

SCOTTSMOOR FLATWOODS SANCTUARY MANAGEMENT PLAN

Scottsmoor, Florida

**SMC Approval
March 6th, 2013**



Photo Credit: Melody Hendrix 2012

**Prepared by: Brevard County
Environmentally Endangered Lands Program
Parks and Recreation Department
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Management Plan Compliance Checklist - Natural Resource Lands	
Requirements	Page Numbers
18-2.021 Acquisitions and Restoration Council.	
1. Executive Summary (Example #1) This should be included in the packet and should be the first page.	1-2
Management Plans. Plans submitted to the division for ARC review under the requirements of Section 253.034 F.S. should be in a form and manner prescribed by rule by the board and in accordance with the provisions of S. 259.032 and should contain where applicable to the management of resources the following:	
2. The common name of the property.	1
3. A map showing the location and boundaries of the property plus any structures or improvements to the property. (Example #2)	6-7
4. The legal description and acreage of the property.	1, 60-69
5. The degree of title interest held by the Board, including reservations and encumbrances such as leases.	1, 111-133
6. The land acquisition program, if any, under which the property was acquired.	2-5
7. The designated single use or multiple use management for the property, including other managing agencies.	1
8. Proximity of property to other significant State/local/federal land or water resources. (Example #3) May be included in the map in item #2.	3, 13
9. A statement as to whether the property is within an Aquatic Preserve or a designated Area of Critical State Concern or an area under study for such designation. If yes, make sure appropriate managing agencies are notified of the plan.	14
10. The location and description of known and reasonably identifiable renewable and non-renewable resources of the property including, but not limited to, the following:	
A. Brief description of soil types, using U. S. D. A. maps when available;	9, 11-13
B. Archaeological and historical resources*;	34-35
C. Water resources including the water quality classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Waters;	14, 82
D. Fish and wildlife and their habitat;	27-30
E. State and federally listed endangered or threatened species and their habitat;	26-30, 96-109
F. Beaches and dunes;	

G.	Swamps, marshes and other wetlands;	25
H.	Mineral resources, such as oil, gas and phosphate;	
I.	Unique natural features, such as coral reefs, natural springs, caverns, large sinkholes, virgin timber stands, scenic vistas, and natural rivers and streams; and	
J.	Outstanding native landscapes containing relatively unaltered flora, fauna, and geological conditions.	14
11.	A description of actions the agency plans, to locate and identify unknown resources such as surveys of unknown archeological and historical resources.	34-35
12.	The identification of resources on the property that are listed in the Florida Natural Areas Inventory. <i>Include letter from FNAI or consultant, where appropriate.</i>	96-109
13.	A description of past uses, including any unauthorized uses of the property. (Example #4)	14, 22
14.	A detailed description of existing and planned use(s) of the property. (Example #5)	40-43
15.	A description of alternative or multiple uses of the property considered by the managing agency and an explanation of why such uses were not adopted.	41
16.	A detailed assessment of the impact of planned uses on the renewable and non-renewable resources of the property and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to mitigate damage caused by such uses.	43-48
17.	A description of management needs and problems for the property.	23-24, 32-40
18.	Identification of adjacent land uses that conflict with the planned use of the property, if any.	38
19.	A description of legislative or executive directives that constrain the use of such property.	1-5
20.	A finding regarding whether each planned use complies with the State Lands Management Plan adopted by the Trustees on March 17, 1981, and incorporated herein by reference, particularly whether such uses represent "balanced public utilization", specific agency statutory authority, and other legislative or executive constraints.	5
21.	An assessment as to whether the property, or any portion, should be declared surplus.	5
22.	Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property. Clearly defined map of parcels can be used.	32-33
23.	A description of the management responsibilities of each agency and how such responsibilities will be coordinated, including a provision that requires that the managing agency consult with the Division of Archives, History and Records Management before taking actions that may adversely affect archaeological or historic resources. (Example #6)	34-35
24.	A statement concerning the extent of public involvement and local government participation in the development of the plan, if any, including a summary of comments and concerns expressed. (Example #7)	41, 134-144
Additional Requirements—Per Trustees		

25. Letter of Compliance of the management plan with the Local Government Comprehensive Plan. Letter from local government saying that the plan is in compliance with local government's comprehensive plan.	5, 59
253.034 State-Owned Lands; Uses. —Each entity managing conservation lands shall submit to the Division of State Lands a land management plan at least every 10 years in a form and manner prescribed by rule by the Board.	
26. All management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing entity plans to identify, locate, protect and preserve, or otherwise use fragile nonrenewable resources, such as archaeological and historic sites, as well as other fragile resources, including endangered plant and animal species.	34-35, 50-51
27. The management plan shall provide for the conservation of soil and water resources and for the control and prevention of soil erosion.	13
28. Land management plans submitted by an entity shall include reference to appropriate statutory authority for such use or uses and shall conform to the appropriate polices and guidelines of the state land management plan.	5
29. All land management plans for parcels larger than 1,000 acres shall contain an analysis of the multiple-use potential of the parcel, which analysis shall include the potential of the parcel to generate revenues to enhance the management of the parcel.	36
30. Additionally, the land management plan shall contain an analysis of the potential use of private managers to facilitate the restoration or management of these lands.	23
31. A physical description of the land.	5, 22-25
32. A desired outcome	1-2
33. A quantitative data description of the land which includes an inventory of forest and other natural resources; exotic and invasive plants; hydrological features; infrastructure, including recreational facilities; and other significant land, cultural, or historical features.	22-25, 34-35
34. A detailed description of each short-term and long-term land management goal, the associated measurable objectives, and the related activities that are to be performed to meet the land management objectives. Each land management objective must be addressed by the land management plan, and where practicable, no land management objective shall be performed to the detriment of the other land management activities.	48-52
35. A schedule of land management activities which contains short-term and long-term land management goals and the related measurable objectives and activities. The schedule shall include for each activity a timeline for completion, quantitative measures, and detailed expense and manpower budgets. The schedule shall provide a management tool that facilitates development of performance measures.	48-52
36. A summary budget for the scheduled land management activities of the land management plan. For state lands containing or anticipated to contain imperiled species habitat, the summary budget shall include any fees anticipated from public or private entities for projects to offset adverse impacts to imperiled species or such habitats, which fees shall be used solely to restore, manage, enhance, repopulate, or acquire imperiled species habitat. The summary budget shall be prepared in such a manner that it facilitates computing an aggregate of land management costs for all state-managed lands using the categories described in s. 259.037(3).	52-53

Each management plan shall describe both short-term and long-term management goals, and include measurable objectives to achieve those goals. <i>Short-term and long-term management goals shall include measurable objectives for the following, as appropriate:</i>	
(A) Habitat restoration and improvement;	48-52
(B) Public access and recreational opportunities;	51-52
C) Hydrological preservation and restoration;	49
(D) Sustainable forest management;	
(E) Exotic and invasive species maintenance and control;	49-50
(F) Capital facilities and infrastructure;	
(G) Cultural and historical resources;	50-51
(H) Imperiled species habitat maintenance, enhancement, restoration, or population restoration	50
253.036 Forest Management. —	
31. For all land management plans for parcels larger than 1,000 acres, the lead agency shall prepare the analysis, which shall contain a component or section prepared by a qualified professional forester which assesses the feasibility of managing timber resources on the parcel for resource conservation and revenue generation purposes through a stewardship ethic that embraces sustainable forest management practices if the lead management agency determines that the timber resource management is not in conflict with the primary management objectives of the parcel. (Example #8)	78-81
259.032 Conservation And Recreation Lands Trust Fund; Purpose. —	
(10)(a) State, regional or local governmental agencies or private entities designated to manage lands under this section shall develop and adopt, with the approval of the Board of Trustees, an individual management plan for each project designed to conserve and protect such lands and their associated natural resources. Private sector involvement in management plan development may be used to expedite the planning process.	

