ARMY PERMIT***

**Permittee:** Westervelt Ecological Services, LLC  
c/o John Wigginton  
2128 Moores Mill Rd, Suite B  
Auburn, AL 36830

**Permit No:** SAJ-2007-04377-IP-EPS

## **U.S. Army Engineer District, Jacksonville**

NOTE: The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

**Project Description:** Fill activities associated with the establishment of a mitigation bank, including placement of fill material over approximately 0.33-acre of waters of the United States (wetlands) for construction of low-water crossings and ditch blocks. An associated Mitigation Banking Instrument (MBI) would allow the applicant to generate and sell credits associated with the preservation, enhancement, restoration and long-term management of wetlands and uplands in an approximately 1,188-acre site referred to as the "Pensacola Bay Mitigation Bank".

**Project Location:** The project site is located in wetlands adjacent to Mulatto Bayou and Escambia Bay, in the Pensacola Bay watershed east of Avalon Boulevard in Sections 32, 37 and 42, Township 1 North, Range 28 West, and Section 03, Township 1 South, Range 28 West in Santa Rosa County, Florida.

**Latitude & Longitude:** Latitude 30° 33' 13.87" North  
Longitude 87° 04' 6.74" West

## **Permit Conditions:**

### **General Conditions:**

Permittee: Pensacola Bay Mitigation Bank

Permit No: SAJ-2007-04377-IP-EPS

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1. The time limit for completing the work authorized ends on **8 March 2015**. If you find that you need more time to complete the authorized activity, submit your request for a time extension to this office for consideration at least one month before the above date is reached.
2. You must maintain the activity authorized by this permit in good condition and in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature and the mailing address of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

**Special Conditions:**

- (1) **Erosion Control:** Prior to the initiation of any work authorized by this permit, the Permittee shall install erosion control measures along the perimeter of all work areas to prevent the displacement of fill material. Immediately after completion of the final grading of the land surface, all slopes, land surfaces, and filled areas adjacent to surface waters or wetlands shall be stabilized using sod, degradable mats, barriers, or a combination of similar stabilizing materials to prevent erosion. The erosion control measures shall remain in place and be maintained until all authorized work has been completed and the site has been stabilized.



- (2) All contractors involved in this permitted activity shall be provided copies of this permit in its entirety. A complete copy shall remain on site at all times during the permitted fill discharge activities.
- (3) **Commencement Notification:** Within 10 days from the date of initiating the authorized work, the Permittee shall provide to the Corps a written notification of the date of commencement of work authorized by this permit.
- (4) **As-Builts:** Within 60 days of completion of the authorized work or at the expiration of the construction window of this permit, whichever occurs first, the Permittee shall submit as-built drawings of the authorized work and a completed As-Built Certification Form (attached) to the Corps. The drawings shall be signed and sealed by a registered professional engineer and include the following:
  - a. A plan view drawing of the location of the authorized work footprint (as shown on the permit drawings) with an overlay of the work as constructed in the same scale as the attached permit drawings (8½-inch by 11-inch). The drawing should show all "earth disturbance," including wetland impacts, water management structures, and any on-site mitigation areas.
  - b. List any deviations between the work authorized by this permit and the work as constructed. In the event that the completed work deviates, in any manner, from the authorized work, describe on the As-Built Certification Form the deviations between the work authorized by this permit and the work as constructed. Clearly indicate on the as-built drawings any deviations that have been listed. Please note that the depiction and/or description of any deviations on the drawings and/or As-Built Certification Form does not constitute approval of any deviations by the U.S. Army Corps of Engineers.
  - c. The Department of the Army Permit number.
  - d. Include pre- and post-construction aerial photographs of the project site, if available.
- (5) **Regulatory Agency Changes:** Should any other regulatory agency require changes to the work authorized or obligated by this permit, the Permittee is advised that a Corps-approved modification to this permit instrument is required prior to initiation of those changes.
- (6) No structure or work shall adversely affect or disturb properties listed in the National Register of Historic Places or those eligible for inclusion in the National Register. Prior to the start of work, the Permittee or other party on the Permittee's behalf, shall conduct a search in the National Register Information System (NRIS). Information can be found at; <http://www.cr.nps.gov/nr/research/nris.htm>. Information on properties eligible for

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inclusion in the National Register can be identified by contacting the Florida Master File Office by email at [fmsfile@dos.state.fl.us](mailto:fmsfile@dos.state.fl.us) or by telephone at 850-245-644.

If unexpected cultural resources are encountered at any time within the project area that was not the subject of a previous cultural resource assessment survey, work should cease in the immediate vicinity of such discoveries. The permittee, or other party, should notify the SHPO immediately, as well as the appropriate Army Corps of Engineers office. After such notifications, project activities should not resume without verbal and/or written authorization from the SHPO.

If unmarked human remains are encountered, all work shall stop immediately, and the proper authorities notified in accordance with Section 872.05, Florida Statutes, unless on Federal lands. After such notifications, project activities on non-Federal lands shall not resume without verbal and/or written authorization from the Florida State Archaeologist for finds under his or her jurisdiction.

- (7) **Reporting Address:** All reports, documentation and correspondence including photographs and reports required in the Conditions of this permit shall be submitted to the following addresses: U.S. Army Corps of Engineers, Enforcement Section, Pensacola Regulatory Office, 41 N. Jefferson, Suite 111, Pensacola, FL 32502. The Permittee shall reference this permit number, **SAJ-2007-04377-IP-EPS**, on all submittals.

Further Information:

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

( ) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

( ) Section 103 of the Marine Protection, Research and Sanctuaries Act of 1972 (33 U.S.C. 1413).

2. Limits of this authorization.

a. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

b. This permit does not grant any property rights or exclusive privileges.

c. This permit does not authorize any injury to the property or rights of others.



d. This permit does not authorize interference with any existing or proposed Federal projects.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

5. Reevaluation of Permit Decision: This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (see 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions: General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest



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decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

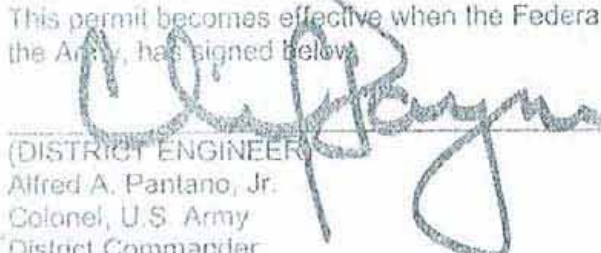
Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

A total of 7 PERMIT DRAWINGS + 26 pages are affixed behind this signature page.

  
(PERMITTEE)

3/10/10  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

  
(DISTRICT ENGINEER)  
Alfred A. Pantano, Jr.  
Colonel, U.S. Army  
District Commander

3/15/10  
(DATE)