

# BUCKINGHAM TRAILS PRESERVE



Land Stewardship Plan  
2012



# Buckingham Trails Preserve

## Land Stewardship Plan

8000 and 8790 Buckingham Road  
Fort Myers, FL 33905



Prepared by the Land Stewardship Section  
Lee County Department of Parks and Recreation

Approved by the Lee County Board of County Commissioners: January 10, 2012

## **Acknowledgements**

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## List of Acronyms

ATV	all-terrain vehicle
BRCP	Buckingham Rural Community Preserve
BTP	Buckingham Trails Preserve
BAAF	Buckingham Army Air Field
BOCC	Lee County Board of County Commissioners
C20/20	Conservation 20/20
CLASAC	Conservation Lands Acquisition and Stewardship Advisory Committee
CREW	Corkscrew Regional Ecosystem Watershed
ECWCD	East County Water Control District
ESA	Environmental Site Assessment
FDACS	Florida Department of Agriculture and Consumer Services
FDEP	Florida Department of Environmental Protection
FGCU	Florida Gulf Coast University
FDOF	Florida Division of Forestry
FLEPPC	Florida Exotic Pest Plant Council
FLU	future land use
FNAI	Florida Natural Areas Inventory
FPL	Florida Power & Light
FWC	Florida Fish and Wildlife Conservation Commission
GMTR	Ground Moving Target Ranges
IRC	Institute for Regional Conservation
LCDCD	Lee County Department of Community Development
LCDCL	Lee County Division of County Lands
LCDNR	Lee County Division of Natural Resources
LCDP	Lee County Division of Planning
LCPR	Lee County Department of Parks and Recreation
LCDOT	Lee County Department of Transportation
LSOM	Land Stewardship Operations Manual
LSP	Land Stewardship Plan
LiDAR	Light Detecting and Ranging
MU	Management Unit
SFWMD	South Florida Water Management District
STRAP	Section-Township-Range-Area-Block.Lot (Parcel)
USACOE	United States Army Corps of Engineers
USFWS	United States Fish and Wildlife Service

## *Vision Statement*

*It is the vision of the Lee County Parks and Recreation Department and the Conservation 20/20 Program to conserve, protect, and restore Buckingham Trails Preserve to a productive, functional, and viable ecosystem. Restoration of disturbed communities and the reintroduction of fire onto the Preserve through prescribed burns will further improve habitat for many rare native plant and animal species including endangered species such as the gopher tortoise. The Preserve will also protect the cultural resources and provide for educational opportunities for visitors.*

## **I. EXECUTIVE SUMMARY**

Buckingham Trails Preserve (BTP) is located in eastern Lee County, within Sections 17 and 20, Township 44 South, Range 26 East. The Preserve contains one nomination, #371, acquired in November 2008 through the Conservation 20/20 Program for \$12.6 million. The Conservation 20/20 program was established in 1996 after Lee County voters approved a referendum that increased property taxes by up to 0.5 mil for the purpose of purchasing and protecting environmentally sensitive lands.

This Conservation 20/20 Preserve totals approximately 572 acres. The Preserve's northern boundary is a drainage canal with Florida Gulf Coast University's satellite campus and private property on the other side; its western boundary contains residential lots and single-family homes; its eastern boundary is an East County Water Control District maintained canal; and its southern boundary is Buckingham Road and additional larger residential lots. Portions of BTP have historically been used for agriculture (crops and cattle), outdoor recreation (camping, hunting and off-road activities), and alterations made for WWII military training associated with Buckingham Army Air Field.

The natural elevations range from 21.5 feet above sea level at the south end and slope in a general northerly direction to 15.3 feet above sea level at the north end of the Preserve.

There are thirteen different soil types found at the Preserve. The soils within the Preserve have all been identified as having severe physical limitations; either ponding, wetness, or being too sandy. Covering over one-third (35 percent) of the Preserve, Oldsmar Sand is the most common soil type. Malabar Fine Sand is the second most common soil type covering nearly 17 percent, while the remaining eleven soil types cover less than one-half of the lands.

BTP is within the Tidal Caloosahatchee Basin of the South Florida Water Management District's Lower West Coast Region. The Preserve lies within the Orange River Watershed. Hydrological alterations have been made on and directly adjacent to BTP that affect the natural sheet flow across the lands. The existing ditches, berms, swales, power line easement, and cattle well all influence the water flow on the site by either interrupting sheet flow or holding water for extended periods in some areas, while excessively draining other areas.

BTP contains a combination of wetland and upland communities that serve as important habitat for a variety of birds, mammals, reptiles and amphibians. The Preserve consists of seventeen natural or altered plant communities described by the Florida Natural Areas Inventory. While pastures, mesic and scrubby flatwoods are the most common plant communities; approximately 48% of the

plant communities are altered landcover types which are typically created by previous land clearing activities, invasive exotic plant infestations resulting in monocultures and/or man-made ditches, roads or cow wells. Another 23% of BTP has been categorized as disturbed communities, primarily due to an abundance of invasive exotic species, lack of fire or hydrologic changes.

The Preserve has a long history of wide-ranging uses with lasting environmental impacts. Intense logging of slash pine from the late nineteenth century until the 1960s virtually eliminated all old growth stands of the southern mixed forest in south Florida. During the 1940s, Buckingham Army Air Field was developed and its associated military training activities occurred on the property. A canal and smaller ditches were dug to quickly drain the lands. During the late '60s to early '70s, agricultural activities had begun and quickly ended, while during the mid '80s portions are cleared again. Cattle grazing activities become more noticeable during the mid 1990s and by 2007, additional land clearing was performed before the Conservation 20/20 Program acquired the land.

In addition to restoring and protecting the resources for wildlife and native plant communities, appropriate resource based public amenities will be created that provide enjoyable opportunities for the public while protecting the Preserve's biologic integrity and cultural resources. A trailhead and trail system will be created to allow hikers and equestrian users onto all but the northwestern section of the Preserve, which is the location of the cattle lease. This will be a primitive trail designed to protect the Preserve's natural and cultural resources, while allowing appropriate public access to BTP and potentially connecting to a future Lee County Department of Transportation's Bikeways Walkways Plan along the planned expansion of Buckingham Road.

The goal of this land stewardship plan is to identify Preserve resources, develop strategies to protect the resources and implement restoration activities to restore BTP to a productive, functional and viable ecosystem while ensuring that the Preserve will be managed in accordance with Lee County Parks and Recreation's Land Stewardship Operations Manual.

Restoration and management activities at BTP will focus on maintaining fire dependant ecosystems with prescribed fire, controlling invasive exotic plant and animal species, protecting cultural resources, hydrological restoration, removing debris, and enhancing wildlife habitat. A Management Action Plan outlines restoration and stewardship goals. This plan outlines these goals and strategies, explains how the goals will be accomplished, and provides a timetable for completion. Any future additions to the Preserve will be managed similarly to this land stewardship plan. This plan will be revised in ten years (2021).

## II. INTRODUCTION

Buckingham Trails Preserve (BTP) was acquired in November 2008 through the Conservation 20/20 (C20/20) Program for almost \$12.6 million. The Preserve totals 572 acres. It is located in eastern Lee County on the north side of Buckingham Road just west of Neal Road. It has a fairly large outparcel on the southern boundary with a finger of land that extends south to Buckingham Road on the east side.

The two most common plant communities are various types of flatwoods and pastures. Historic aerial interpretation indicated that the Preserve had extensive wetland plant communities that have been permanently altered by military training facilities, ditches, and agricultural activities, many that were installed in the early 1940s or the early 1960s. All that remains are two small sections of a slough that have considerable infestation of invasive exotic plants including melaleuca (*Melaleuca quinquenervia*) and bull horn acacia (*Acacia cornigera*). The decades of drainage have changed the plant communities to much drier flatwood systems.

BTP contains a combination of wetland and upland communities that serve as important habitat for a variety of wildlife. Several listed species utilize the Preserve, including state and federal endangered wood storks (*Mycteria americana*) and the state listed gopher tortoise (*Gopherus polyphemus*). The quantity and diversity of wildlife species will hopefully increase as restoration activities take place. The wildlife and overall ecosystem will benefit from enhanced, viable and functioning plant communities through invasive exotic plant removal/control, improved wetland hydroperiods, pasture restoration, and restoration of an essential fire interval with prescribed fire management.

One of the most unique features of this Preserve is its history as a military training facility for World War II when it was part of the Buckingham Army Air Field (BAAF). Resource based recreational opportunities will take advantage of this history by providing interpretive signage describing the cultural resources found on the site. Visitors to BTP will be able to enjoy hiking, equestrian trails and seasonal permitted primitive camping.

The purpose of this stewardship plan is to define conservation goals for BTP that will address the above concerns. It will serve as a guide for Lee County's Department of Parks and Recreation (LCPR) to use best management practices to ensure proper stewardship and protection of the Preserve. It also serves as a reference guide because of the extensive field studies and research of scientific literature and historic records conducted by C20/20 staff that help to explain the Preserve's ecosystem functions, its natural history and its influences from human use.

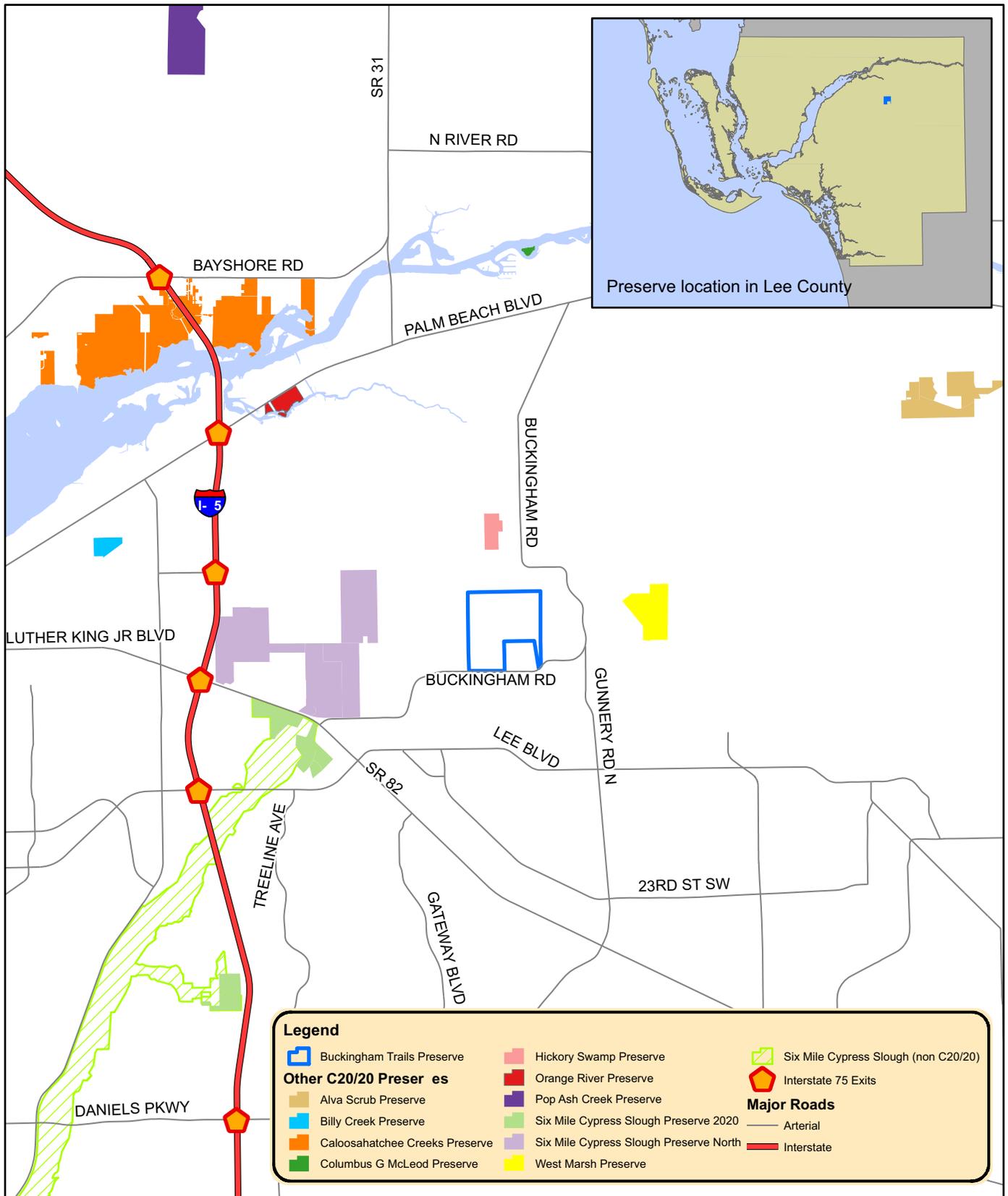
### **III. LOCATION AND SITE DESCRIPTION**

BTP is located in eastern Lee County within Sections 17 and 20, Township 44 South, Range 26 East. The Preserve consists of STRAP # 17-44-26-00-00001.0000, 17-44-26-00-00003.0000, 20-44-26-00-00001.0000 and 20-44-26-00-00006.0000. BTP is accessed via a grassy pull-off from Buckingham Road. The Preserve has two addresses assigned by the Lee County Property Appraiser's office. The main portion of the Preserve has the address of 8790 Buckingham Road and the finger's address is 8000 Buckingham Road, Fort Myers, Florida 33905.

BTP lies on the north side of Buckingham Road and is bordered to the west by 5-acre residential lots, to the north by Florida Gulf Coast University's (FGCU) satellite campus and to the east by both a subdivision to the north and vacant, wooded land to the south. On the south side of the Preserve, there are several 10-45 acre lots that separate the main portion of the Preserve from the finger, some with residences.

The Preserve is approximately 572 acres in size and has several cultural resources associated with the Buckingham Army Air Field and a remnant railroad bed near the southern end of the Preserve. BTP contains seventeen plant communities, a mosaic of both human-altered and natural plant communities; dominant areas are mesic flatwoods and pasture. Approximately 13% of the plant communities are designated as "disturbed," typically due to land clearing activities, invasive exotic plant infestations and/or changes in the natural drainage patterns. Figure 1 shows BTP's location in Lee County while Figure 2 identifies the boundaries of BTP in a 2010 aerial photograph.

# Figure 1: Location Map



## Buckingham Trails Preserve

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Map prepared on 04/13/2011 by lwewerka@leegov.com

This is not a survey.  
Land Stewardship Staff has prepared this map  
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0 1 2 4 Miles

Figure 2: 2010 Aerial



**B u c k i n g h a m T r a i l s P r e s e r v e**

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0 355 710 1,420 Feet

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CONSERVATION 20/20  
LEE COUNTY

## **IV. NATURAL RESOURCES DESCRIPTION**

### **A. Physical Resources**

#### *i. Climate*

General information on the climate of southwest Florida is located in the Land Stewardship Operations Manual's (LSOM) Land Stewardship Plan Development and Supplemental Information section.

#### *ii. Geology*

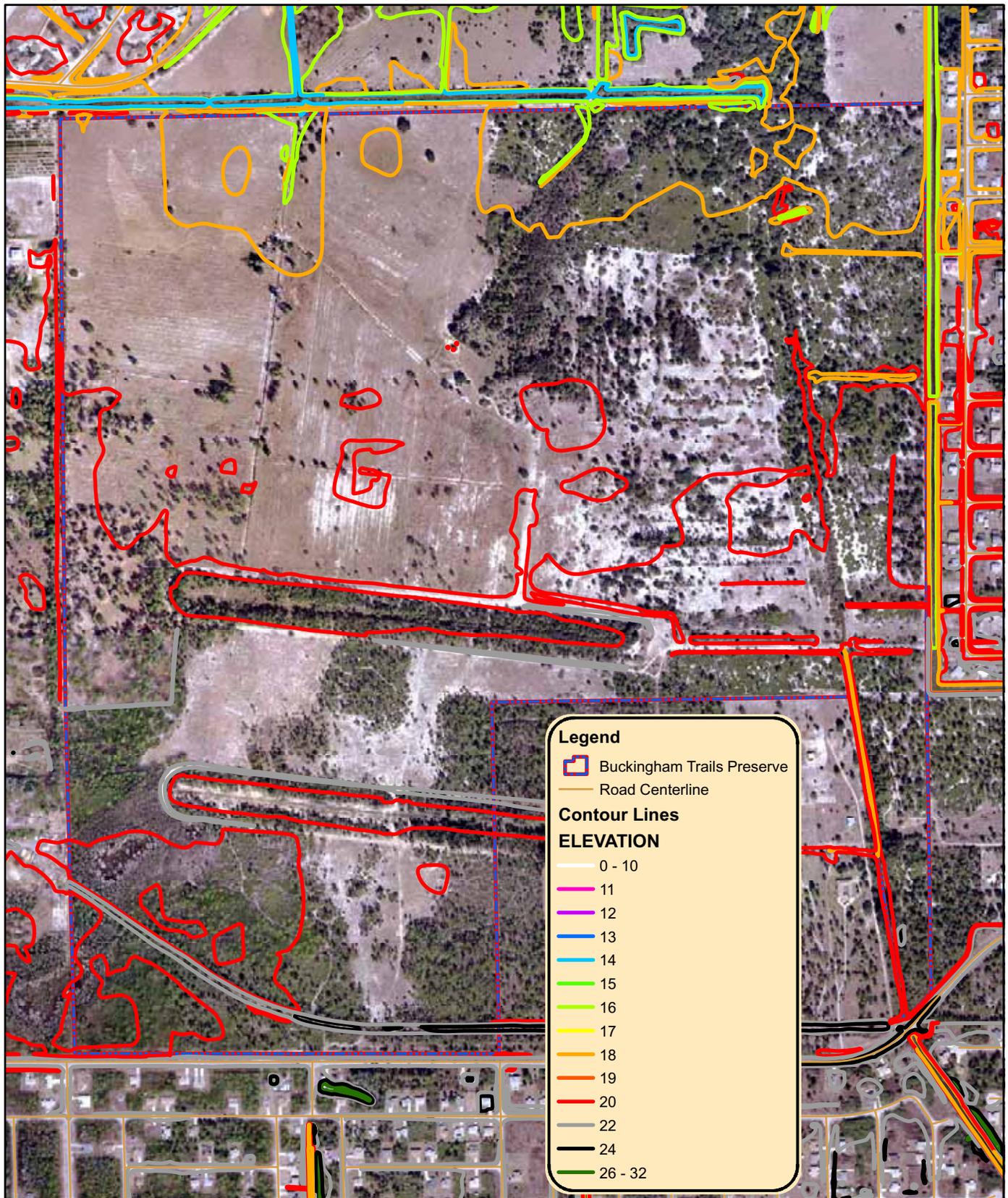
Specific information on the geologic features such as physiographic regions, formations and maps can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

#### *iii. Topography*

Natural elevations at BTP range from 21.5' above sea level at the south end and slope in a general northerly direction to 15.3' above sea level at the northern range of the Preserve. Man-made topographic features at BTP are scattered throughout and include ditches, berms, cow wells, and trails associated with historic gunnery activities. Man-made elevation ranges from excavated ditches at 11.8' to historic military railway bed at 24.8' above sea level (Figure 3). Exterior topographic features include Buckingham Road that acts as an elevated berm along the southern boundary and adjacent storm water drainage ditches along the northern and eastern perimeters of the Preserve.

The following topographic map (Figure 4) uses light detecting and ranging (LiDAR) data, which is an optical remote sensing technology that measures properties of scattered light to find range and/or other information of a distant target.

# Figure 3: Topography Map



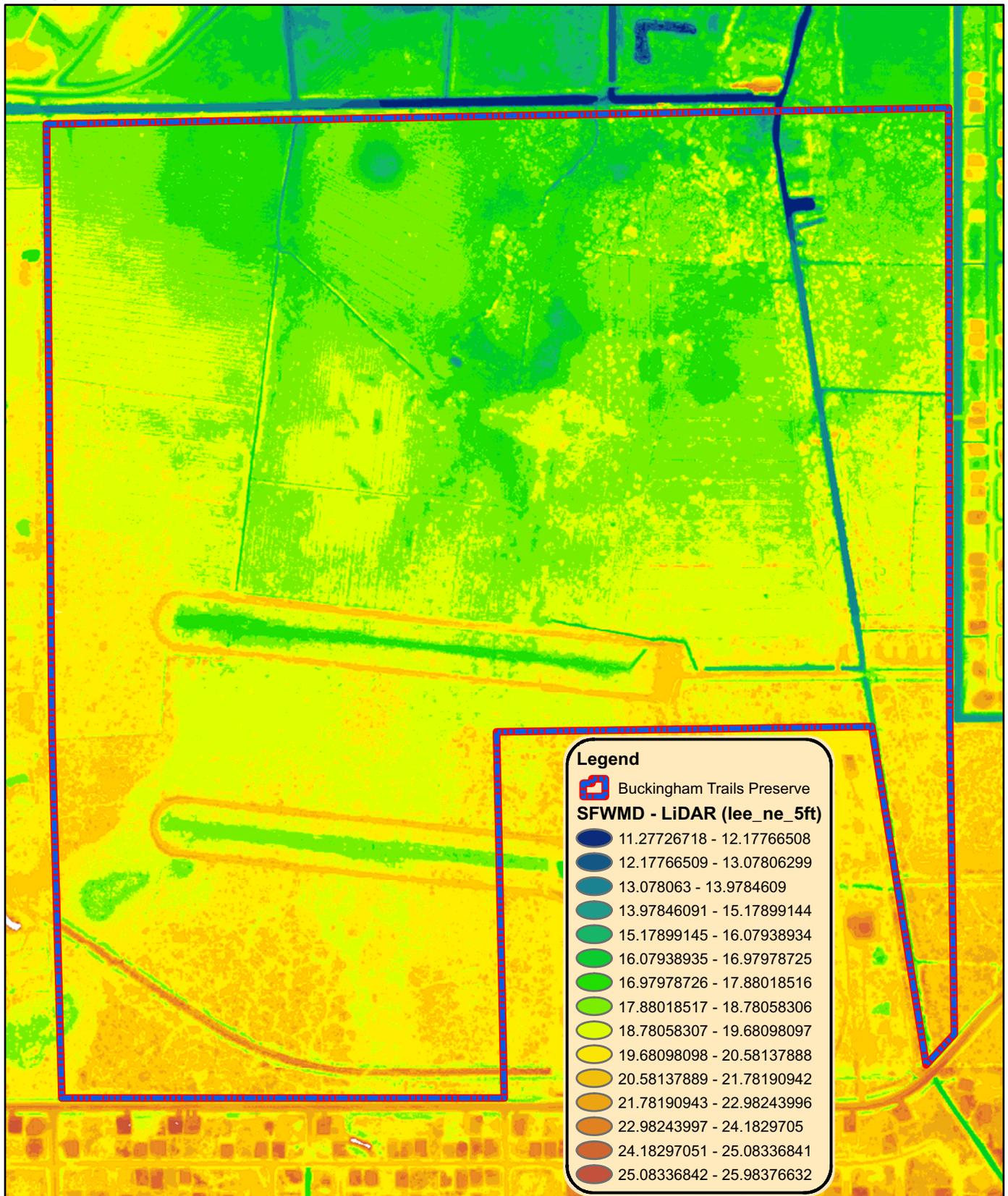
**Buckingham Trails Preserve**

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0      385      770      1,540 Feet

# Figure 4: LiDAR Map



**Buckingham Trails Preserve**

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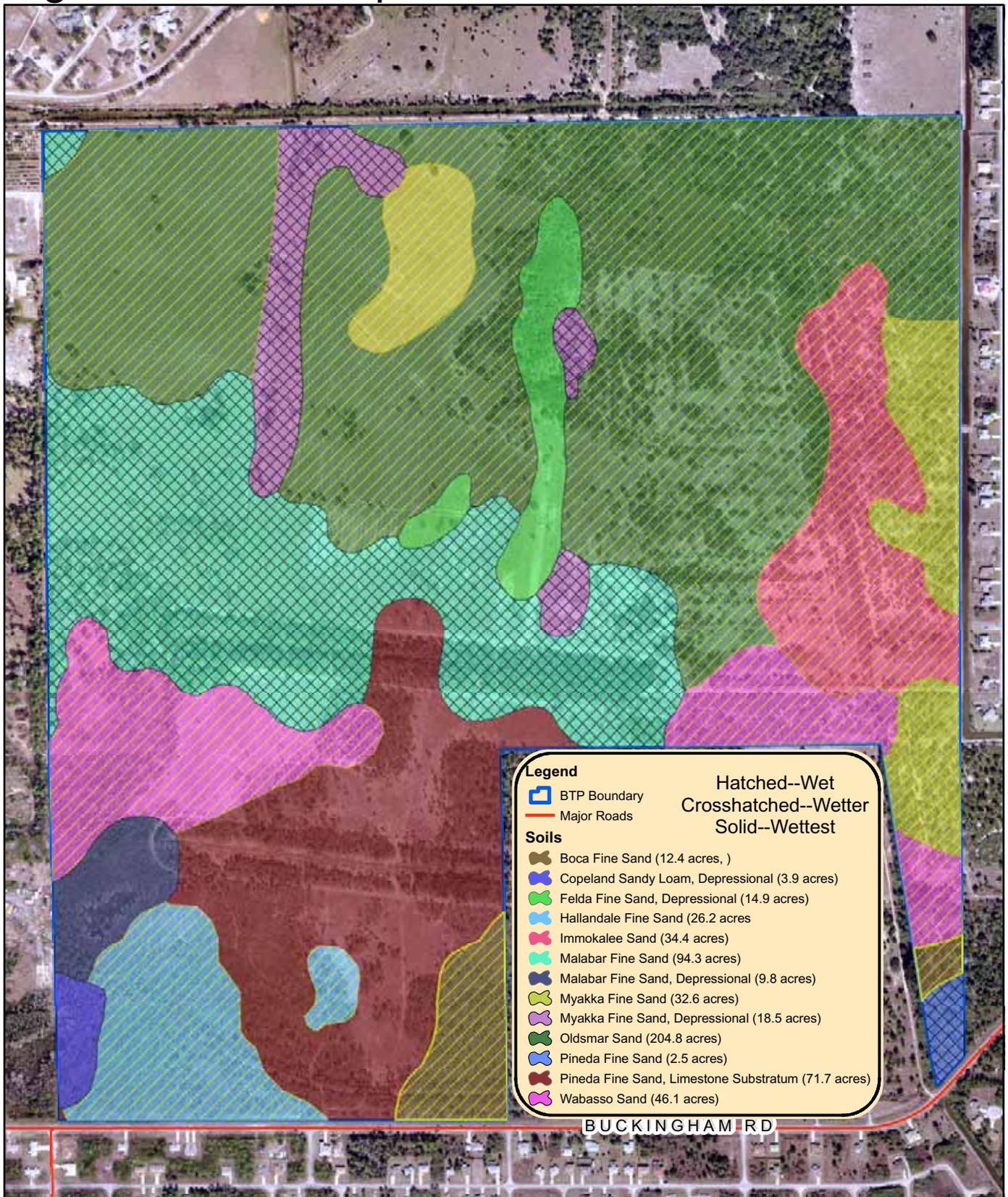
0 385 770 1,540 Feet

*iv. Soils*

BTP contains a total of 13 different soils (Appendices H and Figure 5). Soils play an important role in dictating the location and types of recreation that the Preserve can provide.

Refer to the LSOM's Land Stewardship Plan Development and Supplemental Information section for additional information on soil types and limitation.

# Figure 5: Soils Map



**Buckingham Trails Preserve**

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Map prepared on 02/04/2011 by jwaller@leegov.com

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0 375 750 1,500 Feet

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LEE COUNTY

## **v. Hydrologic Components and Watershed**

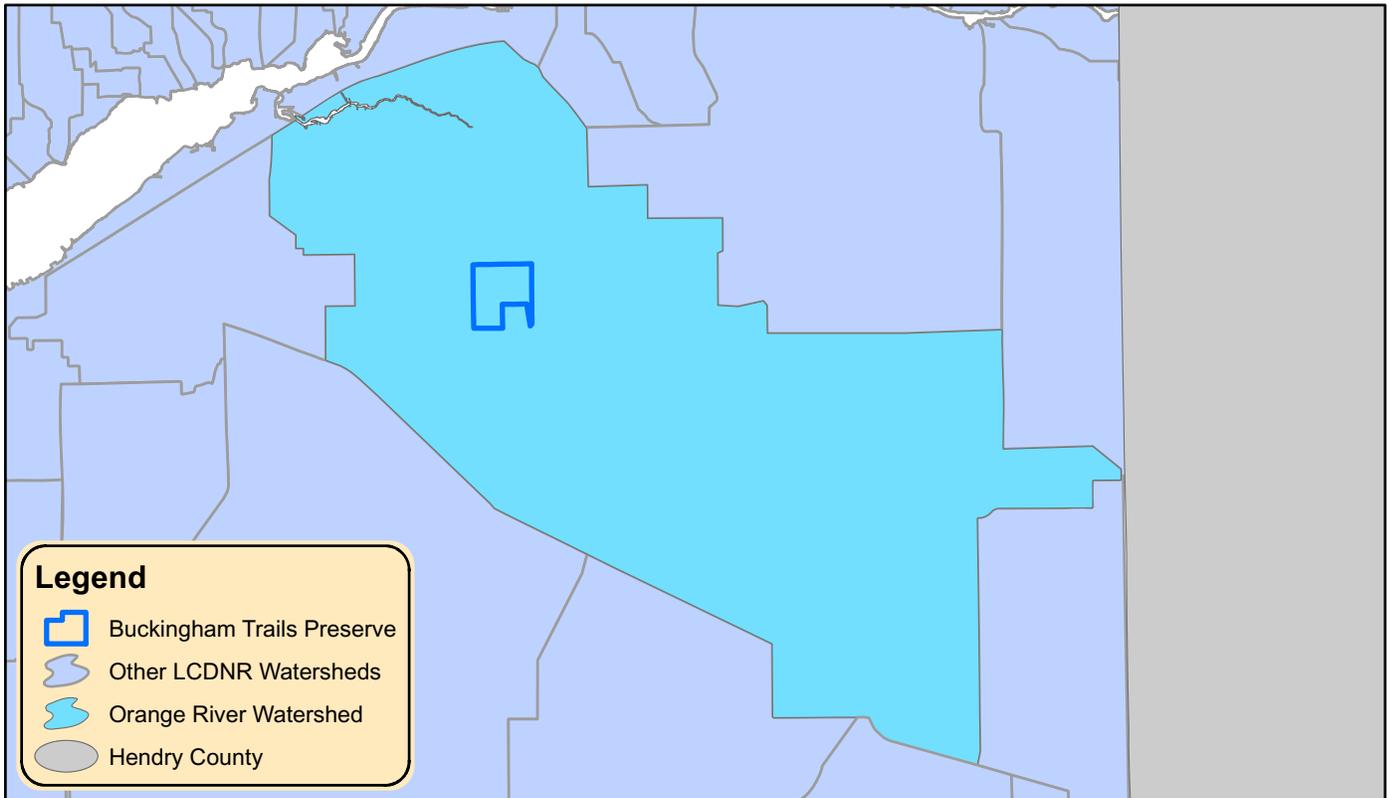
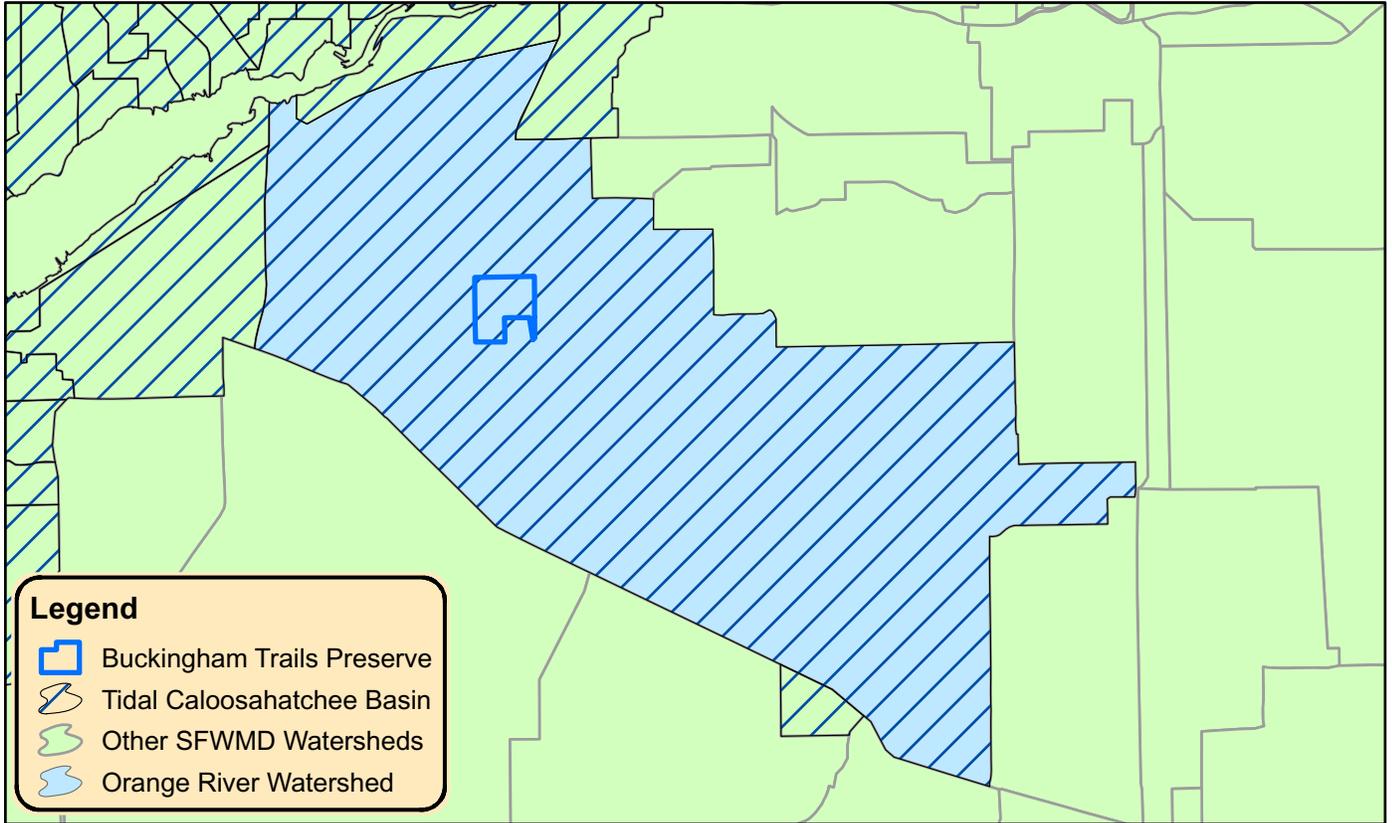
BTP is within the Tidal Caloosahatchee Basin of the South Florida Water Management District's (SFWMD) Lower West Coast Region. The Preserve lies in the Orange River Watershed of both the SFWMD and LCDNR. In this portion of Lee County, the two agencies have slightly different watershed boundaries (Figure 6).

In 1974 the United States Fish and Wildlife Service (USFWS) directed its Office of Biological Services to conduct an inventory of the nation's wetlands. Wetlands were identified on aerial photography by vegetation, visible water features and geography, and subsequently classified in general accordance with the Classification of Wetlands and Deep Water Habitats of the United States (Cowardin et al. 1979). More information about the different classifications can be found there, or in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

In addition to the National Wetlands Inventory's wetlands, C20/20 staff has identified one disturbed wet prairie and numerous man-made disturbances that would be categorized as wetlands. More information about the wet prairie can be found in the Natural Plant Communities section of this plan.

The unnatural features will be discussed more fully in the Internal Influences section of this plan.

# Figure 6: Watersheds Map



**Buckingham Trails Preserve**

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Map prepared on 04/13/2011 by lwewerka@leegov.com

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0 1.5 3 6 Miles

## **B. Biological Resources**

### *i. Ecosystem Function*

Lee County's preserves contain a diversity of plant communities that provide habitat for numerous plant and animal species. The majority of these preserves are not islands of habitat, but are pieces of a larger conservation effort striving to create or maintain a healthy and viable ecosystem.

Refer to the LSOM's Land Stewardship Plan Development section for additional information.

### *ii. Natural Plant Communities*

BTP consists of 17 natural or altered plant communities; the majority of which consists of scrubby flatwoods, mesic flatwoods and pastures. Approximately 48% of the plant communities are designated by Florida Natural Areas Inventory (FNAI) as altered landcover types which are typically created by previous land clearing activities, invasive exotic plant infestations resulting in monocultures, and/or man-made ditches, roads or cow wells. Approximately 23% of BTP has been categorized as disturbed communities, primarily due to an abundance of invasive exotic species, lack of fire or hydrologic changes. The remaining 29% of the BTP plant communities are in an unaltered natural state. Figure 7 shows the location of the plant communities found at BTP. The plant communities are defined using the Guide to the Natural Communities of Florida (2010) prepared by FNAI.

Acreages and percent of cover for each community are listed below. Descriptions of the plant communities and characteristic animals found within each community, as well as management suggestions can be found in the LSOM. The percent cover is slightly over 100% due to rounding off values. A complete list of plant species identified during site inspections to BTP can be found in Appendix A. This list will be updated on a seasonal basis to identify plants in their inflorescence phase.

#### **Swamp Lake** - 1.06 acres, 0.19% coverage of BTP

Two small swamp lakes are located within the disturbed slough community in the southwest corner of the Preserve.

#### **Mesic Flatwoods** – 84.28 acres, 14.7% coverage of BTP

This community will need a burn regime established with a 3-5 year rotation to discourage succession into a hardwood-dominated forest, ensuring an open canopy to allow herbs and forbs to thrive as groundcover.

**Mesic Flatwoods (Disturbed) – 34.70 acres, 6.08% coverage of BTP**

Melaleuca and Brazilian pepper (*Schinus terebinthifolius*) are the primary invasive exotic plants causing disturbance. Cattle have also overgrazed the groundcover.

**Dry Prairie – 8.79 acres, 1.54% coverage of BTP**

This community will be the priority for fire introduction in order to prevent tree invasion and to decrease palmetto coverage which will in turn increase forage opportunities for the gopher tortoise population residing in it.

**Wet Prairie (Disturbed) - 1.47 acres, 0.26% coverage of BTP**

The disturbance to this community is caused by the hydrological changes that have taken place across the Preserve. It is a remnant of a larger historical wetland system.

**Scrubby Flatwoods – 55.73 acres, 9.76% coverage of BTP**

This community has formed due to the drainage of the site. Vegetation diversity is limited and sparse in many bare soil areas.

**Scrubby Flatwoods (Disturbed) – 64.01 acres, 11.19% coverage of BTP**

This area has been disturbed by lack of fire and overuse by cattle which may be preventing forb and grass recruitment into the area. The drainage canals on and adjacent to the Preserve have also caused an unnatural dryness across the site which may also play a role in lack of establishment of groundcover vegetation normally associated with scrubby flatwoods.

**Slough Marsh (Disturbed) – 31.98 acres, 5.60% coverage of BTP**

Historically a slough connected from the northeast to the southwest across the Preserve, but construction of military facilities and clearing of land for agricultural use removed the middle of the slough system. The remaining wetland areas are highly disturbed due to these hydrology changes. Compounding the disturbance in the southwest slough marsh is the over 75% coverage of melaleuca and west Indian marsh grass. The center has a ring of mature cypress with fire scars, indicating at one time a fire did travel through the southern portion of the Preserve. The northern slough marsh has over 50% coverage of invasive exotic vegetation including melaleuca, cogongrass (*Imperata cylindrica*) and bullhorn acacia. Cypress in this one is less frequent and more linear in arrangement.

Staff noted evidence of overgrazed wetland vegetation, hog wallows, and multiple cow and feral hog trails.

**Xeric Hammock** – 13.38 acres, 2.34% coverage of BTP

Xeric hammocks are a result of years of fire exclusion. The only way to return this community to its former plant community is through severe burns during extremely dry conditions, mechanical removal and/or herbicide applications. Long-term management goals for this community may include restoring this portion of the Preserve to a scrubby flatwoods community.

**Altered Landcover Types:**

**Pasture - Improved** – 181.97 acres, 31.87% coverage of BTP

The pasture will be fenced off from the rest of the plant communities and will continue to have an active cattle lease until such time staff determines it is no longer needed or pasture restoration or other work is planned.

**Pasture- Semi-improved** – 36.82 acres, 6.44% coverage of BTP

With the removal of cattle grazing, natural recruitment of other native vegetation from surrounding plant communities is expected to take place.

**Road** – 12.14 acres, 2.12% coverage of BTP

The roads on BTP are remnants of the military operations from the 1940s.

**Canal/Ditch** – 13.51 acres, 2.37% coverage of BTP

Within the Preserve there are several ditches created as part of the military and agricultural operations. One deep canal, known as Nine-Mile Run, extends through the Preserve and onto private property to the north and south.

**Clearing** – 2.34 acres, 0.41% coverage of BTP

There are two areas on the Preserve that are considered clearings associated with the military operations. These areas still have not re-vegetated much from the original clearing shown on the 1944 historical aerial photographs.

**Invasive Exotic Monoculture** – 1.79 acres, 0.31% coverage of BTP

The exotic monocultures at BTP consist of melaleuca.