32. Individual management plans required by s. 253.034(5), for parcels over 160 acres, shall be developed with input from an advisory group - Management plan should list advisory group members and affiliations.	134-144
33. The advisory group shall conduct at least one public hearing in each county in which the parcel or project is located. Managing agency should provide DSL/OES with documentation showing date and location of public hearing.	134-144
34. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing. Managing agency should provide DSL/OES with copy of notice.	
35. The management prospectus required pursuant to 259.032 (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	
36. Summary of Advisory Group Meeting should be provided to DSL/OES.	134-144
37. Individual management plans shall conform to the appropriate policies and guidelines of the state land management plan and shall include, but not be limited to:	
A. A statement of the purpose for which the lands were acquired, the projected use or uses as defined in s. 253.034, and the statutory authority for such use or uses.	1-2
B. Key management activities necessary to achieve the desired outcomes, including, but not limited to, providing public access, preserving and protecting natural resources, protecting cultural and historical resources, restoring habitat, protecting threatened and endangered species, controlling the spread of nonnative plants and animals, performing prescribed fire activities, and other appropriate resource management activities.	43-48
C. A specific description of how the managing agency plans to identify, locate, protect, and preserve, or otherwise use fragile, nonrenewable natural and cultural resources.	43-48
D. A priority schedule for conducting management activities, based on the purposes for which the lands were acquired. (Example #10) The schedule must include a goal, an objective, and a time frame for completion.	48-52
E. A cost estimate for conducting priority management activities, to include recommendations for cost-effective methods of accomplishing those activities. <i>Using categories as adopted pursuant to 259.037, F.S., is suggested. These are: (1) Resource Management; (2) Administration; (3) Support; (4) Capital Improvements; (5) Visitor Services/Recreation; and (6) Law Enforcement.</i>	52-53
F. A cost estimate for conducting other management activities which would enhance the natural resource value or public recreation value for which the lands were acquired. The cost estimate shall include recommendations for cost-effective methods of accomplishing those activities. <i>Using categories as adopted pursuant to 259.037, F.S., is suggested. These are: (1) Resource Management; (2) Administration; (3) Support; (4) Capital Improvements; (5) Visitor Services/Recreation; and (6) Law Enforcement.(Example #10) Include approximate monetary cost and cost effective methods. Can be placed in the appendix.</i>	52-53
38. A determination of the public uses and public access that would be consistent with the purposes for which the lands were acquired.	41-43
259.036 Management Review Teams.—	

39. The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. <i>Can be addressed in the body of the plan or addressed in an appendix. If not in agreement, the managing agency should reply in a statement in the appendix.</i>	5
Other Requirements	
40. This checklist table at front of plan (pursuant to request of ARC and consensus agreement of managing agencies.)	i-vi
41. Accomplishments (implementation) from last plan (format variable by agency)	
42. FNAI-based natural community maps (may differ from FNAI in some cases)	96-109
43. Fire management plans (either by inclusion or reference)(259.032)	71-77
44. A statement regarding incompatible uses [ref. Ch. 253.034 (9)]	
45. Cultural resources, including maps of all sites <u>except Native American sites</u> *	31-32
46. Arthropod control plan	26, 92-95

*While maps of Native American sites should not be included in the body of the management plan, the DSL urges each managing agency to provide such information to the Division of Historical Resources for inclusion in their proprietary database. This information should be available for access to new managers to assist them in developing, implementing and coordinating their management activities.

TABLE OF CONTENTS

I.	EXECUTIVE SUMMARY	1
II.	INTRODUCTION	2
III.	SITE DESCRIPTION AND LOCATION	5
IV.	NATURAL RESOURCE DESCRIPTIONS	8
A.	PHYSICAL RESOURCES	8
	a. Climate	8
	b. Geology	8
	c. Topography.....	8
	d. Soils	9
	e. Hydrology.....	13
B.	BIOLOGICAL RESOURCES	13
	a. Ecosystem Function.....	13
	b. Flora.....	14
	c. Fauna	25
	d. Translocation.....	26
	e. Designated Species.....	26
	f. Biological Diversity.....	29
C.	CULTURAL	31
	a. Archaeological.....	31
	b. Historical	31
	c. Land-Acquisition History	32
	d. Public Interest.....	32
V.	FACTORS INFLUENCING MANAGEMENT.....	32
A.	NATURAL TRENDS.....	34
B.	HUMAN-INDUCED TRENDS	34
	a. Fire suppression.....	34
	b. Hydroperiod alteration.....	34
	c. Trails and Firebreaks	35
C.	EXTERNAL INFLUENCES	35
D.	LEGAL OBLIGATIONS AND CONSTRAINTS	35
	a. The Nature Conservancy	36
	b. Florida Forest Service.....	36
	c. Easements	36
	d. Right of ways.....	36
	e. Leases	36
E.	MANAGEMENT CONSTRAINTS	38
	a. Fire.....	38
	b. Exotic Species	38
F.	PUBLIC ACCESS AND PASSIVE RECREATION.....	40
	a. Parking and Public Access.....	43
	b. Hiking.....	43
	c. Bird Watching	43

d. Mountain Biking.....	43
e. Horseback Riding.....	43
f. Hunting.....	43
VI. MANAGEMENT ACTION PLANS.....	43
A. GOALS.....	43
B. STRATEGIES AND ACTIONS.....	44
VII. PROJECTED TIMETABLE FOR IMPLEMENTATION	48
VIII. FINANCIAL CONSIDERATIONS	52
IX. BIBLIOGRAPHY	54
X. APPENDICES	58
APPENDIX A:.....	59
LETTER OF COMPLIANCE.....	59
APPENDIX B:.....	60
LEGAL DESCRIPTION.....	60
APPENDIX C:.....	70
FEMA MAP	70
APPENDIX D:.....	71
FIRE MANAGEMENT PLAN.....	71
APPENDIX E	78
TIMBER ASSESSMENT.....	78
APPENDIX F:	82
SURFACE WATER QUALITY CLASSIFICATION.....	82
APPENDIX G.....	83
PLANT SURVEYS	83
APPENDIX H.....	89
BIRD SURVEY.....	89
APPENDIX I	92
ARTHROPOD PLAN	92
APPENDIX: J.....	96
FLORIDA NATURAL AREAS INVENTORY	96
APPENDIX K:.....	110
FLORIDA MASTER SITE FILE	110
APPENDIX L	111
TNC GRANT AGREEMENT.....	111
APPENDIX M:.....	124
PROPERTY LEASES	124
APPENDIX N:.....	134
PUBLIC MEETING MINUTES.....	134