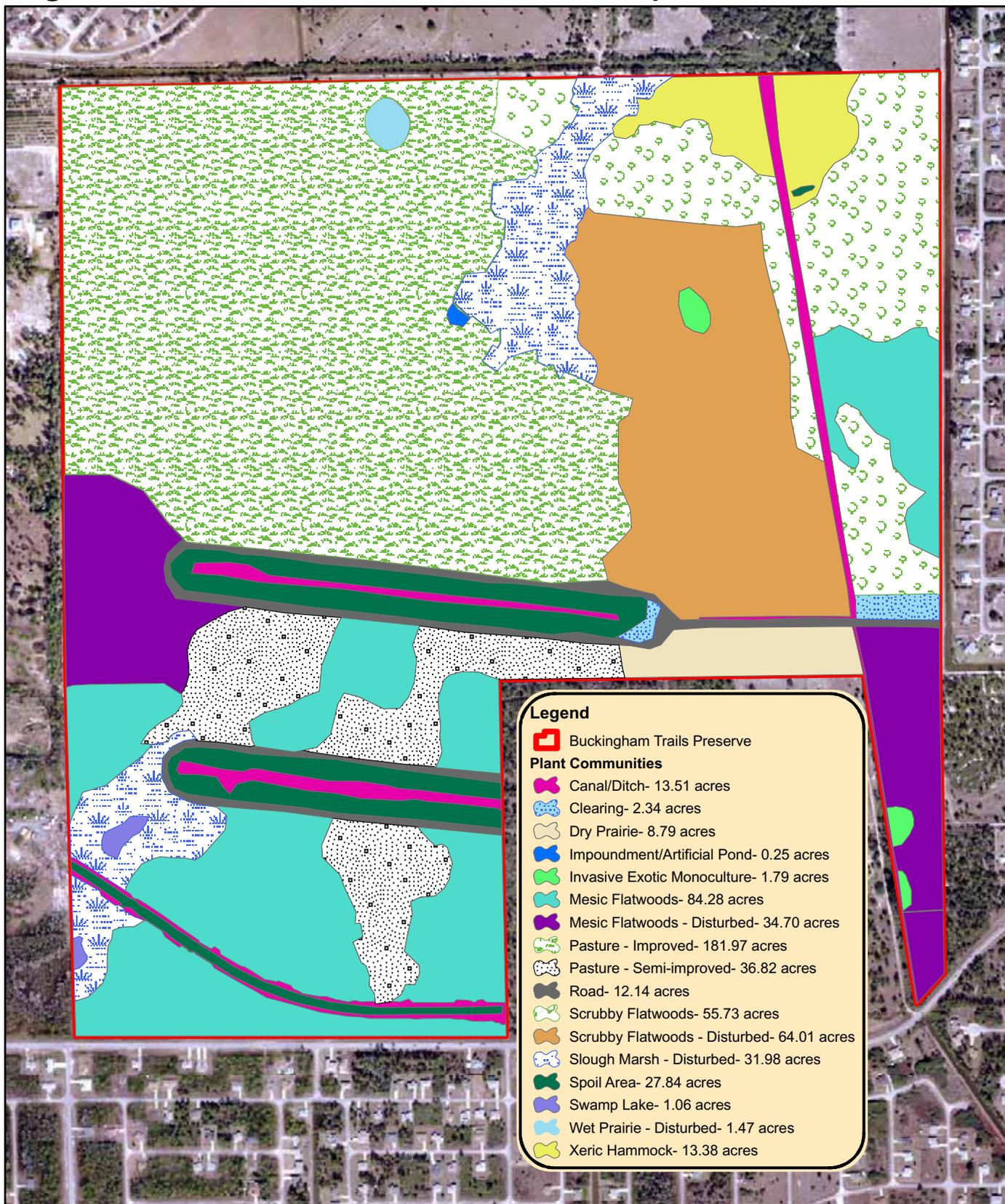
**Impoundment/Artificial Pond** – 0.25 acres, 0.04% coverage of BTP

This disturbed plant community is a cattle pond which was dug on the southwestern edge of the northern slough marsh.

**Spoil Area** –27.84 acres, 4.87% coverage of BTP

Spoil piles were created as a result of the military operations creation of the jeep tracks and railroad line. Brazilian pepper is the dominant exotic vegetation. Since the piles are part of a cultural resource, no restoration work other than exotics treatment is planned.

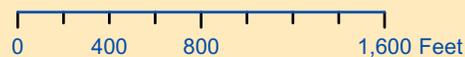
# Figure 7: Plant Communities Map



## Buckingham Trails Preserve

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Map prepared on 02/22/2010 by lgreeno@leegov.com

This is not a survey.  
Land Stewardship Staff has prepared this map for informational and planning purposes.



### *iii. Fauna*

BTP provides a variety of habitats for wildlife including those that are state and federally listed. Six exotic wildlife species have been documented at the Preserve. Appendix B has the complete list of wildlife documented on the Preserve; as recorded through staff field work and site inspections.

Additional general information about fauna on all C20/20 preserves can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

### *iv. Designated Species*

There are a variety of designated animal and plant species found at BTP. Although all native plant and animal species found on the Preserve have some protection due to the preservation of this property, certain species need additional attention. For stewardship purposes, all plants and animals listed by the USFWS, Florida Fish and Wildlife Conservation Commission (FWC), Florida Department of Agriculture and Consumer Services (FDACS), the Institute for Regional conservation (IRC) and FNAI will be given special consideration. Additional natural history on these species and stewardship measures to protect them can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

### *v. Biological Diversity*

General information on biological diversity and measures used to help promote biological diversity can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

## **C. Cultural Resources**

### *i. Archaeological Features*

General information on archeological features in Lee County can be found in the LSOM. Since portions of the Buckingham Army Air Field were known to have existed onsite, staff contracted Suncoast Archaeological Consultants, Inc. to conduct a survey and feature inventory for BTP in April 2011. Their final report titled "Reconnaissance Level Cultural Resource Survey and WWII Feature Inventory for the Buckingham Trail Preserve Property, Lee County, Florida" is included in Appendix C.

Several resource groups were identified and are presented on Figure 8. The report recommends vehicle traffic be restricted on the two Ground Moving Target

Ranges due to erosion already occurring from recent vehicular traffic. It also suggests efforts should be taken to mitigate erosion due to equestrian use which may occur in these areas once BTP trails are opened.

These areas will be protected by routing equestrian trails away from the features, keeping all heavy equipment out of the area and installing interior firelines so that prescribed burning has a minimal impact. The Lee County Ordinance prohibits removal of resources from the site and anyone caught attempting to remove cultural resources will be prosecuted. Future plans include interpretive signage for the cultural resources on site and their connections to the BAAF.

# Figure 8: Cultural Resources Map



**Legend**

- Buckingham Trails Preserve
- Local Roads
- Cultural Resources**
- Jeep Track 1
- Jeep Track 2
- Railroad Grade
- Shooting Range
- Skeet Ranges
- Tower Bases
- Trap Ranges

BUCKINGHAM RD

BILLINGS

**Buckingham Trails Preserve**

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 Map prepared on 04/27/2011 by lgreeno@leegov.com

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## *ii. Land Use History*

Although not all elements of the land use history discussed below occurred across BTP, modifications made on portions of a Preserve or adjacent properties can directly influence the Preserve. C2020 staff has created maps for each historical aerial available; however, only a few representative ones are placed within this Land Stewardship Plan (LSP).

According to interpretations based on aerial photography dating back to 1944 (Figure 9), components of the BAAF military's training facility and regional drainage project are underway. The north-south ditch that bisects the Preserve is finished, while the railroad bed (along the southern boundary) and oval tracks are under construction. Stumping efforts throughout the area appear to have been completed prior to any of the military's activity.

Although the airbase is now closed, the 1953 aerial (Figure 10) shows that buildings once existed to the east of the more clearly defined tracks. By 1966, adjacent to BTP, a canal had been dug along the northern line and facilities have been built on the state-owned property.

By 1970 (Figure 11), most of the property (~270 acres) north of the military tracks has been cleared for agriculture and a small (~8 acres) piece is also cleared east of the on-site drainage canal. The buildings, which were east of the tracks, appear to have been removed. The 1974 aerial reveals that the agricultural fields have been abandoned, additional canals are dug south of Buckingham Road and small ranchettes begin to show up west of the Preserve.

By 1980, vegetation is becoming more noticeable and growing across the Preserve, including areas within the fallow agricultural fields. Neighborhood roads south of the Preserve are being constructed. By 1986, the northwest area is re-cleared again for agriculture and jeep trails are beginning to appear in other areas of the property.

By 1990, it becomes evident again that the agricultural fields were abandoned. By 1993, more jeep trails show up along the east side of the Preserve, while on adjacent property, the eastern canal owned by East County Water Control District (ECWCD) is dug. By 1996, it appears that some fencing was installed as jeep trails begin to fade and a cow well has been excavated near the southeastern area of the pasture. Vegetation has noticeably grown along the interior canal and expanded throughout the property. Some homes have been built along the eastern boundary.

Sometime between 1998 and 2002, the power line was constructed along a portion of BTP's southern boundary. Additionally noted in the 2002 aerial (Figure 12), single-family homes are constructed on adjacent lands, including the piece

directly south of the Preserve and north of Buckingham Road. By 2006, vegetation is cleared again in the northwestern agricultural area and by 2007 (Figure 13), about 50 acres of natural area are cleared of vegetation in the vicinity of the military tracks.

The LSOM's Land Stewardship Plan Development and Supplemental Information section contains additional land use history information related to this Preserve. Refer back to Figure 2 to view a 2010 aerial for comparison.

Figure 9: 1944 Aerial



**Legend**

 Buckingham Trails Preserve

**Buckingham Trails Preserve**

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Map prepared on 11/18/2010 by sfurnari@leegov.com

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# Figure 10: 1953 Aerial



**Buckingham Trails Preserve**

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CONSERVATION  
2020  
LEE COUNTY

# Figure 11: 1970 Aerial



**Buckingham Trails Preserve**

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LEE COUNTY

# Figure 12: 2002 Aerial



**Buckingham Trails Preserve**

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CONSERVATION 2020  
LEE COUNTY

Figure 13: 2007 Aerial



## Buckingham Trails Preserve

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### *iii. Public Interest*

BTP was purchased for the preservation of environmentally sensitive lands, its high probability for listed species, and for the protection of the cultural and historic features located on the property.

Staff has received limited requests from the public for access into the Preserve. Those requests were granted in the form of joining staff on site inspections and even a group tour conducted by staff. Other inquiries about the property include details on the historical features of the property and which recreational activities are permitted on the property. Public interest in equestrian use on the Preserve has also been shown by local citizens.

Information concerning this and all C20/20 preserves can be found on the web site along with copies of their associated stewardship plans when available ([www.conservation2020.org](http://www.conservation2020.org)). Staff may mail newsletters when activities are scheduled to take place that the Preserve neighbors may be interested in.

## **V. FACTORS INFLUENCING MANAGEMENT**

### **A. Natural Trends and Disturbances**

Natural trends and disturbances can include hurricanes, flooding, wildfires, occasional freezes, and the pattern of wet and dry seasons. Implementation of the Management Action Plan will take all of these factors and their influence on projects at BTP into consideration. General information on natural trends and disturbances influencing native communities and stewardship at BTP can be found in the LSOM's Land Stewardship Plan Development and Supplemental Information section.

### **B. Internal Influences**

Several anthropogenic activities have impacted BTP. There are numerous ditches that were created for drainage and agricultural use that range from the deep Nine-Mile Run to numerous ditches covering the northern half of the preserve. There are also ditches that were dug to provide fill for the construction of a railroad berm and elliptical tracks for mobile vehicle shooting ranges. Figure 14 shows the location of the hundreds of ditches using LIDAR data which detects changes in elevation through vegetation. The various ditches stand out as straight lines, the darker the gray, the deeper the ditch. Some of the shallower ditches, associated with the agricultural activities will likely be regraded, plugged or filled during future pasture restoration activities. LCDNR has an interest in cleaning out the vegetation on Nine-Mile Run and possibly improving the

crossing on the northern boundary of the Preserve as part of a larger restoration project on the canals that are located on the perimeter of the Preserve. There is a large ditch, perpendicular to Nine-Mile Run that has three culverts that are in good shape at this time.

In addition to the ditches created by the BAAF aerial gunnery training school, there are numerous artifacts remaining from this time period, primarily constructed of concrete that have been discussed in the Archaeological Features section. These items, along with the railroad bed and Ground Moving Target Ranges (GMTR) are considered cultural resources and will need to be protected from restoration activities that use heavy equipment as well as damage from any recreational opportunities. They also provide a unique opportunity for education of the history of the area for visitors to the Preserve and will have interpretive signs installed nearby. Another remnant of this time period, and possibly later activities, is an unusually high amount of garbage including tires, clay pigeons, construction debris, deer stand and a large tar pot. C20/20 staff has already had several workdays to remove debris and will continue to remove future trash as it is encountered, ensuring that the items removed do not have a cultural significance associated with the BAAF.

This historical use and concerns of trash led to a Phase 2 Environmental Site Assessment (ESA) before the property was purchased through the C20/20 Program. The ESA focused on three concerns, lead contamination from the shot used in BAAF training, rumors of large equipment burial from the BAAF and pesticide contamination from the cattle operations. The consultants installed four monitoring wells to test the ground water for lead contamination, took over a hundred soil samples across the entire Preserve to test for soil contamination for both lead and pesticides, used ground penetrating radar to look for buried equipment and dug ten test pits with a backhoe to search for buried equipment. From all these tests, the only positive results were four areas that had soil lead levels that were above the minimum (400 mg/kg) required for Soil Cleanup by Chapter 62-780, FAC Contaminated Site Cleanup Criteria. However, a second sampling in the area of the four contaminated samples showed that the average lead content was well below the target level (63 mg/kg). It was determined by the consultants that the presence of lead in the soil “does not present an environmental concern” (Ardaman 2008).

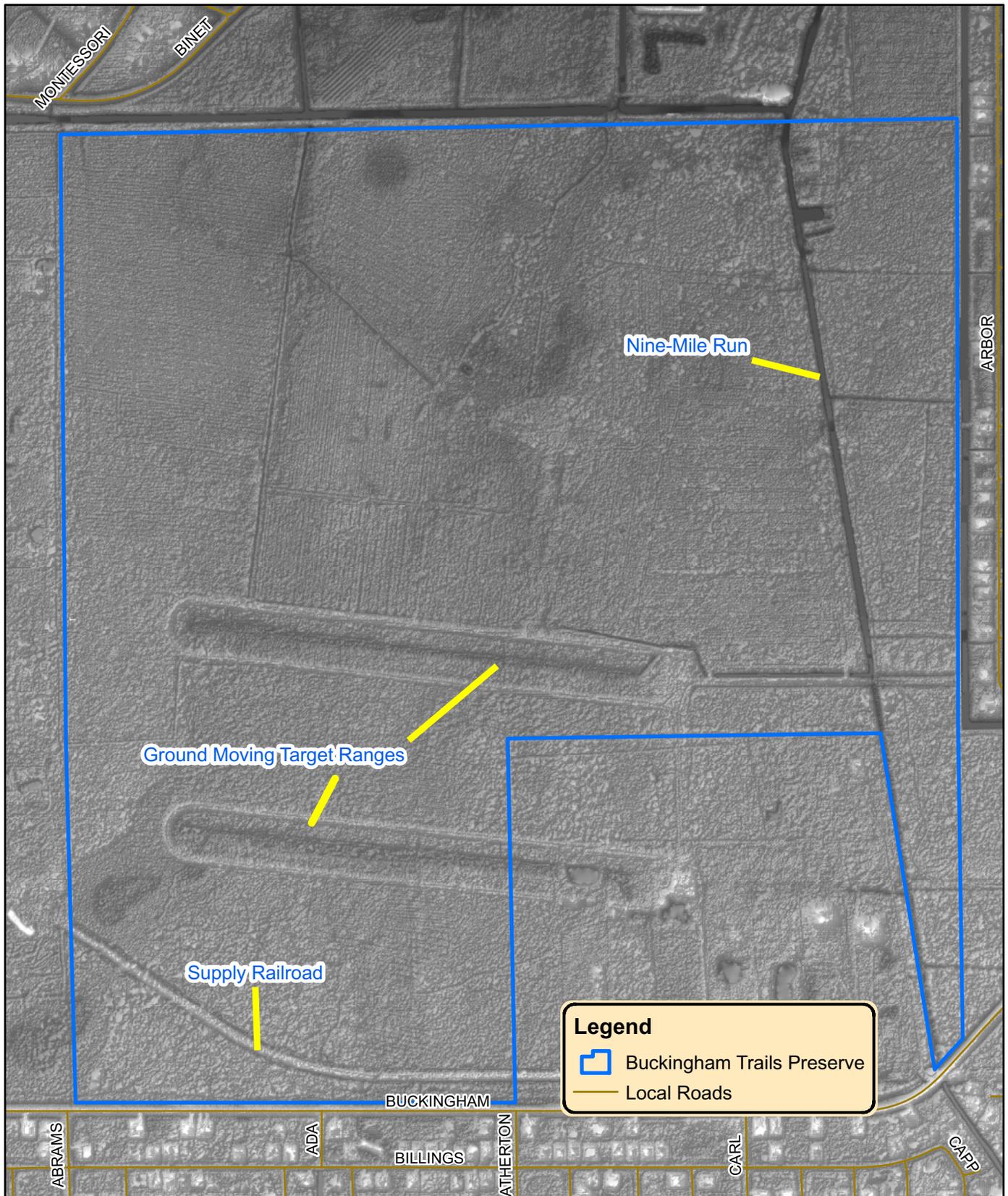
In addition to the monitoring wells installed by the consultants for the ESA, there are several other shallow wells, associated with the agricultural areas that were likely used for irrigation. These do not pose a threat for restoration or recreation, but may be removed during pasture restoration activities. There are also some interior fences, most in poor repair, which may have been used at different times to restrict cattle access into certain portions of the Preserve. Some of those fences will be removed as they are not needed and can be hazardous to visitors to the Preserve as well as staff during restoration activities and site inspections. At this time, the cattle lease will continue, however when the 2010/2011 lease

expires (September 11, 2011) the cattle will be limited to the cleared pasture areas on the northwest corner. The cow pens, interior fences, and various gates associated with this area will remain in those areas as long as C20/20 staff continues to allow cattle grazing on that portion of BTP. A final fence influence is located on the western boundary, towards the north end. That section of the fence is not located on the Preserve boundary and will eventually be shifted out to the proper location.

A final internal influence is the Florida Power & Light (FPL) powerline and guy wires located on the portions of the southern and western boundaries of the Preserve. These lines must be considered when conducting prescribed burns in the area. At this time, Lee County Division of County Lands (LCDCL) has been unable to find a recorded easement for these powerlines. It is hoped with the future improvements on Buckingham Road that they can be relocated outside of the Preserve boundary.

Figure 15 illustrates the various interior influences mentioned in the paragraphs above.

# Figure 14: Internal Influences (Ditches)



**Buckingham Trails Preserve**

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 Map prepared on 04/26/2011 by lwewerka@leegov.com

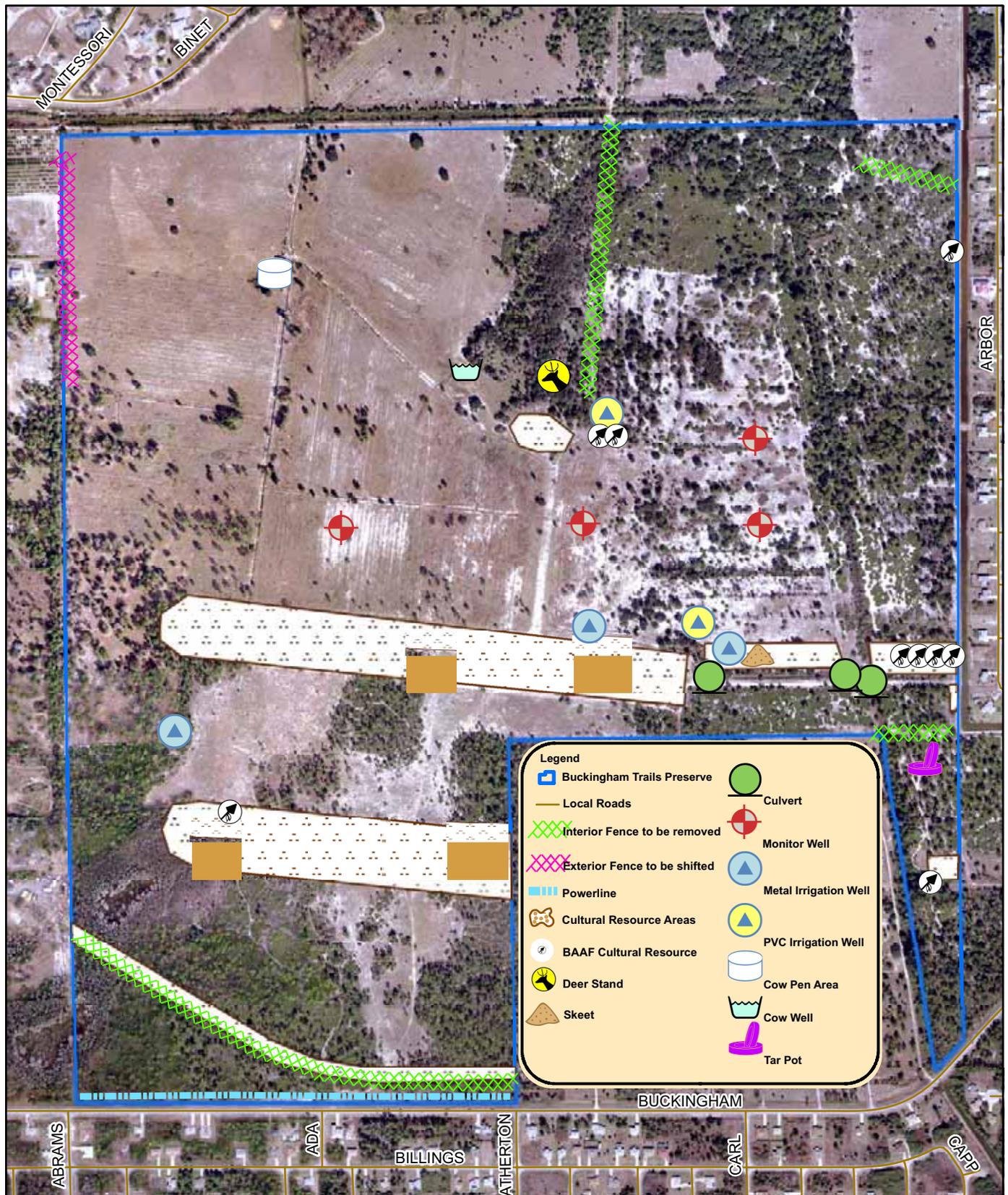
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# Figure 15: Other Internal Influences



**Buckingham Trails Preserve**

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### C. External Influences

There are a variety of external influences that affect BTP (Figure 16). The Preserve is located in the Buckingham Planning Community designated by the Lee County Board of County Commissioners (BOCC) and discussed in the Lee Plan (LCDCD 2010). It is considered the Buckingham Rural Community Preserve (BRCP) and its' mission states that "the residents will continue to work to maintain the rural nature of this area of the county. The residents have limited the commercial activity within the community to a node focused around the intersections of Buckingham Road and Cemetery Road and Buckingham Road and Orange River Road. It is their preference that the majority of the communities commercial needs be met outside of their community. They also have concerns with any transportation projects which increase the volume of traffic through their community" (LCDCD 2010).

Drainage canals also influence the Preserve. Along the perimeter, Sunland (north) & 46-16-3 (east) Canals are maintained by ECWCD, while portions of Nine-Mile Run (internal and external) has been allowed to grow back with native and exotic plants. A portion of "the canal systems collects water from the surrounding areas and discharges into Nine-Mile Run on the west and east sides of Buckingham Road. Nine-Mile Run is a smallish creek that crosses through a neighborhood where it outfalls into the Orange River." Management agencies are "interested in finding an alternate route for water from Nine-Mile Run to get to the Orange River. Diverting some of the water from the north canal through this preserve might be an option" (Wooten 2006). Although this comment was originally associated with Hickory Swamp Preserve (less than .5 mile north of BTP), it is still pertinent to this Preserve.

To the north, approximately 505 acres are owned by the State of Florida (Board of Trustees of the Internal Improvement Trust Fund) (Figure 16). The property was formerly the Gulf Coast Center, used by the Agency for Persons with Disabilities. In January 2010, a lease agreement was signed between the state and FGCU. FGCU could possibly use the property for research, solar energy, developing the golf management or cross country programs, or a student life retreat area.

Other lands directly adjacent to the Preserve are either developed with single family homes (5, 10 or more acres) or are larger, undeveloped parcels that may be developed in the future.

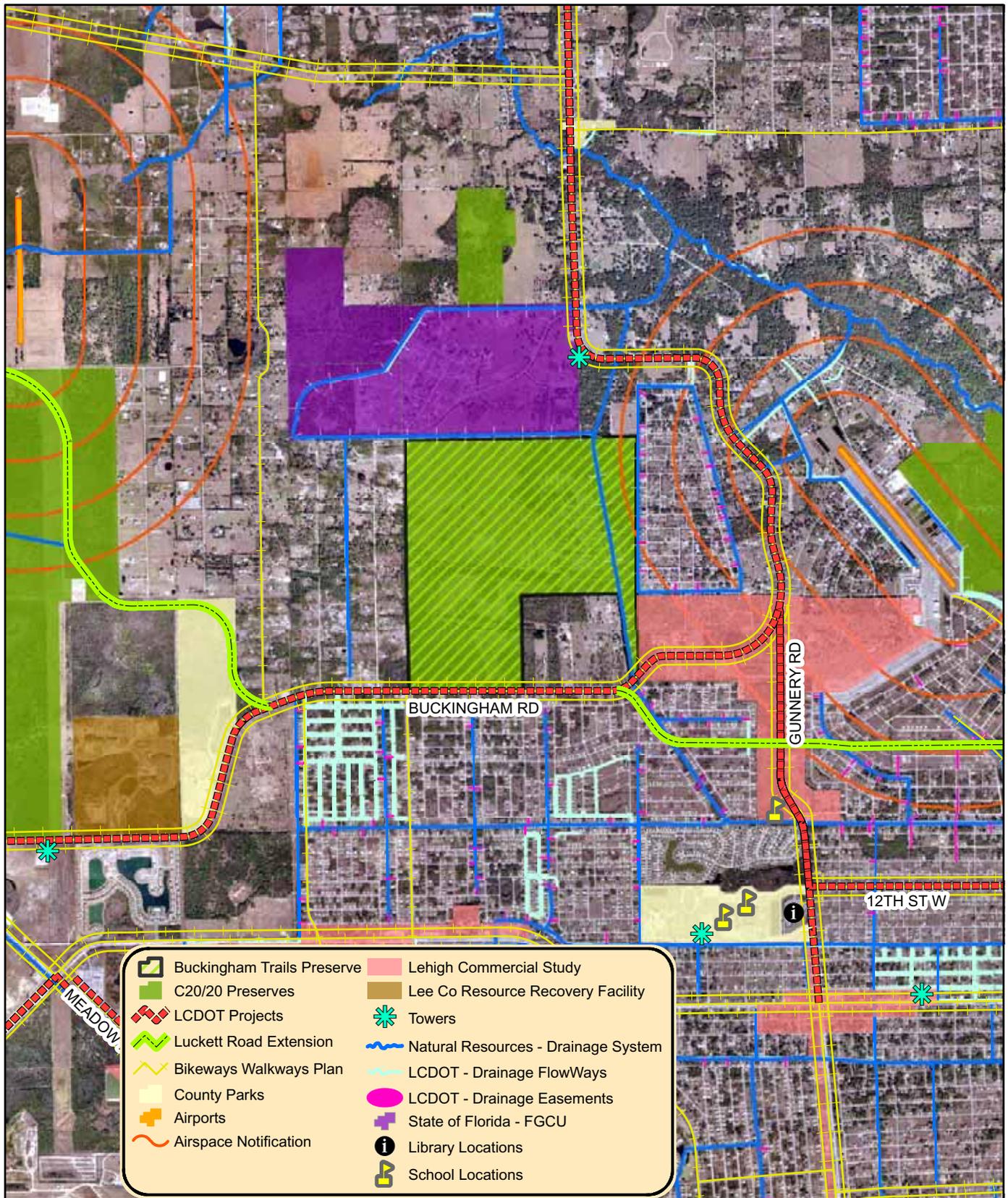
Additional external influences include two airports, Strayhorn & Lehigh Acres West Airpark (includes Lee County Mosquito Control District's runway) that are within two miles of the Preserve's boundary. Florida Power & Light utility power line runs along approximately 1300' of the southern boundary, about 50' into the Preserve. Also along the southern boundary and possibly through the Preserve,

the Bikeways & Walkways Plan is proposing a sidewalk. See Public Access and Resource-Based Recreation for possible plans to incorporate this impact onto the Preserve.

Another probable external influence is the potential for a major roadway to be constructed in the future, south of the Preserve. According to a Lee County Department of Transportation (LCDOT) Major Road Improvements map ([http://www3.leegov.com/PW/uploads/PWNews\\_0608.pdf](http://www3.leegov.com/PW/uploads/PWNews_0608.pdf)) a County Corridor Study is underway to examine expanding and connecting Lockett Road from Ft. Myers through Buckingham and into Lehigh Acres.

Increased growth will likely bring potential issues of illegal horticultural waste dumping, increased trash and demand for greater access to the site. With the encroachment of development and infrastructure improvements, conducting ecological prescribed burns will become more of a challenge. Even with these challenges, it is critical that the management of this Preserve prioritizes efforts to reduce fuel loads, establish and maintain firelines and conduct prescribed burns to minimize the risk of having a wildfire endanger the surrounding areas. At the same time, these management activities will help protect the Preserve's natural and cultural resources from being destroyed by a wildfire.

# Figure 16: External Influences



**Buckingham Trails Preserve**

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LEE COUNTY

## **D. Legal Obligations and Constraints**

### *i. Permitting*

Land stewardship activities at BTP may involve obtaining permits from regulatory agencies. Any proposed hydrologic improvements to the site may require obtaining permits from the Florida Department of Environmental Protection (FDEP), the U.S. Army Corps of Engineers (USACOE) and SFWMD. Hydrological and/or habitat restoration projects requiring heavy equipment or tree removal will require notification to the Lee County Department of Community Development (LCDCD). Burn authorization from the Florida Division of Forestry (FDOF) is required for all prescribed burns conducted on BTP. The proposed primitive trailhead may require limited development permits from the LCDCD and approval from LCDOT to allow traffic (including horse trailers) to pull off Buckingham Road in the proposed location.

### *ii. Other Legal Constraints*

There is an active cattle lease on BTP (Appendix D). As a consideration of the License for Cattle Grazing, this lease may be terminated with a 30-day written notice to the Licensee or canceled upon 48 hours verbal notice if cattle are not kept within the confines of the leased area. The lease is on a one year term and expires during the month of September. Cattle are a beneficial management tool to assist with brush management. Land Stewardship staff has found that removing cattle before restoration activities take place often leads to a rapid invasion of shrubs and weedy species leading to increased costs for future pasture restoration.

Staff contracted Suncoast Archaeological Consultants, Inc. to conduct a survey and feature inventory for BTP in April 2011. As a result of this report the cultural resources will be listed on the Florida Master Site File and if any protection requirements are requested, staff will abide by them to the best of our ability.

In researching the title documents for BTP, staff discovered a recorded reference to a road easement in the title documents but no other reference or documentation could be found. Powerlines are located along the south boundary inside of the Preserve but no recorded easement has been located (see Figure 15 Other Internal Influences Map). County Lands staff was asked to assist in researching these potential easements and they were unable to locate further documentation. A copy of the emailed response is included in Appendix E.

### *iii. Relationship to Other Plans*

The Lee Plan, Lee County's comprehensive plan, is written to depict Lee County as it will appear in the year 2020. Several themes have been identified as having

“great importance as Lee County approaches the planning horizon” (LCDCD 2010). These themes are:

- The growth patterns of the county will continue to be dictated by the Future Land Use map.
- The continued protection of the county’s natural resource base.
- The diversification of the county’s traditional economic base.
- The expansion of cultural, educational and recreational opportunities.
- A significant expansion in the county’s physical and social infrastructure.

The entire Lee Plan can be found on the Internet at:

<http://www3.leegov.com/dcd/Leeplan/Leeplan.pdf>. The sections of the Lee Plan which may pertain to Conservation 20/20 Preserves have been identified in the LSOM.

## **E. Management Constraints**

The principle stewardship constraints for BTP include limited funding, the brief dry season, easement constraints and impacts, and increasing urbanization pressures. Although C20/20 has a management fund, it is inadequate to fulfill the restoration activities for this and the other preserves. Efforts to obtain additional funding through grants and/or monies budgeted for mitigation of public infrastructure projects will be pursued to supplement the operations budget to meet the restoration goals in a timely manner.

Less than 10 percent or approximately 50 acres of BTP is comprised of wetland communities. The remaining plant communities are typically driest between December and May, so most stewardship activities will be conducted during these months. With the exception of wetland areas, if access is necessary for stewardship activities when water levels are high, vehicles such as an all-terrain vehicle (ATV) may be used; otherwise staff will travel on foot.

Urbanization pressures increasingly affect stewardship activities and boundary security. Fire management is a vital tool used to keep fuel loads down, to ensure biological diversity, and to maintain functional habitat value for wildlife. Smoke management will be one of the greatest factors in planning prescribed fires. Prescribed fire parameters become more restrictive with expanding residential and commercial development, increased traffic on nearby roadways and surrounding airports.

When restoration activities and prescribed burns, which could be dangerous to visitors, are in progress, signs will be installed at the entrance and on the trail near the management activity to warn the public that the area is temporarily closed. It is anticipated that most large-scale habitat restoration activities will be completed before the site’s public amenities are complete.

There is an active cattle lease which currently allows up to 60 head of cattle on the property. Coordination with the cattlemen will be needed while doing certain restoration projects, fence work and prescribed burns. Boundary security is a constant challenge and regular patrols are conducted by C20/20 staff and the cattlemen to maintain secure fence lines and gates.

Any utility maintenance or improvements projects conducted by other agencies (LCDOT, FPL or ECWCD) related to their various easements may affect future stewardship activities or potentially close public access while work is being conducted.

## **F. Public Access and Resource-Based Recreation**

Historically, a marginal amount of activity has occurred at BTP, although most has been from trespassers illegally dumping. In recent decades, the Preserve was utilized for cattle ranching and the associated fencing prevented most of the general public from entering. Since Lee County purchased the Preserve, evidence of both hunting and ORVs use has been documented. The Parks and Recreation Ordinance, 06-26 (<http://www.lee-county.com/gov/bocc/ordinances/Ordinances/06-26.pdf>) prohibits both of these activities.

In accordance with the LSOM, BTP is currently classified as a Category 4 Resource Protection & Restoration Preserve. As with all designated Category 4 preserves, “if there is a public interest, staff may provide guided field trips when there are no safety concerns and it is compatible with protecting the animals and plant communities found at the specific preserve.” Future planned work to improve access, provide a low impact trailhead area and create a marked, designated trail system will ultimately bring BTP to classification as a Category 2 Intermediate Use Preserve.

C20/20 staff will pursue other grant opportunities as they become available to enhance resource-based recreational activities proposed at BTP. In the mean time, C20/20 staff has planned opportunities for the public which can be implemented within budget and in a timely manner in order to provide public access.

Many things are taken into consideration in determining resource-based activities which will be offered at C20/20 preserves, including but not limited to, acreage of the site, viable access, presence of similar facilities nearby, plant communities, listed species utilization, access points, soil constraints, hydrologic components, and archaeological/cultural resources. Restoration/stewardship activities can also impact resource-based activity offerings in designated areas of a preserve.

The northwestern portion of BTP will continue to be managed with an active cattle grazing lease until the area is restored and interaction between the public and the cattle will be minimized. The possibility of a gate being accidentally left open by the public also poses the risk of cattle getting into areas of BTP they are not supposed to enter, or even onto Buckingham Road.

At BTP the main limiting factor, besides funding, is access onto the Preserve. Presently, staff can access BTP through a grassy, roadway right-of-way (pull off area) from Buckingham Road with no culvert or improved driveway. Staff also has maintenance access through an eastern ingress/egress along the storm water canal, which is off limits to the public. The Buckingham Road access point will need to be improved for safe public access, which will include a trailhead and turn around area for vehicles.

To facilitate staff unloading machinery for stewardship activities and public access, the trailhead will have minimal fill. Since the trailhead is directly off the road and is visible to passing traffic, an automatic gate is not necessary. If the trails are open, the main gate on Buckingham Road will stay open. Once at the trailhead, pedestrians and equestrian users will use an interior access gate. All gates (main & interior trailhead gate) will be closed when trails are flooded, or during maintenance and restoration activities such as prescribed burning and mechanical vegetation management operations. Although the gates will not be locked daily after hours, a sign will be installed to inform visitors that the trails are only open during daylight hours. No additional neighborhood access gates are planned for BTP. As with all C20/20 preserves, gates from private property onto the Preserve will not be allowed due to legal and liability issues.

Due to the sensitivity of plant communities, soil types, and limited emergency vehicle access in the event of an injury, trails will be closed by staff when water is present on trails. Trail placement was designed near some of the WWII historical/cultural resources and follow the driest firelines, which should minimize the length of time trails are closed. Equestrian trails and hiking trails will be marked, primitive, at grade trails on permanent firelines and existing interior trails. Since BTP contains wetlands and sensitive plant communities, additional trails will not be created. Interpretive panels will be installed near remnant cultural resources to educate visitors about the important role our region provided for WWII military training. There will be several loop trails; over 5 miles in length for hikers and equestrians and an additional 2 miles limited to hikers (see Figure 17, Proposed Master Site Plan Map). Equestrians must stay on designated equestrian trails. If equestrians or hikers deviate from designated trails, protection of natural and cultural resources will take precedence and staff will re-evaluate trails and recreational offerings. Blatant trail violations or impacts to resources could require equestrians and hikers to apply for a permit or this use could be permanently discontinued.

C20/20 staff contacted Corkscrew Regional Ecosystem Watershed Trust (CREW) Executive Director Brenda Brooks for information on their equestrian trails and permit system. CREW land has similar soil and plant community sensitivity as BTP, and is hydric, with trails going under water during heavy rain events as well as during the rainy season. Equestrian access is only offered at one location and is limited to 12 miles of trails for the 60,000 acres of CREW. Permits to ride must be submitted in advance and approved by staff. No more than six equestrians are permitted per day. Staff will not approve a permit when trails are under water. After C20/20 staff reviewed CREW's procedures, it was decided to not pursue permit only riding at BTP unless it becomes necessary. C20/20 staff will look at a permit system similar to CREW's, if: a). parking issues arise, b). there is a notable deterioration of trails, c). deviation from designated trails occurs, or d). to limit any other problematic issues that may arise.

LCPR staff has noted too many user conflict issues arising at existing facilities with multiple-use trails. Besides this, several other reasons exist to prevent offering bicycling trails at BTP. BTP is basically flat, has little shade along most firelines which will be used as trails, is predominantly sandy soil (sugar sand that is regularly disked) making it very difficult and unsafe conditions for most riders. Biking opportunities are already present in nearby parks including: Buckingham Community Park (1 mile west), Harn's Marsh (managed by East County Water Control District – 2 miles east), and Caloosahatchee Regional Park (8 miles northeast).

LCDOT has a proposed Bikeways Walkways Plan along Buckingham Road. If future construction of a bike path takes place on the north side of the road, C20/20 staff will explore the possibility of having the path bump into the southern boundary of the Preserve, adjacent to the road with a vegetative barrier between the path and the road and install a bike rack in the trailhead area. These proposed improvements will be covered under LCDOT's project budget or a recreational-type grant funding source and not from the C20/20 management fund.

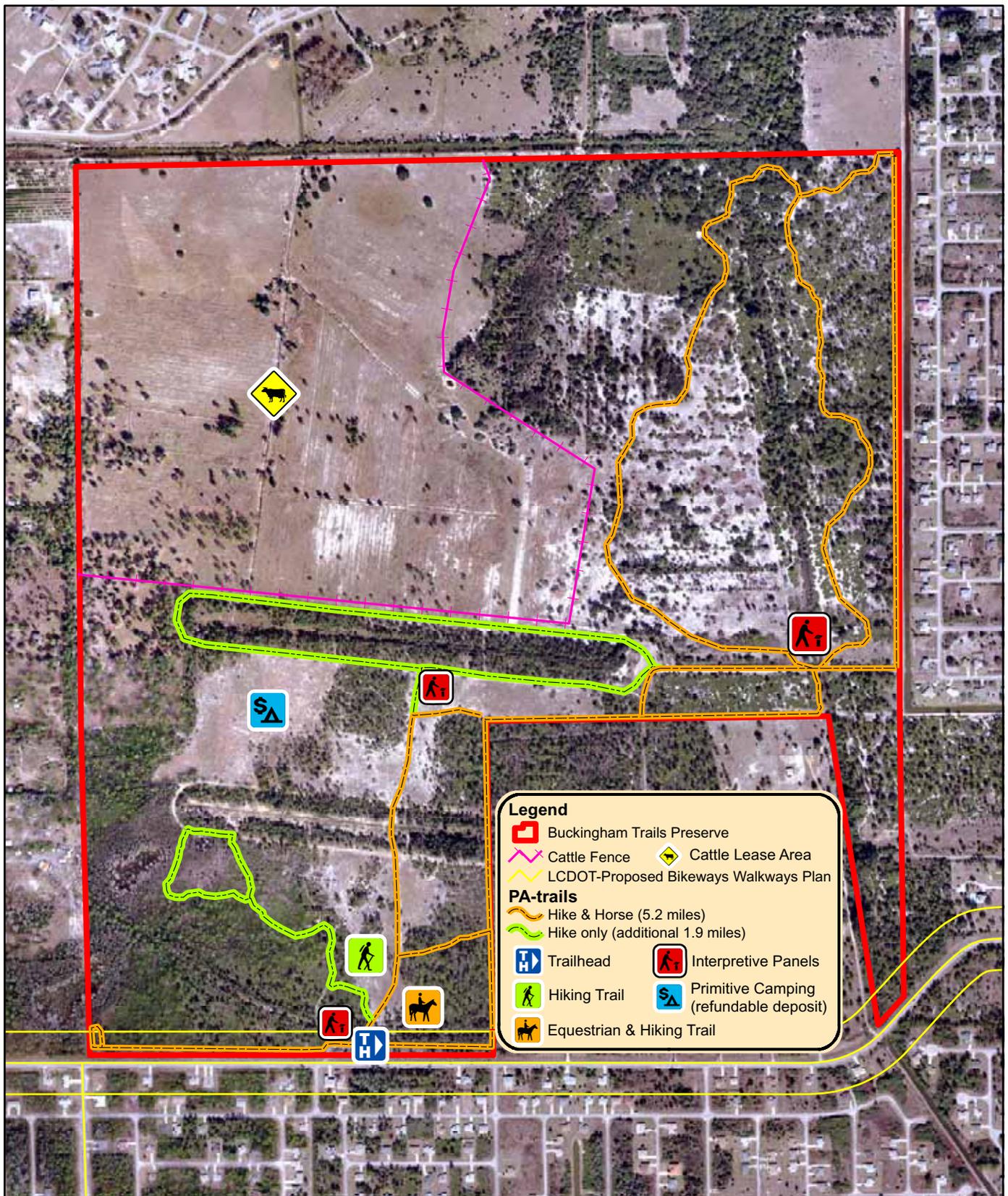
If approved by appropriate county departments (e.g. County Attorney, Risk Management), C20/20 staff has agreed to test an additional nature-based use: primitive backpack camping. Camping restrictions would include such items as (but are not limited to):

1. camp during the drier, winter months (November-March),
2. no more than 6 people/3 tents at the "one" designated campsite,
3. campfire only within the on-site fire ring,
4. campers must walk ½ mile to the campsite with their gear,
5. use Leave No Trace principles,
6. campers must sign release liability/waiver forms, and
7. complete a By Permit Only application with a \$75 deposit (refunded after staff checks that rules/policies were followed).

If this activity becomes too much effort for the site's coordinator or too many other issues occur, than this use will be discontinued.

Recreational amenities will be reexamined during the next revision of this plan (2021).

# Figure 17: Proposed Master Site Plan Map



**Legend**

- Buckingham Trails Preserve
- Cattle Fence
- Cattle Lease Area
- LCDOT-Proposed Bikeways Walkways Plan

**PA-trails**

- Hike & Horse (5.2 miles)
- Hike only (additional 1.9 miles)
- Trailhead
- Interpretive Panels
- Hiking Trail
- Primitive Camping (refundable deposit)
- Equestrian & Hiking Trail

**Buckingham Trails Preserve**

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 Map prepared on 04/01/2011 by sfurnari@leegov.com

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## G. Acquisition

BTP was acquired through the C20/20 Program for a cost of \$12,584,000 for 572.11 acres. This equates to approximately \$22,000 per acre. Nomination 371, which was later named BTP, was purchased on November 25<sup>th</sup>, 2008. The property had been owned since June of 2004 by Waterman-Equestrian Club, LLC who had an original asking price of \$34,320,000.

In 2000, a Development Order was started on the property in order to begin the process for turning the property into "Buckingham Pastoral Estates." This community was described in this case as "ranchettes, riding academy and boarding stables." This Development Order was vacated before any approvals were given.

The preliminary evaluation of Phase I of the ESA showed some elevated lead concentrations in the soils. After a partial Phase II Environmental Site Assessment, additional soil test sites, and several groundwater samples being collected and analyzed the levels were considered safe and the sale went forward.

The STRAP numbers for BTP are 17-44-26-00-00003.0000, 17-44-26-00-00001.0000, 20-44-26-00-00001.0000, and 20-44-26-00-00006.0000. Figure 18 shows each piece of the property associated with each STRAP number. The legal description is located in Appendix F.

Figure 19 illustrates the acquired and nominated parcels by the C20/20 Program located near the Preserve. One additional property was recently nominated in close proximity to BTP. Nomination 455, a 45-acre parcel which shares BTP's southern boundary, however, it was not selected by the Conservation Lands Acquisition and Stewardship Advisory Committee (CLASAC) and has been removed from consideration.

BTP has two Future Land Use (FLU) categories shown on Figure 20. Most of the site, and the surrounding Buckingham area, is listed as Rural Community Preserve. A small cypress feature in the southwestern corner is listed as Wetlands. The Lee Plan states that the Rural Community Preserve future land use designation requires that "Special design approaches are to be used to maintain the existing rural character, for example: conservation easements, flexible road design standards (including relocation of future arterials not serving the rural community), special fencing and sign standards, and retention of historic rural uses" (LCDCD 2010). A maximum density of one unit per acre is also set by this FLU. Staff will coordinate with Lee County Department of Community Development, Division of Planning (LCDP) to change the FLU to "Conservation Lands."

Currently, all of BTP is zoned as agriculture “AG-2” (Figure 21). Land Stewardship staff is in the process of coordinating with LCDP to change the zoning to “Environmentally Critical.”

# Figure 18: STRAP Map



**Legend**

-  BTP Boundary
-  Major Roads
-  Parcels with STRAP Numbers

**Buckingham Trails Preserve**

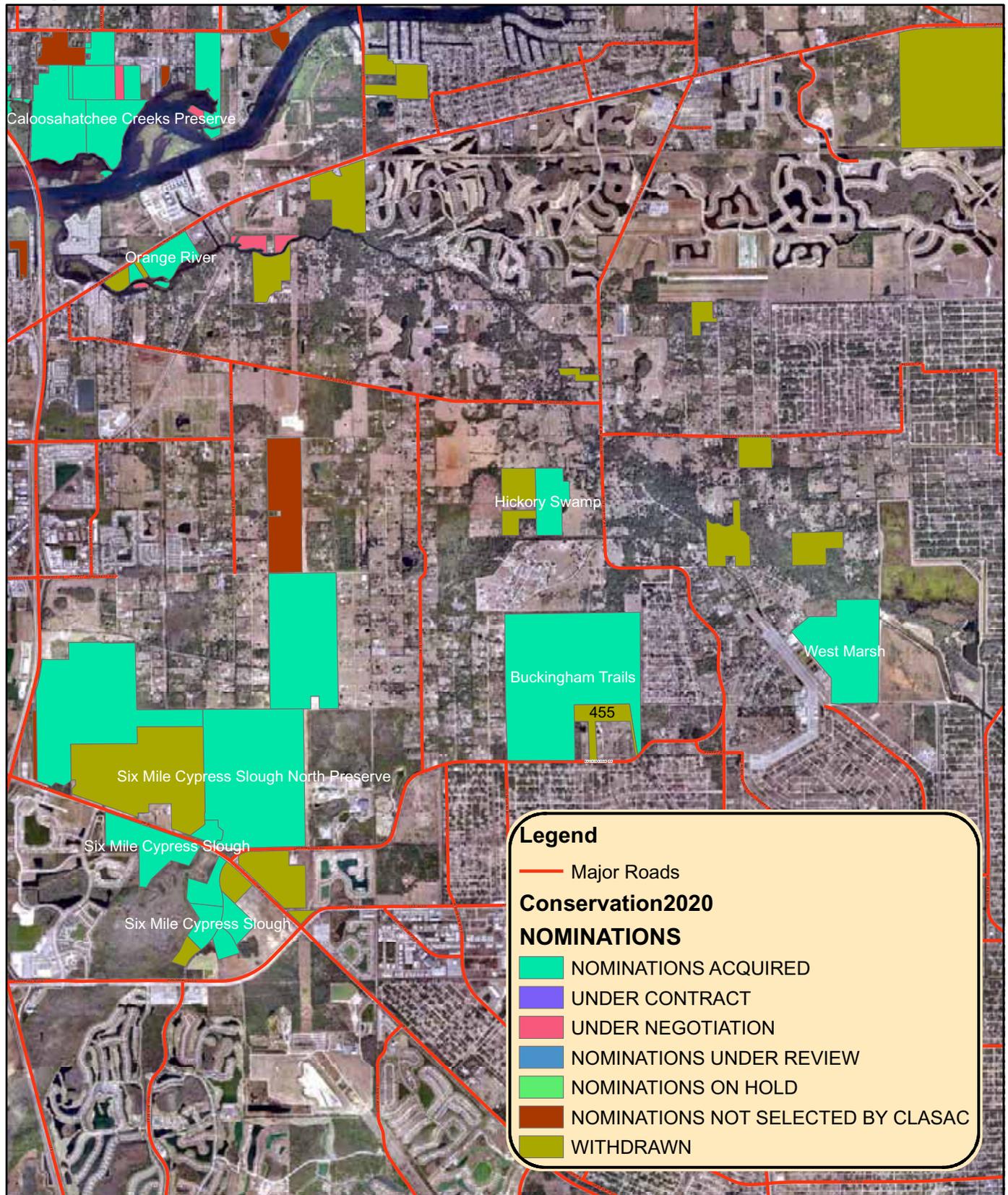
M:\GISLAYERS\Projects\Parks\_Rec\C2020\BuckinghamTrails - 371\BTP\_LSP\_2011\BTP\_STRAP\_map.mxd  
Map prepared on 4/7/2011 by jwaller@leegov.com

This is not a survey.  
Land Stewardship Staff has prepared this map  
for informational and planning purposes.

0      370      740      1,480 Feet




# Figure 19: Acquisitions and Nominations Map



**Buckingham Trails Preserve**

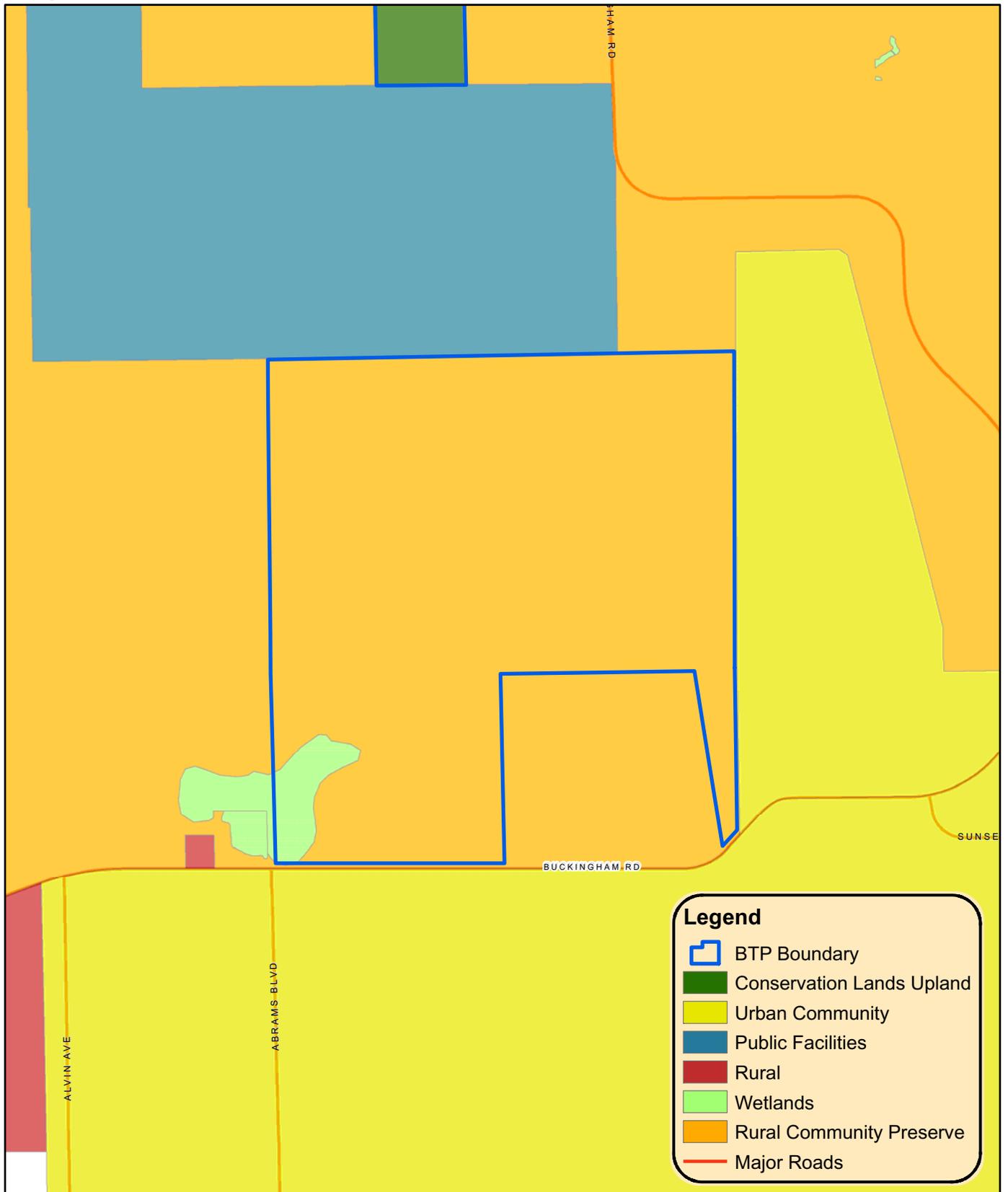
M:\GISLAYERS\Projects\Parks\_Rec\C2020\BuckinghamTrails - 371\BTP\_LSP\_2011\BTP\_Acquisition.mxd  
Map prepared on 12/15/2010 by jwaller@leegov.com

This is not a survey.  
Land Stewardship Staff has prepared this map  
for informational and planning purposes.

0 2,600 5,200 10,400 Feet

N  
CONSERVATION 2020  
LEE COUNTY

# Figure 20: Future Land Use Map



**Buckingham Trails Preserve**

M:\GISLAYERS\Projects\Parks\_Rec\2020\BuckinghamTrails - 371\BTP\_LSP\_2011\BTP\_FLUM.mxd  
 Map prepared on 02/08/2011 by jwaller@leegov.com

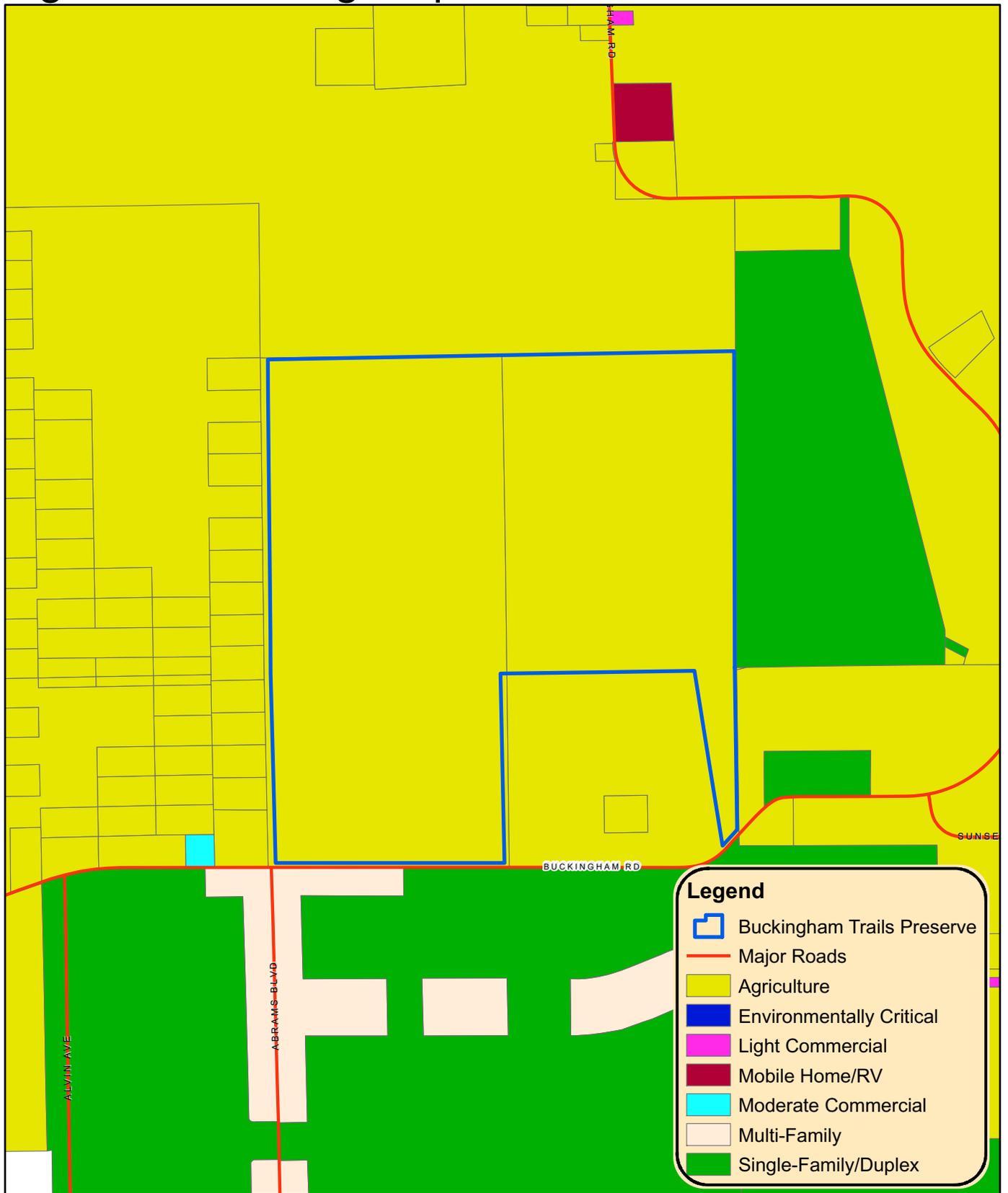
This is not a survey.  
 Land Stewardship Staff has prepared this map  
 for informational and planning purposes.

0 750 1,500 3,000 Feet

N



# Figure 21: Zoning Map



**Legend**

- Buckingham Trails Preserve
- Major Roads
- Agriculture
- Environmentally Critical
- Light Commercial
- Mobile Home/RV
- Moderate Commercial
- Multi-Family
- Single-Family/Duplex

**Buckingham Trails Preserve**

M:\GISLAYERS\Projects\Parks\_Rec\C2020\BuckinghamTrails - 371\BTP\_LSP\_2011\BTP\_Zoning.mxd  
 Map prepared on 04/01/2011 by jwaller@leegov.com

This is not a survey.  
 Land Stewardship Staff has prepared this map  
 for informational and planning purposes.

0 750 1,500 3,000 Feet

## VI. MANAGEMENT ACTION PLAN

### A. Management Unit Descriptions

BTP has been divided into four management units to better organize and achieve management goals. Figure 22 delineates the management units (MU) that were created based on existing trails, roads, ditches, berms, and plant communities. Acreage for all units has been rounded to the nearest whole acre.

- MU 1 (188 acres) is located on the southwestern corner of BTP, adjacent to the southern and western boundaries. It contains the entry trail leading into the preserve, a small wetland cypress feature, the two jeep tracks, and the historic railroad berm. Approximately 52 acres of this MU are improved pasture while approximately 65 acres are hydric flatwoods.

Most of the flatwoods in this unit along with the wetland feature and jeep tracks are all infested with melaleuca. Exotic control work for this as well as some Brazilian pepper and a couple of small patches of cogongrass will be needed. After this work is complete, prescribed fires will be used as a management tool. This unit will also contain the primitive trailhead for equestrian users and hikers.

- MU 2 (180 acres) is located northwestern corner of the Preserve. It is made up entirely of improved pasture with one cow well. The eastern section of this MU has young melaleuca springing up. Fencing will enclose this MU and will restrict the cattle on the property from going into the more natural areas. Long-term goals for this MU include pasture restoration.
- MU 3 (190 acres) is located on the northeastern corner of BTP. Approximately 19 acres of this MU are made up of a wetland feature while the rest is comprised of a scrubby flatwoods and a hammock system with Nine-Mile Run, a drainage canal, running through the center.

The isolated wetland feature in this unit is highly disturbed in the form of drainage and exotic plant infestation. Melaleuca, cogongrass, Brazilian pepper, and bullhorn acacia are the primary species located in this wetland. Drainage ditches redirect water to the north and into a drainage canal.

The scrubby flatwoods will require brush reduction and prescribed fires which will be used as a management tool. The Nine-Mile Run drainage ditch was installed by the military in the 1940s and is now in need of maintenance. Some invasive exotic vegetation has been noted on this

ditch including Australian pine (*Casuarina equisetifolia*) and scattered Old World climbing fern (*Lygodium microphyllum*).

- MU 4 (14 acres) is made up of the finger of the property in the southeastern quadrant of the Preserve. It is comprised primarily of mesic flatwoods and the southern portion of Nine-Mile Run, a drainage ditch. The flatwoods will require some brush reduction for prescribed fire which will be used as a management tool. Sections of Nine-Mile Run have invasive exotics including Australian pine and Old-World climbing fern. Additional fencing may be needed in the future if ATV traffic becomes an issue.

# Figure 22: Management Units Map



**Buckingham Trails Preserve**

M:\GISLAYERS\Projects\Parks\_Rec\C2020\BuckinghamTrails - 371\BTP\_LSP\_2011\BTP\_MU.mxd  
Map prepared on 02/17/2011 by jwaller@leegov.com

This is not a survey.  
Land Stewardship Staff has prepared this map  
for informational and planning purposes.

0      375      750      1,500 Feet




## **B. Goals and Strategies**

The primary management objectives for BTP are natural community and hydrologic improvements, cultural resource protection, removal and continued treatment of invasive exotic plants and prescribed burning. Although funding is currently not available to conduct all of these stewardship activities, tasks at BTP will be prioritized in order of importance and ease of accomplishment and include the following tasks. Grants and/or monies budgeted to mitigate public infrastructure projects will be used to supplement the operations budget to meet our goals in a timely manner.

### **Natural Resource Management**

- ✓ Exotic plant control/maintenance
- ✓ Prescribed fire management
- ✓ Mechanical brush reduction
- ✓ Monitor and protect listed species
- ✓ Exotic and feral animal removal
- ✓ Hydrologic restoration
- ✓ Restoration of pastures and abandoned fields

### **Outside Consultants**

- ✓ Permitting for public access
- ✓ Environmental/engineering

### **Overall Protection**

- ✓ Safeguard cultural and natural resources
- ✓ Install/maintain fire breaks
- ✓ Boundary fence installation, interior fence installation and removal
- ✓ Boundary sign maintenance
- ✓ Assess cattle lease
- ✓ Change Zoning and Future Land Use categories
- ✓ Debris removal and prevent dumping

### **Public Use**

- ✓ Infrastructure improvements for public access
- ✓ Interpretive panels
- ✓ Development of “trial run” primitive backpack camping

### **Volunteers**

- ✓ Assist volunteer group(s)

The following is a description of how each of these goals will be carried out, the success criteria used to measure accomplishment of each goal and a projected timetable outlining which units each activity will take place in and when.

## **Natural Resource Management**

### **Exotic plant control and maintenance**

The most current Florida Exotic Pest Plant Council's (FLEPPC) List of Invasive Species will be consulted in determining the invasive exotic plants to be controlled in each management unit. The goal is to remove/control these exotic species, followed with treatments of resprouts and new seedlings as needed. This goal will bring the entire Preserve to a maintenance level, defined as less than 5% invasive exotic plant coverage.

Prior to each invasive exotic plant control project at BTP performed by contractors, a Prescription Form (located in the LSOM) will be filled out by the contractor(s), reviewed & approved by the C20/20 staff. Final project information will be entered into the GIS database.

- Uplands with light to moderate infestations:

In areas where invasive plants are sporadic and below 50% of the vegetation cover, hand removal will be utilized for control, while heavy equipment may be used in more densely infested areas. Specific methodology will depend on stem size, plant type and season, but generally the stem will be cut near the ground and the stump will be sprayed with appropriate herbicide, or a foliar application will be applied to the entire plant. Hand pulling will be utilized when possible with appropriate species in order to minimize herbicide use. Basal bark treatment may be used at some locations. Areas that receive heavy equipment work will receive follow-up treatment that will include an application of an appropriate herbicide mixture to the foliage of any resprouts or seedlings. Cut stems may be piled to facilitate future potential burning, chipping or removal from site. No replanting will be needed due to significant presence of native vegetation and the native seed bank.

- Uplands with moderate to heavy infestations:

In areas where the exotics occur as monotypic stands or comprise more than 50% of the vegetation cover, the use of heavy equipment will be utilized in appropriate communities and during suitable season. Heavy equipment will be chosen so that soil disturbance and compaction are minimized. In areas along ditches where the hydric soils may not be conducive for heavy equipment, hand crews will be used to cut down and remove these plants. Tree debris will then either be pile burned or mulched. Mulching equipment may be used. Follow-up treatment of these areas will include an application of an appropriate herbicide mixture

to the foliage of any resprouts or seedlings. C20/20 staff will evaluate replanting areas on a case-by-case basis.

- Wetlands with moderate to heavy infestations:

At suitable locations such as seasonal ponds, lightweight equipment may be utilized during dry, winter periods or hand crews will need to hike in on foot and either foliar, girdle, basal bark, or cut-stump the exotics with the appropriate herbicide. Follow-up treatments will need to be conducted on at least an annual basis and may eventually decrease to every two years. Where feasible or necessary, biomass may be removed from sites to be piled and burned and/or mulched.

- Wetlands with light to moderate infestations:

Hand crews will need to hike in and foliar, girdle, basal bark, or cut-stump treat the exotics with the appropriate herbicide. Follow-up treatments will need to be done on an annual basis and may eventually decrease to every two years. Where feasible or necessary, biomass may be removed from wetland sites to be piled and burned and/or mulched.

Since 2010, staff has completed nearly two acres of exotic plant removal work on cogongrass and Old World climbing fern. During the spring of 2011, a LCNR project removed exotic plants along the Preserve's portion of Nine-Mile Run.

### **Prescribed fire management**

A prescribed fire program will be implemented that closely mimics the natural fire regimes for the different plant communities to increase plant diversity and ensure tree canopies remain open. Once restoration projects are completed in management units that contain fire dependent communities, prescribed burns will be performed after the creation of appropriate fire lines/breaks. The timing of prescribed burning will be influenced by seasonal rain, staff and equipment availability, listed species requirements and wind patterns. The C20/20 Burn Team Coordinator has coordinated with the FDOF and finalized the C20/20-wide Fire Management Plan that applies to all Preserves.

Prescribed fire may be utilized for exotic plant control of seedling/sapling in areas previously treated.

C20/20 staff will inform adjacent neighbors of imminent burn plans.

### **Mechanical brush reduction**

Before a prescribed fire is conducted in pine flatwoods or other fire dependent communities of the Preserve, fuel loads may need to be reduced. Slash pines,

saw palmettos and/or invading oaks may need to be thinned mechanically in overgrown areas to achieve desired results and to prevent crown fires or intense fires from occurring.

### **Monitor and protect listed species**

There are several listed species that have been documented on the Preserve including gopher tortoise, wood stork, Florida sandhill crane, and both giant and cardinal airplants. These species will benefit from exotic plant control, prescribed burns, pasture and hydrological restoration activities. During stewardship activities, efforts will be made to minimize negative impacts to listed species.

BTP is part of a countywide tri-annual site inspection program conducted for all C20/20 preserves. The site inspection spreadsheet is available on the LCPR's computer server ("S" drive). These inspections allow staff to monitor for impacts and/or changes to each preserve and includes lists of all animal sightings and new plant species that are found. If, during these inspections, staff finds FNAI listed species, they will be reported using the appropriate forms.

### **Exotic and feral animal removal**

Six exotic animal species have been recorded on BTP. Although melaleuca psyllids and weevils are non-native animals, they are beneficial biological control agents targeting the invasive melaleuca tree. C20/20 staff is primarily concerned with the feral hog. Currently, the only acceptable method of hog removal on C20/20 preserves is trapping, but more aggressive removal methods may be needed. Staff are exploring quota/management hunts in conjunction with FWC and hiring nuisance wildlife personal to shoot hogs at night. Removing all hogs is an unreasonable goal; therefore a control program will need to be continuous on a long-term basis. If practical, a methodology will be established and implemented against other unwanted exotic animal species.

During the field work for this LSP, a domesticated cat was seen on BTP. This Preserve, like other C20/20 preserves, does not contain nor will it support feral cat colonies. FWC's Feral and Free Ranging Cats policy is *"To protect native wildlife from predation, disease, and other impacts presented by feral and free-ranging cats"* (FWC 2003). Any feral cats will be trapped and taken to Lee County Animal Services.

### **Hydrologic restoration**

An engineering consultant(s) will need to be hired to provide recommendations for restoration methods on agricultural ditches and the storm water drainage ditch(s) (related to Nine-Mile Run) that affect sheet flow or unnaturally drain the Preserve. Staff recommend that the hydrologic restoration plan be developed to incorporate other "dried down" wetland areas of the Preserve and remove the

linear canal structure. Because the site has been so heavily impacted by the drainage systems installed both onsite and surrounding the property, future projects may attempt to hold more water onsite in an effort to rehydrate the property.

Any restoration proposal(s) will be presented to SFWMD and USACOE to determine the feasibility of the project and decide which permits will be required. If/when the cow well becomes unnecessary and serves no useful wildlife benefit it will be filled in with its' original adjacent spoil.

### **Restoration of pastures and abandoned fields**

To add community diversity to the Preserve, over 210 acres of abandoned fields and improved pastures will be restored to native plant communities. Restoration of these areas will require several months of data collection to make informed decisions on which plant community would be most successful. Deep soil samples will be taken and analyzed in several portions of the pasture. A rain gauge and additional monitoring wells will be set up in strategic areas to monitor water levels over an entire rainy season and a portion of the dry season. Once the data are analyzed, appropriate plans for native plantings will be developed that could include using seeds and/or plants. To prepare the pasture for plantings it will be necessary to eliminate the pasture grasses. This may be accomplished by repeated disking followed by treating the exotic pasture grasses with an appropriate herbicide. Once the exotic plants are under control, an established planting plan will be executed.

### **Outside Consultants**

#### **Permitting for public access**

Staff may apply for a limited development order (for a driveway and culvert permit) with LCDCD. A consultant may be hired to implement and oversee construction of an appropriate entrance if the scope-of-work is outside LCPR's capabilities.

When Buckingham Road is expanded, LCDOT will be responsible for all aspects and expenses of incorporating the bike/walkway path along the southern boundary of the Preserve, if that feature is still desired by planning staff. Depending on the expense for the bike/walkway feature, Lee County may pursue appropriate grant funding source(s) intended for multi-use trails from regional, state or federal agencies.

#### **Environmental/engineering**

Environmental and/or engineering contractors may need to be hired to perform all or most aspects for the pasture and hydrological restoration projects. The consultant will also be responsible for coordinating and obtaining appropriate environmental permits before restoration efforts begin and for conducting required monitoring and reporting efforts.

### **Overall Protection**

#### **Safeguard cultural and natural resources**

To protect cultural and natural resources, designated hiking and equestrian trails will be marked and monitored by staff to ensure that users are adhering to the trail system. If erosion or damage to resources is being caused by users, additional measures will be implemented to protect these resources, which may include development of a “ride by permit only” system or closing trails, temporarily or permanently.

Staff will apply for listing the cultural resources with the National Register of Historic Places. This listing would potentially allow for additional grant funding opportunities for the protection and interpretation of this site.

#### **Install/maintain fire breaks**

Perimeter and internal fire breaks have been and will be created, where needed, to reduce the potential damage to areas outside the Preserve from a wildfire or prescribed fire. Once C20/20 staff has coordinated the installation of necessary fire breaks, staff will maintain these breaks on an annual basis by either mowing or disking.

#### **Boundary fence installation, interior fence installation and removal**

The perimeter of the Preserve is fenced to prevent activities such as dumping, illegal use of motorized vehicles and to maintain cattle within the leased area. Any interior fence used for the cattle license will be removed once the lease is terminated and/or may temporarily be left in place for the pasture restoration project.

#### **Boundary sign maintenance**

Boundary signs have been installed along the entire perimeter boundary to further protect the Preserve. Missing or damaged signs will be replaced. C20/20 Rangers or staff will check for boundary signs during their patrols and replace them immediately. Boundary signs have been placed every 500 feet.

### **Assess cattle lease**

The Preserve has a long history of cattle grazing. However, C20/20 staff feels that the cattle needed to be contained within the northwest pasture area for various reasons (i.e. erosion along the banks of the linear canal, impacts to wetland areas and cultural features, and future public access). An existing interior fence was replaced to contain the cattle in the pasture area. Staff continually evaluates site conditions to determine if the cattle are negatively impacting the Preserve. If impacts are noted, staff will meet with the Licensee to determine methods to lessen the impacts of cattle and determine if the lease should be continued, altered or terminated.

### **Change Zoning and Future Land Use categories**

Staff will coordinate with LCDP staff to change the zoning and future land use categories for BTP. All zoning designations will be changed to “Environmentally Critical” from “Agriculture” and future land use designations will be modified to either “Conservation Lands – Uplands” or Conservation Lands - Wetlands.”

### **Debris removal and prevent dumping**

BTP has debris scattered throughout portions of the Preserve. Staff anticipates that during restoration activities, the debris will be removed. Several workdays may be required to remove the trash that has accumulated through the years (prior to acquisition) and will include the removal of unwanted interior fencing and cattle pen not required for grazing operations. During tri-annual site inspections, any additional smaller objects that are encountered will be removed. C20/20 Rangers will also assist with removing small items when they are on patrol at the Preserve.

## **Public Use**

### **Infrastructure improvements for public access**

Amenities will include a primitive trailhead, marked hiking and equestrian trails and bike rack. An informational kiosk will be located in the vicinity of the entrance area.

### **Interpretive panels**

C20/20 staff hired an archaeological firm to provide the Cultural Resource Survey & WWII Feature Inventory. Interpretive educational panels regarding these unique cultural and historical features will be created and installed for visitors to learn about our region’s connection with military training activities.

## **Development of “trial run” primitive backpack camping**

C20/20 staff is exploring a “trial run” nature-based activity: primitive backpack camping. Since this would be a new activity for Lee County, staff will need to develop appropriate rules/policies/procedures. The “rules” for this activity would need to be reviewed by Lee County’s Risk Management and/or county attorneys, which will likely require participants to sign “release/liability” forms.

Once approved, staff will designate an area for camping and build a fire ring for small campfires, if even permitted. “Leave No Trace” principles will be followed.

### **Volunteers**

#### **Assist volunteer group(s)**

The LSOM identifies the Land Stewardship Volunteer Program’s mission statement as:

*To aid in the management and preservation of Lee County resource-based public parks and preserves and to provide volunteers with rewarding experiences in nature.*

Since 2010, the Lee County Bird Patrol volunteer group has performed bird monitoring surveys at BTP on a monthly basis.

If there is interest from the community to form a volunteer group, staff will work with them to assist with the many diverse stewardship activities that will be associated with this Preserve, such as trail maintenance, wildlife monitoring and other land stewardship projects.

The following “Prioritized Projected Timetable for Implementation” is based on obtaining necessary funding for numerous land stewardship projects. Implementation of these goals may be delayed due to changes in staff, extreme weather conditions or a change in priorities on properties managed by Lee County.

VII. PROJECTED TIMETABLE FOR IMPLEMENTATION

Management Activity	Jan-12	April-12	July-12	Oct-12	Jan-13	April-13	July-13	Oct-13	Jan-14	April-14	July-14	Oct-14	Jan-15	April-15	July-15	Oct-15	Jan-16	April-16	July-16	2017 or later	
<b>Natural Resource Management</b>																					
<b>Mechanical tree and brush reduction</b>					X																
Rollerchopping/forestry mowing of understory																					
<b>Prescribed fire management</b>																					
Install interior firelines				X																	
Conduct prescribed burning				On-going																	→
<b>Exotic plant control/maintenance</b>																					
Logging of melaleuca				X									2,4								
Initial treatment									1,3												
Follow-up treatment													1,3				2,4				X
<b>Habitat restoration</b>																					
Hydrologic and spoil restoration																					X
Pasture restoration																					X
<b>Maintenance (On-going/Annual)</b>																					
Exotic animal removal																					X
Fire break now/disk				X				X				X									X
Evaluate cattle leases			X				X				X									X	
<b>Outside Consultants</b>																					
Environmental/Engineering								X													
Permitting trailhead								X													
<b>Public Recreation</b>																					
Installation of trailhead and gates									X												
Installation of hiking/equestrian trails									X												
Interpretive signage design and installation								X													
Overnight camping logistics planning								X													
<b>Overall Protection</b>																					
Trash removal																					
Apply for National Register of Historic Places																					
Removal of selected interior fencing																					X
Change Zoning or Land Use categories																					Zoning
<b>Volunteers</b>																					
Assist volunteer group																					X

## **VIII. FINANCIAL CONSIDERATIONS**

There is a management fund established in perpetuity for all C20/20 preserves. Monies from this fund primarily serve to meet the operational needs of the Management section of the C20/20 Program, but a certain amount of this fund will be set aside for planned restoration projects.

Other possible funding for exotic plant removal and restoration projects may be requested through grants from agencies such as SFWMD, FDEP, and USFWS or include additional mitigation opportunities. Expenditures to date and projected costs and funding sources are listed in Appendix G.

## IX. LITERATURE CITED

Ardaman & Associates, Inc. 2008. Phase 1 and limited phase two environmental site assessment report. Fort Myers (FL): Ardaman & Associates, Inc. Ardaman Project No 08-4749

[FNAI] Florida Natural Areas Inventory. Tallahassee (FL): Guide to the Natural Communities of Florida 2010 Update [cited 2010 Mar 2]. Available from: [http://www.fnai.org/natcomguide\\_update.cfm](http://www.fnai.org/natcomguide_update.cfm) .

[FWC] Florida Fish and Wildlife Conservation Commission. [Internet]. Tallahassee (FL): Review of Free Ranging Cats Policy; May 30, 2003. [cited 2006 Sept 9]. Available from: <http://myfwc.com/cats/review.htm>

[LCDCD] Lee County Department of Community Development. The Lee Plan 2009 Codification As Amended through May 2011 [Internet]. [cited 2011 Mar 2]. Available from: <http://www3.leegov.com/dcd/ComprehensivePlanning/planningmain.htm#The%20Lee%20Plan>

Wooten, WS. (Lee Co. Division of Natural Resources, Ft. Myers, FL. [wootenws@leegov.com](mailto:wootenws@leegov.com)). RE: Lee County Ditches & Drainage Systems [electronic mail on the Internet]. Message to: Sherryl Furnari (Lee Co. Conservation 20/20, Ft. Myers, FL. [sfurnari@leegov.com](mailto:sfurnari@leegov.com)). 2006 Jun 29, 2:12 pm [cited 2006 Jun 30]. [1 screen].

Land Stewardship Staff of Lee County Parks and Recreation. (2003). Land Stewardship Operations Manual.