I. EXECUTIVE SUMMARY

Scottsmoor Flatwoods Sanctuary (SFS) is part of a sanctuary network established by the Environmentally Endangered Lands (EEL) Program in Brevard County. The intent of the Program is to acquire environmentally sensitive lands as a first step “towards long-term protection of essential natural resources, open space, green space, wildlife corridors and maintenance of natural ecosystems functions” (Brevard County EEL Program, Sanctuary Management Manual, 1997). The network of public lands also provides passive recreation and environmental education programs to Brevard County residents and visitors. Currently, title to the property is held by Brevard County through the EEL Program.

SFS encompasses +/- 1,541.41 acres east and west of I-95 in Scottsmoor, Brevard County, Florida. In September 2008, the EEL Program acquired 981.66 acres east of I-95 and 540 acres west of I-95 with Brevard County Environmentally Endangered Lands (EEL) Program funds and partially funded by a grant under the Florida Scrub-Jay Conservation Program Fund Memorandum of Understanding between the U.S. Fish and Wildlife Service and The Nature Conservancy. 852.66 acres east of I-95 was purchased from Scottsmoor Partners and 540 acres west of I-95 was purchased from Ag Ventures, LLC Honeybrook Development. An additional 129 acres was donated to the EEL Program east of I-95 by The Nature Conservancy (TNC). In October 2011, the EEL Program purchased an additional 19.75 acres east of I-95 with assistance from the United States Air Force 45th Space Wing. A conservation easement in favor of the US Air Force (USAF) is located on 11.73 acres of the acquisition for future scrub mitigation purposes. The 1,541.41 acre site is located within Sections 3, 4, 37, 40 and 41, Township 20 South Range 34 East. SFS, along with other EEL properties in the North Regional Management Area, is served by the EEL Program Management & Education Center at the Enchanted Forest Sanctuary, located south of SFS on State Road 405. As described in the Sanctuary Management Manual, SFS is a Category II site, or intermediate site. Category II sites may include nature trails, a dedicated parking area and interpretive signs along some nature trails. The multi-use site will be open for passive recreation to the public during daylight hours.

Uplands are the dominant natural community and accounts for +/- 1165.81 acres while wetlands occur on +/-375.6 acres of the Sanctuary. SFS natural communities have a typical ridge to swale distribution alternating upland and wetlands communities (Schmalzer 2006). SFS consists primarily of mesic flatwoods, scrubby flatwoods and depression marshes. Preliminary surveys of the site and surrounding lands noted the presence, or potential presence, of several listed plant and animal species. Protected species documented on-site during recent or past studies include lacelip ladies' tresses (*Spiranthes laciniata*), snowy orchid (*Habenaria nivea*), pine lily (*Lilium catesbaei*), yellow butterort (*Pinguicula lutea*) gopher tortoise (*Gopherus polyphemus*), American alligator (*Alligator mississippiensis*), and Florida Scrub-Jays (*Aphelocoma coerulescens*).

The primary goals of the site include the conservation and restoration of ecosystem function, natural communities, and native species habitat. The collection and

Scottsmoor Flatwoods Sanctuary Draft Management Plan

documentation of natural and cultural resource data are important management goals. Other management goals include the provision of public access and environmental education.

Existing cleared roads and previous wildfire plowlines throughout the site offer opportunities for public access including hiking, mountain biking, horseback riding, nature observation, and environmental education. A trailhead at the end of Magoon Rd., International Dr. and Blount's Ridge will provide access to these trails. An educational kiosk will include information about the site and the EEL Program. Guided hikes can also be scheduled for the property. Fourteen miles of trails are proposed for the site, offering an abundance of volunteer opportunities. The trails will be natural surface trails with minimal improvements such as boardwalks and signage where necessary. The proposed recreation and educational opportunities will provide Brevard County residents with an opportunity to enjoy of the unique and valuable natural resources available in Brevard County, thereby promoting the long-term preservation of Brevard's natural heritage.

II. INTRODUCTION

In two separate referendums in 1990 and again in 2004, Brevard County voters approved funding for the Environmentally Endangered Lands (EEL) Program. The Program's Vision Statement is as follows:

“The Environmentally Endangered Lands (EEL) Program acquires, protects and maintains environmentally endangered lands guided by scientific principles for conservation and the best available practices for resource stewardship and ecosystem management. The EEL Program protects the rich biological diversity of Brevard County for future generations. The EEL Program provides passive recreation and environmental education opportunities to Brevard's citizens and visitors without detracting from primary conservation goals of the program. The EEL Program encourages active citizen participation and community involvement.”

The Program established a conceptual framework and funding mechanism to implement an EEL sanctuary network in Brevard County. The EEL sanctuary network represents a collection of protected natural areas that form a regional conservation effort focused upon protection of biological diversity. Within the countywide EEL sanctuary network, four management areas are geographically defined within Brevard County. For each management area, a specific site is identified as a Center for Regional Management. The sites that will function as Centers for Regional Management for the EEL Program are:

- I. The Enchanted Forest Sanctuary (Regional Management Center for North Mainland)
- II. Pine Island Conservation Area (Regional Management Center for Central Mainland)
- III. Malabar Scrub Sanctuary (Regional Management Center for South Mainland)

Scottsmoor Flatwoods Sanctuary Draft Management Plan

IV. Barrier Island Center (Regional Management Center for South Beaches)

These Centers provide strategically located hubs for implementing the countywide conservation, passive recreation, and environmental education goals of the EEL Program.

Other EEL sanctuaries within the North Regional Management Area include: Buck Lake Conservation Area (managed jointly with SJRWMD), North Buck Lake Scrub Sanctuary, South Lake Conservation Area, Fox Lake Sanctuary, Indian River Sanctuary, Indian Mound Station Sanctuary and Dicerandra Scrub Sanctuary.

The EEL Program *Sanctuary Management Manual* (SMM) guides conservation and land stewardship decisions implemented by the Brevard County EEL Program. The SMM details principles and directives for conservation, public access and environmental education within the EEL sanctuary network. The SMM also outlines the EEL Selection & Management Committee's (SMC) role in advising staff and the Brevard County Board of County Commissioners on acquisition and management related issues (Chapter 2, Section 4.3.4).