## **X. APPENDICES**

Appendix A: Plant Species List

Appendix B: Wildlife Species List

Appendix C: Cultural Resource Survey

Appendix D: Cattle License

Appendix E: LCDCL Easement Research

Appendix F: Legal Description

Appendix G: Expended and Projected Costs and Funding Sources

Appendix H: BTP Soils Chart

Appendix I: Driveway Entrance

## **Appendix A: Plant Species List**

## Appendix A: Plant Species List for Buckingham Trails Preserve

Scientific Name	Common Name	Status	EPPC	FDA	IRC	FNAI
<b>Family: Cladoniaceae (deer lichens)</b>						
<i>Cladina sp.</i>	deer lichen	native				
<b>Family: Blechnaceae (mid-sorus fern)</b>						
<i>Blechnum serrulatum</i>	swamp fern	native				
<i>Woodwardia virginica</i>	Virginia chain fern				R	
<b>Family: Dennstaedtiaceae (cuplet fern)</b>						
<i>Pteridium aquilinum</i>	braken fern	native				
<b>Family: Nephrolepidaceae (sword fern)</b>						
<i>Nephrolepis exaltata</i>	wild Boston fern	native				
<b>Family: Osmundaceae (royal fern)</b>						
<i>Osmunda regalis</i>	royal fern	native		CE	R	
<b>Family: Polypodiaceae (polypody)</b>						
<i>Phlebodium aureum</i>	golden polypody	native				
<i>Pleopeltis polypodioides</i>	resurrection fern	native				
<b>Family: Pteridaceae (brake fern)</b>						
<i>Pteris vittata</i>	Chinese ladder brake	exotic	II			
<b>Family: Schizaeaceae (curly-grass)</b>						
<i>Lygodium microphyllum</i>	Old-World climbing fern		I			
<b>Family: Thelypteridaceae (marsh fern)</b>						
<i>Thelypteris kunthii</i>	widespread maiden fern	native				
<b>Family: Vittariaceae (shoestring)</b>						
<i>Vittaria lineata</i>	shoestring fern	native				
<b>Family: Cupressaceae (cedar)</b>						
<i>Juniperus virginiana</i>	red cedar	native				
<i>Taxodium distichum</i>	bald cypress	native				
<b>Family: Pinaceae (pine)</b>						
<i>Pinus elliotii</i> var. <i>densa</i>	south Florida slash pine	native				
<b>Family: Agavaceae (agave)</b>						
<i>Yucca aloifolia</i>	Spanish bayonet	native				
<b>Family: Arecaceae (palm)</b>						
<i>Phoenix reclinata</i>	Senegal date palm	exotic	II			
<i>Sabal palmetto</i>	cabbage palm	native				
<i>Serenoa repens</i>	saw palmetto	native				
<b>Family: Bromeliaceae (pineapple)</b>						
<i>Tillandsia balbisiana</i>	northern needleleaf	native		T		
<i>Tillandsia fasciculata</i> var. <i>densispica</i>	cardinal airplant	native		E		
<i>Tillandsia recurvata</i>	ball-moss	native				
<i>Tillandsia setacea</i>	southern needleleaf	native				
<i>Tillandsia usneoides</i>	Spanish-moss	native				
<i>Tillandsia utriculata</i>	giant airplant	native		E		
<b>Family: Commelinaceae (spiderwort)</b>						
<i>Commelina erecta</i>	whitemouth dayflower	native			I	
<b>Family: Cyperaceae (sedge)</b>						
<i>Cladium jamaicense</i>	Jamaica swamp sawgrass	native				
<i>Cyperus ligularis</i>	swamp flatsedge	native				
<i>Cyperus surinamensis</i>	tropical flatsedge	native				
<i>Eleocharis cellulosa</i>	gulf coast spikerush	native				
<i>Eleocharis interstincta</i>	knotted spikerush	native				
<i>Fimbristylis cymosa</i>	hurricanegrass	native				
<i>Fuirena pumila</i>	dwarf umbrellasedge	native				
<i>Fuirena scirpoidea</i>	southern umbrellasedge	native			R	

## Appendix A: Plant Species List for Buckingham Trails Preserve

Scientific Name	Common Name	Status	EPPC	FDA	IRC	FNAI
<i>Rhynchospora colorata</i>	starrush whitetop	native				
<i>Rhynchospora fernaldii</i>	Fernald's beaksedge	native			CI	
<i>Rhynchospora globularis</i>	globe beaksedge	native			I	
<b>Family: Dioscoreaceae (yam)</b>						
<i>Dioscorea bulbifera</i>	air-potato	exotic	I			
<b>Family: Eriocaulaceae (pipewort)</b>						
<i>Lachnocaulon anceps</i>	whitehead bogbutton	native			R	
<b>Family: Juncaceae (rush)</b>						
<i>Juncus marginatus</i>	shore rush	native			R	
<i>Juncus megacephalus</i>	bighead rush	native			R	
<i>Juncus roemerianus</i>	needle rush	native			R	
<b>Family: Marantaceae (arrowroot)</b>						
<i>Thalia geniculata</i>	alligatorflag	native				
<b>Family: Orchidaceae (orchid)</b>						
<i>Encyclia tampensis</i>	Florida butterfly orchid	native		CE		
<i>Habenaria floribunda</i>	toothpetal false reinorchid	native				
<i>Oeceoclades maculata</i>	monk orchid	exotic				
<b>Family: Poaceae (grass)</b>						
<i>Andropogon glomeratus var. glaucopsis</i>	purple bluestem	native			R	
<i>Andropogon glomeratus var. pumilus</i>	common bushy bluestem	native				
<i>Andropogon gyrans</i>	Elliott's bluestem	native			I	
<i>Andropogon virginicus var. glaucus</i>	chalky bluestem	native			R	
<i>Aristida purpurascens</i>	arrowfeather threeawn	native				
<i>Aristida stricta</i>	wiregrass	native				
<i>Cenchrus spinifex</i>	coastal sandbur	native				
<i>Echinochloa walteri</i>	coast cockspur	native				
<i>Eragrostis virginica</i>	coastal lovegrass	native			I	
<i>Eustachys glauca</i>	saltmarsh fingergrass	native				
<i>Eustachys petraea</i>	pinewoods fingergrass	native				
<i>Hymenachne amplexicaulis</i>	trompetilla	exotic	I			
<i>Imperata cylindrica</i>	cogongrass	exotic	I			
<i>Muhlenbergia capillaris</i>	hairawn muhly	native				
<i>Panicum rigidulum</i>	redtop panicum	native				
<i>Panicum virgatum</i>	switchgrass	native				
<i>Rhynchelytrum repens</i>	rose natalgrass	exotic	I			
<i>Setaria parviflora</i>	knotroot foxtail	native				
<i>Sporobolus indicus</i>	smutgrass	exotic				
<i>Spartina bakeri</i>	sand cordgrass	native				
<b>Family: Smilacaceae (smilax)</b>						
<i>Smilax auriculata</i>	earleaf greenbriar	native				
<i>Smilax laurifolia</i>	laurel greenbriar	native				
<i>Smilax tamnoides</i>	bristly greenbriar	native			I	
<b>Family: Acanthaceae (acanthus)</b>						
<i>Ruellia caroliniensis</i>	Carolina wild petunia	native			I	
<b>Family: Anacardiaceae (cashew)</b>						
<i>Rhus copallinum</i>	winged sumac	native				
<i>Schinus terebinthifolius</i>	Brazilian pepper	exotic	I			
<i>Toxicodendron radicans</i>	eastern poison ivy	native				
<b>Family: Annonaceae (custard-apple)</b>						
<i>Annona glabra</i>	pondapple	native				
<i>Asimina reticulata</i>	netted pawpaw	native				

## Appendix A: Plant Species List for Buckingham Trails Preserve

Scientific Name	Common Name	Status	EPPC	FDA	IRC	FNAI
<b>Family: Apiaceae (carrot)</b>						
<i>Eryngium baldwinii</i>	Baldwin's eryngo	native			R	
<i>Oxypolis filiformis</i> subsp. <i>filiformis</i>	water cowbane	native				
<b>Family: Apocynaceae (dogbane)</b>						
<i>Asclepias tuberosa</i>	butterfly milkweed	native				
<i>Sarcostemma clausum</i>	white twinevine	native				
<b>Family: Aquifoliaceae (holly)</b>						
<i>Ilex cassine</i>	dahoon	native				
<i>Ilex glabra</i>	gallberry	native				
<b>Family: Araliaceae (ginseng)</b>						
<i>Centella asiatica</i>	spadeleaf					
<b>Family: Asteraceae (aster)</b>						
<i>Ambrosia artemisiifolia</i>	common ragweed	native				
<i>Baccharis glomeruliflora</i>	silverling	native				
<i>Baccharis halimifolia</i>	groundsel tree	native				
<i>Bidens alba</i>	beggarticks	native				
<i>Bigelovia nudata</i> subsp. <i>Australis</i>	pineland rayless goldenrod	native			R	
<i>Carphephorus corymbosus</i>	Florida paintbrush	native			R	
<i>Coreopsis leavenworthii</i>	Leavonworth's tickseed	native				
<i>Elephantopus elatus</i>	tall elephantsfoot	native			R	
<i>Erechtites hieraciifolius</i>	fireweed	native				
<i>Erigeron quercifolius</i>	oakleaf fleabane	native				
<i>Eupatorium capillifolium</i>	dogfennel	native				
<i>Eupatorium leptophyllum</i>	falsefennel	native			R	
<i>Euthamia graminifolia</i>	flattop goldenrod	native				
<i>Helenium amarum</i>	Spanish daisy	native			I	
<i>Iva microcephala</i>	piedmont marshelder	native				
<i>Mikania scandens</i>	climbing hempvine	native				
<i>Pityopsis graminifolia</i>	narrowleaf silkgrass	native				
<i>Pluchea odorata</i>	sweetscent	native				
<i>Pluchea rosea</i>	rosy camphorweed	native				
<i>Pterocaulon pycnostachyum</i>	blackroot	native				
<i>Sonchus asper</i>	spiny sowthistle	exotic				
<i>Symphotrichum carolinianum</i>	climbing aster	native			R	
<b>Family: Boraginaceae (borage)</b>						
<i>Heliotropium polyphyllum</i>	pineland heliotrope	native				
<b>Family: Cactaceae (cactus)</b>						
<i>Opuntia humifusa</i>	pricklypear	native				
<b>Family: Casuarinaceae (sheoak)</b>						
<i>Casuarina equisetifolia</i>	Australian-pine	exotic	I			
<b>Family: Ceratophyllaceae (hornwort)</b>						
<i>Ceratophyllum demersum</i>	coontail	native				
<b>Family: Clusiaceae (mangosteen)</b>						
<i>Hypericum cistifolium</i>	roundpod St. John's-wort	native				
<i>Hypericum fasciculatum</i>	sandweed	native			R	
<i>Hypericum hypericoides</i>	St. Andrew's-Cross	native				
<i>Hypericum reductum</i>	Atlantic St. John's-wort	native			R	
<i>Hypericum tetrapetalum</i>	fourpetal St. John's-wort	native				
<b>Family Chrysobalanaceae (coco plum)</b>						
<i>Licania michauxii</i>	gopher apple	native				
<b>Family: Ebenaceae (ebony)</b>						

## Appendix A: Plant Species List for Buckingham Trails Preserve

Scientific Name	Common Name	Status	EPPC	FDA	IRC	FNAI
<i>Diospyros virginiana</i>	common persimmon	native			R	
<b>Family: Euphorbiaceae (spurge)</b>						
<i>Caperonia castaneifolia</i>	chestnutleaf falsecroton	native			I	
<i>Cnidoscolus stimulosus</i>	tread softly	native				
<i>Stillingia sylvatica</i>	queensdelight	native			R	
<b>Family: Ericaceae (heath)</b>						
<i>Bejaria racemosa</i>	tarflower	native			R	
<i>Vaccinium myrsinites</i>	shiny blueberry	native				
<b>Family: Fabaceae (pea)</b>						
<i>Abrus precatorius</i>	rosary pea	exotic	I			
<i>Acacia auriculiformis</i>	earleaf acacia	exotic	I			
<i>Acacia cornigera</i>	bullhorn acacia	exotic				
<i>Albizia lebbek</i>	woman's tongue	exotic	I			
<i>Crotalaria rotundifolia</i>	rabbitbells	native				
<i>Desmodium incanum</i>	zarzabacoa comun	exotic				
<i>Senna pendula</i>	valumerto	exotic	I			
<b>Family: Fagaceae (beech)</b>						
<i>Quercus elliotii</i>	running oak	native			R	
<i>Quercus geminata</i>	sand live oak	native				
<i>Quercus laurifolia</i>	laurel oak	native				
<i>Quercus minima</i>	dwarf live oak	native			R	
<i>Quercus myrtifolia</i>	myrtle oak	native				
<i>Quercus virginiana</i>	Virginia live oak	native				
<b>Family: Gentianaceae (gentian)</b>						
<i>Sabatia stellaris</i>	rose-of-plymouth					
<b>Family: Haloragaceae (watermilfoil)</b>						
<i>Proserpinaca palustris</i>	marsh mermaidweed	native			R	
<i>Proserpinaca pectinata</i>	combleaf mermaidweed	native			R	
<b>Family: Lamiaceae (mint)</b>						
<i>Hyptis alata</i>	musky mint	native				
<i>Monarda punctata</i>	spotted beebalm	native			I	
<i>Piloblephis rigida</i>	wild pennyroyal	native			R	
<b>Family: Lauraceae (laurel)</b>						
<i>Persea palustris</i>	swamp bay	native				
<b>Family: Loganiaceae (logania)</b>						
<i>Mitreola sessilifolia</i>	swamp hornpod	native			R	
<b>Family: Malvaceae (mallow)</b>						
<i>Melochia spicata</i>	bretonica peluda	native			I	
<i>Sida cordifolia</i>	llima	exotic				
<i>Urena lobata</i>	caesarweed	native	II			
<b>Family: Myrsinaceae (myrsine)</b>						
<i>Ardisia escallonioides</i>	marlberry	native				
<i>Rapanea punctata</i>	myrsine	native				
<b>Family: Myricaceae (bayberry)</b>						
<i>Myrica cerifera</i>	wax myrtle	native				
<b>Family: Myrtaceae (myrtle)</b>						
<i>Melaleuca quinquenervia</i>	punktree	exotic	I			
<i>Syzygium cumini</i>	Java plum	exotic	I			
<b>Family: Nymphaeaceae (waterlily)</b>						
<i>Nuphar advena</i>	spatterdock	native				
<b>Family: Onagraceae (eveningprimrose)</b>						

## Appendix A: Plant Species List for Buckingham Trails Preserve

Scientific Name	Common Name	Status	EPPC	FDA	IRC	FNAI
<i>Gaura angustifolia</i>	southern beeblossom	native				
<i>Ludwigia octovalvis</i>	Mexican primrosewillow	native				
<i>Ludwigia repens</i>	creeping primrosewillow	native				
<b>Family: Passifloraceae (passionflower)</b>						
<i>Passiflora suberosa</i>	corkystem passionflower	native				
<b>Family: Phytolaccaceae (pokeweed)</b>						
<i>Phytolacca americana</i>	American pokeweed	native				
<b>Family: Polygalaceae (milkwort)</b>						
<i>Polygala grandiflora</i>	showy milkwort	native				
<i>Polygala nana</i>	candyroot	native			R	
<b>Family: Polygonaceae (buckwheat)</b>						
<i>Polygonella polygama var. brachystachya</i>	October flower	native			I	
<i>Polygonum hydropiperoides</i>	swamp smartweed	native			R	
<b>Family: Rosaceae (rose)</b>						
<i>Rubus argutus</i>	sawtooth blackberry	native				
<b>Family: Rubiaceae (madder)</b>						
<i>Cephalanthus occidentalis</i>	common buttonbush	native				
<i>Psychotria nervosa</i>	wild coffee	native				
<i>Psychotria sulzneri</i>	shortleaf wild-coffee	native				
<i>Spermacoce assurgens</i>	woodland false buttonweed	native				
<i>Spermacoce verticillata</i>	shrubby false buttonweed	exotic				
<b>Family: Salicaceae (willow)</b>						
<i>Salix caroliniana</i>	Carolina willow	native				
<b>Family: Sapindaceae (soapberry)</b>						
<i>Cupaniopsis anacardioides</i>	carrotwood	exotic	I			
<b>Family: Sapotaceae (sapodilla)</b>						
<i>Sideroxylon reclinatum</i>	Florida bully	native			R	
<b>Family: Solanaceae (nightshade)</b>						
<i>Physalis walteri</i>	Walter's groundcherry	native				
<i>Solanum americanum</i>	American black nightshade	native				
<i>Solanum viarum</i>	tropical soda apple	exotic	I			
<b>Family: Tetrachondraceae (tetrachondra)</b>						
<i>Polypremum prodcumbens</i>	rustweed					
<b>Family: Urticaceae (nettle)</b>						
<i>Boehmeria cylindrica</i>	false nettle	native				
<b>Family: Verbenaceae (vervain)</b>						
<i>Callicarpa americana</i>	American beautyberry	native				
<i>Phyla nodiflora</i>	capeweed	native				
<b>Family: Veronicaceae (speedwell)</b>						
<i>Bacopa caroliniana</i>	lemon bacopa	native				
<i>Lindernia dubia var. anagallidea</i>	yellowseed false pimpernel	native				
<i>Lindernia grandiflora</i>	Savannah false pimpernel	native			I	
<b>Family: Vitaceae (grape)</b>						
<i>Ampelopsis arborea</i>	peppervine	native				
<i>Parthenocissus quinquefolia</i>	Virginia creeper	native				
<i>Vitis shuttleworthii</i>	calloose grape	native			R	
<i>Vitis rotundifolia</i>	muscadine	native				

## **Key**

### **Florida EPPC Status**

I = species that are invading and disrupting native plant communities

II = species that have shown a potential to disrupt native plant communities

### **FDACS (Florida Department of Agriculture and Consumer Services)**

E = Endangered

T = Threatened

CE = Commercially Exploited

### **IRC (Institute for Regional Conservation)**

CI = Critically Imperiled

I = Imperiled

R = Rare

### **FNAI (Florida Natural Areas Inventory)**

G= Global Status

T= Threatened

CE= Commercially Exploited

1= Critically imperiled because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.

2= Imperiled because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.

3= Either very rare and local throughout its range (21-200 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.

4= Apparently secure

5= Demonstrably secure

## **Appendix B: Wildlife Species List**

# Wildlife Species List for Buckingham Trails Preserve

Scientific Name	Common Name	Designated Status		
		FWC	FWS	FNAI
<b>MAMMALS</b>				
<b>Family: Dasypodidae (armadillos)</b>				
<i>Dasypus novemcinctus</i>	nine-banded armadillo *			
<b>Family: Leporidae (rabbits and hares)</b>				
<i>Sylvilagus floridanus</i>	eastern cottontail			
<b>Family: Felidae (cats)</b>				
<i>Felis silvestris</i>	domestic cat *			
<b>Family: Procyonidae (raccoons)</b>				
<i>Procyon lotor</i>	raccoon			
<b>Family: Suidae (old world swine)</b>				
<i>Sus scrofa</i>	feral hog *			
<b>Family: Mephitidae (skunks)</b>				
<i>Spilogale putorius</i>	eastern spotted skunk			
<b>BIRDS</b>				
<b>Family: Anatidae (swans, geese and ducks)</b>				
<b>Subfamily: Anatinae (dabbling ducks)</b>				
<i>Anas fulvigula</i>	mottled duck			
<b>Family: Odontophoridae (new world quails)</b>				
<i>Colinus virginianus</i>	northern bobwhite			
<b>Family: Anhingidae (anhingas)</b>				
<i>Anhinga anhinga</i>	anhinga			
<b>Family: Ardeidae (herons, egrets, bitterns)</b>				
<i>Ardea herodias</i>	great blue heron			
<i>Ardea alba</i>	great egret			G5/S4
<i>Egretta caerulea</i>	little blue heron	SSC		G5/S4
<i>Egretta tricolor</i>	tricolored heron			
<i>Bubulcus ibis</i>	cattle egret			
<i>Butorides virescens</i>	green heron			
<b>Family: Threskiornithidae (ibises and spoonbills)</b>				
<i>Eudocimus albus</i>	white ibis			
<b>Family: Ciconiidae (storks)</b>				
<i>Mycteria americana</i>	wood stork	E	E	G4/S2
<b>Family: Cathartidae (new world vultures)</b>				
<i>Coragyps atratus</i>	black vulture			
<i>Cathartes aura</i>	turkey vulture			
<b>Family: Accipitridae (hawks, kites, accipiters, harriers, eagles)</b>				
<b>Subfamily: Elaninae and Milvinae (kites)</b>				
<i>Elanoides forficatus</i>	swallow-tailed kite			G5/S2
<b>Subfamily: Buteoninae (buzzard hawks and eagles)</b>				
<i>Haliaeetus leucocephalus</i>	bald eagle	T		G5/S3
<b>Subfamily: Accipitrinae (bird hawks)</b>				
<i>Accipiter cooperii</i>	Cooper's hawk			G5/S3
<b>Subfamily: Buteoninae (buzzard hawks and eagles)</b>				
<i>Buteo lineatus</i>	red-shouldered hawk			
<i>Buteo jamaicensis</i>	red-tailed hawk			
<b>Family: Falconidae (falcons)</b>				
<b>Subfamily: Falconinae (falcons)</b>				
<i>Falco sparverius</i>	American kestrel			
<b>Family: Gruidae (cranes)</b>				
<i>Grus canadensis pratensis</i>	Florida sandhill crane	T		G5T2T3/S2S3
<b>Family: Charadriidae (plovers)</b>				
<i>Charadrius vociferus</i>	killdeer			
<b>Family: Scolopacidae (sandpipers and phalaropes)</b>				
<i>Tringa solitaria</i>	solitary sandpiper			
<b>Family: Columbidae (pigeons and doves)</b>				

# Wildlife Species List for Buckingham Trails Preserve

Scientific Name	Common Name	Designated Status		
		FWC	FWS	FNAI
<i>Zenaida asiatica</i>	white-winged dove			
<i>Zenaida macroura</i>	mourning dove			
<i>Columbina passerina</i>	common ground-dove			
<b>Family: Cuculidae (cuckoos and their allies)</b>				
<i>Coccyzus americanus</i>	yellow-billed cuckoo			
<b>Family: Caprimulgidae (goatsuckers)</b>				
<i>Chordeiles minor</i>	common nighthawk			
<b>Family: Apodidae (swifts)</b>				
<i>Chaetura pelagica</i>	chimney swift			
<b>Family: Alcedinidae (kingfishers)</b>				
<i>Ceryle alcyon</i>	belted kingfisher			
<b>Family: Picidae (woodpeckers)</b>				
<i>Melanerpes carolinus</i>	red-bellied woodpecker			
<i>Picoides pubescens</i>	downy woodpecker			
<i>Colaptes auratus</i>	northern flicker			
<i>Dryocopus pileatus</i>	pileated woodpecker			
<b>Family: Tyrannidae (tyrant flycatchers)</b>				
<i>Sayornis phoebe</i>	eastern phoebe			
<i>Myiarchus cinerascens</i>	great-crested flycatcher			
<b>Family: Laniidae (shrikes)</b>				
<i>Lanius ludovicianus</i>	loggerhead shrike			
<b>Family: Vireonidae (vireos)</b>				
<i>Vireo griseus</i>	white-eyed vireo			
<i>Vireo solitarius</i>	blue-headed vireo			
<i>Vireo olivaceus</i>	red-eyed vireo			
<b>Family: Corvidae (crows, jays, etc.)</b>				
<i>Cyanocitta cristata</i>	blue jay			
<i>Corvus brachyrhynchos</i>	American crow			
<i>Corvus ossifragus</i>	fish crow			
<b>Family: Hirundinidae (swallows)</b>				
<i>Tachycineta bicolor</i>	tree swallow			
<b>Family: Troglodytidae (wrens)</b>				
<i>Thryothorus ludovicianus</i>	Carolina wren			
<i>Troglodytes aedon</i>	house wren			
<b>Family: Sylviidae (gnatcatchers)</b>				
<i>Polioptila caerulea</i>	blue-gray gnatcatcher			
<b>Family: Turdidae (thrushes)</b>				
<i>Sialia sialis</i>	eastern bluebird			
<b>Family: Mimidae (mockingbirds and thrashers)</b>				
<i>Dumetella carolinensis</i>	gray catbird			
<i>Mimus polyglottos</i>	northern mockingbird			
<i>Toxostoma rufum</i>	brown thrasher			
<b>Family: Parulidae (wood-warblers)</b>				
<i>Dendroica coronata</i>	yellow-rumped warbler			
<i>Dendroica dominica</i>	yellow-throated warbler			
<i>Dendroica pinus</i>	pine warbler			
<i>Dendroica discolor</i>	prairie warbler			
<i>Dendroica palmarum</i>	palm warbler			
<i>Mniotilta varia</i>	black-and-white warbler			
<i>Setophaga ruticilla</i>	American redstart			
<b>Family: Emberizine (sparrows and their allies)</b>				
<i>Pipilo erythrophthalmus</i>	eastern towhee			
<i>Passerculus sandwichensis</i>	savannah sparrow			
<b>Family: Cardinalidae (cardinals, some grosbeaks, new world buntings, etc.)</b>				
<i>Cardinalis cardinalis</i>	northern cardinal			

# Wildlife Species List for Buckingham Trails Preserve

Scientific Name	Common Name	Designated Status		
		FWC	FWS	FNAI
<b>Family: Icteridae (blackbirds, orioles, etc.)</b>				
<i>Quiscalus quiscula</i>	common grackle			
<b>REPTILES</b>				
<b>Family: Testudinidae (gopher tortoises)</b>				
<i>Gopherus polyphemus</i>	gopher tortoise	T		G3/S3
<b>Family: Polychridae (anoles)</b>				
<i>Anolis sagrei</i>	brown anole *			
<b>Family: Colubridae (harmless egg-laying snakes)</b>				
<i>Coluber constrictor priapus</i>	southern black racer			
<b>FISHES</b>				
<b>Family: Lepisosteidae (gar fish)</b>				
<i>Lepisosteus platyrhincus</i>	Florida gar			
<b>INSECTS</b>				
<b>Family: Psyllidae (psyllids)</b>				
<i>Boreioglycaspis melaleucae</i>	melaleuca psyllid *			
<b>Family: Curculionidae (true weevils)</b>				
<i>Oxyops vitiosa</i>	melaleuca weevil *			
<b>Family: Papilionidae (swallowtails)</b>				
<i>Eurytides marcellus</i>	zebra swallowtail			
<b>Family: Pieridae (whites and sulphurs)</b>				
<b>Subfamily: Coliadinae (sulphurs)</b>				
<i>Nathalis iole</i>	dainty sulphur			
<b>Family: Nymphalidae (brushfoots)</b>				
<b>Subfamily: Heliconiinae (longwings)</b>				
<i>Agraulis vanillae</i>	gulf fritillary			
<b>Subfamily: Nymphalinae (brushfoots)</b>				
<i>Junonia coenia</i>	common buckeye			
<b>Subfamily: Danaidae (milkweed butterfiles)</b>				
<i>Danaus plexippus</i>	monarch			
<b>ARACHNIDS</b>				
<b>Family: Araneidae (orb weavers)</b>				
<i>Gasteracantha elipsoides</i>	crablike spiny orb weaver			

## KEY:

**FWC = Florida Fish & Wildlife Conservation Commission**

**FWS = U.S. Fish & Wildlife Service**

E - Endangered

T - Threatened

SSC - Species of Special Concern

**FNAI = Florida Natural Areas Inventory**

G - Global rarity of the species

S - State rarity of the species

T - Subspecies of special population

1 - Critically imperiled

2 - Imperiled

3 - Rare, restricted or otherwise vulnerable to extinction

4 - Apparently secure

5 - Demonstrably secure

\* = Non-native

## **Appendix C: Cultural Resource Survey**

**Reconnaissance Level  
Cultural Resource Survey and WWII  
Feature Inventory for the  
Buckingham Trail Preserve Property,  
Lee County, Florida**



# **Reconnaissance Level Cultural Resource Survey and WWII Feature Inventory for the Buckingham Trail Preserve Property, Lee County, Florida**

**Prepared for:  
Lee County Parks & Recreation  
Fort Myers, Florida**

**Prepared by:  
Matthew P. White, M.A., RPA  
Principal Investigator**



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## INTRODUCTION

Suncoast Archaeological Consultants, Inc. completed a reconnaissance level cultural resource survey and World War II (WWII) feature inventory for the 572 acre Buckingham Trail Preserve property for the Conservation 20/20 Program, which is a land conservation program administered by Lee County Division of County Lands and Lee County Parks and Recreation. The Buckingham Trail Preserve property is located to the north of Buckingham Road between the Buckingham Park and Eastwood Acres neighborhoods (Figure 1). Presently, much of the property consists of pasturelands with smaller areas of melaleuca and scrub pine.

### Lee County Parcel Numbers

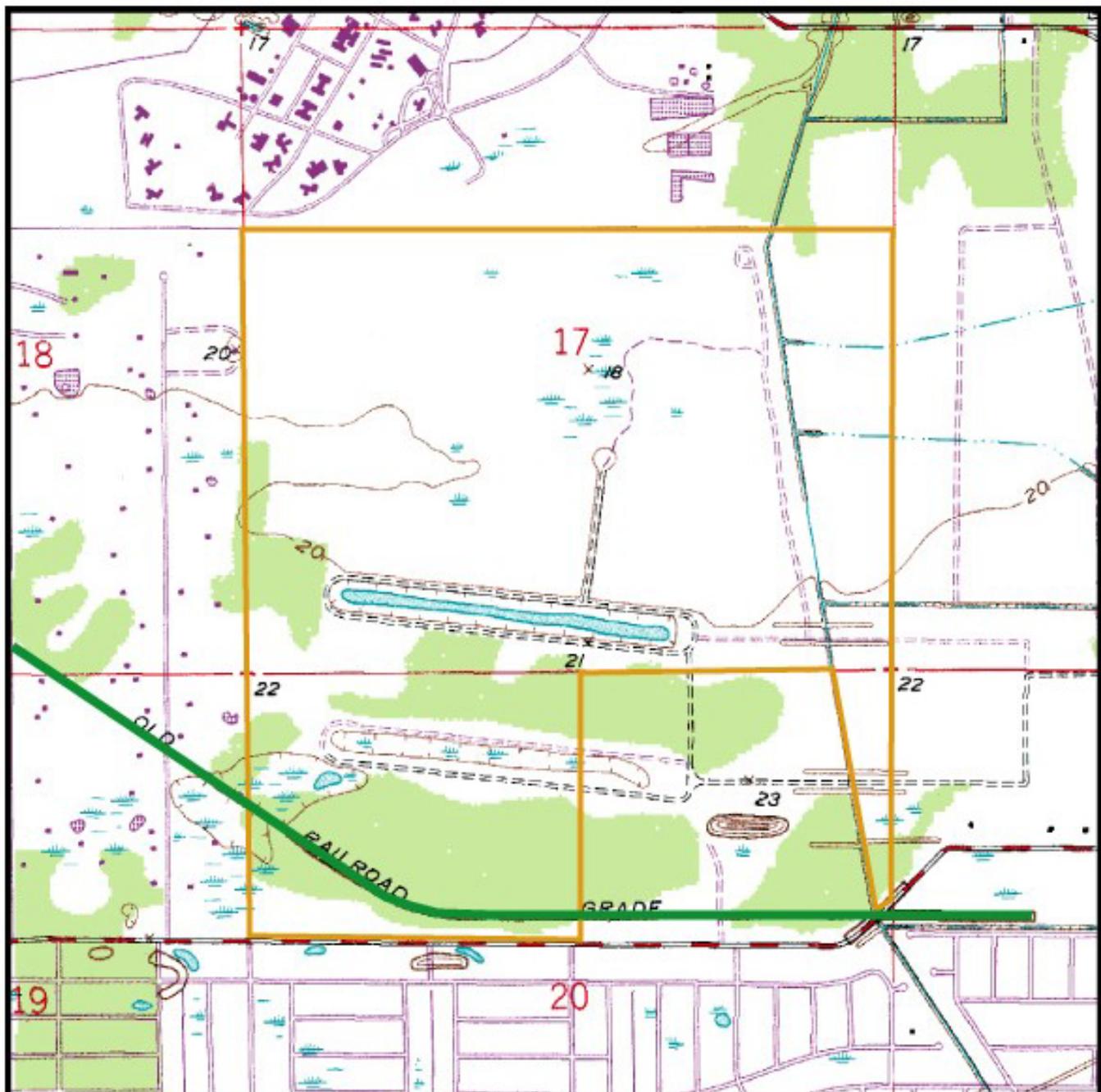
#20-44-26-00-00001.0000  
 #20-44-26-00-00006.0000  
 #17-44-26-00-00001.0000  
 #17-44-26-00-00003.0000

Two primary goals were undertaken during this project. The first was to determine the property's potential of supporting unrecorded prehistoric and/or early historic archaeological resources which may be eligible for listing on the National Register of Historic Places (NRHP) or otherwise of local or regional significance. The second goal was to identify, record, and assess all WWII era features located within the preserve. While only an abandoned railroad grade in the southern portion of the property (8LE2063) has been recorded within the Florida Master Site File (FMSF), it is common knowledge to those familiar with the property that numerous additional WWII era features associated with the Buckingham Army Air Field (BAAF) and its associated Flexible Gunnery Training School are located within property. It is in the interest of Lee County to preserve these sites while at the same time allowing public access and recreation within the property.

The Principal Investigator for this project is listed on the Register of Professional Archaeologists (RPA) and meets the qualifications put forth within the Secretary of the Interior's "Standards and Guidelines for Archaeological and Historic Preservation" (36 CFR Part 61). This survey was conducted in accordance with the Florida Division of historical Resources *Historic Preservation Compliance Review Program* manual, Chapter 267 and 373 Florida Statutes, and Chapter 1A-46, *Florida Administrative Code*.

## PROJECT AREA DESCRIPTION

The project area is located a little over 3 miles east of Interstate 75 in the Buckingham community of Lee County. The property itself is located within the central and southern portions of Section 17 and the northern half of Section 20 within Township 44 South, Range 26 East. The property is accessed via a locked gate along its south edge adjacent to the Buckingham Road and Ada Avenue intersection, or alternatively via a locked gate



**SUNCOAST**  
 ARCHAEOLOGICAL CONSULTANTS, INC.

**Figure 1.**  
**Project Location on a USGS Quadrangle Map,**  
**Showing Previously Recorded Resources**

0 1/4 Mile  
 0 1/4 Kilometer

Project Boundary  
 Resource Group  
 81L2063

located along its eastern edge at the southwestern corner of the Buckingham Park neighborhood.

Presently, much of the property is currently utilized for cattle grazing (Figure 2). Numerous furrows and drainage ditches in the northern portion of the property evidence a former agricultural function of much of the project area. Two large oval shaped berms in the central and southern portions of the property are remnants of Buckingham Army Air Field training facilities, and an abandoned railroad grade that crosses through the southern portion of the project area is also associated with this WWII base.

Lands to the south, east, and west of the subject property are currently composed primarily of single-family residential neighborhoods, while land to the north consists of a mix of residential and agricultural. Orange River is located almost a mile northeast of the property and the Caloosahatchee River is nearly 4 miles to the north.

## **Environment**

The project area sits within the western portion of the Caloosahatchee Valley, a relatively flat east to west elongated plain over which the Caloosahatchee River flows westward to the Gulf of Mexico. Historically, the Caloosahatchee River was a shallow meandering system approximately 50 mile long with its headwaters near Lake Hicpochee in south/central Glades County. While the river experienced low flow rates for much of the year, annual overflow discharge from Lake Okeechobee likely filled the Caloosahatchee Valley with a large network of braided waterways as the main river course flooded. Today, the river extends approximately 71 miles from Lake Okeechobee to San Carlos Bay, as a channelized flood control and navigational waterway. The river was supplied by inflows from Lake Okeechobee after late 19<sup>th</sup> century dredging operations, an eventually channelized to improve navigation and flood control during the early part of the 20<sup>th</sup> century.

Throughout much of the 20<sup>th</sup> century the western portion of the Caloosahatchee Valley was dominated by pastureland and agriculture. To permit such activity an extensive system of drainage control canals were excavated throughout the region in order to direct surface and groundwater into the Caloosahatchee River. During the second half of the 20<sup>th</sup> century the land south of the river within the western portion of the valley was transformed into one of the largest pre-platted subdivisions in the nation known as Lehigh Acres. As part of the subdivision process numerous additional drainage ditches and canals were constructed further draining the landscape.

As a result of these land drainage operations and channelization of the Caloosahatchee River, the natural environment of the region has been drastically altered. Prior to these modern efforts, much of the region was likely composed of an expansive south Florida flatwoods ecosystem. Vegetation in the flatwoods would have consisted of an overstory of loose slash pine, with a dominant midstory of saw palmetto, wax myrtle, cabbage palm, and a variety of oaks. The understory would have been dominated by wiregrass, panicum, gopher apple, and redroot sedges. It is likely that prior to modern agricultural



Figure 2. Cattle and excavated watering hole in the northern portion of the project area.



Figure 3. Basin swamp in the southwestern corner of the project area.

practices, a majority of the project area supported a combination of mesic and wet flatwood communities.

Two small isolated basin swamp/marsh environments are located within the project area. These include an approximately 18 acre elongated basin in the north/central portion of the property and a 15 acre basin occupying the southwestern corner of the property (Figure 3). The southwestern basin appears to be deeper and more mature in its domination by pond and bald cypress, while the north/central basin is much shallower within numerous mesophytic species growing amongst the cypress, including invasive melaleuca. At the time of the field survey both basins were found to be completely dry due to a severe drought conditions in the region.

A narrow linear depressional wetland is located within the northwestern quarter of the property. Presently, this linear wetland has been transformed from its original context by the excavation of a drainage ditch along its length. Originally, this slough channeled excess surface and subsurface water from the project area north into a gradually expanding natural drainage system before emptying into Orange River.

As with much of the Caloosahatchee Valley, the topography of the project area is generally flat, with natural elevations ranging between 18 and 22 feet above mean sea level (amsl).

Soils within the project area are dominated by poorly drained varieties, including Oldsmar, Malabar, Wabasso, Boca, Myakka, Immokalee, Hallandale, and Pineda fine sands. All these soil types are common to south Florida flatwood environments. Very poorly drained soils including Copeland sandy loam-depressional, Malabar fine sand-depressional, Myakka fine sand-depressional, and Felda fine sand-depressional are located within the two isolated basin swamps and in the vicinity of the former linear wetland drainage.

## **REGIONAL PREHISTORY AND HISTORY**

### **Prehistory**

The project area is located within a prehistoric culture area known as the Caloosahatchee region (Milanich 1994; Milanich and Fairbanks 1980). The Caloosahatchee region is defined through a distinct post 500 B.C. ceramic tradition as compared to neighboring regions. This ceramic tradition has primarily been recorded within sites along the coast, near the mouth of the Caloosahatchee River in San Carlos Bay, Pine Island Sound, and Estero Bay. Inland portions of this region have experienced more cultural mixing with neighboring culture area traditions. These include influences from cultural developments within the Circum-Glades and Okeechobee Basin culture areas.

It should be noted before proceeding to a brief summary of all three culture areas, that while these regions have been recently defined as distinct in regard to ceramic traditions

and thus inferences of separate cultural trajectories have been made, it is becoming increasingly clear that populations within all three culture areas were intricately connected within a complex economic and possible political system throughout much of prehistory. Other similarities may have existed including social frameworks and belief systems. Despite their differences in settlement patterns due to environmental adaptations and slight differences in material culture, all three groups together are distinct from central and north Florida native populations, appearing more similar to each other.

A brief summary of the prehistory in the region is presented below, including a look at native populations prior to 500 B.C. within the Paleoindian and Archaic periods.

### **Paleoindian Period (12000 to 8000 B.C.)**

Evidence of human occupation of the Florida peninsula began during the Paleoindian period around 10,000 to 12,000 B.C. Lower sea levels due to expansive polar ice caps would have produced a much dryer environment than is seen today across much of the region (Milliman and Emery 1968). The Everglades and Big Cypress areas would have been a relatively dry inland savannah landscape, with the Pleistocene shoreline being located nearly 100 miles out from the modern day Gulf Coast shoreline.

There is evidence that now extinct megafauna once roamed the state. While it is believed that the earliest inhabitants of Florida likely hunted such extinct beasts, there is yet any evidence that such activities occurred south of Lake Okeechobee. In fact, not one confirmed Paleoindian site has been discovered in the region, with the closest of such being discovered in Sarasota and St. Lucie Counties.

The lack of archaeological evidence for Paleoindian occupation in south Florida may be a result of rising sea levels since Pleistocene Era. During this period, the majority of the freshwater sources were likely located within lower terrain closer to the historic shoreline. It is possible that potential Paleoindian sites in south Florida have been flooded by these rising water levels.

### **Archaic Period (8,000 to 500 B.C.)**

The end of the Paleoindian period is marked by rather elevated environmental and climatic changes, with warmer seasons and less arid conditions a wider variety of environmental habitats began to emerge. The megafauna of the previous period began to move closer to extinction and human populations reacted to these changes by shifting their subsistence strategies (Milanich 1994). Early Archaic people began to exploit more diverse resources including small game, marine and freshwater resources. People began to live in larger groups, to use a greater diversity of tools, and to inhabit more of peninsular Florida.

A staple of the Archaic tool-kit, and the most common find at Archaic period sites throughout much of the Florida peninsula is the chert biface and chert biface production debitage. However, in south Florida only a few chert tools have been encountered. This

is likely due to the absence of natural sources of this raw material in the region. The few examples of human modified chert were found as completed tools with no associated production material. It is therefore, surmised that such objects were not produced in south Florida but instead were brought into the region from the north. Instead, the south Florida Archaic utilized marine shell and bone materials for many of the functions their contemporaries to the north used chert (Carr 1981).

As with the rest of the state, the Archaic period in south Florida was characterized by an increased reliance on shellfish and marine resources on the coast and smaller game such as turtles, snakes, and rabbits in the interior. The discovery of fish vertebra and bone fish hooks at both coastal and interior wetland sites indicates the heavy reliance on the exploitation of fish resources.

Some of the most noted Archaic sites in this region come from the western portion of south Florida. These include the West Bay site in Collier County and the Brighton Complex in eastern Glades County. Numerous Archaic period sites have also been discovered within Brevard County.

During the latter portion of the Archaic period ceramic technology was devised and the production of fiber tempered ceramic vessels became a fairly frequent activity for populations across peninsular Florida. There are examples of early fiber tempered ceramics in south Florida, but thus far such evidence is sparse with the majority of such finds coming from Marco Island located along coastal Collier County. The only evidence of fiber tempered ceramics from the eastern portion of the south Florida region have been found at the Honey Hill and the 202<sup>nd</sup> Street sites in Dade County and the Markham Park site in Broward County (Carr 2002).

### **Post 500 B.C. South Florida Prehistory (500 B.C. to A.D. 1750)**

#### *Caloosahatchee Culture Area (Coastal Calusa)*

The Caloosahatchee River bisects this region as it extends from just south of where the Peace River empties into Charlotte Harbor south to the Naples area and east up the river valley. The vast majority of information regarding the Caloosahatchee region comes from excavations along the coast. Such excavations have been centered on the extensive shell middens and shell mounds that are located on most every coastal and barrier island (Marquardt 1992). Spanish explorers to this region recorded a large chiefdom society with a capital believed to be located at Mound Key in Estero Bay.

This coastal environment is one of the richest inland marine environments in Florida with numerous oyster beds and plentiful marine and waterfowl life. Marine resource extraction and coastal shell midden sites also extend up the Caloosahatchee River into its tidally influenced lower portion to approximately Beautiful Island, near the present day crossing of Interstate 75.

Caloosahatchee ceramics consist of mainly sand-tempered plain and laminated sand-tempered wares. By approximately A.D. 700 there is a dramatic increase in the occurrence of Belle Glade Plain pottery (Widmer 1988). During later periods, a few hundred years prior to European contact, St. Johns Plain and St. Johns Check-Stamped ceramics make their first appearance in the area. St. John associated ceramics appear in numerous assemblages during late prehistory, not only across south Florida but throughout the Florida peninsula. Safety Harbor ceramics also appear within coastal Caloosahatchee region sites at this time.

Generally, the Caloosahatchee culture area is defined through a human coastal adaptation. It is likely, that with additional research the geographic definition of the Caloosahatchee region will be reduced to the coast, with middle and upper portions of the Caloosahatchee River being placed within the Okeechobee Basin culture area, associated with the Belle Glade tradition. More to this point and a discussion of the Belle Glade culture is presented below.

#### *Glades Culture Area (Circum-Glades Tradition)*

The Glades region is relatively large and environmentally diverse, including most of south Florida from the Ten Thousand Islands to the coast of Palm Beach, south to Homestead and the Florida Bay and north to sawgrass regions of Hendry and Palm Beach Counties. This area includes the Everglades, Big Cypress, northern Keys, and Atlantic Coastal Ridge. Populations within the Glades region are considered to have continued many of the lifeways common during the Archaic period, based on similarities in their artifact assemblages and settlement patterns (Goggin 1949).

Glades populations commonly settled along the coastline, adjacent to coastal marshes and creek and river mouths. Such sites consist of large shell middens with a variety of marine life remains including bivalves such as oyster, whelk, and scallop shells also inshore fish and marine turtle species; all of which were important parts of the coastal Glades subsistence base (Milanich 1994). The abundance of possible subsistence resources between the marine and inshore ecosystems would have provided the means to support a rather large population base along these coastal locations.

Settlements in the Glades region have also been identified within interior locations in the Everglades and Big Cypress areas. Numerous sites have been identified on small, slightly elevated tree islands within these regions (Milanich 1994). Tree islands represent one of the few year round dry areas within this vast wet ecosystem. Archaeologically, such sites are typically identified through dense deposits of freshwater turtle, snake, and fish remains. The contents of these middens demonstrate a heavy reliance on aquatic resources and a successful adaptation to wetland environments. Because of the general inundated nature of the entire Glades region, canoe travel would have been an extremely important mode of transportation.

Ceramics associated with early populations within the Glades region typically consists of sand-tempered plain wares with minor amounts of Sanibel Incised, Cane Patch Incised,

Fort Drum Incised, and Fort Drum Punctated. Through time more none local ceramics appear in the region including St. Johns Check-Stamped and Safety Harbor ceramics. However, generally, the sand-tempered plain wares remain the most dominate type throughout the nearly 2000 years of the Glades Tradition.

#### *Okeechobee Basin Culture Area (Belle Glade Tradition)*

The Okeechobee Basin culture area includes the land within the Kissimmee River drainage and the region surrounding Lake Okeechobee. This includes the Kissimmee Valley, Lake Istokpoga region, Fisheating Creek drainage area, and lake side areas in Hendry, Palm Beach, and St. Lucie Counties. Belle Glade tradition is marked by the appearance of Belle Glade Plain. Like Glades Plain, Belle Glade Plain is a sand-tempered ceramic, however, it is distinguished through numerous horizontal scrape marks on its exterior surface created by the smoothing of the nearly dry paste which drags exposed sand temper particles across the exterior.

Belle Glade sites are most commonly found along major river or creek courses or within more elevated (better soil drainage) areas adjacent to major lakes such as Lake Okeechobee, Lake Kissimmee, or Lake Istokpoga. None ceramic material found at these sites are very similar to that found within interior Glades tradition sites to the south, including dense freshwater fish and turtle middens.

The region is famous for the unique earthworks associated with Belle Glade occupation. Such earthworks include ponds, canals, linear and annular embankments, and raised geometric shaped mounds (Milanich 1994). Some of the larger sites associated with this tradition are the Fort Center site located along Fisheating Creek in eastern Glades County, the Ortona site to the north of the Caloosahatchee River, and Belle Glade site along the southeastern shore of Lake Okeechobee.

Many researchers have identified the Belle Glade tradition as an inland manifestation of the Caloosahatchee culture area and the coastal Calusa that extended along the upper portion of the Caloosahatchee River and up the Kissimmee Valley. Similarities in the two regions cultural chronology and the appearance of Belle Glade ceramics within later (post A.D. 700) coastal Caloosahatchee sites suggest these close ties (Widmer 1988).

## **History**

The first official European visit to Florida was by Ponce de Leon in 1513. His arrival heralded in numerous other Spanish explorers all with an eye for wealth as opposed to settlement. Spain desired to control the harbors off the mouth of the Caloosahatchee River and within the Charlotte Harbor region. However, a strong native population in this coastal providence was already well established.

In 1521 Ponce de Leon returned to Florida and attempted to establish a colony on Pine Island, but faced stiff native resistance and was fatally wounded in the attempt. The colony failed as a result. During the late 1560s Hernando Menendez entered the

Charlotte Harbor region and met with the Calusa Indians under Chief Carlos. He established a garrison at San Anton on Mound Key south of the Caloosahatchee River mouth. However, disturbances to the shaky alliance between Carlos and the Spanish erupted and the garrison was disbanded. After Ponce de Leon and Hernando Menendez there is no evidence that any Spanish or other European expeditions were ever led into the Charlotte Harbor region with ideas of the establishment of military forts or civilian settlements during the 17<sup>th</sup> century.

During the 18<sup>th</sup> century Cuban fishermen made their way to the coastal area and established commercial fishing outposts. These outposts employed native populations. Mullet, grouper, whelks, and a variety of other marine resources were shipped to Cuban markets from Charlotte Harbor.

Shortly after the first Spanish contacts with Southwest Florida Indian groups, there is documentary and archaeological evidence that their populations and cultural identities quickly disappeared. The cause is often attributed to a combination of European diseases and social upheaval. There is ample evidence that European diseases spread rapidly through native societies for which they had no resistance. The high death rate associated with these diseases as well as a general disruption to the native worldview caused by European contact appears to have quickly unraveled the existing social, religious, political, and economic systems that these native populations depended on.

To the north the Seminoles prospered in the central and north Florida interiors raising cattle and growing their traditional crops of beans, squash, and tobacco (Fairbanks 1973). The Spanish and Seminole generally maintained good relations, mainly through separation. When the British acquired Florida in 1763 a complex trade relationship was established between the Seminole and the new European governance. The Seminole provided animal pelts for shipment back to Europe and produce, livestock and game for the subsistence of British settlements along the coasts. The British in turn provided the Seminole with non-local goods such as metal and iron pots, hatchets, blankets, guns, and a variety of other common European articles. At this time most of the Florida Seminole population was residing from north/central Florida north, with southwest Florida being used as seasonal hunting grounds.

After the American Revolutionary War in 1783, the Spanish regained control of Florida. They continued to permit British trading agencies to operate in the region and encouraged British settlers to remain. However, the second Spanish claim over Florida was weak, as political and financial troubles in Europe left little interest or ability in aiding the small Spanish settlements.

During the War of 1812, the British were accused of fighting a proxy engagement against the newly established American government via Creek Indians in Alabama and Georgia. The arms, ammunition, and encouragement for these Creek assaults were believed to be supplied by British trading companies in Florida. Andrew Jackson, the general of southern military operations in America, led numerous raids into the north Florida panhandle and peninsula, destroying British trading posts and Seminole and Creek

settlements and driving the native populations further south into the north/central portion of the Florida peninsula.

Due to Spain's lack of control over Florida's borders and their preoccupation with combating the Napoleonic War in Europe, they ceded Florida to the United States in 1819 with the official turnover occurring in 1821. With the acquisition of Florida, American southern planters flooded into the northern portion of the state to take advantage of free land claims and unspoiled farmlands. With this new influx of white settlers into the interior regions of Florida, hostilities between the new arrivals and the Seminole began to occur. The Americans had no interest in trading with the Seminole as the British did, but instead simply wanted the best lands, which until then were occupied by the native populations.

As hostilities grew, the United States Army was deployed to protect American citizens and to hunt down aggressive Seminole warriors. Over time, the Seminole populations were pushed further south into their former hunting ground in the central and southern Florida. In 1823 a treaty (the Treaty of Moultrie Creek) was signed which set up a reservation land south of Ocala, which Seminoles could occupy unhindered by white encroachment. However, many white settlers saw this reservation boundary as soft and moved into Seminole lands. Equally, poor agricultural lands within the reservation hindered the subsistence capabilities of the natives and starvation was rampant. Because of these circumstances, tensions again began to mount. Aggressions by the Seminoles and counter actions by the American Military began what was to be known as the Second Seminole War. The war lasted between 1835 and 1842, with the military constructing numerous forts and roads across the peninsula. It was during this period that Col. Persifer F. Smith led a military regiment southwest from Fort Basinger (located on the Kissimmee River) to the mouth of the Caloosahatchee River. Col. Smith established three small fortifications in the region that were used as bases for raids into the Big Cypress and Everglades to capture or kill Seminoles.

At the close of the war the U.S. military action had removed many Seminole to reservation lands in what was to become Oklahoma or had pushed the remaining populations deep into the Big Cypress and Everglades regions of south Florida.

In an attempt to establish more American settlement within peninsular Florida, the Armed Occupation Act of 1842 enabled any male 18 or older to claim title to 160 acres of land by erecting a habitable building, cultivating at least five acres of land, and living on it for five years (Covington 1961). This initiative had more of an effect within north and central Florida as opposed to the southwestern coast. The threat of native hostility was still high in this region. Non-native settlements were generally composed of isolated Cuban fishing hamlets scattered along the numerous islands within Charlotte Harbor and its estuaries. There are no recorded non-military American settlements within interior southwest Florida at this time.

During the 1850s an effort was made to survey lands within the Big Cypress and Everglades. Because isolated pockets of Seminole populations were still present in the

region these survey crews were accompanied by US military. In 1855, a survey crew and military escort encountered a small farm owned by one of the paramount Seminole elders of the period, Billy Bowlegs. The American expedition maliciously destroyed much of Bowlegs' banana crop. In retaliation Bowlegs and forty Seminole warriors attacked a small US military patrol lead by First Lieutenant George Hartsuff. Other Seminole also responded, including isolated attacks along the Caloosahatchee River and east along the Miami River. Attacks even occurred as far north as the Sarasota and Tampa region. The US Military quickly organized to counter these aggressions and placed bounties on all male Seminoles. Bounty hunters and militia men flooded the southwest Florida region searching the swamps and hammocks for Seminole villages. By March 15, 1858 Billy Bowlegs band and numerous other Seminole groups surrendered to the United States and agreed to be relocated to western reservations.



Figure 4. Jacob Summerlin, circa 1900.

With the easing of Seminole tensions the cattle industry in west/central and southwestern Florida was able to flourish. Cattle were herded up twice a year and run to Punta Rassa, located just south of the Caloosahatchee River mouth. There they were loaded on schooners and shipped to Cuba. In 1860, one of the largest cattle barons of Florida, Jacob Summerlin (Figure 4), partnered with cattle shipper James McKay to build a cattle loading dock to the north of the Caloosahatchee, in the vicinity of Key Point. The following year Florida seceded from the United States following South Carolina and Mississippi, resulting in the Civil War.

Early in the war few actions ever came to the interior regions of central and south Florida. However, the economy of these regions was severely hindered as the Federal Navy imposed blockades of the Florida coast including the mouth of Boca Grande Pass and the southern entrance to San Carlos Bay. These blockades hindered cattle shipments. Summerlin and McKay moved their docking operations from Key Point to Charlotte Harbor Town, located on the north side of the Peace River mouth well out of sight of the federal boats. However, Cuba was not the only market for cattle during this time. The Confederate Army was writing contracts paying eight dollars a head for cattle delivered to north/central Florida. Between supplying the Confederate Army and the rising beef prices in Cuba, the Civil War period sustained a healthy cattle industry in southwestern Florida.

In 1863, in response to the regions new function supplying Confederate beef, the Federal Navy was ordered to sail up the Caloosahatchee River and take Fort Myers. This strategic position was used as a stronghold for raiding parties with the purpose of disrupting the regions cattle trade. In response the Confederate War Department approved the development of the popularly named Cow Calvary. This group was primarily made up of ranchers, their sons and cowhands. They patrolled rangeland looking to intercept Federal raiding parties and they also escorted cattle drives north to Confederate depot points. In 1865, Lieutenant William M. Hendry led a Cow Calvary party numbering 275 against the Federal position at Fort Myers. The Confederates were vastly outnumbered and outgunned. In March of 1865, when Confederate surrender was imminent, Fort Myers was abandoned by Federal Troops.

Even with the vibrancy of the cattle industry, very few settlers made the Lee County region their home. In fact, it was not until the 1880s that the region's population began to grow significantly. During this period the state of Florida was facing financial crisis. As a result the state began shopping around for buyers to purchase large tracts of state owned land. One such buyer was Hamilton Disston, a wealthy industrialist from Pennsylvania. In 1881 Disston purchased 4 million acres in south Florida for 25 cents an acre and entered into a land reclamation contract which provided him ownership of half of all the swampland outside of his purchase that he drained and made arable. Much of the land within present day Lee County was part of the Disston contract. The initial dredging of the Caloosahatchee River began as a Disston operation.

Disston formed the Disston Land Company and began selling off much of his Florida holdings by the middle part of the 1880s. Many of these buyers were northern land speculators who purchased large amounts of land in the Lee County region and began an aggressive advertising campaign in northern cities promoting the region as a paradise and began publicizing the healing effects of its warm climate. Such promotions were highly effective, even drawing Henry Ford and Thomas Edison to construct winter retreats in the Fort Myers area.

In 1885, Fort Myers was officially incorporated and recorded a population of 349, most of whom were likely seasonal residents. In 1887, Lee County was formed out of a portion of Monroe County and named for the Civil War general Robert E. Lee. While many new inhabitants moved to the growing Fort Myers area, the county as a whole remained relatively sparsely populated. The primary economic driver consisted of agriculture,

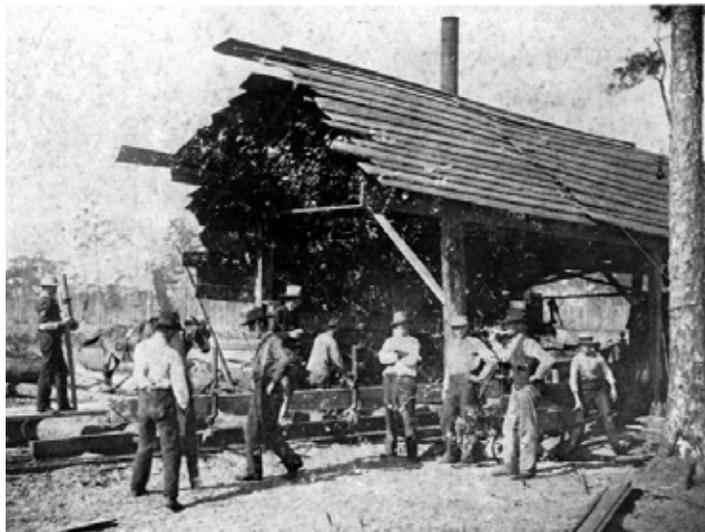


Figure 5. Sawmill in Buckingham on Orange River, c1910.

particularly citrus, timber, and cattle (Figure 5).

Until the early 1920s the only efficient way to get to Lee County or Fort Myers was via boat, equally, this was the only way to transport agricultural goods produced in the region to northern markets. A rail line was constructed to Punta Gorda in 1886, however, roads between this Peace River town and Fort Myers were poor. This all changed in 1926 when the Seaboard Air Line extended a line from Tampa to Fort Myers and the following year the Atlantic Coast Line extended from its termination in Punta Gorda to the Caloosahatchee region. With the railroad established farmers were able to quickly and less expensively get their products to northern markets and individuals curious about the “paradise” of Fort Myers could more easily visit. Thus, began the tourist industry in Lee County.

While the railroad was important for providing easy access to the region, it paled in comparison to the effect of the Tamiami Trail constructed in 1928. The road is currently known as US 41. This roadway connected Tampa with Miami via Fort Myers. With the growing popularity of the car in the first part of the 20<sup>th</sup> century families were able to visit Lee County for as little as a long weekend. It was during this time that construction began on hotels along Fort Myers Beach.

During the first part of the 20<sup>th</sup> century much of the development within the Fort Myers area oriented toward the growing tourist industry and the even larger phenomena of the seasonal residents, popularly called “snow birds”. This all changed at the beginning of the 1940s with the outbreak of World War II. The federal government, with aid and



Figure 6. Buckingham Army Air Field, aerial from 1945.

assistance from local and state authorities, acquired the small Fort Myers airport (Paige Field) and large tracts of land within the interior of Lee County which became Buckingham Army Air Field (Figure 6). During the war more than 70,000 servicemen and their families were stationed in the Fort Myers area. With this influx of population came a rapid expansion of city and county infrastructure and commerce. After the war, many of the servicemen stationed in the region remained, making Lee County their home.

Throughout the second half of the 20<sup>th</sup> century Lee County has grown rapidly with much of its development geared toward seasonal residents and tourism. The recreational fishing industry within Charlotte Harbor and Pine

Island Sound has also played a key role in the region's tourism appeal.

By the end of the 20<sup>th</sup> century there were just under a half million residents of Lee County. Throughout much of the past century populations in the county were concentrated within the Fort Myers area with areas away from the Caloosahatchee River being dominated by agriculture and undrained wetlands. However, within the last 20 years residential development has rapidly increased in these outlying locations, with one of the largest examples being Lehigh Acres located within the eastern portion of the county. This rapid growth within Lee County has been interrupted in more recent years as a result of a depressed housing market and a global economic recession, however, it is likely that the future of the region is still bright for the same reasons that spurred its initial growth.

## **History of the Buckingham Flexible Gunnery Training School**

In the spring of 1942 the City of Fort Myers and Lee County allocated public lands and acquired private lands for lease to the Federal Government for use as a wartime base. Initially the offering consisted of 6,500 acres, which was leased for 1 dollar a year. At the time, the lease acreage consisted primarily of pastureland and pine flatwoods interspersed with wetlands. While on paper the lease agreement appears to be a windfall for the Federal Government, the resulting economic benefits of the base to Fort Myers (then a town of 10,000) and Lee County were immeasurable (Grismer 1982).

In early May of 1942 a temporary base headquarters office was established in a storefront in downtown Fort Myers, base construction began toward the end of the month. The first Base Commander was Colonel Delmar T. Spivey, a former Commandant of the Air War College at the Maxwell Air Force Base in Alabama (Thole 1996). The new base was named the Buckingham Army Air Field. Subsequent negotiations with local and state officials expanded the base lease acreage and established three auxiliary sites, including crash boat stations at Fort Myers and Marco Island and a submarine base in Naples.

Col. Spivey was issued 10 million dollars to build a flexible gunnery training school as part of the Buckingham base. The gunnery school was to be used to train enlisted personnel to man the 30 and 50 caliber gun turrets of the B-24 and B-17 bombers. During the early stages of World War II U.S. fighter planes were not fitted with large enough fuel tanks to provide the escort range the bombers required to enter deep into Europe on bombing runs; therefore, the bombers only defense against enemy fighters were their gun turrets located within the nose, tail, belly, top, and sides of the planes. At the start of the war the military had only a handful of individuals trained in the operation of electric turrets and there was no established training schedule or combat curriculum for such operations. Therefore, each base was given latitude to make their own training regimen and to develop a curriculum for flexible gunnery tactics.

Base construction was a hurried affair, with just under 3,000 servicemen and private contractors working 10 hour days 7 days a week. It was never the intention of the military to develop Buckingham Army Air Field into a permanent base, but instead, its

use-life was only planned for the length of the war (Freeman 2006). Therefore, many of the buildings and other construction projects associated with the base were not built to stand the test of time. Many structures were simple wood frames covered by tarpaper. Formal base activation was on July 5, 1942, although base construction projects continued until November of that year. The flexible gunnery training began on September 5, 1942 with the first class completing their training in mid-October (Thole 1996).

Col. Spivey requested transfers for some of the few trained aerial gunnery servicemen who at the time were based at Tyndall Field in Panama City, Florida. This group became Spivey's first group of flexible gunnery instructors. Together, Spivey and his team developed a training schedule and operational curriculum for the development of experienced flexible gunnery cadets. The Spivey training schedule initially consisted of a five week course.

The first week consisted of classroom education on the functional properties of the 30 and 50 caliber machine guns. Each student was expected to master the assembly and disassembly of these weapons and was taught how to troubleshoot possible weapon malfunctions (Figure 7). The students were also taught the art of leading a target using 12 gauge shotguns to shoot clay pigeons on the trap and skeet ranges (Thole 1996).



Figure 7. 1945 photo of trainees learning 50 caliber repair and maintenance at a Buckingham Air Field firing range.

In the second week of training the trainee was instructed in the art of determining the range and speed of moving objects while observing from a non-stationary position and the effect this movement had on targeting. This was accomplished by having trainees shoot 12 gauge shotguns at clay pigeons from the back of a moving jeep. The trainee was also instructed in the identification of enemy planes and tips for quickly distinguishing enemy planes from ally planes (Thole 1996).

During the third week of training trainees were expected to improve on their targeting skills by shooting 22 caliber rifles at moving plane shaped targets placed on a conveyor belt. Instruction was also provided in the operation and maintenance of electric turrets. The trainee was also expected to master the identification of both enemy and ally ships and submarines from aerial images (Thole 1996).

During the fourth week trainees were given the opportunity to fire the 30 and 50 caliber machine guns. They fired at large targets towed by jeeps while operating the guns from either the waist gun position or from within electric turrets while moving at 25 to 30 miles per hour in the back of a jeep or truck (Figure 8). The trainees were also taught how to use the blinker code that allowed bombers to communicate while maintaining radio silence (Thole 1996).



Figure 8. Gun turrets mounted to the backs of trucks, 1945 photo from the Buckingham Army Air Field.

The fifth and final week of training included actually flight time, with the trainee boarding B-17s for from which they would get live practice at targeting a large windsock towed by a target plane. Each trainee's bullet tips were marked in different color paint so the hits could be scored (Thole 1996).

This original training schedule went through numerous modifications as more funding and newer technology was developed. One of the most significant of these changes was the inclusion of simulator training. Through a system of

movie projections and electric sensors the trainee was able to practice targeting moving aircraft in a more real world setting. The Buckingham field is known to have had at least two such simulators on base by the end of the war.

In 1943 the Army Air Force established a Central Instructors School at Buckingham Field. The school was headed by Lt. Colonel Daniel W. Jenkins a graduate of the British Royal Air Force's gunnery training course and a highly experienced gunner from some of the early bomber activity on the European front. The Central Instructors School consisted of a four week course that focused primarily on instruction tactics for training flexible gunners (Thole 1996). All instructors for the U.S. Army's six flexible gunnery schools across the nation had to complete the Buckingham Central Instructor's School four week course.

At the beginning of the war the Buckingham Flexible Gunnery School suffered from a general lack of experienced instructors and a lack of funding and training equipment. This was also the period when the demand for trained flexible gunners was at its highest point. The survival rate for a gunner at the beginning of the war was just over 50%. Because of its dangerous nature, enlistment into the flexible gunnery program was on a volunteer basis. During its initial years large numbers of non-specialist servicemen

signed up, including Army cooks, radio operators and mechanics. As the war went on and ally forces won control over the European skies after severely crippling the German Luftwaffe (Air Force) the demand for additional flexible gunners waned and the Army Air Force lifted its volunteer requirement and began training all aviation specialists in flexible gunnery.

At the close of the war in 1945 the Buckingham Flexible Gunnery School had graduated over 50,000 gunners (Thule 1996). As intended, the close of the war also meant the deactivation of the Buckingham Army Air Field. The facilities at the base served as temporary classrooms for Edison College until 1947, at which point the federal government initiated the complete dismantling of the base with buildings, utility infrastructure and all other base components being auctioned off to the public and removed from the property (Grismer 1982).

Today the runways of the base are used as a private airstrip known as Buckingham Field. Outside of these features, very little remains of the original base. A few concrete foundations and earthen features are all that remain. Residential development associated with East Fort Myers and Lehigh Acres has been built over much of the former base location.

## **BACKGROUND RESEARCH**

### **Previously Recorded Resources**

A review of the Florida Master Site File (FMSF) records indicates that a previously recorded railroad grade (8LL2063) runs east to west within the southern portion of the project area (see Figure 1). This grade is the remnant of an abandoned rail line known as the Buckingham Military Railway. It was essentially a spur line connecting the Buckingham Army Air Field with the Seaboard Air Line just east of Fort Myers. The line was used to supply the base during its operational period.

While not yet recorded with the FMSF, it is common knowledge to all who are familiar with the Buckingham Trail Preserve property that WWII era features are located within the project area which are associated with the Buckingham Army Air Field's Flexible Gunnery Training Program. These features include two bermed oval vehicle tracks and what have been identified as four concrete bunkers. As a result of this current study, all WWII era features within the property will be recorded with the FMSF.

Outside of the project area few cultural resources (including prehistoric and early historic archaeological sites) have been recorded. The closest recorded prehistoric site to the property is a prehistoric shell midden (8LL742) located approximately 1.25 miles north of the Buckingham Trail Preserve, along the south bank of the Orange River. This absence of historic cultural resources is seen throughout the region, despite numerous

large scale cultural resource surveys being conducted on lands to the north, south, and west of the project area.

The lack of prehistoric and historic cultural resources in this portion of the county is expected. In fact, the almost non-existent historic occupation of this region is specifically why it was chosen as an ideal location for the construction of a military base in the first half of the 20<sup>th</sup> century. Equally, it has been concluded by many archaeologists that prehistoric habitation in southwest Florida was typically centered around the resource rich coastal estuaries, major river courses, and the large wetland systems within the Big Cypress and Everglades. The pine flatwoods are believed to have been sparsely inhabited.

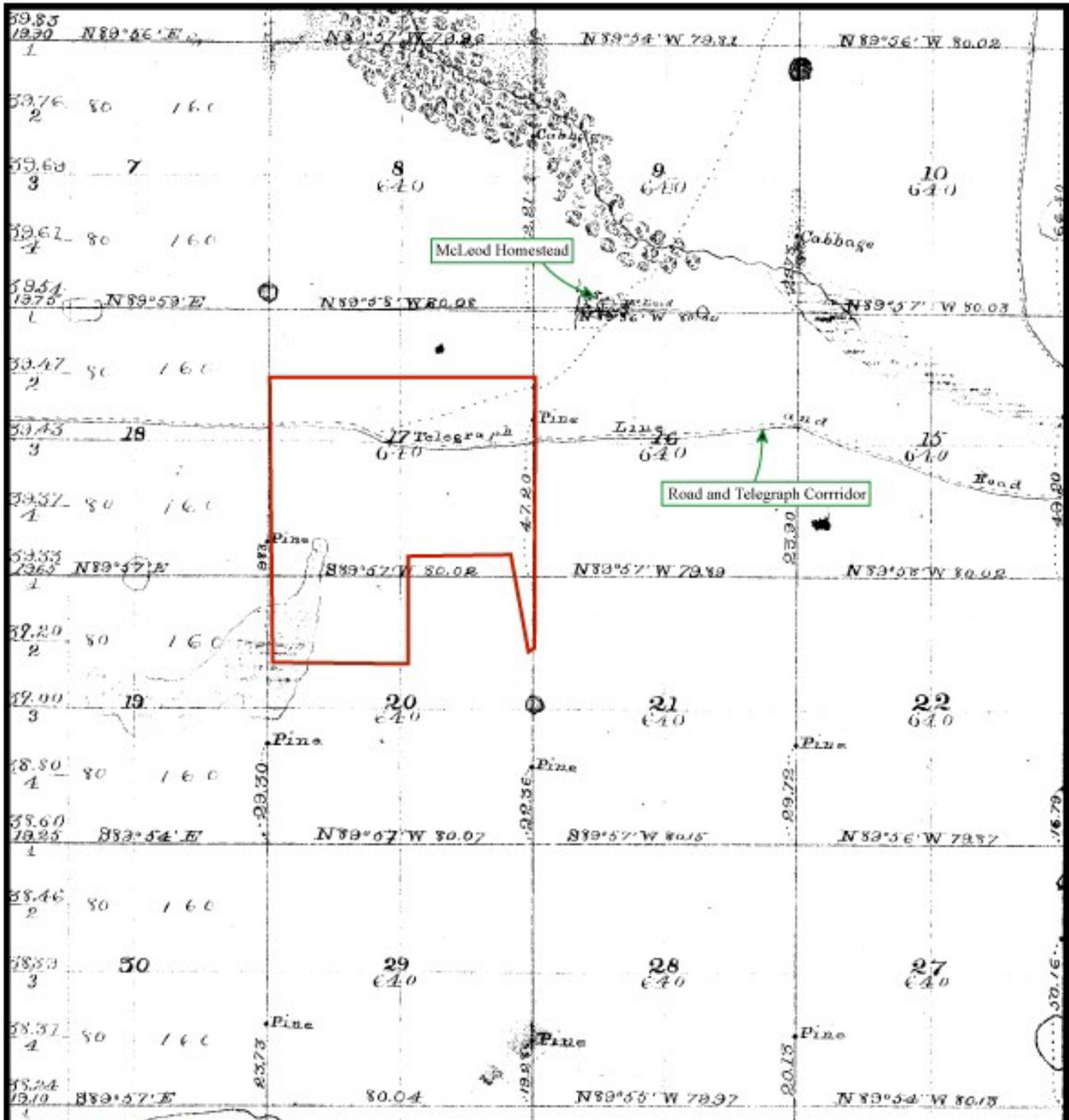
## Historic Map Review

An 1873 General Land Office (GLO) survey map for Township 44 South, Range 26 East was reviewed for evidence of historic land use during the latter half of the 19<sup>th</sup> century (Figure 9). This map shows a road crossing east to west through the center of Section 17 labeled as “Telegraph Line and Road from Fort Myers to Fort Thompson”. This map feature denotes the location of the main road of this period running east of Fort Myers to the south of the Caloosahatchee River. Its terminus destination of Fort Thompson was a Third Seminole War fort located in the vicinity of present day La Belle, Florida.

The telegraph line labeled on the map identifies the International Ocean Telegraph Line. Shortly after the Civil War, Captain James A. Scrymser and General William F. Smith, both of New York, with the support of various influential investors formed the International Ocean Telegraph Company (IOTC). In 1865 the company petitioned the U.S. Congress, the Florida Legislator and the Spanish government for the rights to lay an overland telegraph line from Lake City, Florida to Punta Rassa, Florida and then connect the Punta Rassa station with submerged line to Key West and across the Florida Straits to Havana, Cuba (Figure 10). All parties granted the request,



Figure 10. 1860s drawing showing workers installing IOTC telegraph line.



**Figure 9.**  
**1873 General Land Office Survey Maps**  
**for Township 44 South, Range 26 East**

 Approximate Location of Project Area

and work began on the Florida land line in 1866. In 1867, the IOTC cable became the first U.S. international submerged communications line.

From the map it appears that the telegraph line paralleled the “Fort Myers to Fort Thompson” road corridor as it crossed through the northern portion of the project area. Just before crossing Orange River (which during the late 19<sup>th</sup> century was known as Twelve Mile Creek) along the eastern edge of Section 14 the road and the line split, with the road heading east to Fort Thompson and the telegraph line turning north towards its Caloosahatchee River crossing located just east of the present day Fort Myers Shores community.

The 1873 GLO map also shows a homestead labeled “McLeod” along the southern edge of Section 9 just south of the Orange River, a little over a half mile northeast of the project area. While it is not certain, it is possible that this homestead was the early home of Columbus G. McLeod, born in 1845 and was known to have lived in the region. McLeod is known as a lifelong bird enthusiast and during the last decade of the 19<sup>th</sup> century and the first of the 20<sup>th</sup> he served as a Sheriff for Desoto County (which at this date included present day Charlotte County) and was appointed by the Audubon Society as a Game Warden issued with the task of policing illegal bird poaching in the northern portion of Charlotte Harbor. McLeod gained fame in 1908 when he went missing in Charlotte Harbor and was presumed murdered by plume hunters. The shock and horror of his death is believed to have swayed the Florida Legislator’s opinion in taking a harder line against poachers throughout the state (Wilbanks 1998).

Additional maps of the region were also reviewed, including the 1863 Johnson & Ward map, an 1874 Columbus Drew map, 1893 George F. Crum map, the 1900 Mast, Crowell & Kirkpatrick map, the 1910 Hammond map, the 1920 US Railroad Administration map, and the 1932 USGS map. A study of these maps reveals that interior Lee County was likely sparsely populated throughout much of the 19<sup>th</sup> and early 20<sup>th</sup> century, until the establishment of the Buckingham Army Air Field. The maps do indicate that after the late 19<sup>th</sup> century dredging of the Caloosahatchee River numerous small communities popped up along its course, some in the vicinity of old Seminole War forts along with some new locations. The community of Buckingham, located adjacent to the Orange River, first appears on maps just before the start of the 20<sup>th</sup> century.

One of the most useful maps reviewed for this project was a 1942 Army Corps of Engineers map of the Buckingham Army Air Field (Figure 11). This map clearly shows the two bermed vehicle tracks to the west of the base, the map labels these features as “Ground Moving Target Ranges” (GMTR). The map also shows a road leading due east from each GMTR. Paralleling the northern edge of the southern road are numerous features labeled as “Skeet Ranges”. To the south of the southern road are two “Sentry Boxes” and a “Flexible Gunnery Truck Shed”. Two “Sentry Boxes” are also located to the south of the western portion of the northern road. Paralleling the northern edge of the eastern portion of the north road are numerous features labeled as “Trap Ranges”. It should be noted that the eastern third of the southern GMTR and the majority of the southern road are located off the project area within an outparcel located in the northeast

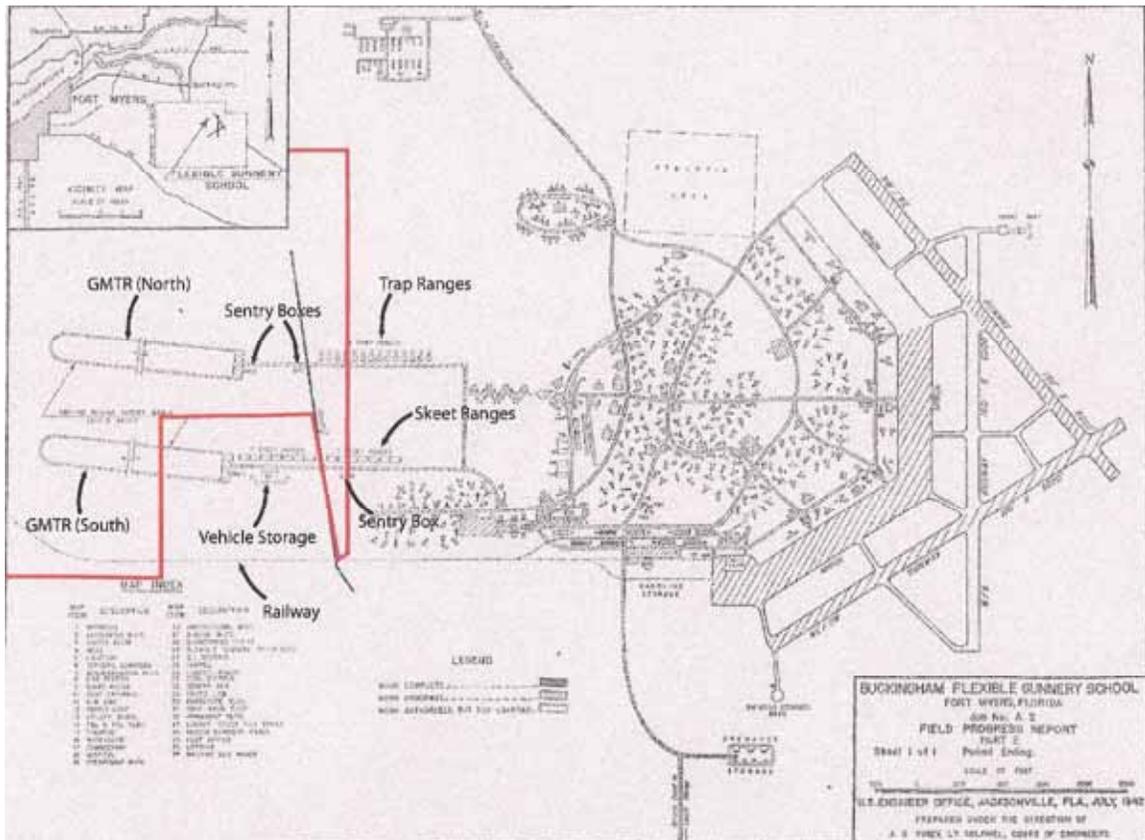


Figure 11. 1942 Map of Buckingham AAF, Showing Elements within Project Area

corner of Section 20. Also, all features shown on the map as being located within the project area are keyed as being under construction at the time the map was produced (July 1942).

## Historic Aerial Review

Historic aerial photographs of the project area dating to 1944, 1953, and 1958 were reviewed. The 1944 aerial shows both the north and south GMTRs, the skeet ranges to the north of the southern road, and the trap ranges to the north of the northern road; all of which are located in the exact same position as evidenced on the 1942 Army Corps of Engineers map (Figure 12).

Differences observed on this aerial compared to the 1942 map is the location of sentry boxes and the addition of skeet ranges along the northern road. A small structure is displayed on the 1944 aerial located along the southern portion of the eastern edge of both GMTRs, these locations correspond to the 1942 map location for sentry boxes. However, no corresponding structures are observed on the aerial to the east where the map displays the location of two additional sentry boxes. It is possible these facilities were removed prior to the aerial or not constructed per plan. The 1944 aerial also shows the addition of six skeet ranges to the south of the eastern portion of the northern road, adjacent to the trap ranges. These ranges were not displayed on the 1942 map.

Throughout the rest of the project area, the terrain appears to be nearly devoid of trees with the exception of the two basin swamps in the north/central and southeastern portions



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**Figure 12.**  
**Aerial Photograph from 1944**



 Approximate Project Boundary



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**Figure 13.**  
**Aerial Photograph from 1953**



 Approximate Project Boundary

of the property. This aerial signature is common to the region during the early 20<sup>th</sup> century with timber harvesting having removed much of the larger old growth pine within the flatwoods.

The 1944 aerial also shows three circular features to the south of the Buckingham Military Railway, south of modern day Buckingham Road. These features are similar in shape to the 50 caliber ranges recorded to the south of SR 82 (8LL2406); however, they are considerably smaller in size. These three features were not assessed as part of this project because they are outside of the current project area.

The 1953 and 1958 aerials are identical to each other. Both show Buckingham AAF as being completely abandoned, with the structures in the central portion of the base and those associated with the training ranges in and around the project area having been dismantled and removed (Figure 13). However, the aerial signature of all the ranges (GMTR, skeet, trap) are all still present at this time. In addition, just east of the northern GMTR to the north of the road but east of the trap ranges the 1950s aerials display four black semicircular signatures with what appear to be rectangular shaped cleared/disturbed areas directly to their south. This aerial signature is somewhat similar to the skeet ranges, yet different enough to suggest that they served a separate function.

All three aerials were analyzed for any possible aerial signature of the 19<sup>th</sup> century Fort Myers to Fort Thompson road corridor and the adjacent IOTC telegraph line; however, no such evidence was identified.

## **Informant Interview**

No informants familiar with the history of the project area were identified during this survey. There is no certified local government official (CLG) for this portion of Lee County.

## **METHODOLOGY AND PROJECT EXPECTATIONS**

This survey of the Buckingham Trails Preserve was designed to meet two goals. The first was to determine the property's potential of supporting unrecorded prehistoric and/or early historic archaeological resources which may be eligible for listing on the National Register of Historic Places (NRHP) or otherwise of local or regional significance. The second goal was to identify, record, and assess all WWII era features located within the preserve.

In order to achieve these goals extensive background research was conducted which included a review of historic and modern maps, aerial photographs, documents, and reports associated with the property and surrounding region. Background research also included a search of the Florida Master Site File database for information on cultural resources that have been recorded in the vicinity of the subject property, as well as a review of relevant archaeological, historical, and environmental reports. Documentation

related to the Buckingham Army Air Field and regarding the military's Flexible Gunnery Training program was also reviewed.

### *Reconnaissance Cultural Resource Survey*

A reconnaissance cultural resource survey was conducted to determine the property's potential for supporting possible unrecorded prehistoric and early historic archaeological sites. During this survey background research aided in locating portions of the subject property that have a higher potential of containing unrecorded cultural resources and helped identify the types of cultural resources likely to be present within the project area.

Throughout the inland portion of Lee County it has been found that the most likely location of possible unrecorded archaeological sites include those areas in close proximity to creeks and rivers along elevated and relatively well drained soils. No such locations were identified within the project area. However, three locations were identified as possessing more favorable characteristics for possibly supporting unrecorded archaeological sites due to their location adjacent to wetland resources. These locations include lands surrounding the two basin swamps/marshes in the north/central and southwestern portions of the project area and terrain adjacent to what was possibly a narrow natural slough feature in the northwestern portion of the property.

In order to confirm and test these probability areas limited shovel testing was conducted along the uplands adjacent to the property's wetland resources. All shovel tests measured approximately 50 x50 cm wide and were excavated to a depth of 100 cm below surface (cmb). All excavated soil was screened through ¼ inch mesh metal screen. Field notes recorded each test's location, soil stratigraphy, presence or absence of artifacts, and environmental setting. A small number of tests were also excavated outside of these relatively higher probability locations.