As outlined in the SMM, the EEL Program will adopt and implement an ecosystem approach to environmental management. Ecosystem management is defined as an integrative, flexible approach to the management of natural resources. Key themes of ecosystem management include the following:

1. Adaptive Management – Natural areas must be managed in the context of the landscape in which they exist and based on scientific knowledge. Resource managers must adapt to continuing advances in the scientific understanding of ecosystems and changing environmental and human influences on the resources.
2. Partnerships – Interagency and private sector partnerships are essential to manage and protect ecosystems. Natural resource management is complex and requires multi-disciplinary skills and experiences.
3. Holistic Approach – Ecosystem management includes the maintenance, protection, and improvement of both natural and human communities. This system approach to management considers the “big picture” of natural resource protection, community economic stability and quality of life.

Land management issues, such as fire management, protection and restoration of natural hydrologic cycles, threatened and endangered species, and removal of invasive exotics must be integrated with issues, such as provisions for public access and levels of human use. The integration of ecosystem protection and human needs combine to form the foundation of an effective ecosystem management strategy.

The Environmentally Endangered Lands Program SMM establishes a general framework for management of specific sites and establishes ten Principles of Conservation summarized below, to achieve the following:

Scottsmoor Flatwoods Sanctuary Draft Management Plan

1. Maintain all sites in a natural state and/or restore sites to enhance natural resource values.
2. Protect natural resource values by maintaining biological diversity and using conservation as a primary goal for decision-making.
3. Balance human use with the protection of natural resources.
4. Apply the most accurate scientific principles to strategies for conservation.
5. Collect and use the most accurate data available for developing site management plans.
6. Consider the interests and values of all citizens by using scientific information to guide management policy making.
7. Promote effective communication that is interactive, reciprocal, and continuous with the public.
8. Promote the value of natural areas to Brevard County residents and visitors through the maintenance of the quality of resource values, public services, and visitor experiences.
9. Promote the integration of natural resource conservation into discussions of economic development and quality of life in Brevard County.
10. Provide a responsible financial strategy to implement actions to achieve long-term conservation and stewardship goals.

In addition to the Principles of Conservation, this Management Plan will provide specific goals, strategies, and actions to guide management of the sanctuary in terms of the objectives of the Environmentally Endangered Lands Program. The plan is divided into the following ten sections:

- I. *Executive Summary* identifies the location, size, general natural resource features and primary management goals for the site.
- II. *Introduction* provides a brief introduction to the EEL Program and the site and describes the structure of the management plan.
- III. *Site Description and Location* provides a detailed site location and description.
- IV. *Natural Resource Descriptions* includes physical resources (climate, geology, topography, soils, and hydrology), biological resources (ecosystem function, flora, fauna, designated species, and biological diversity), and cultural resources (archaeological, historical, land-acquisition history, and public interest).
- V. *Factors Influencing Management* includes natural trends, human-induced trends, external influences, legal obligations and constraints, management constraints, and public access and passive recreation.
- VI. *Management Action Plans* include specific goals, strategies and actions.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

- VII. *Projected Timetable for Implementation* prioritizes activities and provides a time frame for Management Plan implementation.
- VIII. *Financial Considerations* discusses funding mechanisms and projected management costs.
- IX. *Bibliography* cites original research and publications used to develop the Management Plan.
- X. *Appendices* includes supplemental information

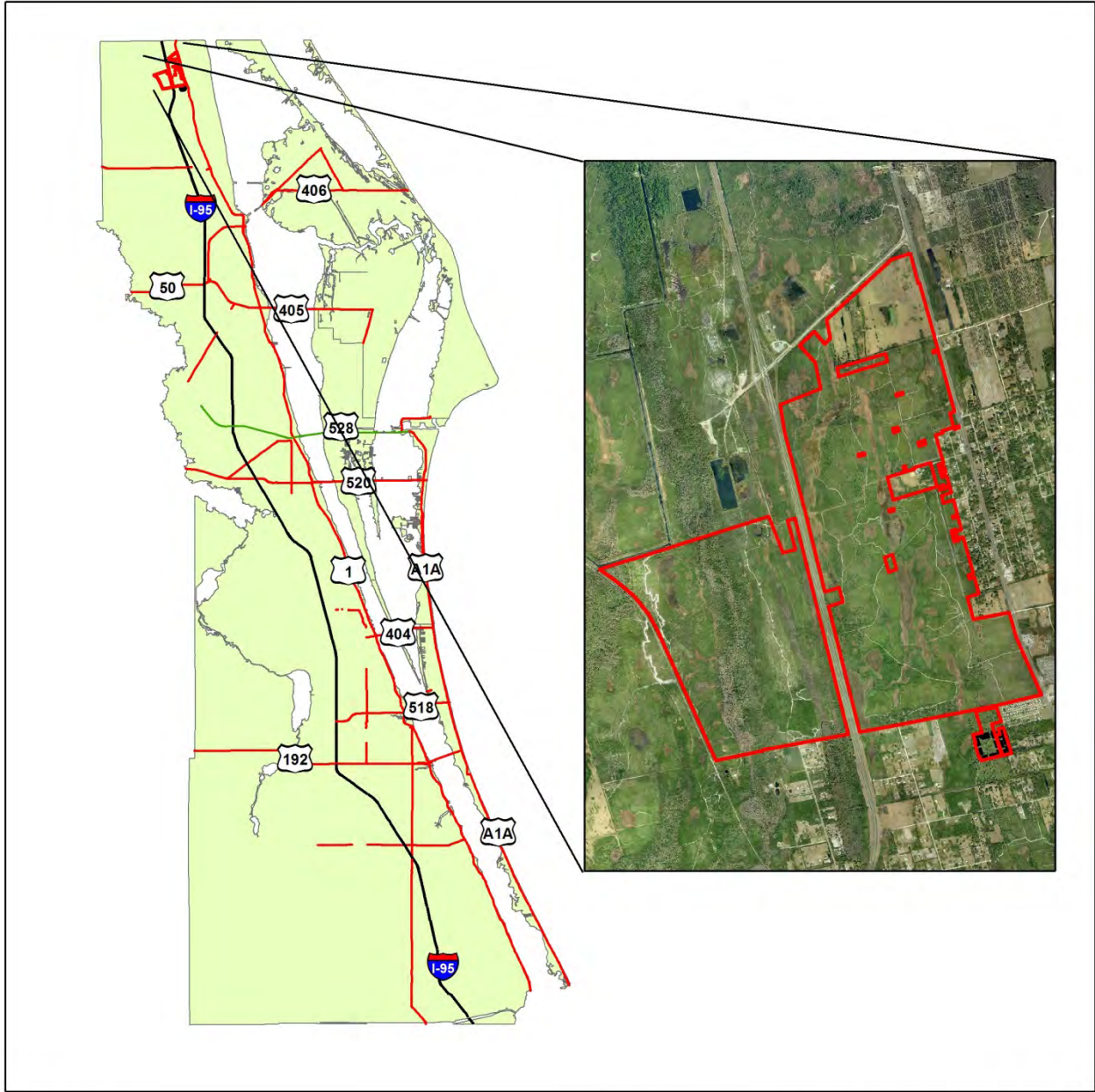
Uses planned for SFS comply with the Conceptual State Lands Management Plan and its requirement for “balanced public utilization,” and comply with the mission of the EEL program as described in the SMM. Such uses also comply with Article VIII, Section 1 of the Florida Constitution as well as Chapters 375, 380, 259, 125, and 403 of the Florida Statutes. This plan is also in conformance with the Local Government Comprehensive Plan for Brevard County, Florida, as approved and adopted. The letter confirming compliance is contained in Appendix A. Additionally, the EEL Program will consider the findings and recommendations of the Land Management Review Team in finalizing the required 10-year update should the title be transferred to the State of Florida.

III. SITE DESCRIPTION AND LOCATION



SFS is a 1,541.41-acre site (Sections 3, 4, 37, 40 and 41, Township 20 South Range 34 East) located east and west of Interstate 95 and south of State Road 5A in Scottsmoor, Florida (Figures 1 & 2, Appendix B). The EEL Selection and Management Committee (SMC) considered site location, natural communities, biological diversity, habitat quality, and contribution to functional ecological integrity to determine if the acquisition of SFS met the EEL Program conservation goals. There is no portion of SFS that should be declared surplus.

SFS is composed of six different natural communities including an improved pasture in the northeast corner of the Sanctuary. SFS consists mainly mesic and scrubby flatwoods. The mesic flatwood community consists of an open to close canopy of slash pine (*Pinus elliottii*), longleaf pine (*Pinus palustris*) and pond pine (*Pinus serotina*). The understory is composed of saw palmetto (*Serenoa repens*), gallberry (*Ilex glabra*), shiny lyonia (*Lyonia lucida*), shiny blueberry (*Vaccinium myrsinites*), deerberry (*Vaccinium stamineum*), wiregrass (*Aristida stricta* var. *beyrichiana*), winged sumac (*Rhus copallinum*), earleaf greenbrier (*Smilax auriculata*), cat greenbrier (*Smilax glauca*) and wax myrtle (*Myrica cerifera*) with few openings. The scrubby flatwoods community has a similar canopy and understory than the mesic flatwoods community with the addition of sand pine (*Pinus clausa*), Chapman’s oak (*Quercus chapmanii*), sand live oak (*Quercus geminata*) and myrtle oak (*Quercus myrtifolia*).

Scottsmoor Flatwoods Sanctuary Draft Management Plan



Legend

-  Sanctuary Boundary
-  USAF Easement



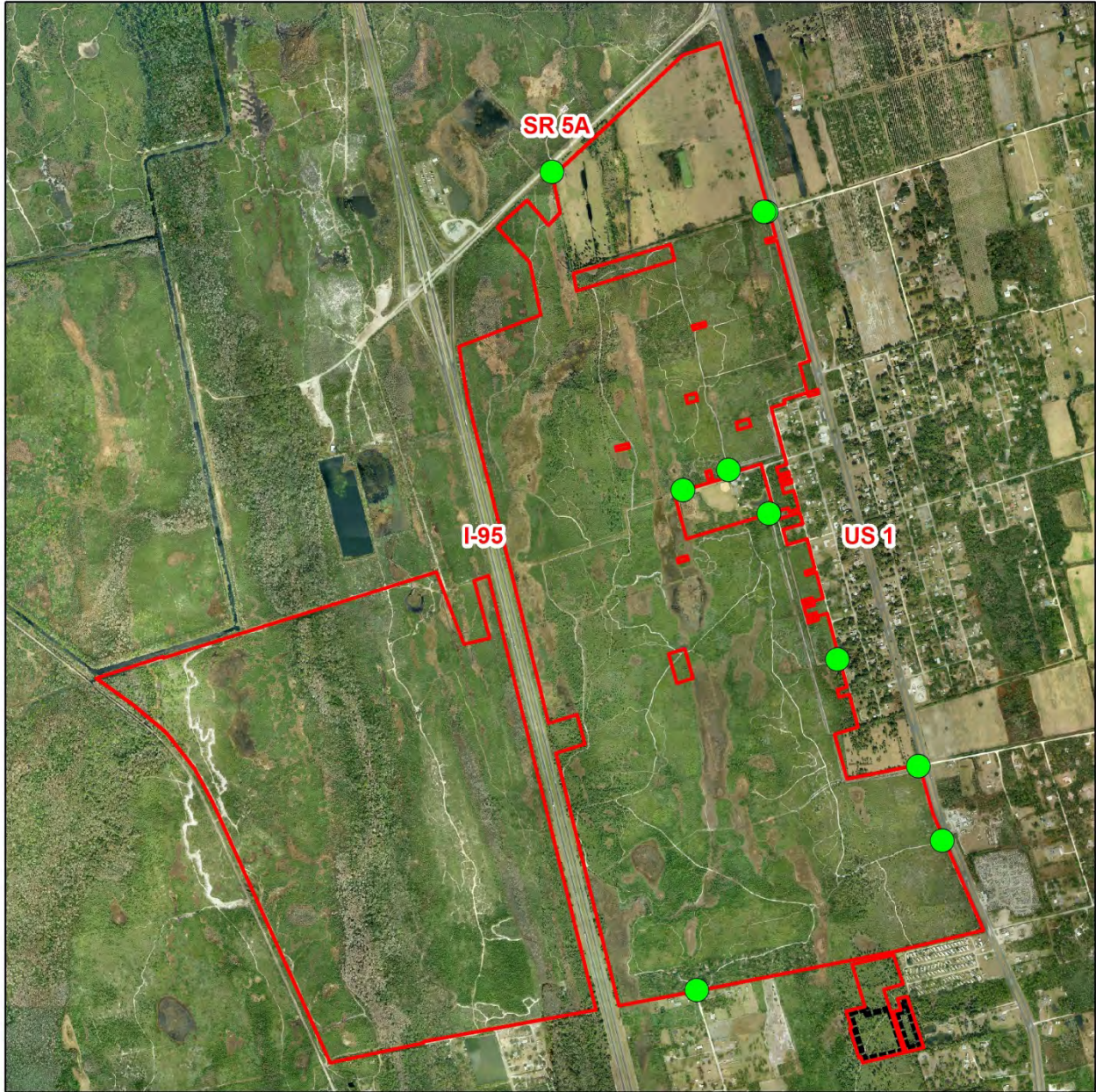
0 5 10 20 Miles

Map updated on 09/05/2012 for
Scottsmoor Flatwoods Sanctuary Management Plan.