In addition to shovel testing a surface survey was conducted across the entire property to determine if cultural features such as prehistoric mounds, historic structures, or exposed surface artifacts are located within the project area. A special consideration was also given to the identification of possible remnants of the Fort Myers to Fort Thompson road corridor and the IOTC telegraph line that an 1873 map identified as running east to west through the northern portion of the project area.

Previous archaeological surveys in the vicinity of the project area and generally within the inland flatwoods region of Lee County have identified that prehistoric and early historic occupation in this region was generally sparse. As mentioned previously, what sites are found are typically located adjacent to navigable waterways such as the Orange and Caloosahatchee Rivers. These rivers likely provided important transportation routes connecting inland camps with the resource rich estuaries of Charlotte Harbor, San Carlos Bay, and Pine Island Sound. Because of the absence of such geographic features within or adjacent to the project area, it was determined that the Buckingham Trails Preserve property likely has a low probability of supporting prehistoric or early historic habitation sites.

### *Inventory of WWII Era Features*

Background research and field surface inspection were both utilized in order to identify, assess, and record all WWII era features within the project area. Historic aerials dating to the middle 20<sup>th</sup> century as well as a 1942 Army Corps of Engineers map of the Buckingham AAF proved invaluable in identifying the location of possible WWII era features within the subject property. Prior to the field survey each of these locations were marked on modern aerial field maps so that they could be explored in detail during the field survey.

As a result of background research, it was found that numerous historic features associated with the Buckingham AAF are located within the project area. Through documentary evidence and aerial photographs it was determined that most if not all of the WWII era structures were likely removed from the property after the base was decommissioned. Therefore, the most likely evidence of individual feature locations was expected to be found through scatters of historic construction debris and foundations, earthen features associated with the ranges, and possible bullet casings and other historic materials.

## **Laboratory Methods and Curation**

No cultural material was recovered during this survey. All field notes, maps, and other documentation are presently curated at the Suncoast offices.

## **RESULTS**

### **Reconnaissance Cultural Resource Survey**

As part of the reconnaissance cultural resource survey of the project area a total of 30 shovel tests were excavated within the property. Twenty three of these tests were placed along uplands surrounding the two basin swamps/marshes and adjacent to the possibly former slough feature in the northwestern portion of the property. These tests encountered a soil profile consisting of a gray 'A' horizon followed by a light gray 'B' horizon. Typically, the 'A' horizon terminated at approximately 20 cmbs but occasionally extended to 50 and 60 cmbs. Occasionally, an orangish clay and sand filled 'C' horizon was encountered between 70 and 100 cmbs. No cultural material was encountered as a result of subsurface testing.

A surface survey was conducted of the entire project area; with the exception of the WWII era features discussed in detail below, no prehistoric or early historic features or surface artifacts were encountered. During the surface survey a special consideration was given to the possible identification of surface features that may be related to the 19<sup>th</sup>

century Fort Myer to Fort Thompson road corridor or the IOTC telegraph line; however, no such evidence was identified. It is likely that this road was simply a dirt trail, wide enough to support horse drawn wagons. Thus, without constant use, a resource of this type is likely overgrown and has disappeared into the landscape.

Due to the negative results of both background research and field investigation, it has been determined that the Buckingham Trails Preserve property has a low probability of supporting significant prehistoric or early historic archaeological sites or other related historic resources.

## **Inventory of WWII Era Features**

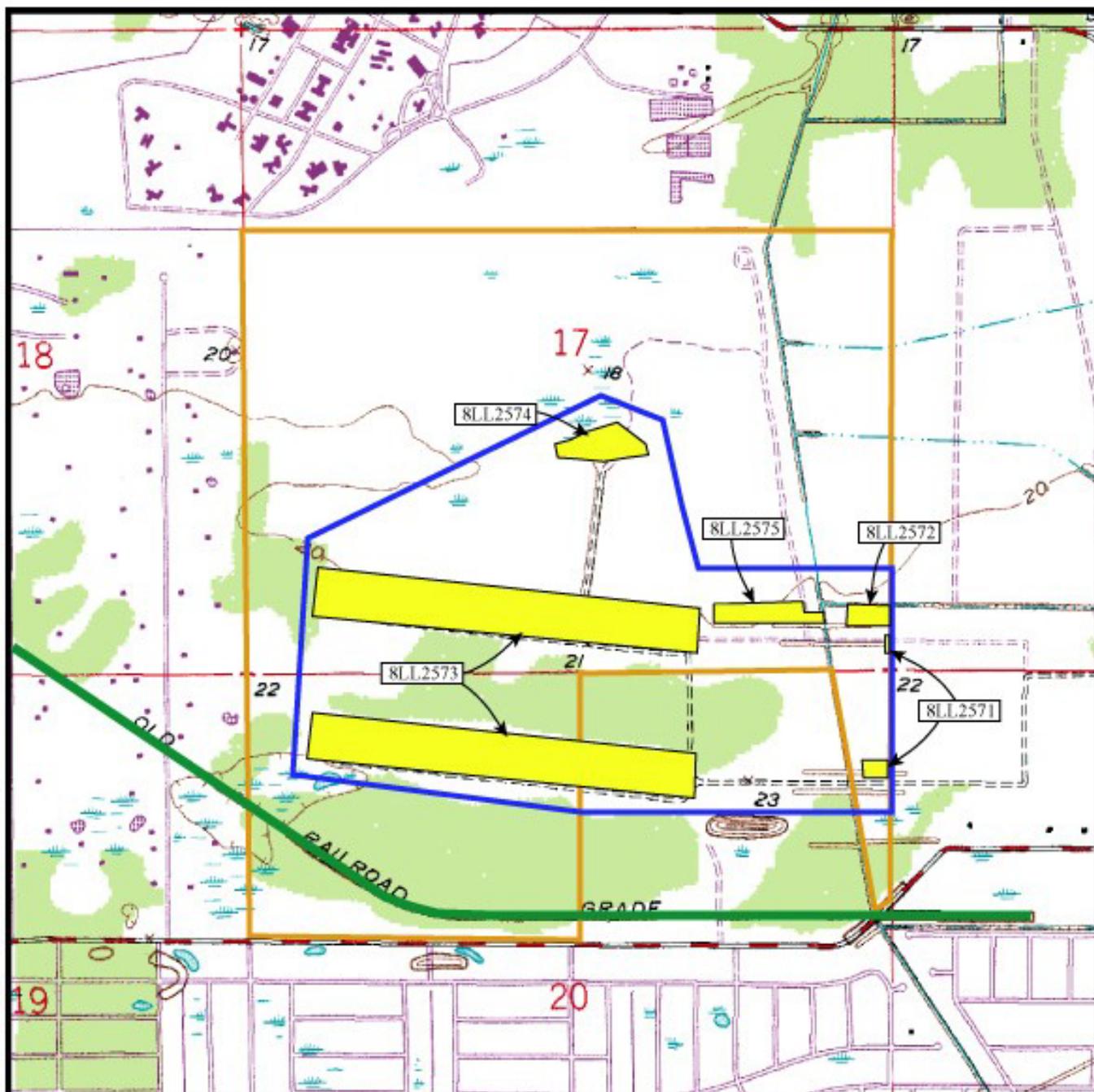
Historic maps and aerials as well as an extensive surface survey of the subject property were utilized to identify and record WWII era features within the project area, all of which are believed to be related to the Buckingham Army Air Field's Flexible Gunnery Training Program. In all, a total of five individual archaeological sites (8LL2571 to 8LL2575) were recorded and the previously recorded Buckingham Military Railway (8LL2063) corridor was relocated and reassessed as part of this phase of the project survey (Figure 14). The five newly recorded archaeological sites were grouped into a single newly formed resource group designation known as the Buckingham Army Air Field resource group (8LL2570). All WWII era sites identified within the project area are discussed in detail below.

### **Resource Groups**

#### *8LL2570, Buckingham Army Air Field*

The Buckingham Army Air Field resource group was created in order to connect the five WWII era archaeological sites within the project area due to their shared association as part of the BAAF. It is hoped that through future studies this resource group will grow to include the large number of BAAF associated features to the east and south of the project area. While much of these areas are currently privately owned, particularly within single-family subdivisions, it has been observed by the Principal Investigator for this project that within these neighborhoods numerous WWII era elements still exist relatively undisturbed. Such elements include a large portion of the BAAF airstrip that is now associated with the Buckingham Airpark community and numerous building foundations and at least three previously recorded historic structures (8LL1032-8LL1034).

All sites within the Buckingham Army Air Field resource group have been individually assessed as a result of this project as to their eligibility status for listing on the NRHP.



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**Figure 14.**  
**Project Location on a USGS Quadrangle Map,**  
**Showing Newly Recorded Cultural Resources**



- ▣ Project Boundary
- ▣ Archaeological Site
- ▣ Resource Group 8LL2570
- ▣ Resource Group 8LL2063

### *8LL2063, Buckingham Military Railway*

The Buckingham Military Railway extended from the southern portion of the BAAF (approximately 1 mile east of the project area's southeastern corner) to eastern Fort Myers where it merged into the former Seaboard Air Line corridor. The line was used to transport people and supplies to and from the base.

Within the project area the 8LL2063 corridor consists of a raised flat topped berm extending between 2 and 4 meters above the surrounding ground surface (Figure 15). The berm was created by fill extracted from ditching to its north and south. All ties and rails have been removed from the summit of the berm and during a walkover, no rail spikes or other rail related artifacts were identified.



Figure 15. Buckingham Military Railway, as it exists within the project area, facing west.

This railway berm was recorded during a 2008 survey of the Luckett Property located adjacent to Interstate 75, approximately 3 miles west of the project area (Survey #15048). At this time it was determined that the berm was not eligible for listing on the NRHP, and this assessment was confirmed by the Florida State Historic Preservation Officer (Ambrosino 2008). While the 2008 survey never physically inspected the portion of the railroad berm within the Buckingham Trails Preserve project area, this former resource assessment is no less true for the current project area's portion of the rail line.

Because this railway berm is only peripherally associated with the Buckingham AAF it was not reassigned to the newly established Buckingham Army Air Field resource group

(8LL2570). Since this resource is not directly associated with the Buckingham AAF Flexible Gunnery Training School, it has been determined that it is not potentially eligible for listing on the NRHP.

## **WWII Era Features**

### *8LL2571, Buckingham AAF Skeet Ranges*

Skeet shooting was an important training exercise at flexible gunnery school as it taught the gunners the principals of leading and timing when firing at moving targets. According to a 1945 US Air Force documentation on flexible gunnery training skeet shooting as a training exercise is preferred to trap because the flight of the target in skeet more resembles that of an attacking fighter plane (USAF 1945). Skeet shooting typically involves targeting objects moving at an angle across the shooters range of vision as opposed to trap shooting within which the target typically move away from the shooter.

The possibility that skeet ranges could be present within the project area was first identified during a review of a 1942 map of the BAAF. The presence of such features was confirmed during a review of historic aerials of the region. On these aerials the skeet ranges take the form of a typical skeet layout with a semicircular outline. It was found that while numerous skeet ranges were identified in this region, most were located within the outparcel in the southeastern corner of the project area or to the east of the preserve.



Figure 16. Clay pigeon fragments located within 8LL2571.

It was discovered that only one complete range is located within the project area in addition to two partial ranges. One and a half ranges are located within the central portion of the property's southeastern arm (UTM coordinate Z17, E427559, N2946815) and a half range is located approximately 280 meters to the north directly adjacent to the southwestern corner of the Buckingham Park subdivision (UTM coordinate Z17 E435993, N2947068).

During the field inspection, each of these locations were visited; however, no earthen or structural features were identified. Although, a number of shattered clay pigeon targets were found across the surface in each location (Figure 16). As with much of the BAAF, any structural features or other elements associated with these skeet ranges were likely removed during the late 1940s after the base was decommissioned.

Due to this site's relationship with the World War II era Buckingham Army Air Field Flexible Gunnery Training School, it is considered potentially eligible for listing on the National Register of Historic Places. This eligibility recommendation was identified under Criterion A for inclusion to the NRHP which includes resource that "are associated with events that have made a significant contribution to the broad patterns of our history" (36 CFR Part 60, NRHP).

However, it is our opinion that because the ranges within the site lack any of their original design or structural integrity, the effect of possible future recreational use or facilities installation activities associate with the preserve will not disturb important information regarding the site itself. Because almost nothing of these skeet ranges exist today, the primary mitigation to this site has been conducted through the information documented in this report.

#### *8LL2572, Buckingham AAF Trap Ranges*

Trap shooting consists of firing at clay pigeons flying away from the shooter. The pigeons are typically released from a trap house that is located 15 to 25 meters in front of the shooter. Four trap ranges were identified within the project area.

The trap ranges were first identified on the 1942 BAAF map and on historic aerial photographs of the project area. In the field these ranges were located through the location of what at first glance appear to be four large concrete bunkers (central UTM coordinate Z17 E427566, N2947188). These bunkers are in fact trap houses from which clay pigeons were flung (Figure 17). The four trap houses form an east-west line with each house located approximately 30 meters from its neighbor. Within the trap house a small T shaped cut was made in the floor of each and within three houses were the remains of a wooden mounting system that likely held the trap devise in place.

Approximately 20 meters south (to the rear) of each trap house a small U shaped concrete foundation was found with the open end of the U facing the trap house. In the center of each U is a small square concrete lined depression. These foundations likely supported a small platform on which the shooter stood, although it is unclear what function the



Figure 17. Concrete trap house located within 8LL2572.



Figure 18. Possible shooter platform foundation within 8LL2572

concrete depression served. North (to the front) of each trap house numerous shattered clay pigeon fragments were identified. Also, approximately 30 to 40 meters north of the trap houses dense concentrations of clay pigeon fragments were found, these concentrations likely represent the unscored target landing areas.

It should be noted that during the field investigation of this site additional concrete trap houses were observed to the east of the project area, within private lots located in the Buckingham Park subdivision.

Due to this site's relationship with the Buckingham Army Air Field Flexible Gunnery Training School it is considered potentially eligible for listing on the National Register of Historic Places under Criterion A which includes resource that "are associated with events that have made a significant contribution to the broad patterns of our history" (36 CFR Part 60, NRHP).

Because 8LL2572 retains much of its historic visual integrity through the location of the concrete trap houses as well as the associated possible shooter platform foundations, it is recommended that recreational use and possible future facilities installations within this site be restricted. Particularly, future activities associated with the Buckingham Trails Preserve should avoid damaging the concrete features associated within the site.

#### *8LL2573, Buckingham AAF Vehicle Tracks*

The most prominent man-made elements within the project area are the two large elongated oval shaped earthen features in the central and southern portions of the project area. These two features are clearly visible on modern aerial photographs of the region (Appendix A) and also plotted on the most recent USGS Olga, FLA quadrangle map (see Figure 1). The 1942 Buckingham AAF map labels these features as "Ground Moving Target Ranges" (GMTR).

The GMTRs were utilized during the Flexible Gunnery trainees second week in the training program, after becoming proficient on the trap and skeet ranges. The purpose was to teach the trainee how to apply the same targeting skills learned on the skeet and trap ranges with the added element of shooting from a non-stationary position. In addition, trainees were required to use specially designed truck mounted 12 gauge shot guns in order to provide a similar effect to firing from the mounted 50 caliber guns on the B series bombers.

The vehicles would enter the GMTRs from the east side and travel approximately 20 miles per hour along the paved loop track. Throughout the course traps would be positioned that flung clay targets at different elevations (USAF 1945). Stanley Vaughan, a graduate of the Buckingham AAF Flexible Gunnery Program remembers; "You had a ring around you and you were standing in the truck, and it went through the woods, so you were swaying from side to side. The clay pigeons would come out first from the



Figure 19. Bermed vehicle track associated with 8LL2573.



Figure 20. Possible concrete trap or trap house foundations.

right, then from the left, then low, then high, then two or three at the same time from different directions” (Wadsworth and Johnson 2010).

During the field investigation the two GMTRs on the property were identified as consisting of a low oval shaped raised berm (Figure 19). The interiors of each oval had been excavated for fill in order to construct the berm. No ditching was identified along the outside edges of the oval berms. The northern GMTR is located wholly within the project area; however, only the western two thirds of the southern GMTR is contained within the subject property. Both are oriented a few degrees off due east-west, and measure approximately 1 kilometer long and 100 meter wide. The center point of the northern GMTR is located at UTM coordinate Z17 426684E, 2947193N and the center point of the southern is at Z17 426616E, 2946839N.

The summits of both berms are relatively flat, measuring approximately 5 meters with a slight erosional sloop toward the excavated center of each oval. A surface inspection found numerous asphalt fragments along the berm summit, likely remnants of the paved vehicle tracks.

Numerous concentrations of shattered clay pigeons were observed at regular intervals (between 60 and 80 meters apart) along the outside edge of the berm. Many of these concentrations were found in association with a concrete foundation that raised approximately 30 cm above the ground surface with rebar protruding from the top, likely used for securing a wood framed structure (Figure 20). These concrete foundations are square in shape with one half consisting of a sunken basin that extends approximately 1 meter below the surface.



Figure 21. 1944 Life Magazine photo of GMTR training at Nellis Air Force Base in Nevada. Note the trap houses on right side on what appear to be concrete foundations.

These clay pigeon fragment concentrations are believed to be the location of traps along the vehicle track. The concrete foundations were likely supports for the traps and trap houses (Figure 21). It is unclear why some concentrations were associated with concrete foundations and some were not. It is possible that in order to provide more dramatic angles and elevations to the target flights some of the traps were placed along small towers thus requiring some sort of foundation system. However, it should be noted that two concrete foundations observed during this study were found to have been excavated from their in ground position, thereby, it is possible that foundations were at one time located in association with all clay concentrations but were subsequently removed.

Both the north and south GMTRs that make up 8LL2573 are prominent features within the project area both from the air and from the ground. Due to these features' association with the Buckingham Army Air Field Flexible Gunnery Training School, 8LL2573 is determined to be potentially eligible for listing on the National Register of Historic Places under Criterion A which includes resource that "are associated with events that have made a significant contribution to the broad patterns of our history" (*36 CFR Part 60, NRHP*).

Ground disturbing activities that would significantly alter the present visual integrity of the two vehicle tracks should be avoided. Recreational use along these features (e.g. walking or equestrian trails) could be permitted if proper steps are taken to avoid excessive erosion of these features. Ideally, proper management of these features within the Buckingham Trails Preserve should also combat natural erosion of these features as well.

#### *8LL2574, Buckingham AAF Elements*

The Buckingham AAF Elements site was identified through a collection of concrete pier foundations representing at least eight structures that would have been located along the southern edge of the basin swamp/marsh in the northern portion of the project area (Figure 22). These structural foundations were identified during the field survey of the property.

The 1987 Olga, FL USGS quadrangle map shows what appears to be a raised road leading from the northern GMTR north to this location before dead-ending. Also, while no indication is provided for the presence of any features in this location on the 1944 aerial, the 1953 aerial shows what appears to be the road leading north to this location and an oval shaped clearing in the general area of the site. No structure signatures were observed in this location on the 1953 aerial.

Of the eight possible structure locations, five of the pier foundations were found to be identical in pier shape, size, layout, and orientation. Due to these similarities these pier foundations likely supported identical structures. The four similar foundations consist of six piers each (three to each long side) forming a north-south oriented rectangle measuring approximately 5x10 meters. Each concrete pier measures approximately 50 cm square (Figure 23).

**Figure 22.**  
**Location of Structure**  
**Foundations within 8LL2574**

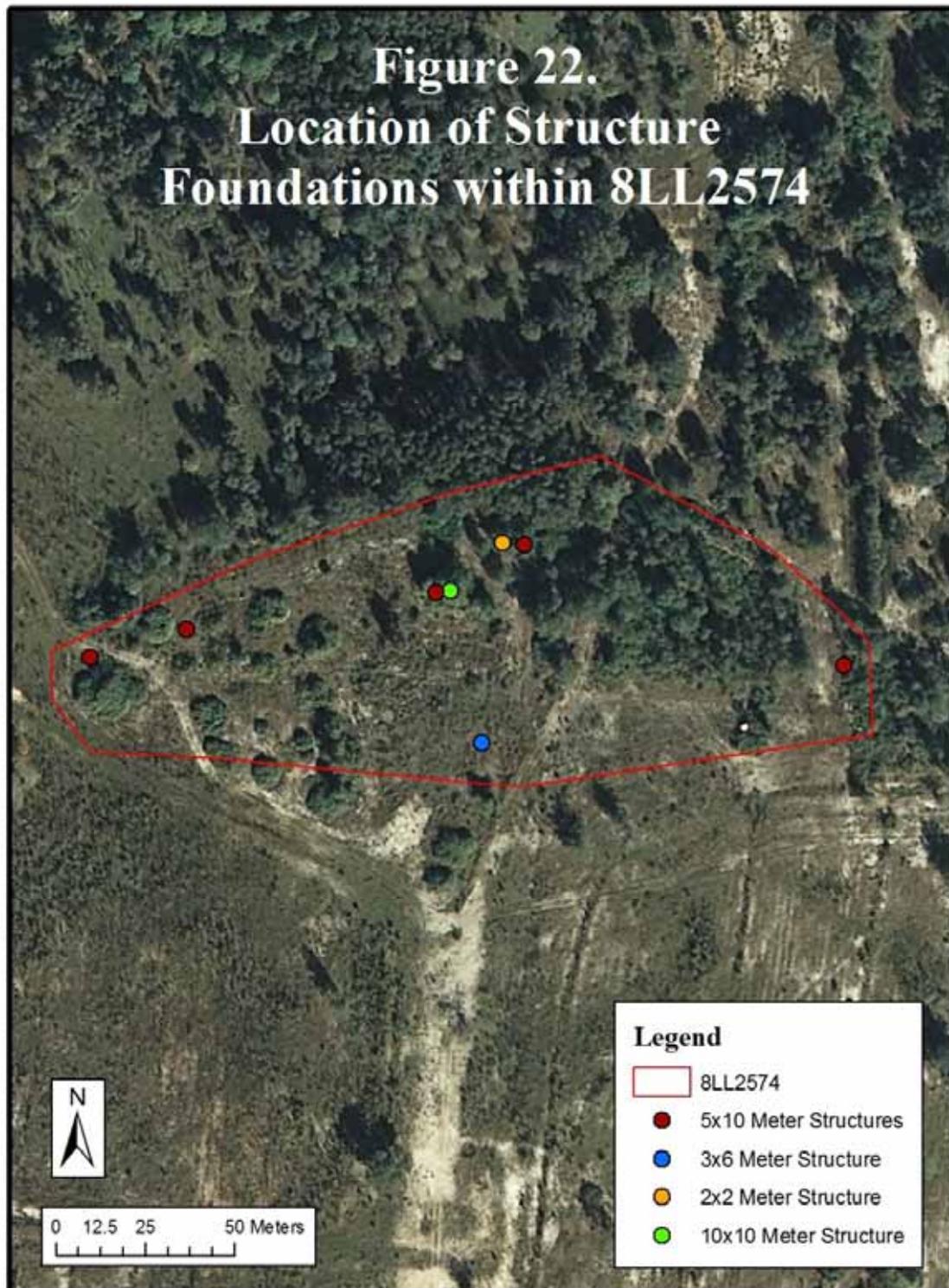




Figure 23. Portion of a 5x10 meter concrete pier foundation within 8LL2574.



Figure 24. Possible tower foundation within 8LL2574.

The remaining three structure foundations include a smaller six (three to a side) concrete piers foundation measuring 3x6 meters also oriented north-south, a square four pier foundation measuring 2x2 meters, and square 16 pier foundation measuring 10x10 meters. While it is believed that the smaller 2x2 meter foundation possibly supported some sort of tower (Figure 24), it is not known what type of structures the other could have been or what function these structures may have served. It should be noted however, that these concrete pier foundations are in the same style of those associated with Buckingham Army Air Field facilities throughout the region.

As with the vast majority of the Buckingham AAF facilities, the structures associated with this site were likely removed after the base was decommissioned. Outside of the numerous concrete pier foundations, no additional construction material was recovered. It is unclear why these features are not listed on the 1942 map of the Buckingham AAF or evidenced on the 1944 aerial of the region. It is perhaps likely that these facilities were constructed near the end of the base's use life after the 1944 aerial flight and before the bases closing in 1945.

Outside of its general proximity to the Flexible Gunnery Training School related sites (8LL2571, 8LL2572, 8LL2573, and 8LL2575) to its south, no evidence was identified during background research or during the field survey to suggest that this former structure concentration was a direct part of the gunnery training program. As a result, it has been determined that 8LL2574 does not share the same significant historic association as the other four sites included within the 8LL2570 resource group; therefore, it is our opinion that the Buckingham AAF Elements site is not eligible for listing on the NRHP.

#### *8LL2575, Buckingham AAF Ranges*

Approximately 40 meters east of the northern GMTR (8LL2573) is a line of four separate, very dense, clay pigeon fragment concentrations (Figure 25). Each is relatively large, measuring 35 meters east-west and 20 meters north-south. At the southern end of each clay pigeon concentration is a slightly elevated rectangular earthen platform, each measuring approximately 15 meters across (east-west) and 5 meters wide (north-south). On all but the western most concentration, a line of seven concrete square footers were observed along the southern edge of the platform (Figure 26). Occasionally a similar square concrete footer was found to offset from this line approximately 2 meters to the north. Each footer has a single rebar edge protruding from its top. Just north of the clay pigeon concentrations occasional square concrete foundations were identified, similar in style to those found along the vehicle tracks to the west.

Directly east of the eastern most clay concentration are the remains of an asphalt pad, which possibly served as a vehicle parking area. Due to the proximity of this pad to the other features this pad was included in the Buckingham AAF Ranges site area.

It is believed that the four clay concentration features represent the location of some sort of shooting range. Due to the density of these concentrations it was at first believed that



Figure 25. Clay pigeon fragment concentrations within 8LL2575.



Figure 26. Raised platform and concrete footers along south side of clay concentration.

they may represent dump locations where broken clay targets were deposited after periodic cleanups of the surrounding ranges. However, the location of the raised platform and the similar distribution pattern of each concentration evidences that this was most likely some sort of shooting range.

The concrete footers look very similar to those observed on the 1945 photo in Figure 7, which supported an open walled tin covering over the gun placements on a firing range. The 1954 aerial photograph clearly shows the outline of the raised rectangular area along the southern portion of the clay concentration which fanned out to the north.

It is known through historic records that military training associated with flexible gunnery school was constantly adapting to provide trainees with more realistic training scenarios to those they would face in combat. One of the primary concerns of many officers regarding targeting and sighting on both skeet and trap ranges was that the flight of the clay targets away and across the shooters range of vision was not typical of fighter plane combat patterns when attacking a B class bomber, which typically includes a head on trajectory (USAF 1945). As evidenced by the discovery of possible trap foundations, similar to those seen along the GMTRs, to the north of the clay concentrations, it could be suggested that these ranges were utilized to help trainees target objects moving directly at them, with the raised platform along the eastern edge being the shooter station.

While it is unclear what the exact function of these ranges was, it is clear that they were heavily utilized as evidenced by the dense clay target fragment concentrations which were recorded in some areas to a depth of nearly 10 cm.

Due to this site's obvious relationship with the Buckingham Army Air Field Flexible Gunnery Training School it is considered potentially eligible for listing on the National Register of Historic Places under Criterion A which includes resource that "are associated with events that have made a significant contribution to the broad patterns of our history" (36 CFR Part 60, NRHP).

Future recreational use within the site should be limited to help preserve its current visual integrity. It is also recommended that excessive ground disturbances be avoided within its location, including activities that could possible damage the concrete footers or elevated earthen platform.

## **CONCLUSIONS AND RECOMMENDATIONS**

The United States military had no organized flexible gunnery training program prior to 1942; however, the bombing of Pearl Harbor on December 7, 1941 and with President Roosevelt's declaration of war the following day, the U.S. after nearly two years of remaining on the sidelines officially entered World War II and the need for trained flexible gunnery personnel was born. The Buckingham Army Air Field was established with the specific goal of being a training ground for flexible gunnery personnel. When it was established it was the fourth of a total of seven flexible gunnery training facilities,

and the Buckingham AAF was the only facility to support an expanded instructor training program.

During the early years of the war, when the German air force was still intact and Japanese Mitsubishi A6M Zero's still ruled the skies of the South Pacific the odds of a flexible gunner surviving multiple campaigns on a B class bomber was not good, with a 1 in 2 MIA average. A large number of personnel trained at the Buckingham facility never returned home after deployment.

While the Buckingham AAF was an important training ground for WWII personnel, the establishment of the base also served as a turning point in the social and economic future of Lee County. The base not only brought thousands of military service personnel to the region, it also brought thousands of non-military jobs associated with the construction, service, and hospitality industries. Many new residents moved to Lee County to fill these positions. After the war and the decommissioning of the base, many military and non-military immigrants to Lee County remained, making the region their home.

The Buckingham Trails Preserve occupies what can be described as the heart of the Buckingham AAF flexible gunnery training grounds, with remnants of skeet and trap ranges, two oval shaped ground moving target ranges, and four ranges of unknown function. These former facilities have been recorded in this report through four separate archaeological sites (8LL2571, 8LL2572, 8LL2573, and 8LL2575) and have been identified as part of the newly established Buckingham Army Air Field resource group (8LL2570).

Because of the unique nature of the above listed sites as part of one of the few established Flexible Gunnery Training Programs in the nation, it has been concluded that these sites are potentially eligible for listing on the National Register of Historic Places under Criterion A which includes resource that "are associated with events that have made a significant contribution to the broad patterns of our history" (36 CFR Part 60, NRHP).

Lee County has expressed an interest in preserving these features while allowing public access to the preserve for recreational purposes. It is also possible that these sites could be utilized for educational purposes, with signage to identify the more visible features on the property and provide a brief history of the Flexible Gunnery Training Program. In an effort to help preserve the contextual integrity of these sites it has been suggested that recreational activities or facility installations associated with the preserve should be limited within the four sites deemed potentially eligible for the NRHP.

As a result of this survey it has been determined that the most vulnerable resource is the two vehicle tracks (8LL2573) located within the central and southern portions of the property. Already, it is evidenced that motorized vehicle traffic along the summit of these raised oval berms has aided in significantly eroding these features. It is suggested that vehicle traffic be restricted along these features. Also, steps should be taken to mitigate the erosional effect of possible equestrian usage on these features.

In addition to the discovery of the four flexible gunnery training sites, numerous Buckingham AAF former structure locations were identified within the northern portion of the project area (8LL2574). However, no evidence was discovered during background research or during the field survey to directly associate these features with the Flexible Gunnery Training Program; therefore, the site was determined to not meet the eligibility criteria for listing on the NRHP.

The previously recorded Buckingham Military Railway (8LL2063) resource group crosses through the southern portion of the project area. This resource was formerly determined to be not eligible for listing on the NRHP, and as a result of the current survey we concurred with this recommendation.

In addition to recording all WWII associated features within the project area a reconnaissance level archaeological survey was also conducted of the property. Limited shovel tests were excavated within what was identified through background research and field investigation as being the most likely locations for possible unrecorded prehistoric or early historic archaeological sites; however, no cultural resources were encountered and it was determined that the property has a low probability of supporting unrecorded prehistoric or early historic archaeological sites.

With preservation and restricted recreational use (or mitigation against adverse effects of use) of the four flexible gunnery training related sites it has been determined that recreational activities and facilities installation within the Buckingham Trails Preserve will not affect any cultural resources listed or potentially eligible for listing on the NRHP.

However, Lee County is advised to carefully review the Unanticipated Discoveries statement in Appendix B and to adhere to its stipulations in the event that undiscovered historic material or features are identified during future activities on the property.

## REFERENCES CITED

Akerman, Joe A.

1976 *Florida Cowman: A History of Florida Cattle Raising*. 4<sup>th</sup> edition, Florida Cattlemens's Association, Kissimmee.

Almy, Marion M.

1982 Archaeological Investigations at the Cypress Creek Site (8-Hi-471): An Inland, Short-term, Multi-Period Aboriginal Occupation in Northern Hillsborough County, Florida. *Interstate I-75 Highway Phase II Archaeological Reports. Number 4*. Florida Division of Historical Resources, Tallahassee.

1990 *Cultural Resource Survey of the Caliente Springs Tract, Charlotte County, Florida* Survey #2584, on file at DHR, Tallahassee.

Ambrosino, Meghan

2008 *A Cultural Resource Assessment Survey of the Luckett Property, Lee County, Florida*. Survey #15048, on file at DHR.

Anderson, D. G.

1996 Models of Paleoindian and Early Archaic Settlement in the Lower Southeast. In *The Paleoindian and Early Archaic Southeast*, edited by D. G. Anderson and K. E. Sassaman, pp. 29-57. University of Alabama Press, Tuscaloosa.

Austin, Robert J.

1996 Prehistoric Chert Procurement and Mobility Strategies on the Lake Wales Ridge. *The Florida Anthropologist* 49:211-223.

Austin, R. J., and D. Ste. Claire

1982 *The Deltona Project: Prehistoric Technology in the Hillsborough River Basin*. Department of Anthropology, University of South Florida, Archaeological Report No. 12, Tampa.

Bense, Judith A.

1994 *Archaeology of the Southeastern United States: Paleoindian to World War I*. Academic Press, San Diego.

Browning, William D. and Roy Jackson

1991 Cultural Resource Assessment Survey of a Portion of US 17 in Charlotte and DeSoto Counties, Florida. On File at DHR, Survey #2891.

Bullen, Ripley P.

1959 The Transitional Period in Florida. *Southeastern Archaeological Conference Newsletter* 6:43-53.

Cordell, Ann S.

2004 Paste Variability and Possible Manufacturing Origins of Late Archaic Fiber-Tempered Pottery from Selected Sites in Peninsular Florida. In *Early Pottery: Technology, Function, Style, and Interaction in the Lower Southeast*. Edited By R. Saunders and C. T. Hays, pp. 63-104. University of Alabama Press, Tuscaloosa.

Covington, James W.

1961 The Armed Occupation Act of 1842. *Florida Historical Quarterly* 40(1).

Daniel, I. Randolph and Michael Wisenbaker

1987 *Harney Flats: A Florida Paleo-Indian Site*. Baywood Publishing Co., Farmingdale, NY.

Doran, G. H., and D. N. Dickel

1988 Multidisciplinary Investigations at the Windover Site. In *Wet Site Archaeology*, edited by B. A. Purdy, pp. 263-289. The Telford Press, Caldwell, NJ.

Fairbanks, Charles H.

1973 *The Florida Seminole People*. Indian Tribal Series, Phoenix.

Frisbie, Louise

1974 *Peace River Pioneers*. E.A. Seemann Publishing, Miami.

Freeman, Paul

2005 Abandoned & Little Known Airfields. Online at [www.airfields-freeman.com](http://www.airfields-freeman.com)

Grismer, Karl

1982 *The Story of Fort Myers* The Island Press Publishers, Fort Myers

Historic Property Associates

1989 *Cultural Resource Assessment Survey of Charlotte County, Florida*. Survey on file at DHR, Tallahassee.

Janus Research, Inc.

2006 *Addendum to Cultural Resource Assessment Survey of the Bennett Property, Lee County, Florida*. Survey #13639, on file at DHR, Tallahassee.

2005 *A Cultural Resource Assessment Survey of the Stoneybrook Oaks Project Area, DeSoto County, FL*. Survey # 10981 on file at DHR, Tallahassee.

Lane, George

1998 *A Pictorial History of Arcadia and DeSoto County*. Southern Heritage Press, Inc. St. Petersburg.

- Luer, George M. and Marion M. Almy  
1980 The Development of Some Aboriginal Pottery of the Central Peninsular Gulf Coast of Florida. *The Florida Anthropologist* 33:207-225.
- Mahon, John K.  
1985 *History of the Second Seminole War, 1835-1842*. Revised Edition. University of Florida Press, Gainesville.
- Milanich, Jerald T.  
1994 *Archaeology of Precolumbian Florida*. University Press of Florida, Gainesville.
- Milanich, Jerald T. and Charles H. Fairbanks  
1980 *Florida Archaeology*. Academic Press, New York.
- Mitchem, Jeffrey M.  
1989 *Redefining Safety Harbor: Late Prehistoric/Protohistoric Archaeology in West Peninsular Florida*. Ph.D. dissertation, University of Florida, Gainesville
- Plowden, Jean  
1929 History of Hardee County . The Florida Advocate, Wauchula, Florida.
- Purdy, Barbara A.  
1981 *Florida's Prehistoric Stone Technology*. University of Florida Press, Gainesville
- Russo, Michael and Gregory M. Heide  
2004 The Emergence of Pottery in South Florida. In *Early Pottery: Technology, Function, Style, and Interaction in the Lower Southeast*. Edited By R. Saunders and C. T. Hays, pp. 63-104. University of Alabama Press, Tuscaloosa.
- Sassaman, Kenneth E.  
2004 Common Origins and Divergent Histories in the Early Pottery Traditions of the American Southeast. In *Early Pottery: Technology, Function, Style, and Interaction in the Lower Southeast*. Edited By R. Saunders and C. T. Hays, pp. 63-104. University of Alabama Press, Tuscaloosa.
- Tebeau, Charlton W.  
1971 *A History of Florida*. Revised 1980. University of Miami Press, Coral Gables, Fl.
- Thole, Lou  
1996 *Forgotten Fields of America*. Pictorial Histories Publishing Company, Montana
- United States Census  
2006 *Florida Census Records*. www.census.gov. Downloaded July 6, 2006

## USAF

1945 *Flexible Gunnery Training in the AAF*. Army Air Force Historical Studies #31.

## Wadsworth, Chris and Matt Johnson

2010 *Images of America: Buckingham Army Air Field*. Arcadia Publishing, Charleston.

## Wharton, Barry

1984 *Archaeological Resources of the Upper Hillsborough Flood Detention Area, Pasco and Polk Counties, Florida*. Produced for the Southwest Florida Water Management District. On file at DHR.

## Wilbanks, William

1998 *Forgotten Heroes: Police Officers Killed in Early Florida*. Turner Publishing Company

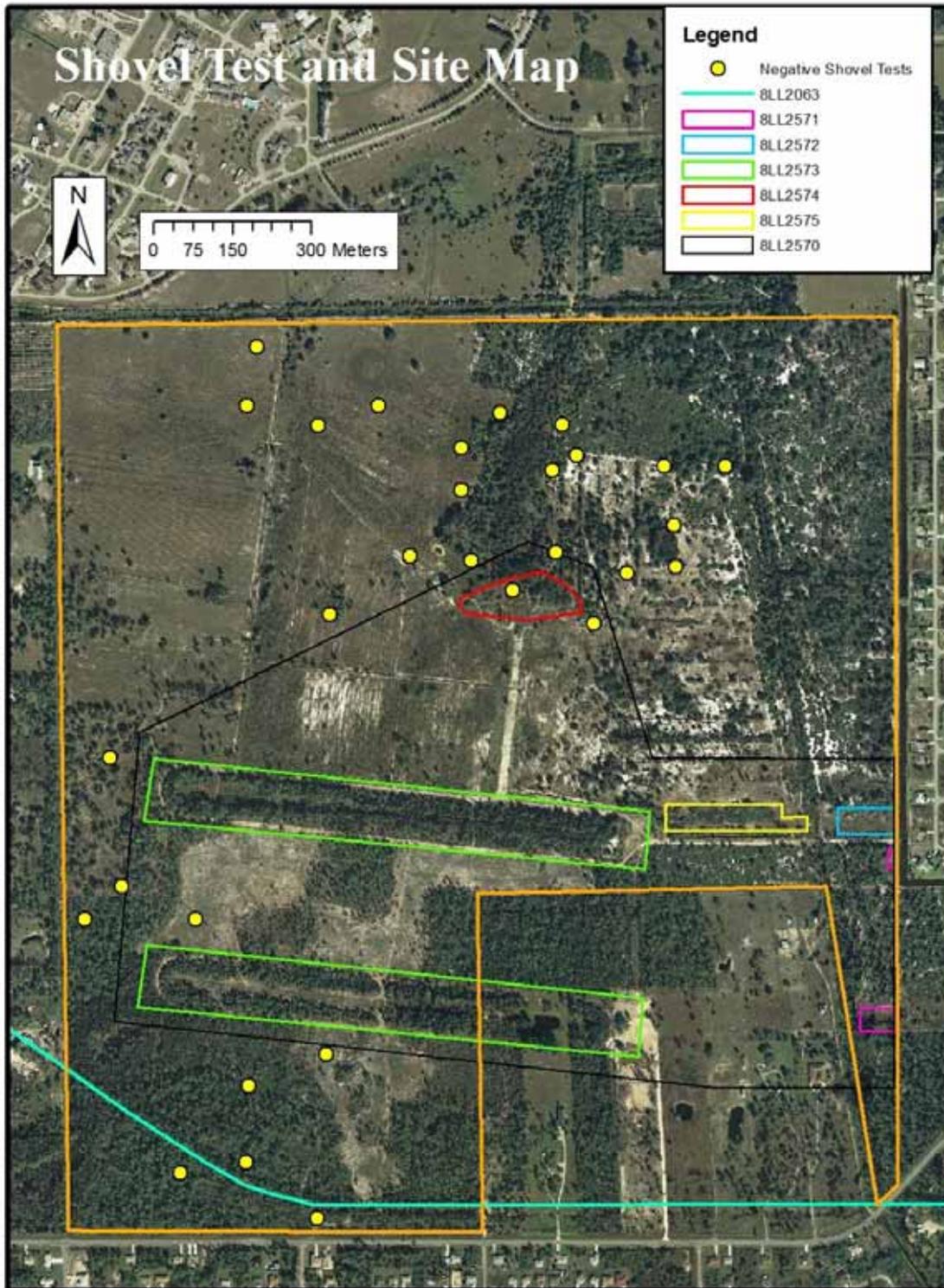
## Willey, Gordon R.