Disclaimer: Calculated acreages indicated on the map
are based solely on secondary mapping sources. No
warranties or representations of accuracy are expressed
or implied.

Source: Florida Aerial Photography Archive Collection

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Legend

-  Sanctuary Boundary
-  USAF Easement
-  Gate



0 1,000 2,000 4,000 Feet

Map updated on 09/05/2012 for Scottsmoor Flatwoods Sanctuary Management Plan.

Disclaimer: Calculated acreages indicated on the map are based solely on secondary mapping sources. No warranties or representations of accuracy are expressed or implied.

Source: Florida Aerial Photography Archive Collection

IV. NATURAL RESOURCE DESCRIPTIONS

This section provides descriptions of the natural resources, including physical resources (climate, geology, topography, soils, and hydrology), biological resources (ecosystem function, flora, fauna, designated species, and biological diversity) and cultural resource information (archeological, historical, land-use history and public interest). Climatic change, seasonal variability, topographic relief, soil types, and disturbance contribute to species distribution and community composition.

A. Physical Resources

a. Climate

SFS is located in east central Florida, an isothermal area at the junction of the temperate and subtropical climatic zones. Temperature data from representative locations in Brevard County indicate an average annual temperature of approximately 74°F. August is typically the warmest month, averaging 82°F, whereas January is the coolest month, averaging about 62°F (Schmocker et al. 1990). Summer temperatures are moderated by frequent afternoon thunderstorms. Periods of extreme cold weather are infrequent due to the site's latitude and proximity to the Atlantic Ocean. The most recent "hard" freeze occurred in the winter of 1989. Long-term rainfall data for the area indicate an average of 54 inches per year in north Brevard County (Schmocker et al. 1990). Wet and dry seasons are typically well defined, with the wet season occurring between May and October, and the dry season occurring between November and April. Annual and seasonal rainfall is subject to large variation in both amount and distribution.

During summer, Central Florida has some of the highest frequencies of thunderstorms in the world, which is the natural ignition source in Florida (Duncan et al. 2010). Cloud to ground lightning strikes occurs frequently during summer storms. This is an important source of natural fire ignition, which determined the historic natural fire regime. Prevailing winds are generally from north to northeast during the dry season (November to April) and from the east during the wet season (May to October) (ESMC, 1989).

b. Geology

SFS is located on the Atlantic Coastal Ridge, a geological shoreline feature estimated to have formed up to 140,000 years ago when the sea level was as much as 30 feet above the present level. The property is part of a relic beach and dune system, an important geological feature that influences the biological diversity of Brevard County. The Atlantic Coastal Ridge extends along the east coast of Florida and is a major feature of mainland Brevard County, made of both single and multiple relict beach ridges. These ridges appear to have formed along an erosional rather than prograding shoreline, and in most places contain little carbonates. Formation of the Atlantic Coastal Ridge is associated with Pamlico time (ca. 140,000 – 120,000 years before present) (Schmalzer et al. 1999). Brevard County is not aware of any mineral resources, such as oil, gas and phosphate located within the Sanctuary boundary.

c. Topography

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Based on a review of the USGS Topographic Quadrangle Map (Figure 3), ground elevations east of I-95 varies slightly from 25' National Geodetic Vertical Datum (NGVD) throughout most of the property to 30' NGVD in the northeast corner. West of I-95, ground elevations range from 20' NGVD near the west boundary to approximately 35' NGVD in the northeast corner of the property. The majority of the entire site is at an elevation of approximately 25' NGVD.

d. Soils

Soil types within SFS, as defined by the Natural Resource Conservation Service (formerly the Soil Conservation Service), (Figure 4) are as follows:

Anclote sand (An) is a nearly level, very poorly drained sandy soil. This soil type is characteristic of broad areas on flood plains, marshy depressions in the flatwoods, and poorly defined drainage ways. In most years, the water table is within a depth of 10 inches for more than 6 months. In dry seasons it is deeper, but seldom below a depth of 40 inches. The soil is flooded for 2 to 7 days following heavy rains.

Astatula fine sand, dark surface (As)* is a nearly level to gently sloping, excessively drained, sandy soil on high undulating ridges. The water table is below 10 feet at all times. Astatula fine sand is an aquifer recharge soil.

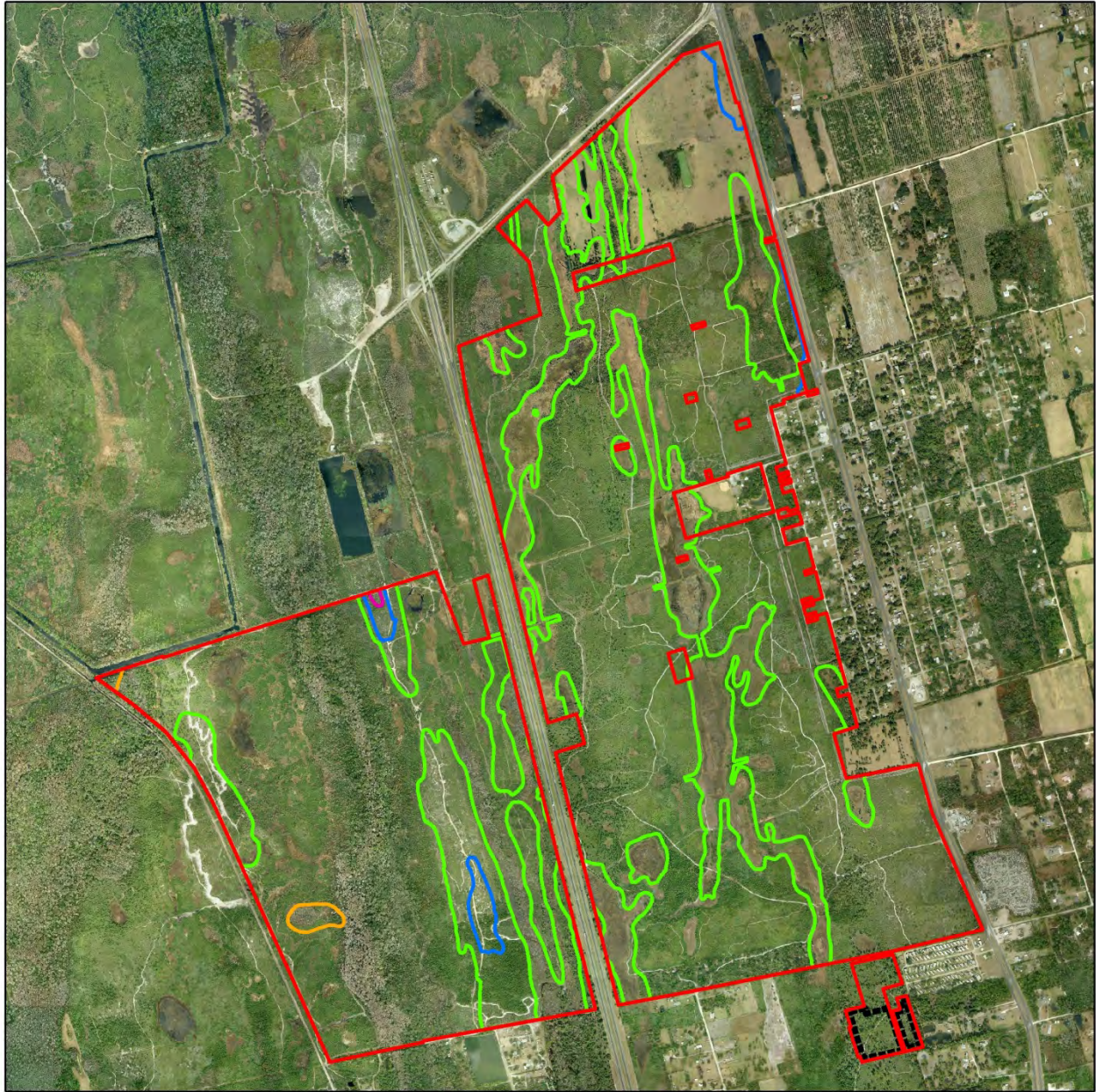
Basinger sand (Ba) is a nearly level, poorly drained, sandy soil in sloughs of poorly defined drainageways and depressions in flatwoods. It is occasionally flooded for 2 to 7 days following heavy rains. In most years the water table is within a depth of 10 inches for 2 to 6 months of the year, and between 10 and 40 inches for 6 months or more. In the dry seasons it is below a depth of 40 inches for short periods.