1949 *Archaeology of the Florida Gulf Coast*. Smithsonian Miscellaneous Collections. Volume 113. Washington D.C.

## Wood, Lewis N.; Joan Deming; and Ray Williams

1976 *An Archaeological and Historical Survey of the C. F. Industries, Inc. Property in Northwestern Hardee County*. University of South Florida, Department of Anthropology Report #2.

**Appendix A:**  
**Shovel Test Map**



**Appendix B:**  
**Unanticipated Discoveries Statement**

## **Unanticipated Discoveries Statement**

Even with a thorough investigation of a particular property by a professional archaeologist, there is still the possibility that unrecorded cultural resources were not discovered on the said property. Therefore, a procedure has been developed for the treatment of any unexpected discoveries that may occur during the development phase. Below are steps that should be taken by the property owner or development firm upon discovery of such resources.

- 1) If unexpected cultural remains (particularly those consisting of human burials) are encountered, the location of the discovery should be avoided in order to minimize further impact.
- 2) A qualified professional archaeologist should be contacted immediately and informed of the discovery.

A mitigation plan will then be developed in conjunction with the State Historic Preservation Officer (SHPO) and the State Archaeologist so that further adverse impact on the resource can be avoided.

Human remains are protected by state law as stipulated in Chapter 872.05 of the Florida Statutes. Below are portions of Chapter 872.05 that apply to landowners and developers.

*(3) NOTIFICATION.--*

- (a) Any person who knows or has reason to know that an unmarked human burial is being unlawfully disturbed, destroyed, defaced, mutilated, removed, excavated, or exposed shall immediately notify the local law enforcement agency with jurisdiction in the area where the unmarked human burial is located.
- (b) Any law enforcement agency that finds evidence that an unmarked human burial has been unlawfully disturbed shall notify the district medical examiner pursuant to subsection (4).

*(4) DISCOVERY OF AN UNMARKED HUMAN BURIAL OTHER THAN DURING AN ARCHAEOLOGICAL EXCAVATION.--*When an unmarked human burial is discovered other than during an archaeological excavation authorized by the state or an educational institution, all activity that may disturb the unmarked human burial shall cease immediately, and the district medical examiner shall be notified. Such activity shall not resume unless specifically authorized by the district medical examiner or the State Archaeologist.

- (a) If the district medical examiner finds that the unmarked human burial may be involved in a legal investigation or represents the burial of an individual who has been dead less than 75 years, the district medical examiner shall assume jurisdiction over and responsibility for such unmarked human burial, and no other provisions of this section shall apply. The district medical examiner shall have 30 days after notification of the unmarked human burial to determine if he or she shall maintain jurisdiction or refer the matter to the State Archaeologist.

- (b) If the district medical examiner finds that the unmarked human burial is not involved in a legal investigation and represents the burial of an individual who has been dead 75 years or more, he or she shall notify the State Archaeologist, and the division may assume jurisdiction over and responsibility for the unmarked human burial pursuant to subsection (6).
- (c) When the division assumes jurisdiction over an unmarked human burial, the State Archaeologist shall consult a human skeletal analyst who shall report within 15 days as to the cultural and biological characteristics of the human skeletal remains and where such burial or remains should be held prior to a final disposition.

(10) VIOLATION AND PENALTIES.--

- (a) Any person who willfully and knowingly disturbs, destroys, removes, vandalizes, or damages an unmarked human burial is guilty of a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.
- (b) Any person who has knowledge that an unmarked human burial is being disturbed, vandalized, or damaged and fails to notify the local law enforcement agency with jurisdiction in the area where the unmarked human burial is located is guilty of a misdemeanor of the second degree, punishable as provided in s. 775.082 or s. 775.083.
- (c) This subsection shall not apply to any person acting under the direction or authority of the division or to any person otherwise authorized by law to disturb, destroy, or remove an unmarked human burial.

- (11) RULES.--The Department of State may prescribe by rule procedures for reporting an unmarked human burial and for determining jurisdiction over the burial.

If human remains are discovered during the development phase of a project the State Archaeologist (Dr. Ryan Wheeler) should be contacted immediately. Contact information is listed below.

State Archaeologist

Dr. Ryan Wheeler (rjwheeler@dos.state.fl.us)  
 Bureau of Archaeological Research  
 B. Calvin Jones Center for Archaeology at the Governor Martin House  
 1001 de Soto Park Drive  
 Tallahassee, Florida 32301  
 (850) 245-6444

State Historic Preservation Officer

Scott Stroh (smstroh@dos.state.fl.us)  
 Florida Division of Historical Resources  
 R.A. Gray Building  
 500 South Bronough St.  
 Tallahassee, Florida 32399-0250  
 (850) 245-6300

**Appendix C:**  
**FMSF Survey Log and Site Forms**

## **Appendix D: Cattle License**

## LICENSE FOR CATTLE GRAZING

This Agreement made this 25 day of NOVEMBER, 2008 by and between LEE COUNTY, a political subdivision and charter county of the State of Florida, c/o Director of Parks and Recreation, 3410 Palm Beach Boulevard, Fort Myers, FL 33916, telephone (239) 533-7275, hereinafter referred to as "Licensor," and Shane and Denise Parker, husband and wife, whose address is 13500 Peace Road, Fort Myers, FL 33905, telephone (239) 694-2247, hereinafter referred to as "Licensee":

### WITNESSETH

Licensor, in consideration of the fees paid, the covenants and agreements herein to be kept and performed by the Licensee, does hereby grant to the Licensee a license solely for the grazing of cattle on Licensor's lands as described as follows, to wit:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

In further consideration of this Agreement, the parties agree as follows:

1. Licensee agrees to pay Licensor the total sum of \$271.50, due by September 11<sup>th</sup> each year for the term of this license to use the described property solely for cattle grazing.
2. This License is not assignable to any other party.
3. This License shall extend for an initial term of three years, which at the expiration of such term may be renewable upon the concurrence of both parties for one additional year, and/or may be revocable by the Licensor by giving the Licensee 30 days written notice to remove the cattle from the premises.
4. Licensee will not use the described lands for any other purpose other than cattle grazing.
5. Licensee will maintain the existing four strand barbed wire fence around the perimeter of the property with the exception of the road frontage. Road frontage will be maintained with five strand barbed wire during the term of the License. The fence shall remain the property of the Licensor.
6. Licensee agrees to keep the fence in excellent state of repair at all times during the term of this Agreement.
7. It is mutually agreed that this Agreement may be canceled upon 48 hours written notice to the Licensee if any of Licensee's cattle are not kept within the confines of the property described in Exhibit "A."
8. Licensee covenants and agrees to file an annual personal property tax return with the County of Lee, State of Florida, as required by law.

9. All section corners, quarter corners, and other survey monuments lying in the premises will be properly flagged by Licensor. Licensee agrees to bear any survey costs for the resetting of these monuments in the event they are disturbed by the Licensee in any way.
10. Licensee hereby indemnifies and releases the Licensor from any and all claims for damages to both persons and property as the result of the cattle grazing, and will hold Licensor harmless from all such damages during the term of this Agreement to include all reasonable fees, costs and expenses from any resulting litigation in any forum as the result of such damage as claimed or brought by third parties.
11. Licensee must obtain written approval from Conservation 20/20 Land Stewardship Supervisor prior to performing any land clearing, controlled burns, fertilizing, exotic removal, chopping, chemical spraying, or other land management activities.
12. Licensee shall not exceed 60 head of cattle at any time.

Signed and sealed the date above written.

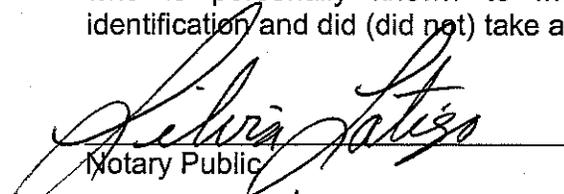
LICENSEE



Shane Parker

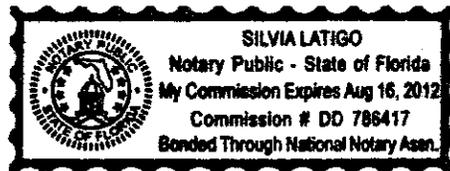
STATE OF FLORIDA ) ss:  
 COUNTY OF LEE )

The foregoing instrument was acknowledged before me this 11<sup>th</sup> day of November, 2008, by Shane Parker, a married person, who is personally known to me or has produced Driver License Fl. as identification and did (did not) take an oath.

  
 Notary Public

Silvia Latigo  
 Print Name

My Commission Expires:

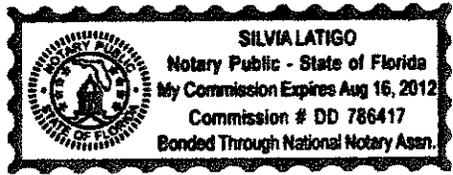


Denise B. Parker  
Denise Parker

STATE OF FLORIDA ) ss:  
COUNTY OF LEE )

The foregoing instrument was acknowledged before me this 11<sup>th</sup> day of November, 2008, by Denise B. Parker, a married person, who is personally known to me or has produced Driver License FL as identification and did (did not) take an oath.

Silvia Latigo  
Notary Public  
Silvia LATIGO  
Print Name  
My Commission Expires:



LICENSOR  
LEE COUNTY PARKS & RECREATION

BY: [Signature]  
Director

Approved as to Form  
By: [Signature]  
Lee County Attorney's Office

## Exhibit "A" Attachment

The point of beginning being the Southwest corner of Section 17, Township 44 South, Range 26 East; thence N 89°19'51" E along the South line of said Section 17, 5288.62 feet to the Southeast corner of said Section 17; thence N 0°03'28"E, 1698.21 feet along the East line of said Section 17; thence S 89°07'26"W 5301.24 feet to the West line of said Section 17; thence S 0°21'48"E 1678.67 feet to the Southwest corner of said Section 17 and the point of beginning.

Also the following described tract of land, the point of beginning being the Northwest corner of Section 20, Township 44 South, Range 26 East; thence N 89°19'51"E along the North line of said Section 20, 5288.62 feet to the Northeast corner of said Section 20; thence S 0°41'51"E along the East line of said Section 20, 201.79 feet; thence S 89°07'20"W, 5286.05 feet to the West line of said Section 20; thence N 01°22'14"W along the West line of said Section 20, 221.33 feet to the point of beginning;

And

Commencing at the Northwest corner of Section 20, Township 44 South, Range 26 East; thence S 01°22'14"E, 221.33 feet along the West line of said Section 20 to a point of beginning; thence N 89°07'20"E, 5286.05 feet to the East line of said Section 20; thence S 0°41'51"E, 1597.35 feet along the East line of said Section 20 to a point on the Northwesterly right-of-way line of Buckingham Road; thence S 42°36'02" W, 229.41 feet along said right-of-way to the P.C. of a curve to the right having a radius 630.72 feet; thence Southwesterly through a central angle of 47°34'00" an arc distance of 523.62 feet to the P.T. of said curve; thence N 89°49'58"W along the Northerly right-of-way of said Buckingham Road, 4638.65 feet to the West line of said Section 20; thence N 01°22'14"W along the West line of said Section 20, a distance of 1875.60 feet to the point of beginning;

And

Commencing at the Southwest corner of Section 17, Township 44 South, Range 26 East; thence N 0°21'48"W, 1678.67 feet to a point of beginning; thence N 89°07'26"E, 5301.24 feet to the East line of said Section 17; thence N 0°03'28" E along the East line of said Section, 1900.00 feet; thence S 89°07'33"W, 5314.70 feet to the West line of said Section 17; thence S 0°19'56"E 923.27 feet to the West quarter corner of said Section 17; thence S 0°21'48"E, 976.73 feet to the point of beginning.

Continued on next page

Less and except the following described parcel:

A tract of land in the Northeast quarter of Section 20, Township 44 South, Range 26 East, lying North of Buckingham Road (SR #82A), Lee County, Florida described as follows:

Beginning at the Northwest corner of the NE  $\frac{1}{4}$  of said Section 20; thence N  $89^{\circ}19'51''$ E along the North line of the NE  $\frac{1}{4}$  of said Section 20 a distance of 2189.31 feet to the centerline of an existing ditch; thence S  $8^{\circ}59'56''$ E 1996.9 feet to a point on a curve to the right on the Northerly right-of-way line of said Buckingham Road at its intersection with the centerline of said existing ditch; said curve having radius 630.72 feet; thence Southwesterly through central angle of  $46^{\circ}20'45''$  an arc distance of 510.18 feet to the P.T.; thence N  $89^{\circ}49'58''$ W, along the North right-of-way line of said Buckingham Road a distance of 2006.25 feet to the West line of said NE  $\frac{1}{4}$  of Section 20; thence N  $1^{\circ}01'45''$ W, along the West line of said NE  $\frac{1}{4}$  of Section 20 a distance of 2135.23 feet to the point of beginning;

And

Less and except the West 50 feet of said Section 17 lying South of the North 1730 feet and the West 50 feet of the said Section 20 lying North of Buckingham Road.

## **Appendix E: LCDCL Easement Research**

**Waller, James (Lee)**

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**From:** Waller, James (Lee)  
**Sent:** Thursday, May 12, 2011 9:43 AM  
**To:** Waller, James (Lee)  
**Subject:** FW: Watermen Equestrian Club - Nom 371

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**From:** Fischer, Pat  
**Sent:** Friday, February 25, 2011 12:17 PM  
**To:** Olson, Cathy  
**Subject:** Watermen Equestrian Club - Nom 371

Hi Cathy:

Upon reviewing file regarding your questions, please see below for our response to the following encroachments and easements:

1. Fence encroachment in multiple places – fence was relocated.
2. Power pole located inside the property line along SE boundary – if future maintenance or construction is contemplated by the power provider we will require the provider to relocate outside our property line.
3. Guy wires for power poles along westerly boundary – if future power maintenance or construction is contemplated we would require the provider to relocate outside the property line.
4. There is a 50’ road easement running outside our property line along the westerly property line which actually contains the overhead power service. Since the westerly abutting private party land ownership is small acreage(5-10 acres) with access provided by Eastwood Acres Road, the likelihood of a future public road utilizing the road easement abutting the conservation land is very unlikely.

Please contact me if we can be of additional assistance.

Best Regards

Pat Fischer  
County Lands Division  
Lee County Government, Florida  
[pfischer@leegov.com](mailto:pfischer@leegov.com)  
Phone (239) 533-8681  
Fax (239) 485-8391

Note: Florida has a broad public records law.  
Most written communications to or from County officials regarding County business are public records available to the public and media upon request.  
Your e-mail communications may be subject to public disclosure.

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Please note: Florida has a very broad public records law. Most written communications to or from County Employees and officials regarding County business are public records available to the public and media upon request. Your email communication may be subject to public disclosure.

Under Florida law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing.

## **Appendix F: Legal Description**



**Old Republic National Title Insurance Company**

**OWNER'S POLICY**

**Schedule A**

Policy No.:  
SDC-796896

Effective Date:  
November 26, 2008 @ 10:56 AM

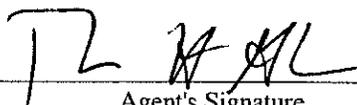
Agent's File Reference:  
THG WATER LEE

Amount of Insurance: \$12,584,000.00 ✓

1. Name of Insured: LEE COUNTY, a political subdivision of the State of Florida ✓
2. The estate or interest in the land described herein and which is covered by this policy is a Fee Simple and is at the effective date hereof vested in the named insured as shown by instrument recorded as Official Records Instrument Number 2008000309748 of the Public Records of Lee County, Florida. ✓
3. The land referred to in this policy is described as follows:  
  
SEE EXHIBIT "A" ATTACHED HERETO

Agent No.: **BO9099**

<p>Issuing Agent:</p> <p><b>HENDERSON, FRANKLIN, STARNES &amp; HOLT, P.A.</b></p> <p>1715 Monroe St. P. O. Box 280 Fort Myers, FL 33902</p>
---

  
\_\_\_\_\_  
Agent's Signature  
**Thomas H. Gunderson**  
Attorney at Law

**Old Republic National Title Insurance Company**  
**OWNER'S POLICY**  
**Schedule B**

Policy No.:  
SDC-796896

Agent's File Reference:  
THG WATER LEE

This policy does not insure against loss or damage by reason of the following exceptions:

- DEL
1. Taxes for the year of the effective date of this policy and taxes or special assessments which are not shown as existing liens by the public records. ✓
  2. Rights or claims of parties in possession not shown by the public records.
  3. Encroachments, overlaps, boundary line disputes, and any other matters which would be disclosed by an accurate survey and inspection of the premises.
  4. Easements or claims of easements not shown by the public records.
  5. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records.
  6. The lien of all taxes for the year 2009 and thereafter, which are not yet due and payable. ✓
  7. Lee County Ordinance 86-14 and 86-38 providing for mandatory solid waste collection and the imposition of special assessments for said collection services. The special assessments for the current tax year are payable with the ad valorem taxes. *TYPICAL SOLID WASTE*
  8. Any lien provided by Chapter 159, Florida Statutes, in favor of any municipality or authority for unpaid charges for services by any water, sewer or gas system to the land described herein. ✓
  9. Oil, gas, mineral, or other reservations as set forth in deed by Consolidated Naval Stores Company recorded in Deed Book 146, Page 168; said rights subsequently conveyed to Consolidated-Tomoka Land Company by Deed recorded in Official Records Book 553, page 144 and extended by Notice recorded in Official Records Book 1093, page 422 (as to Section 17) and by Notice recorded in Official Records Book 1093, page 425 (as to Section 20) and further conveyed to Indigo Group, Inc., a Florida corporation by Warranty Deed recorded in Official Records Book 4516, page 2118, Public Records of Lee County, Florida. NOTE: The right of entry has been released pursuant to a Release of Surface Entry Rights with Respect to Oil, Gas, and Mineral Interest executed by Indigo Group, Inc. and recorded November 26, 2008 in Official Records Instrument No. 2008000309747, Public Records of Lee County, Florida. ✓
  10. Oil, gas, mineral, and other reservations as set forth in deed by Lee County, Florida, a political subdivision of the State of Florida and The City of Fort Myers, Florida, a Florida Municipal corporation recorded in Deed Book 219, Page 403 and Release of Right of Entry by Lee County as to the insured parcel as described in instrument recorded in Official Records Book 4565, page 3890 and Termination and Release of Gas, Oil, Mineral and Sub-Surface Rights from The City of Fort Myers recorded in Official Records Book 4573, Page 1122 and Official Records Book 4576, Page 1514, Public Records of Lee County, Florida. ✓
  11. Road right-of-way to Lee County, a political subdivision of the State of Florida recorded in Deed Book 273, Page 251, Public Records of Lee County, Florida. ✓
  12. Notice of Subsurface Interest recorded in Official Records Book 1856, Page 144, Public Records of Lee County, Florida. No right of surface entry. ✓
  13. Exceptions 2 through 5 are hereby deleted. ✓
  14. Subject to matters shown on survey prepared by Cooner & Associates, Inc., Surveying and Mapping, under Project Number 081004.01 dated November 3, 2008. ✓

## Exhibit "A" Attachment

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Continued on next page ✓

Less and except the following described parcel:

A tract of land in the Northeast quarter of Section 20, Township 44 South, Range 26 East, lying North of Buckingham Road (SR #82A), Lee County, Florida described as follows:

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And

Less and except the West 50 feet of said Section 17 lying South of the North 1730 feet and the West 50 feet of the said Section 20 lying North of Buckingham Road. ✓

not be liable for and will not pay the fees ( ) 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 this paragraph 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.*

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) The company will pay only those costs, attorneys' fees and expenses incurred in accordance with Section 4 of the 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

3

Prepared by and return to:

Thomas H. Gunderson  
Attorney at Law  
HENDERSON, FRANKLIN, STARNES & HOLT, P.A.  
1715 Monroe St. P. O. Box 280  
Fort Myers, FL 33902  
239-344-1100  
File Number: THG WATER LEE  
Will Call No.: 35

INSTR # 2008000309748, Pages 4  
Doc Type D, Recorded 11/26/2008 at 10:56 AM,  
Charlie Green, Lee County Clerk of Circuit Court  
Deed Doc. \$88088.00 Rec. Fee \$35.50  
Deputy Clerk JMILLER  
#3

Parcel Identification No. 17-44-26-00-00001.0000  
17-44-26-00-00003.0000  
20-44-26-00-00001.0000  
20-44-26-00-00006.0000

[Space Above This Line For Recording Data]

### Warranty Deed

(STATUTORY FORM - SECTION 689.02, F.S.)

This Indenture made this 11th day of November, 2008 between WATERMEN-EQUESTRIAN CLUB, LLC, a Florida limited liability company whose post office address is 265 Sevilla Avenue, Coral Gables, FL 33134 of the County of Miami-Dade, State of Florida, grantor\*, and LEE COUNTY, a political subdivision of the State of Florida whose post office address is P.O. Box 398, Fort Myers, FL 33902-0398 of the County of Lee, State of Florida, grantees\*,

Witnesseth, that said grantor, for and in consideration of the sum of TEN AND NO/100 DOLLARS (\$10.00) and other good and valuable considerations to said grantor in hand paid by said grantee, the receipt whereof is hereby acknowledged, has granted, bargained, and sold to the said grantee, and grantee's heirs and assigns forever, the following described land, situate, lying and being in Lee County, Florida, to-wit:

SEE EXHIBIT "A" ATTACHED HERETO

Subject to taxes for 2008 and subsequent years; covenants, conditions, restrictions, easements, reservations and limitations of record, if any.

and said grantor does hereby fully warrant the title to said land, and will defend the same against lawful claims of all persons whomsoever.

\* "Grantor" and "Grantee" are used for singular or plural, as context requires.

In Witness Whereof, grantor has hereunto set grantor's hand and seal the day and year first above written.

Signed, sealed and delivered in our presence:

WATERMEN-EQUESTRIAN CLUB, LLC, a Florida limited liability company

THG  
Witness Name: Thomas H. Gunderson

By: [Signature]  
EDDY GARCIA, Manager

Nancy Moss  
Witness Name: Nancy Moss

By: [Signature]  
DAVID KRAIZGREEN, Manager

THG  
Witness Name: Thomas H. Gunderson  
Nancy Moss  
Witness Name: Nancy Moss

(Corporate Seal)

Acquisition approved by the Lee County Board of Commissioners action on SEP. 30, 2008 and accepted on behalf of the board by Paul R. [Signature] NOV. 25, 2008 in accordance with BS 20081049 Project CONS 2000, 8800 Parcel 371

State of Florida  
County of Lee

The foregoing instrument was acknowledged before me this 11 day of November, 2008 by EDDY GARCIA, Manager, who  is personally known or  has produced \_\_\_\_\_ as identification.

[Notary Seal]  **THOMAS H. GUNDERSON**  
MY COMMISSION # DD 752633 EXPIRES  
March 24, 2012  
BONDED THRU TROY FAIN INSURANCE, INC.

TH AG  
Notary Public

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

My Commission Expires: \_\_\_\_\_

State of Florida  
County of Lee

The foregoing instrument was acknowledged before me this 11 day of November, 2008 by DAVID KRAIZGRUN, Manager, who  is personally known or  has produced \_\_\_\_\_ as identification.

[Notary Seal]  **THOMAS H. GUNDERSON**  
MY COMMISSION # DD 752633 EXPIRES  
March 24, 2012  
BONDED THRU TROY FAIN INSURANCE, INC.

TH AG  
Notary Public

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

My Commission Expires: \_\_\_\_\_

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Continued on next page

**Less and except the following described parcel:**

**A tract of land in the Northeast quarter of Section 20, Township 44 South, Range 26 East, lying North of Buckingham Road (SR #82A), Lee County, Florida described as follows:**

**Beginning at the Northwest corner of the NE  $\frac{1}{4}$  of said Section 20; thence N  $89^{\circ}19'51''$ E along the North line of the NE  $\frac{1}{4}$  of said Section 20 a distance of 2189.31 feet to the centerline of an existing ditch; thence S  $8^{\circ}59'56''$ E 1996.9 feet to a point on a curve to the right on the Northerly right-of-way line of said Buckingham Road at its intersection with the centerline of said existing ditch; said curve having radius 630.72 feet; thence Southwesterly through central angle of  $46^{\circ}20'45''$  an arc distance of 510.18 feet to the P.T.; thence N  $89^{\circ}49'58''$ W, along the North right-of-way line of said Buckingham Road a distance of 2006.25 feet to the West line of said NE  $\frac{1}{4}$  of Section 20; thence N  $1^{\circ}01'45''$ W, along the West line of said NE  $\frac{1}{4}$  of Section 20 a distance of 2135.23 feet to the point of beginning;**

**And**

**Less and except the West 50 feet of said Section 17 lying South of the North 1730 feet and the West 50 feet of the said Section 20 lying North of Buckingham Road.**

This document prepared by  
County Lands Division

Project: **Conservation Lands Program, Project 8800**

Parcel: 371

STRAP No's.: 17-44-26-00-00001.0000, 17-44-26-00-00003.0000, 20-44-26-00-00001.0000 and 20-44-26-00-00006.0000

BOARD OF COUNTY COMMISSIONERS

LEE COUNTY

AGREEMENT FOR PURCHASE AND SALE OF REAL ESTATE

THIS AGREEMENT for purchase and sale of real property is made this 30 day of September, 2008 by and between Watermen-Equestrian Club, LLC, hereinafter referred to as SELLER, whose address is 8045 NW 155 Street, Miami Lakes, FL 33016, and **LEE COUNTY**, a political subdivision of the State of Florida, hereinafter referred to as BUYER.

WITNESSETH:

1. **AGREEMENT TO PURCHASE AND TO SELL:** SELLER hereby agrees to sell and BUYER hereby agrees to purchase, subject to the terms and conditions hereinafter set forth, all of that certain parcel of land consisting of 572.11 acres more or less, and located on the North side of Buckingham Road near the intersection of Abrams Boulevard, Lee County, Florida and being more particularly described in attached "Exhibit A", hereinafter called the "Property". This property will be acquired for the Conservation Lands Program, Project 8800, hereinafter called the "Project".

2. **PURCHASE PRICE AND TIME OF PAYMENT:** The total purchase price will be Twelve Million Five Hundred Eighty Four Thousand Dollars (\$12,584,000), payable at closing in U.S. currency by official bank check.

A6a  
9-30-08

3. **EVIDENCE OF TITLE:** The SELLER will provide the BUYER (County) with an Owner's title commitment and title insurance in the amount of the purchase price, issued by Henderson, Franklin, Starnes & Holt, PA as agent for Old Republic National Title Insurance Company. The commitment must also show the subject premises has legal and marketable access to the County right-of-way system. This commitment must be accompanied by one copy of all documents constituting exceptions to the title commitment and, may be subject only to real estate taxes for the current year, zoning and use restrictions imposed by governmental authority, and restrictions and easements common to the area and subject to those matters shown as permitted title exceptions on attached Exhibit "B" (Permitted Title Exceptions).

BUYER will have 30 days from the date of delivery to examine the title documents provided with the commitment. If title commitment includes items that are unacceptable to the County or indicative of a title defective, BUYER will notify SELLER in writing as to the provisions in the title commitment that are unacceptable or title defects that must be addressed by SELLER. SELLER will make a prompt and diligent effort to correct the defects and eliminate the unacceptable title commitment provisions. If SELLER fails to make corrections within 60 days after notice, BUYER may elect to accept the Property in its existing condition with an appropriate reduction to the purchase price, or may terminate this Agreement without obligation.

4. **CONDITION OF PROPERTY; RISK OF LOSS:** BUYER has inspected the Property and, except as is otherwise provided herein, accepts the Property in the condition inspected. Any loss and/or damage to the Property occurring between the date of this offer and the date of closing or date of possession by BUYER, whichever occurs first, will be at SELLER's sole risk and expense. However, BUYER may accept the damaged property and deduct from the purchase price any expenses required to repair the damage, or BUYER may cancel this Agreement without obligation.

5. **SELLER'S INSTRUMENTS AND EXPENSES:** SELLER will pay for and provide:
- (a) A statutory warranty deed, and an affidavit regarding liens, possession, and withholding under FIRPTA in a form sufficient to allow "gap" coverage by title insurance;
  - (b) documentary stamps on deed;
  - (c) utility services up to, but not including the date of closing;
  - (d) taxes or assessments for which a bill has been rendered on or before the date of closing, if closing occurs between October 31 and January 1, then the SELLER is responsible for the full year's ad valorem real estate taxes for the year;

- (e) payment of partial release of mortgage fees, if any;
- (f) SELLER's attorney fees, if any.
- (g) Environmental Audit, (if desired by BUYER). EG initial

6. **BUYER'S INSTRUMENTS AND EXPENSES:** BUYER will pay for:

- (a) Recording fee for deed;
- (b) ~~Environmental Audit, (if desired by BUYER).~~ EG initial

7. **TAXES:** BUYER is exempt from ad valorem taxation. SELLER will be charged for Real Estate taxes and personal property taxes (if applicable) up to, but not including the date of closing. SELLER will pay all taxes determined to be legally due and payable by the County Tax Collector. If closing occurs between October 31 and January 1, then the SELLER is responsible for the ad valorem real estate taxes for the full year without proration.

8. **DEFECTS IN TITLE AND LEGAL ACCESS:** Prior to closing, BUYER will have 30 days from the date of the delivery of the title commitment to County Lands Division to examine the title and documents establishing legal access to the property. If title or legal access is found to be defective, BUYER will notify SELLER in writing of the defects and SELLER will make a prompt and diligent effort to correct such defects. If SELLER fails to make such corrections within 60 days after notice, BUYER may elect to accept the Property in its existing condition with an appropriate reduction to the purchase price, or may terminate this Agreement without obligation.

9. **SURVEY:** At least 30 days prior to closing SELLER will obtain, at SELLER's expense, a survey meeting ALTA/ACSM Land Title Survey standards and requirements depicting at minimum the boundary of the property, improvements located on the property, easements (recorded and unrecorded) affecting the property and encroachments onto the property. The field survey must occur on a date subsequent to the date of this agreement, and be based upon the title commitment provided to the BUYER. The sealed survey must be certified to the BUYER, the Title Insurance Underwriter, and the Title Company closing the transaction, and be provided to BUYER in both printed and digital formats. If the survey shows a discrepancy in the size or dimensions of the Property, encroachments onto the Property, improvements located on the Property (and subject to this agreement) encroaching onto adjacent lands, violations of recorded covenants, or violations of the provisions of this Agreement, upon notice to the SELLER, the BUYER may elect to treat the discrepancies, violations and/or encroachments as a title defect subject to the provisions of paragraph 3 regarding notice and correction.

10. **ENVIRONMENTAL AUDIT:** SELLER shall have performed by Ardaman and Associates within 60 days of closing, at SELLER's expense, an environmental audit of the Property. If the audit identifies environmental problems unacceptable to the BUYER, BUYER may elect to accept the Property in its existing condition with an appropriate abatement to the purchase price or BUYER may terminate this Agreement without obligation. EB initials

11. **ABSENCE OF ENVIRONMENTAL LIABILITIES:** The SELLER hereby warrants and represents that the Property is free from hazardous materials and does not constitute an environmental hazard under any federal, state or local law or regulation. No hazardous, toxic or polluting substances have been released or disposed of on the Property in violation of any applicable law or regulation. The SELLER further warrants that there is no evidence that hazardous, toxic or polluting substances are contained on or emitting from the property in violation of applicable law or regulation. There are no surface impoundments, waste piles, land fills, injection wells, underground storage areas, or other man-made facilities which have or may have accommodated hazardous materials. There is no proceeding or inquiry by any governmental agency with respect to production, disposal or storage on the property of any hazardous materials, or of any activity that could have produced hazardous materials or toxic effects on humans, flora or fauna. There are no buried, partially buried, or above-ground tanks, storage vessels, drums or containers located on the Property. There is no evidence of any release of hazardous materials onto or into the Property.

The SELLER also warrants that there have been no requests to SELLER from any governmental authority or other party for information, notices of claim, demand letters or other notification that there is any potential for responsibility with respect to any investigation or clean-up of hazardous substance releases on the property. All warranties described herein will survive the closing of this transaction.

In the event the SELLER breaches the warranties as to environmental liability, SELLER agrees to indemnify and hold the BUYER harmless from all fines, penalties, assessments, costs and reasonable attorneys' fees resulting from contamination and remediation of the property.

12. **TIME AND BINDING AGREEMENT:** Time is of the essence for closing this transaction. The BUYER's written acceptance of this offer will constitute an Agreement for the purchase and sale of the Property that will bind the parties, their successors and assigns. However, SELLER understands and agrees BUYER'S ability to close will be contingent on the timing and availability of designated funds. In the event the BUYER abandons this project after execution of this Agreement, but before closing, BUYER may terminate this Agreement without obligation.

13. **DATE AND LOCATION OF CLOSING:** The closing of this transaction will be held at the office of the insuring title company on or before 60 days from the date this Agreement is made. The time and location of closing may be changed by mutual agreement of the parties. If sufficient Conservation Lands Program funds are not available on the stated closing date, either party may cancel this Agreement without obligation, or extend the closing date by mutual agreement.

14. **ATTORNEYS' FEES:** The prevailing party in any litigation concerning this Agreement will be entitled to recover reasonable attorneys' fees and costs.

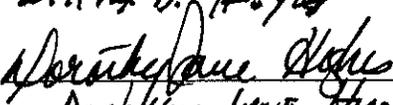
15. **REAL ESTATE BROKERS:** SELLER hereby agrees to indemnify and hold the BUYER harmless from and against any claims by a real estate broker claiming by or through SELLER. BUYER hereby agrees to indemnify and hold the SELLER harmless from and against any claims by a real estate broker claiming by or through BUYER.

16. **POSSESSION:** SELLER warrants that there are no parties in possession other than SELLER unless otherwise stated herein. SELLER agrees to deliver possession of Property to BUYER at time of closing unless otherwise stated herein.

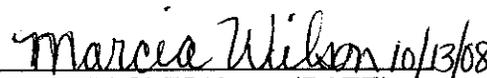
17. **TYPEWRITTEN/HANDWRITTEN PROVISIONS:** Typewritten and handwritten provisions inserted herein or attached hereto as addenda, and initialed by all parties, will control all printed provisions in conflict therewith.

18. **SPECIAL CONDITIONS:** Any and all special conditions are attached to this Agreement and signed by all parties.

WITNESSES:

  
\_\_\_\_\_  
William D. Hughes  
  
\_\_\_\_\_  
Dorothy Jane Hughes

CHARLIE GREEN, CLERK

BY:   
\_\_\_\_\_  
DEPUTY CLERK (DATE) 10/13/08

SELLER:

Watermen-Equestrian Club, LLC  
A Florida Limited Liability Company

  
\_\_\_\_\_  
Eddy Garcia  
Its Managing Member

BUYER:

LEE COUNTY, FLORIDA, BY ITS  
BOARD OF COUNTY COMMISSIONERS

BY:   
\_\_\_\_\_  
CHAIRMAN OR VICE CHAIRMAN



APPROVED AS TO LEGAL FORM  
AND SUFFICIENCY

  
\_\_\_\_\_  
COUNTY ATTORNEY (DATE) 10/17/08

## SPECIAL CONDITIONS

Page 1 of 2

1. The purchase price of \$12,584,000 is based upon the SELLER's stated acreage of 572.11 acres. The acreage will be verified by the boundary survey obtained by SELLER pursuant to Paragraph 9 of the Agreement. If the actual net acreage is less than 572.11 acres the purchase price will be adjusted downwards accordingly at the agreed per acre price of \$22,000.
2. The purchase price of \$12,584,000 is based upon 10%, or +/- 57 acres of the overall parcel being deemed wetlands. BUYER will obtain, at its expense, a Wetland Determination Report. If the report indicates the parcel is more than 12% wetlands, the purchase price will be adjusted downward at \$22,000 per acre or the SELLER may terminate this Agreement without obligation.
3. SELLER warrants that the property is in substantially the same condition as it existed when the application for the nomination of the property for the Conservation Land Program Project was received on July 16, 2007. In this regard, SELLER warrants that no logging, clear cutting, mining or other significant impacts have occurred to or on the property. BUYER must inspect the property prior to closing and if, in BUYER'S opinion, significant detrimental activity has occurred on the property since the time it was nominated, with or without the SELLER'S knowledge and consent, BUYER may elect to accept the damaged property in its existing condition with an appropriate reduction in the purchase price, or may terminate this agreement without obligation.
4. BUYER intends to purchase this property as part of the Conservation Lands Program Project. The purpose of this project is preservation and conservation of environmentally sensitive and desirable property. The existence of severed oil, gas and mineral rights conflicts with the BUYER's purpose. Therefore, BUYER will deem the existence of oil, gas and mineral rights or leases in a third party as a defect in the chain of title.  
SELLER agrees to obtain separate releases for the right of surface entry for each oil, gas and mineral rights lease or interest. In the alternative, SELLER agrees to provide a title commitment and owner's title insurance policy that does not list the separate oil, gas and mineral rights or leases as an exception; or, exclude the rights over, under or upon the surface of the subject property necessary to exercise these rights.  
If SELLER fails to have the separate rights or leases as to the right of surface entry released of record, or if the title commitment and owner's title insurance policy provided by SELLER excludes either the separate rights or leases or the access rights necessary to exercise the oil, gas and mineral rights from coverage, BUYER may elect to accept the property in its existing condition with an appropriate reduction to the purchase price, or may terminate this Agreement without obligation.
5. SELLER, at their expense, are to remove all concrete slabs, pilings, foundations, and clean up areas where removal takes place, and dispose of said items and refuse off site in accordance with Governmental regulations. SELLER is also responsible for the removal of any waste piles, to include abandoned and/or buried vehicles, farm machinery and equipment, or household appliances.
6. Within ten days of BUYER's acceptance, SELLER is to furnish names of the tenants occupying the property, and copies of all leases, licenses, and agreements attached as Exhibit "C". All existing leases and agreements to occupy or use subject property are to be canceled or assigned to County prior to closing. After BUYER's acceptance of this purchase agreement, BUYER has SELLER's permission to contact Lessees currently grazing cattle on property to determine if they wish to enter into a License Agreement with the County to continue grazing cattle.
7. SELLER, at its expense, will have any and all wells on the property inspected by a licensed well contractor to ensure they were properly constructed and are in good working order. SELLER, at its expense, will have any and all wells tested for potential water contaminants (as specified by Lee County on a case by case basis) by a licensed laboratory, in accordance with government regulations.
8. SELLER, at its expense, will ensure any and all wells on the property are properly plugged by a licensed well contractor, in accordance with government regulations.
9. SELLER, at its expense, will remove any farm pumps, fuel tanks, and related structures from the property in accordance with government regulations.

**SPECIAL CONDITIONS**

Page 2 of 2

- 10. Not with standing paragraphs 8 and 9, BUYER may elect to retain any and all wells and or related structures on the subject property.
- 11. SELLER must provide BUYER with all South Florida Water Management District permits. SELLER is responsible for any requirement or liabilities arising from active South Florida Water Management District permits issued on subject property, if any.
- 12. In the event both parties do not sign the Agreement by September 30, 2008, any offer to sell or purchase the property will be deemed null and void.
- 13. SELLER, at its expense, will realign the fence encroachments as identified by the Jeffrey C. Crooner and Associates, Inc., survey dated June 14, 2004 prior to closing.
- 14. All terms set forth in Items 1-13 of the Special Conditions will survive the closing of this transaction.

WITNESSES:

*Val J. W.*  
*William J. Hughes*  
*Maraty Jane Hughes*  
*Dorothy Jane Hughes*

**SELLER:**

Watermen-Equestrian Club, LLC  
A Florida Limited Liability Company

By: *Eddy Garcia* (DATE)  
 Eddy Garcia  
 Its Managing Member

CHARLIE GREEN, CLERK

**BUYER:**

LEE COUNTY, FLORIDA, BY ITS  
BOARD OF COUNTY COMMISSIONERS

BY: *R. G. Judice*  
 CHAIRMAN OR VICE CHAIRMAN



APPROVED AS TO LEGAL FORM  
AND SUFFICIENCY

*Mindy D. J.*  
 COUNTY ATTORNEY (DATE)

# Exhibit "A"

THE POINT OF BEGINNING BEING THE SOUTHWEST CORNER OF SECTION 17, TOWNSHIP 44 SOUTH, RANGE 26 EAST; THENCE N 89°19'51" E ALONG THE SOUTH LINE OF SAID SECTION 17, 5288.62 FEET TO THE SOUTHEAST CORNER OF SAID SECTION 17; THENCE N 0°03'28" E, 1698.21 FEET ALONG THE EAST LINE OF SAID SECTION 17; THENCE S 89°07'26" W 5301.24 FEET TO THE WEST LINE OF SAID SECTION 17; THENCE S 0°21'48" E 1678.67 FEET TO THE SOUTHWEST CORNER OF SAID SECTION 17 AND THE POINT OF BEGINNING.

ALSO THE FOLLOWING DESCRIBED TRACT OF LAND, THE POINT OF BEGINNING BEING THE NORTHWEST CORNER OF SECTION 20, TOWNSHIP 44 SOUTH, RANGE 26 EAST; THENCE N 89°19'51" E ALONG THE NORTH LINE OF SAID SECTION 20, 5288.62 FEET TO THE NORTHEAST CORNER OF SAID SECTION 20; THENCE S 0°41'51" E ALONG THE EAST LINE OF SAID SECTION 20, 201.79 FEET; THENCE S 89°07'20" W, 5286.05 FEET TO THE WEST LINE OF SAID SECTION 20; THENCE N 01°22'14" W ALONG THE WEST LINE OF SAID SECTION 20, 221.33 FEET TO THE POINT OF BEGINNING;

AND;  
COMMENCING AT THE NORTHWEST CORNER OF SECTION 20, TOWNSHIP 44 SOUTH, RANGE 26 EAST; THENCE S 01°22'14" E, 221.33 FEET ALONG THE WEST LINE OF SAID SECTION 20 TO A POINT OF BEGINNING; THENCE N 89°07'20" E, 5286.05 FEET TO THE EAST LINE OF SAID SECTION 20; THENCE S 0°41'51" E, 1597.35 FEET ALONG THE EAST LINE OF SAID SECTION 20 TO A POINT ON THE NORTHWESTERLY RIGHT-OF-WAY LINE OF BUCKINGHAM ROAD; THENCE S 42°36'02" W, 229.41 FEET ALONG SAID RIGHT-OF-WAY TO THE P.C. OF A CURVE TO THE RIGHT, HAVING RADIUS 630.72 FEET; THENCE SOUTHWESTERLY THROUGH A CENTRAL ANGLE OF 47°34'00" AN ARC DISTANCE OF 523.62 FEET TO THE P.T. OF SAID CURVE; THENCE N 89°49'58" W ALONG THE NORTHERLY RIGHT-OF-WAY OF SAID BUCKINGHAM ROAD, 4638.65 FEET TO THE WEST LINE OF SAID SECTION 20; THENCE N 01°22'14" W ALONG THE WEST LINE OF SAID SECTION 20, A DISTANCE OF 1875.60 FEET TO THE POINT OF BEGINNING;

AND;  
COMMENCING AT THE SOUTHWEST CORNER OF SECTION 17, TOWNSHIP 44 SOUTH, RANGE 26 EAST; THENCE N 0°21'48" W, 1678.67 FEET TO A POINT OF BEGINNING; THENCE N 89°07'26" E, 5301.24 FEET TO THE EAST LINE OF SAID SECTION 17; THENCE N 0°03'28" E ALONG THE EAST LINE OF SAID SECTION 17, 1900.00 FEET; THENCE S 89°07'33" W, 5314.70 FEET TO THE WEST LINE OF SAID SECTION 17; THENCE S 0°19'56" E, 923.27 FEET TO THE WEST QUARTER CORNER OF SAID SECTION 17; THENCE S 0°21'48" E, 976.73 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT THE FOLLOWING DESCRIBED PARCEL:  
A TRACT OF LAND IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 44 SOUTH, RANGE 26 EAST, LYING NORTH OF BUCKINGHAM ROAD (SR #82A), LEE COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

BEGINNING AT THE NORTHWEST CORNER OF THE NE ¼ OF SAID SECTION 20; THENCE N 89°19'51" E ALONG THE NORTH LINE OF THE NE ¼ OF SAID SECTION 20 A DISTANCE OF 2189.31 FEET TO THE CENTERLINE OF AN EXISTING DITCH; THEN S 8°59'56" E, 1996.9 FEET TO A POINT ON A CURVE TO THE RIGHT ON THE NORTHERLY RIGHT-OF-WAY LINE OF SAID BUCKINGHAM ROAD AT ITS INTERSECTION WITH THE CENTERLINE OF SAID EXISTING DITCH. SAID CURVE HAVING RADIUS 630.72 FEET; THENCE SOUTHWESTERLY THROUGH CENTRAL ANGLE OF 46°20'45" AN ARC DISTANCE OF 510.18 FEET TO THE P.T.; THENCE N 89°49'58" W, ALONG THE NORTH RIGHT-OF-WAY LINE OF SAID BUCKINGHAM ROAD A DISTANCE OF 2006.26 FEET TO THE WEST LINE OF SAID NE ¼ OF SECTION 20; THENCE N 1°01'45" W, ALONG THE WEST LINE OF SAID NE ¼ OF SECTION 20 A DISTANCE OF 2135.33 FEET TO THE POINT OF BEGINNING;

AND;  
LESS AND EXCEPT THE WEST 50 FEET OF SAID SECTION 17 LYING SOUTH OF THE NORTH 1730 FEET; AND THE WEST 50 FEET OF THE SAID SECTION 20 LYING NORTH OF BUCKINGHAM ROAD.

CONTAINING 572.11 ACRES ±

## **Exhibit "B"**

### **Permitted Exceptions**

1. General or special taxes and assessments required to be paid in the year 2008 and subsequent years.
2. Lee County Ordinance 86-14 and 86-38 providing for mandatory solid waste collection and imposition of special assessments for said collection services. The special assessments for the current tax year are payable with the ad valorem taxes.
3. Any lien provided by Chapter 159, Florida Statutes, in favor of any municipality or authority for unpaid charges for services by any water, sewer or gas system to the land described herein.
4. Road right-of-way to Lee County, a political subdivision of the State of Florida recorded in Deed Book 27, Page 251, Public records of Lee County, Florida.
5. Road right-of-way to Lee County, a political subdivision of the State of Florida recorded in Deed Book 273, Page 251, Public Records of Lee County, Florida.

EXHIBIT "C"

CATTLE LEASE AGREEMENT  
ON APPROXIMATELY \_\_\_\_\_ ACRES IN  
SECTION \_\_\_\_\_, TOWNSHIP \_\_\_\_\_ SOUTH, RANGE \_\_\_\_\_ EAST  
LEE COUNTY, FLORIDA, U.S.A.

Lloyd Bess and Shane Parker, hereinafter referred to as the "LESSEE" will lease approximately +/- 5865/ acres for \$10.00 a year in said Section 10, Township 14 South, Range 26 East, in Lee County, Florida from the following persons and or entities:

1. Watermen of Gwestrain Club LLC
2. \_\_\_\_\_
3. \_\_\_\_\_

The aforementioned persons shall hereinafter be referred to as the "LESSOR".

In consideration of the conveyance by 'LESSOR of the lands herein described, the parties hereto, agree as follows:

- LESSOR hereby grants to LESSEE a license to enter the following described lands from November 1, 2004 to January 1, 2010, said land described as follows:

+/- 220.77 acres - strap # 17-44-26-00 - 00001, 0000  
 +/- 248.24 acres - strap # 17-44-26-00 - 00003, 0000  
 +/- 125.00 acres - strap # 20-44-26-00 - 00001, 0000  
 +/- 12.5 acres - strap # 20-44-26-00 - 00006, 0000  
 +/- \_\_\_\_\_ acres - strap # \_\_\_\_\_

- In the event said property is sold, the LESSOR must give the LESSEE one hundred twenty (120) days notification, in writing, to vacate the property or properties.
- The LESSEE will repair and maintain the existing exterior fences of the cattle grazing area.
- The LESSEE agrees that title, ownership, and possession of the lands are the LESSOR.
- The LESSEE shall not commit or permit any unlawful acts, activities, or nuisances on the property, nor commit any waste thereon, to the premises arising from the exercise of the lease.
- The LESSEE shall be allowed to keep his horse or horses on the cattle lease since they are a tool used in working the cattle located on said lease.
- The LESSEE shall be allowed to place bee hives on the property.
- The LESSOR will provide a source of water for the cattle. The LESSOR will have a cow well dug at no cost to the LESSEE.
- Until completion of the lease, the LESSEE shall continue in possession of the property and shall have the benefit of the land until the lease is completed.
- This agreement shall become null and void upon the expiration date stated herein unless same extended in writing by all of the parties hereto.
- At the end of the lease on said property, the cattle grazing lease may be renewed by the LESSEE if the LESSOR so desires.

• Lessee will furnish a minimum of \$500,000 (Five hundred thousand) liability insurance coverage against injuries to himself, his

Exhibit "C"

Employee's or others. Said liability insurance shall name the lessor, or any other person legally responsible, as an additional insured, lessee will furnish proof of insurance of land leased by this agreement.

- At the time said property is sold, or the lease is not renewed, or canceled for any reason, all interior fences, cattle pens, windmills, mineral boxes, syrup tanks, pumps, fencing materials and tools stored on site, and any structure built or brought to the lease by the LESSEE will remain the property of the LESSEE.
- If the lease is broken within one (1) year after the LESSOR has fertilized the cattle grazing area, then the LESSOR shall reimburse LESSEE for the total cost of the fertilizer and the cost of spreading the fertilizer.
- The LESSEE is required to have insurance on the livestock grazing on the properties listed in this lease. The LESSEE will provide the LESSOR with a copy of the insurance and continued proof of coverage. AND NAME WATERMEN-EQUESTRIAN CLUB AS ADDITIONAL INSURED
- If the LESSOR decides to build a house or houses on his or her property the lease will not be broken. The LESSOR will pay for the material and labor to fence around the houses and the driveways.
- This lease evidences the entire lease between the parties and the same shall not be modified or altered by any verbal understanding between the parties hereto or their agents or representatives unless and until such changes or modifications shall have been reduced to writing and signed by the parties hereto.

IN WITNESS WHEREOF, the parties have signed this lease.

[Signature]  
(LESSOR) date 12/26/04

witness: [Signature]

Wanda D. Garcia

witness: [Signature]

DAVID D. KRAIZMAN

witness: [Signature]

Shane Parker

Lloyd Bess  
Lloyd Bess (LESSEE) date

witness: Wanda Bess

Wanda Bess

[Signature]  
Shane Parker (LESSEE) date 1/26/05

witness: Lloyd Bess

Lloyd Bess

witness: Wanda Bess

B. Type of Loan

<input type="radio"/> 1. FHA	<input type="radio"/> 2. FmHA	<input type="radio"/> 3. Conv. Unins.	<b>6. File Number</b> THG WATER LEE	<b>7. Loan Number</b> ID:	<b>8. Mortg. Ins. Case Num.</b>
<input type="radio"/> 4. V.A.	<input type="radio"/> 5. Conv. Ins.				

C. NOTE: This form is furnished to give you a statement of actual settlement costs. Amounts paid to and by the settlement agent are shown. Items marked "(p.o.c.);" were paid outside the closing; they are shown here for informational purposes and are not included in the totals.

D. NAME OF BORROWER: LEE COUNTY, a political subdivision of the State of Florida  
Address of Borrower: P.O. Box 398, Fort Myers, Florida 33902-0398

E. NAME OF SELLER: WATERMEN-EQUESTRIAN CLUB, LLC, a Florida limited liability company  
Address of Seller: 265 Sevilla Avenue, Coral Gables, Florida 33134 TIN: 20-1127743

F. NAME OF LENDER:  
Address of Lender:

G. PROPERTY LOCATION: Buckingham Road, Fort Myers, Florida 33905

H. SETTLEMENT AGENT: HENDERSON, FRANKLIN, STARNES & HOLT, P.A.  
Place of Settlement: 1715 Monroe St., P. O. Box 280, Fort Myers, Florida 33902 TIN: 59-1237100  
Phone: 239-344-1100

I. SETTLEMENT DATE: 11/25/08 DISBURSEMENT DATE: 11/25/08

J. Summary of borrower's transaction		K. Summary of seller's transaction	
<b>100. Gross amount due from borrower:</b>		<b>400. Gross amount due to seller:</b>	
101. Contract sales price	12,584,000.00	401. Contract sales price	12,584,000.00
102. Personal property		402. Personal property	
103. Settlement charges to borrower (Line 1400)	35.50	403.	
104. Appraisal Reimbursement	6,900.00	404. Appraisal Reimbursement	6,900.00
105.		405.	
<b>Adjustments for items paid by seller in advance:</b>		<b>Adjustments for items paid by seller in advance:</b>	
106. City/town taxes		406. City/town taxes	
107. County taxes		407. County taxes	
108. Assessments		408. Assessments	
109.		409.	
110.		410.	
111.		411.	
112.		412.	
<b>120. Gross amount due from borrower:</b>	<b>12,590,935.50</b>	<b>420. Gross amount due to seller:</b>	<b>12,590,900.00</b>
<b>200. Amounts paid or in behalf of borrower:</b>		<b>500. Reductions in amount due to seller:</b>	
201. Deposit or earnest money		501. Excess deposit (see Instructions)	
202. Principal amount of new loan(s)		502. Settlement charges to seller (line 1400)	106,475.65
203. Existing loan(s) taken subject to		503. Existing loan(s) taken subject to	
204. Principal amount of second mortgage		504. Payoff of first mortgage loan	1,704,672.63
205.		505. Payoff of second mortgage loan	
206.		506. Deposits held by seller	
207. Principal amt of mortgage held by seller		507. Principal amt of mortgage held by seller	
208.		508. OGM Release Fee	575,000.00
209.		509.	
<b>Adjustments for items unpaid by seller:</b>		<b>Adjustments for items unpaid by seller:</b>	
210. City/town taxes		510. City/town taxes	
211.		511.	
212.		512.	
213.		513.	
214.		514.	
215.		515.	
216.		516.	
217.		517.	
218.		518.	
219.		519.	
<b>220. Total paid by/for borrower:</b>	<b>0.00</b>	<b>520. Total reductions in amount due seller:</b>	<b>2,386,148.28</b>
<b>300. Cash at settlement from/to borrower:</b>		<b>600. Cash at settlement to/from seller:</b>	
301. Gross amount due from borrower (line 120)	12,590,935.50	601. Gross amount due to seller (line 420)	12,590,900.00
302. Less amount paid by/for the borrower (line 220)	0.00	602. Less total reductions in amount due seller (line 520)	(2,386,148.28)
303. Cash ( <input checked="" type="checkbox"/> From <input type="checkbox"/> To ) Borrower:	12,590,935.50	603. Cash ( <input checked="" type="checkbox"/> To <input type="checkbox"/> From ) Seller:	10,204,751.72

Substitute Form 1099 Seller Statement: The information contained in blocks E, G, H, and I and on line 401 is important tax information and is being furnished to the IRS. If you are required to file a return, a negligence penalty or other sanction will be imposed on you if this item is required to be reported and the IRS determines that it has not been reported.

Seller Instructions: If this real estate was your principal residence, file Form 2119, Sale or Exchange of Principal Residence, for any gain, with your tax return; for other transactions, complete the applicable parts of Form 4797, Form 6262 and/or Schedule D (Form 1040).

Borrower's Initial(s):

Seller's Initial(s):

L. Settlement Charges				Borrower	POC	Seller	POC	Paid from Borrow Funds Settlement	Paid from Seller's Funds at Settlement
700. Total Sales/Brokers Com. based on price	\$12,584,000	% =							
701.		% to							
702.		% to							
703. Commission paid at settlement									
704.		to							
800. Items payable in connection with loan:				Borrower	POC	Seller	POC		
801. Loan origination fee		% to							
802. Loan discount		% to							
803. Appraisal fee		to							
804. Credit report		to							
805. Lender's inspection fee		to							
806. Mortgage insurance application fee		to							
807. Assumption Fee		to							
808.		to							
809.		to							
810.		to							
811.		to							
900. Items required by lender to be paid in advance:				Borrower	POC	Seller	POC		
901. Interest from		to	@	/day					
902. Mortgage insurance premium for		months to							
903. Hazard insurance premium for		years to							
904. Flood insurance premium for		years to							
905.		years to							
1000. Reserves deposited with lender:				Borrower	POC	Seller	POC		
1001. Hazard insurance		months @		per month					
1002. Mortgage insurance		months @		per month					
1003. City property taxes		months @		per month					
1004. County property taxes		months @		per month					
1005. Annual assessments		months @		per month					
1006. Flood insurance		months @		per month					
1007.		months @		per month					
1008.		months @		per month					
1009. Aggregate accounting adjustment									
1100. Title charges:				Borrower	POC	Seller	POC		
1101. Settlement or closing fee		to	HENDERSON, FRANKLIN, STARNES & HOLT, P.A.					250.00	
1102. Abstract or title search		to							
1103. Title examination		to							
1104. Title insurance binder		to							
1105. Document preparation		to							
1106. Notary fees		to							
1107. Attorney's Fees		to							
(includes above item numbers: )									
1108. Title Insurance		to	Old Republic Nat. Title/HENDERSON, FRANKLIN					25,688.00	
(includes above item numbers: )									
1109. Lender's coverage (Premium):									
1110. Owner's coverage (Premium):	\$12,584,000.00		(\$25,688.00)						
1111. Endorse:									
1112. Butler Title Rebate		to	HENDERSON, FRANKLIN, STARNES & HOLT, P.A.,					-8,834.40	
1113.		to							
1200. Government recording and transfer charges:									
1201. Recording fees	Deed	\$35.50	Mortgage(s)	Releases	\$18.50		35.50	18.50	
1202. City/county tax/stamps	Deed		Mortgage(s)						
1203. State tax/stamps	Deed	\$88,088.00	Mortgage(s)					88,088.00	
1204.		to							
1205.		to							
1300. Additional settlement charges:				Borrower	POC	Seller	POC		
1301. Survey		to							
1302. Pest Inspection		to							
1303. 2008 Taxes #17-44-26-00-00003.0000		to	Lee County Tax Collector					420.45	
1304. 2008 Taxes #20-44-26-00-00006.0000		to	Lee County Tax Collector					22.97	
1305. 2008 Taxes #20-44-26-00-00001.0000		to	Lee County Tax Collector					230.62	
1306. 2008 Taxes #17-44-26-00-00001.0000		to	Lee County Tax Collector					591.51	
1307.		to							
1308.		to							
1309.									
1400. Total settlement charges:									
(Enter on lines 103, Section J and 502, Section K)								35.50	106,475.65

I have carefully reviewed the HUD-1 Settlement Statement and to the best of my knowledge and belief, it is a true and accurate statement of all receipts and disbursements made on my account or by me in this transaction. I further certify that I have received a copy of the HUD-1 Settlement Statement.

LEE COUNTY *Paul R Ehrnfelt* *NOV. 25, 2008* WATERMEN EQUESTRIAN CLUB, LLC  
 By: Paul R. Ehrnfelt, As Agent for Lee County Borrower By: EDDY GARCIA, Manager Seller  
 By: \_\_\_\_\_ Borrower By: DAVID KRAIZGRUN, Manager Seller

The HUD-1 Settlement Statement which I have prepared is a true and accurate account of this transaction. I have caused, or will cause, the funds to be disbursed in accordance with this statement.

HENDERSON, FRANKLIN, STARNES & HOLT, P.A.  
 By: [Signature] Date 11/25/08  
 As Its Authorized Representative

WARNING: It is a crime to knowingly make false statements to the United States on this or any other similar form. Penalties upon conviction can include a fine and imprisonment. For details see: Title 18 U.S. Code Section 1001 and Section 1010.

# Closing Statement Addendum

Seller: WATERMEN-EQUESTRIAN CLUB, LLC, a Florida limited liability company  
Buyer: LEE COUNTY, a political subdivision of the State of Florida  
Property: Buckingham Road, Fort Myers, FL 33905  
Closing Agent: HENDERSON, FRANKLIN, STARNES & HOLT, P.A.  
Thomas H. Gunderson  
Closing Date: November 24, 2008  
File Number: THG WATER LEE

**AGREEMENT TO COOPERATE:** If requested by Closing Agent, Title Agent or Title Underwriter, the parties agree to fully cooperate and adjust for clerical errors, including the execution or re-execution of any reasonable documentation and/or the remittance of any additional sums.

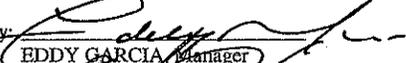
Buyer:

LEE COUNTY, a political subdivision of the State of Florida

By:  NOV 25, 2008  
PAUL R. BHRNFELT, As Agent for Lee County

Seller:

WATERMEN-EQUESTRIAN CLUB, LLC, a Florida limited liability company

By:   
EDDY GARCIA, Manager

By:   
DAVID KRAIZGRUM, Manager

(Corporate Seal)

## **Appendix G: Expended and Projected Costs and Funding Sources**

## EXPENDED \$

### Resource Enhancement and Protection

Item	Funding Source	Costs
Exotic plant control	C20/20	\$300
Fireline installation	C20/20 (in-house)	\$20,000
Exotic and nuisance vegetation removal from Nine Mile Canal	LCNR	\$27,735
Cultural Resource Survey	C20/20	\$4,100
Permits for exotic plant control	C20/20	\$100
Installation of interior cattle fence	C20/20	\$12,398
<b>total</b>		<b>\$64,633</b>

### Overall Protection

Item	Funding Source	Costs
Install new gates	C20/20	\$500
Boundary signs	C20/20	\$576
Trash removal	C20/20 (in-house)	\$120
<b>total</b>		<b>\$1,196</b>

**TOTAL COST TO DATE**

**\$65,829**

## Appendix G - Expended and Projected Costs and Funding Sources

### PROJECTED \$

#### Structures & Improvements

Item	Possible Funding Sources	Costs
Construction of trailheads and walkthroughs	C20/20	\$40,000
Information kiosk		\$2,000
Trail markers		\$1,500
Entrance & trail signs		\$850
Closed trail signs		\$500

**Total Cost Estimate**

**\$44,850**

#### Resource Enhancement and Protection

Item	Possible Funding Sources	Costs
Initial invasive exotic plant removal of natural areas	C20/20/FDEP	\$152,850
Hydrologic Restoration		\$800,000
Pasture restoration		\$664,196
Mechanical brush reduction	C20/20	\$70,250
Trash removal		\$3,000
Interior fence removal		\$990
Exotic animal removal		\$3,000
Additional fireline installation		\$10,000

**Total Cost Estimate**

**\$1,704,286**

#### Overall Protection

Item	Possible Funding Sources	Costs
Fence repairs	C20/20	\$200

**Total Cost Estimate**

**\$49,100**

**Grand Total Cost Estimate**

**\$1,798,236**

#### Site Management and Maintenance

Item	Possible Funding Sources	Costs
Exotic plant control	C20/20	\$37,500
Prescribed fire regime (annually)	C20/20, FDOF	\$2,133
Annual trail maintenance	C20/20	\$1,250
Fireline maintenance		\$576

**Yearly Maintenance Estimate**

**\$41,459**

## **Appendix H: BTP Soils Chart**

## Buckingham Trails Preserve Soils Chart

Soil Types	Map Symbol	Total Acres	% of Preserve	Habitats (Range Site)	Physical Attributes			Biological Attributes					
					Wetland Class (1)	Hydrologic Group (2)	% Organic Matter	Potential as habitat for wildlife in--	Openland	Woodland	Wetland	Rangeland	Limitations for Recreational Paths & Trails
Boca Fine Sand	13	12.4	2.2%	south Florida flatwoods		B/D	1-3%	fair	poor	poor	fair	good	Severe: wetness, too sandy
Copeland Sandy Loam, Depressional	45	3.9	0.7%	freshwater marshes/ponds	P	D*	2-6%	good	very poor	very poor	good	good	Severe: ponding
Felda Fine Sand, Depressional	49	14.9	2.6%	freshwater marshes/ponds	P	B/D	1-4%	good	very poor	very poor	good	good	Severe: wetness, too sandy
Hallandale Fine Sand	6	26.2	4.6%	south Florida flatwoods		B/D	2-5%	fair	poor	poor	fair	poor	Severe: wetness, too sandy
Immokalee Sand	28	34.4	6.0%	south Florida flatwoods		B/D	1-2%	poor	poor	poor	poor	poor	Severe: wetness, too sandy
Maiabari Fine Sand	34	94.3	16.5%	slough	S	B/D	1-2%	poor	poor	poor	fair	poor	Severe: wetness, too sandy
Maiabari Fine Sand, Depressional	44	9.8	1.7%	freshwater marshes/ponds	P	B/D*	1-2%	good	very poor	very poor	good	good	Severe: ponding, too sandy
Myakka Fine Sand	11	32.6	5.7%	south Florida flatwoods		B/D	<2%	poor	poor	poor	poor	poor	Severe: wetness, too sandy
Myakka Fine Sand, Depressional	53	18.4	3.2%	fresh water marshes and ponds	P	D	1-2%	poor	very poor	very poor	good	good	Severe: ponding, too sandy
Oldsmar Sand	33	204.8	35.8%	south Florida flatwoods		B/D	1-2%	poor	fair	fair	poor	poor	Severe: wetness, too sandy
Pineda Fine Sand	26	2.4	0.4%	slough	S	B/D	5-6%	poor	poor	poor	fair	poor	Severe: wetness, too sandy
Pineda Fine Sand, limestone substratum	77	71.7	12.5%	slough	S	B/D	1-2%	poor	poor	poor	fair	poor	Severe: wetness, too sandy
Wabasso Sand	35	46.1	8.1%	south Florida flatwoods		B/D	1-4%	poor	poor	poor	poor	poor	Severe: wetness, too sandy

### Color Key:

Upland	
Wetlands Rarely Present (Under 20%)	
Wetlands Sometimes Present (20-40%)	
Wetlands Often Present (75-95%)	
Wetlands Very Often Present (100%)	

(1) F - Flooding: The temporary inundation of an area caused by overflowing streams, runoff from adjacent slopes or tides.

S - Slough (sheet flow): A broad nearly level, poorly defined drainage way that is subject to sheet-flow during the rainy season.

P - Ponding: Standing water on soils in closed depressions. The water can be removed only by percolation or evapotranspiration.

(2) \* Water table is above the surface of soil

B - Soils having a moderate infiltration rate (low to moderate runoff potential) when thoroughly wet.

C - Soils having a slow infiltration rate (moderate to high runoff potential) when thoroughly wet.

D - Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet.

## **Appendix I: Driveway Entrance**

## Waller, James (Lee)

---

**From:** Furnari, Sherryl  
**Sent:** Wednesday, June 08, 2011 3:51 PM  
**To:** Waller, James (Lee); Wewerka, Laura; Greeno, Laura  
**Cc:** Olson, Cathy  
**Subject:** FW: 1st Draft - Buckingham Trails Preserve Land Stewardship Plan  
**Attachments:** DrivewayCulvertSample.pdf; BuckinghamRoadParkAccess.pdf

Below is my response back to them...but review what will need to be done in the future ☺

I really appreciate all of the detailed information you provided regarding the future public access for the preserve. It really helps us with planning these activities when we have some inclination on what to expect as the project gets closer. Now we know it's going to cost us some \$\$ and will take more time getting an engineer/contractor assigned for the construction & applying for all of the proper permits.

Thank you,

Sherry

---

**From:** Kirkpatrick, Daniel  
**Sent:** Wednesday, June 08, 2011 3:03 PM  
**To:** Furnari, Sherryl  
**Cc:** Blackburn, Don  
**Subject:** FW: 1st Draft - Buckingham Trails Preserve Land Stewardship Plan

Sherryl,

Here are other DOT comments to add to Andy Getch comments sent on 6/1/2011:

- 1) Driveway Access must align with Ada Avenue and the driveway width must be 24' wide for in-out traffic. The asphalt driveway must be constructed back to the ROW line. It is recommended by DOT Staff that the pipe under the driveway be extended long enough for anticipated widening of the driveway in the future of 4' on each side for paved shoulders.
- 2) DOT Staff will require the driveway radius to be R45' per LDC 10-296, Table 6 to provide for a safe access for a pick-up truck and horse trailer entering and exiting to the site off this high speed arterial road.
- 3) DOT Operations has confirmed there is definitely a swale on the north side of road and the water drains to the east to Cavanaugh Canal. The applicant will need to construct the asphalt driveway w/ pipe and mitered end sections similar to the attached "Driveway Culvert Sample pdf". The section of driveway must match the arterial road section per LDC10-296, Table 4 which is 12" Stabilized Subgrade, 8" Limerock Base, 2-1/2" S-I and 1" S-III Wearing Surface. The design sketch of the driveway along with the size and invert of the pipe including topographic and grade elevations must be done and signed & sealed by an Engineer (please refer to "Sample" pdf).
- 4) Please see attached "Buckingham Road Park Access pdf" for aerial depiction of your access (Detail A) and another driveway to the east that is similar to what the applicant needs to construct (Detail B). The correct size and invert of pipe is important to maintain the capacity and flow of water to the outfall canal.

- 5) Lee County has recently constructed 4' paved shoulders on Buckingham Road and the Contractor and Engineer for the project will design and tie into the existing asphalt shoulder.
- 6) A Lee County ROW Permit will be required.

Dan Kirkpatrick  
Engineer-Lee County Dept. of Transportation  
3rd floor  
1500 Monroe Street  
Fort Myers, Florida 33901  
direct line (239) 533-8580x48140  
FAX (239) 533-8520  
[kirkpado@leegov.com](mailto:kirkpado@leegov.com)

---

**From:** Blackburn, Don  
**Sent:** Thursday, May 26, 2011 3:32 PM  
**To:** Kirkpatrick, Daniel  
**Subject:** FW: 1st Draft - Buckingham Trails Preserve Land Stewardship Plan

Here is the info from Parks

Don Blackburn  
Development Services Manager  
Lee County, Florida  
239-533-8587, ext. 48804

---

**From:** Houck, Pamela  
**Sent:** Thursday, May 26, 2011 1:04 PM  
**To:** Blackburn, Don  
**Subject:** RE: 1st Draft - Buckingham Trails Preserve Land Stewardship Plan

Hog hunting opportunity? How come Pavese isn't on the review list? What is it that he does?

---

**From:** Blackburn, Don  
**Sent:** Thursday, May 26, 2011 11:51 AM  
**To:** Houck, Pamela  
**Subject:** FW: 1st Draft - Buckingham Trails Preserve Land Stewardship Plan

Saddle up!

Don Blackburn  
Development Services Manager  
Lee County, Florida  
239-533-8587, ext. 48804

---

**From:** Furnari, Sherryl  
**Sent:** Thursday, May 26, 2011 11:20 AM  
**To:** Manzo, Barbara; Harner, David; Porter, Gary; Cerdan, Dean; Derums, Deborah; Flanjack, Alise; Eckert, Tim - North Fort Myers, FL; Repenning, Robert; Karim, Annisa; Cain, Teresa; Ottolini, Roland; Wooten, Wanda; Calvert, Daniel; Gutierrez, Amanda; Blackburn, Don; Getch, Andrew; Hiatt, Betsie; Weston, Michael; Bickford, Karen  
**Cc:** Olson, Cathy; Waller, James (Lee)  
**Subject:** 1st Draft - Buckingham Trails Preserve Land Stewardship Plan

Lee County Parks and Recreation Land Stewardship staff has written the first draft of the Land Stewardship Plan for the Buckingham Trails Preserve, located off of Buckingham Road in Fort Myers (Buckingham).

We would appreciate your review of this first draft with your comments, if your schedule permits.

In the past, we provided a partial copy of the Land Stewardship Plan, but thought this time around we'd go totally digital (save more resources) and have reviewers access the entire draft plan on the website's link:

<http://www.conservation2020.org/documents/LSP/BTP.pdf>. Bookmarks have been made for this .pdf file to quickly get to various sections of the plan that may be of more interested you.

The deadline for providing comments is **Thursday, June 9, 2011**. You may send them anyway you wish, all the contact information is provided below.

Thank you in advance for your assistance in reviewing this plan!

Sherry Furnari  
Land Stewardship Coordinator  
Conservation 20/20  
Lee County Parks & Recreation  
3410 Palm Beach Blvd.  
Ft. Myers, FL 33916  
Cell: (239) 707-3325  
Fax: (239) 485-2302  
E-mail: [sfurnari@leegov.com](mailto:sfurnari@leegov.com)  
Website: <http://www.conservation2020.org>



*...the natural place to play*

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Please note: Florida has a very broad public records law. Most written communications to or from County Employees and officials regarding County business are public records available to the public and media upon request. Your email communication may be subject to public disclosure.

Under Florida law, email addresses are public records. If you do not want your email address released in response to a public records request, do not send electronic mail to this entity. Instead, contact this office by phone or in writing.



# SURVEY PLAT

SECTION 15, TOWNSHIP 43 SOUTH, RANGE 26 EAST,  
LEE COUNTY, FLORIDA

EXHIBIT: 1-2

EASEMENT DESCRIPTION  
OF A PARCEL LYING IN  
SECTION 15, TOWNSHIP 43 SOUTH, RANGE 26 EAST,  
ALVA, LEE COUNTY, FLORIDA

A PARCEL OF LAND LYING IN THE STATE OF FLORIDA, COUNTY OF LEE, SECTION 15,  
TOWNSHIP 43 SOUTH, RANGE 26 EAST, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF SAID SECTION 15, RUN S.00°55'18"W., ALONG  
THE EAST LINE OF SAID SECTION 15 FOR 2658.15 FEET; THENCE S.00°32'58"W., ALONG  
THE EAST LINE OF SAID SECTION 15 FOR A DISTANCE OF 1307.93 FEET TO THE NORTH  
RIGHT-OF-WAY LINE OF NORTH RIVER ROAD (SR-78), THENCE RUN N.88°50'57"W., ALONG  
THE NORTH RIGHT-OF-WAY LINE OF NORTH RIVER ROAD (SR-78) FOR 11.94 FEET TO A POINT  
OF CURVE TO THE RIGHT, HAVING A RADIUS OF 938.66 FEET AND A CENTRAL ANGLE OF  
32°36'34"; THENCE RUN ALONG SAID NORTH RIGHT-OF-WAY LINE OF NORTH RIVER ROAD  
(SR-78) AND SAID CURVE FOR 534.23 FEET TO A POINT OF TANGENT; THENCE RUN  
N.58°14'21"W., ALONG THE NORTH RIGHT-OF-WAY LINE OF NORTH RIVER ROAD (SR-78) FOR  
123.90 FEET TO THE POINT OF BEGINNING; THENCE CONTINUE N.56°14'21"W., ALONG THE NORTH  
RIGHT-OF-WAY LINE OF NORTH RIVER ROAD (SR-78) A DISTANCE OF 29.82 FEET; THENCE  
RUN N.00°44'04"E., A DISTANCE OF 25.00 FEET; THENCE RUN S.89°15'56"E., A DISTANCE OF  
25.00 FEET; THENCE RUN S.00°44'04"W., A DISTANCE OF 41.25 FEET TO THE POINT OF  
BEGINNING.

CONTAINING 828 SQUARE FEET, OF 0.02 ACRES, MORE OR LESS

## NOTES:

SURVEY BASED ON THE DESCRIPTION AS SHOWN ABOVE AND EXISTING  
MONUMENTATION.

BEARINGS BASED ON THE NORTH RIGHT-OF-WAY LINE OF NORTH RIVER ROAD  
(SR-78) AS BEARING N.56°10'29"W.

INFORMATION WAS TAKEN FROM FLOOD INSURANCE RATE MAP 125124 0250 B, WITH  
AN EFFECTIVE DATE OF SEPTEMBER 19, 1994.

THE FEMA FLOOD ZONE INFORMATION INDICATED HEREON IS BASED ON  
MAPS SUPPLIED BY THE FEDERAL GOVERNMENT. THIS FLOOD INFORMATION TO  
COMPLY WITH ALL PERMITTING REGULATORY ENTRIES PRIOR TO  
UNDERGROUND IMPROVEMENTS, UTILITIES AND/OR FOUNDATIONS WERE NOT  
LOCATED UNLESS OTHERWISE NOTED.

WETLANDS, IF ANY, WHERE NOT LOCATED.

THIS PLAT PREPARED AS A BOUNDARY SURVEY AND IS NOT INTENDED TO  
DELINEATE THE JURISDICTION OR JURISDICTIONAL AREAS OF ANY FEDERAL,  
STATE, REGIONAL OR LOCAL AGENCY, BOARD, COMMISSION OR OTHER ENTITY.

SUBJECT TO EASEMENTS, RESTRICTIONS, RESERVATIONS AND RIGHTS-OF-WAY  
(RECORDED AND UNRECORDED, WRITTEN AND UNWRITTEN).

ELEVATIONS SHOWN HEREON ARE BASED ASSUMED DATUM.

DATE OF LAST FIELD WORK: 11-2-2004.

REVISIONS: TO RELOCATE SPRINT EASEMENT 11-2-04 RY

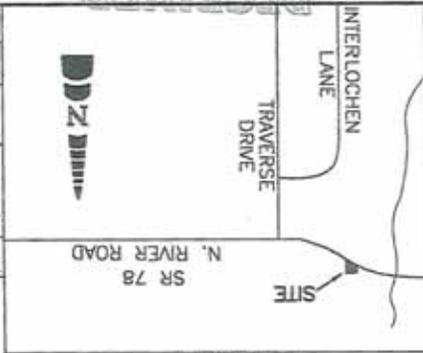
## CERTIFIED:

- SPRINT-FLORIDA, INCORPORATED

NOT VALID WITHOUT THE SIGNATURE AND THE ORIGINAL PASTED SEAL OF A FLORIDA  
LICENSED SURVEYOR AND MAPPER.  
THIS BOUNDARY SURVEY IS ONLY FOR THE LANDS AS DESCRIBED. IT IS NOT A  
CERTIFICATE OF TITLE, ZONING, EASEMENTS OR FREEDOM OF ENCUMBRANCES.  
THIS SURVEY WAS PREPARED WITHOUT BENEFIT OF AN ABSTRACT OF TITLE AND ALL  
MATTERS OF TITLE SHOULD BE REFERRED TO AN ATTORNEY AT LAW.

## VICINITY MAP

NOT TO SCALE



DATE: 9-23-04	BY: RY	SCALE: 1" = 20'	DRAWN BY: DJO	PROJECT NO.: 6844
FIELD BOOK/NO.: 235/67	PROJECT NO.: 6844	DATE: 11/3/04	BY: DENNIS G. CONNELL, JR.	PROFESSIONAL SURVEYOR AND MAPPER FLORIDA CERTIFICATE NO. 158 5430
<p>FOR THE FIRM:</p> <p>DATE SIGNED: 11/3/04</p>				
<p>5245 RAUSSEY WAY, SUITE #2 FORT MYERS, FLORIDA 33907 PHONE: (239) 275-8575 FAX: (239) 275-8457</p> <p><b>METRON</b> SURVEYING &amp; MAPPING, LLC LAND SURVEYORS-PLANNERS L#B# 7071</p> <p>www.metronfl.com</p>				
<p>SR 78 N. RIVER ROAD</p> <p>TRVERSE DRIVE</p> <p>INTERLOCHREN LANE</p> <p>SITE</p>				
<p>15831 NORTH RIVER ROAD, ALVA</p> <p>BOUNDARY SURVEY</p>				

RECEIVED  
JUN 5 2005

# SURVEY PLAT

OF A PARCEL LYING IN  
SECTION 15, TOWNSHIP 43 SOUTH, RANGE 26 EAST,  
LEE COUNTY, FLORIDA

EXHIBIT: 2-2

P.O.C.  
NORTHEAST CORNER  
OF SECTION 15

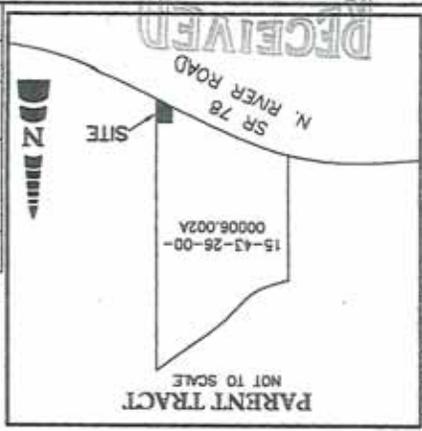


LINE TABLE

Line	Bearing	Distance
L1	N.56°14'21"W	29.82
L2	N.00°44'04"E	25.00
L3	S.89°15'58"E	25.00
L4	S.00°44'04"W	41.25

Curve number 1  
 Radius = 938.66'  
 Delta = 534.23'  
 Tangent = 274.57'  
 Chord = 527.05'  
 Chord Brg. = N.72°32'38"W

- LEGEND:**
- LONG. = LONGITUDE
  - LAT. = LATITUDE
  - ELEV. = ELEVATION
  - P.O.B. = POINT OF BEGINNING
  - P.O.C. = POINT OF COMMENCEMENT
  - S.C.M. = SET 4"x4" CONCRETE MONUMENT
  - +100.1' = TYPICAL ELEVATION
  - = FENCE LINE
  - - - = GUY WIRE ANCHOR
  - = WOOD UTILITY POLE



**TITLE:** 15831 NORTH RIVER ROAD, ALVA

**BOUNDARY SURVEY**

**METRON SURVEYING & MAPPING, LLC**  
 LAND SURVEYORS & PLANNERS  
 LBS# 7071  
 5245 RAMSEY WAY, SUITE #2  
 FORT MYERS, FLORIDA 33907  
 PHONE: (239) 275-8575  
 FAX: (239) 275-8457  
 www.metronllc.com

**PROJECT NO.:** 0844

**DATE:** 8-23-04

**SCALE:** 1" = 20'

**PROJECT NO.:** 15-43-26

**DATE:** 15-43-26

JUN 05 2009  
 67  
 COMMUNITY DEVELOPMENT

CORRECT SIZE OF PIPE  
w/ M.E.S. END  
DETAIL  
"A"



BUCKINGHAM RD

ADA AVE

BILLINGS ST

ELO AVE

ZA AVE





DETAIL "A"  
RACK  
ENTRANCE

DETAIL "B"  
TYPICAL  
ASPH. DRIVEWAY  
W/ PIPE

BUCKINGHAM RD

BILLINGS ST

BECK ST

BELROSE ST

BENTON ST

CENTENNIAL BLVD

BRISTO ST

ATHERTON AVE

ADELINS AVE

CHAPLIN AVE

CHAPEL AVE

CARLFIELD AVE

CALVERT AVE

CHAMPION AVE

CAPPA AVE

BRISTO ST

BRISTO ST

BARON ST

BEECHER ST

CRAMPION AVE

Carranagh

Champion N.

46-20-2

46-19-3



BUCKINGHAM RD



BILLINGS ST

CARL AVE

CHAPEL A