Immokalee sand (Im) is a nearly level, poorly drained sandy soil in broad areas in the flatwoods, on low ridges between sloughs, and in low, narrow areas between sand ridges and lakes and ponds. In most years the water table is within a depth of 10 inches for 1 to 2 months. It is between 10 and 40 inches more than half the time, and during short, dry periods it is below a depth of 40 inches.

Myakka sand (Mk) is a nearly level, poorly drained sandy soil in broad areas in flatwoods and in areas between sand ridges and sloughs and ponds. In most years the water table is within a depth of 10 inches for 1 to 4 months and between 10 and 40 inches for more than 6 months. In dry seasons it is below a depth of 40 inches. The soil is flooded for 2 to 7 days once in 1 to 5 years.

Myakka sand, ponded (Mp) is a nearly level, poorly drained, sandy soil in shallow depressions in the flatwoods. This soil is similar to Myakka sand, but it is in low places where water accumulates. In most years it is flooded for 6 to 12 months.

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Legend

- | | | |
|---|--------------------|--|
|  | Sanctuary Boundary | Elevation (NGVD) |
|  | USAF Easement |  20 |
| | |  25 |
| | |  30 |
| | |  35 |



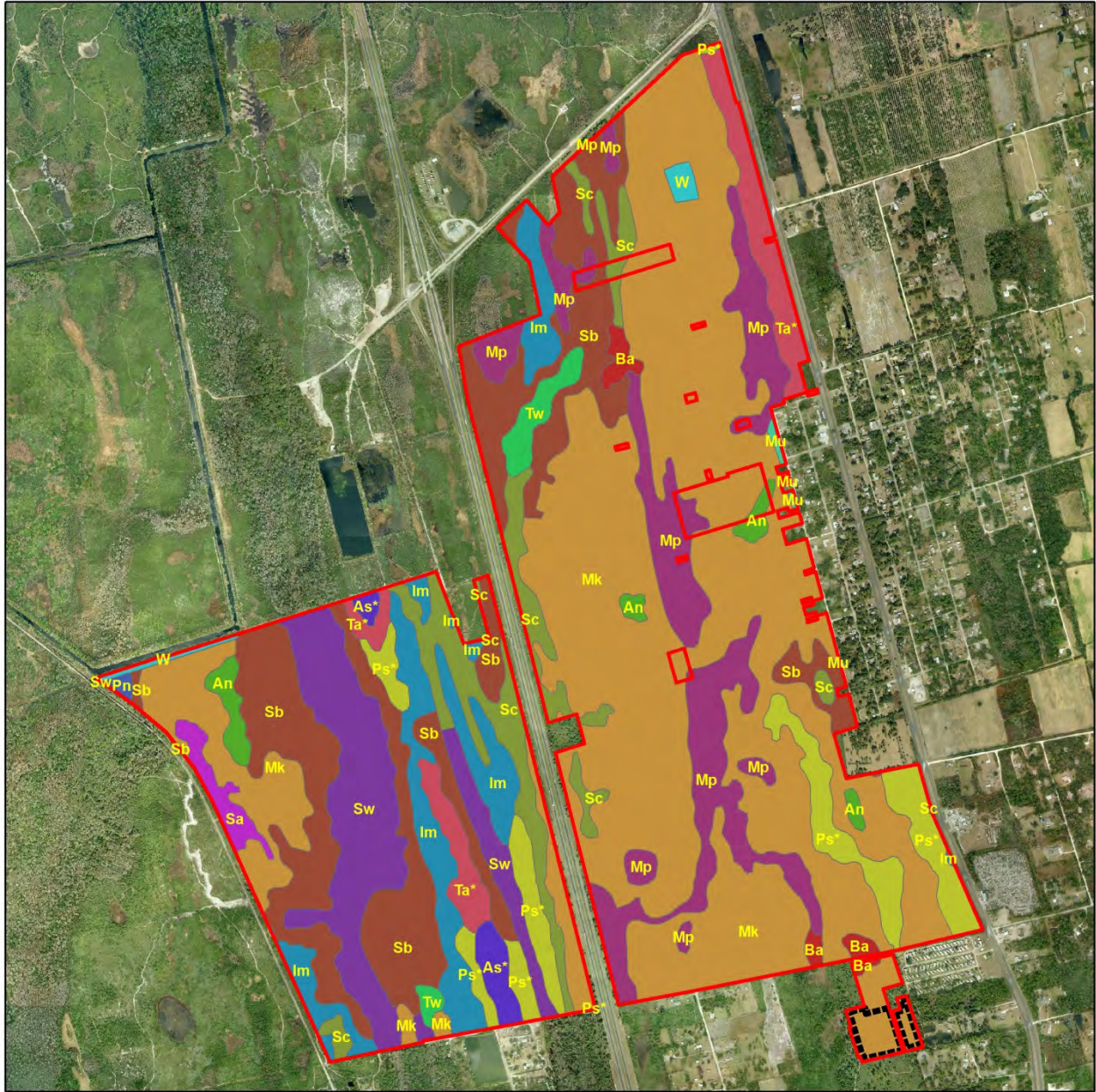
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Map updated on 09/05/2012 for Scottsmoor Flatwoods Sanctuary Management Plan.


Disclaimer: Calculated acreages indicated on the map are based solely on secondary mapping sources. No warranties or representations of accuracy are expressed or implied.

Source: USGS Topographic Quadrangle.

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




Legend

 Sanctuary Boundary

 USAF Easement

Soil Type

 An	 Im	 Mu	 Sa	 Sw	 W
 As*	 Mk	 Pn	 Sb	 Ta*	
 Ba	 Mp	 Ps*	 Sc	 Tw	



0 1,000 2,000 4,000 Feet

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Source: Natural Resource Conservation Service.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Myakka-Urban land complex (Mu) is 40 to 55 percent Myakka soil, 25 percent a Myakka soil that has been altered for use as building sites or covered by streets and buildings, and 20 to 45 percent Urban land or areas covered by houses, streets, driveways, buildings, parking lots, and other related construction.

Pineda sand (Pn) is a nearly level poorly drained sandy soil on broad hammocks and in low sloughs. It has a profile described as representative of the series. In most years the water table is within a depth of 10 inches for 1 to 2 months and between 10 and 40 inches for more than six months. In dry seasons it is below a depth of 40 inches. The soil is flooded for 2 to 7 days once in 1 to 5 years.

*Pomello sand (Ps)** is a nearly level, moderately well drained sandy soil on broad low ridges and low knolls. The water table is 30 to 40 inches below the surface for 2 to 4 months in most years and between 40 and 60 inches for more than 6 months. During dry periods, it is below 60 inches for short periods. Pomello sand is an aquifer recharge soil.

Satellite sand (Sa) is a nearly level, somewhat poorly drained sandy soil on broad low ridges in the flatwoods. The water table is 10 to 40 inches below the surface for 2 to 6 months in most years. Most of the time it is within a depth of 60 inches. During prolonged dry periods it is below 60 inches.

St. Johns sand (Sb) is a nearly level, poorly drained sandy soil on broad low ridges in flatwoods. This soil has the profile described as representative of the series. The water table is within a depth of 10 inches for 2 to 6 months in most years and typically between 10 and 40 inches the remainder of the year. During extended dry periods it is below 40 inches. This soil is occasionally flooded for 2 to 7 days following heavy rains.

St Johns soils, ponded (Sc) are in sloughs, poorly defined drainageways, and shallow intermittent ponds in the flatwoods. Individual areas are generally long and narrow, but some cover 40 acres or more. They consist of St. Johns soils and soils that are similar but have a weakly cemented layer at a depth of 40 inches for 6 to 12 months in most years. Most areas are continuously flooded for 6 months or more in most years.

Swamp (Sw) consists of nearly level, poorly drained and very poorly drained areas of soils that have a dense cover of wetland hardwoods, cypress trees, vines, and shrubs. Swamp is in poorly defined natural drainageways, in depressions, and in large bay heads. It is flooded with fresh water most of the time.

*Tavares fine sand (Ta)** is a nearly level and gently sloping, moderately well drained sandy soil on narrow to broad, moderately low ridges. The water table is at a depth of 40 to 60 inches for more than 6 months in most years. In dry seasons it is below 60 inches. Tavares fine sand is an aquifer recharge soil.

Tomoka muck (Tw) is a nearly level, very poorly drained muck soil in broad flat marshes, small depressions, and swamps. Sandy and loamy layers are at a depth of 16 to 40 inches. The water

table is within a depth of 10 inches for 9 to 12 months in most years, and water is frequently above the surface. In dry periods it is between 10 and 30 inches.

(Source: U.S Department of Agriculture. Soil Survey of Brevard County, Florida, 1974)

Note: * denotes a soil with aquifer recharge characteristics

Soil disturbing activities will be limited to creating and maintaining firelines and hiking trails. On areas that have been disturbed prior to acquisition, assessments will be made to determine if soil erosion is occurring, and, if so, the appropriate measures to stop or control the effects of the erosion.

e. Hydrology

SFS lies within Community Panel Number 25 and 100, of the FEMA maps dated April 1989 (Appendix C). The FEMA map shows that the majority of the site resides in flood zone A. Flood zone A means that no base elevation has been determined. Isolated portions of the sanctuary lies in flood zone X. Flood zone X is an area that is deemed to be outside the 500-year flood plain. The property is not located within an Aquatic Preserve, designated as an Area of Critical State Concern or under review for such designation.

B. Biological Resources

a. Ecosystem Function

The preservation of SFS ecosystem function depends on the enhancement of its natural communities, which will result in an increase of species viability. Restoration of the natural communities is mainly dependent upon the removal of exotic species, the reintroduction of an adequate fire regime and the restoration of the natural hydroperiod. SFS management actions include; the restoration of natural communities, restoration and enhancement of habitat for gopher tortoises and Florida Scrub-Jays, removal of invasive exotic species and implementation of prescribed fire. The SFS Fire Management Plan (Appendix D) identifies each fire dependent ecosystem with a specific fire regime, the location of each fire unit and fireline and the pre-burn treatment necessary for each unit before the implementation of prescribed burn.

SFS is approximately twenty miles north of the Enchanted Forest Sanctuary, a 471.31-acre conservation area managed by the EEL Program. These properties along with Dicerandra Scrub Sanctuary, Salt Lake Wildlife Management Area, Seminole Ranch Conservation Area, St. Johns National Wildlife Refuge, South Lake Conservation Area, Indian Mound Station Sanctuary, Fox Lake Sanctuary, North Buck Lake Scrub Sanctuary and Buck Lake Conservation Area, and other Florida Forever Board of Trustees projects in the vicinity, help to form a conservation corridor within the urban areas of North Brevard County.

SFS preserves a fine example of the upland and wetland communities that once covered larger areas of Brevard County. These communities in a contiguous form, increases the value of the site in terms of ecosystem function. These communities support a high number of endemic plant and animal species. The preservation of ecotones (transition areas between community types) also

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increases the intrinsic biological value of the site. These ecotones are important due to the high diversity of plant species found in these areas, and the wide variety of animal species that depend upon these areas for significant life function requirements.

SFS uplands consist primarily of mesic and scrubby flatwoods. Section 253.036 of the Florida Statutes requires that plans in excess of 1,000 acres include a timber assessment prepared by a qualified professional forester to assess the feasibility of managing timber resources for resource conservation and revenue generation purposes through a stewardship ethic that embraces sustainable forest management practices (Appendix E).

SFS wetlands consist of depression marshes, floodplain swamps and cypress swamps. The Department of Environmental Protection considers all surface waters on SFS, including isolated wetlands, as Class III waters (Rule 62-302.400(12)(b)5.,FAC). The site does not include any Outstanding Florida Waters (Rule 62-302.700, Florida Administrative Code) (Appendix F).

The Sanctuary, along with adjacent parcels of scrub habitat, is important as a surficial aquifer recharge area. Recharge occurs when water seeps through well-drained upland scrub soils down to the aquifer layer to be stored. The site is also important in the preservation of designated plant and animal species and provides a significant area of unaltered flora and fauna, free from development.

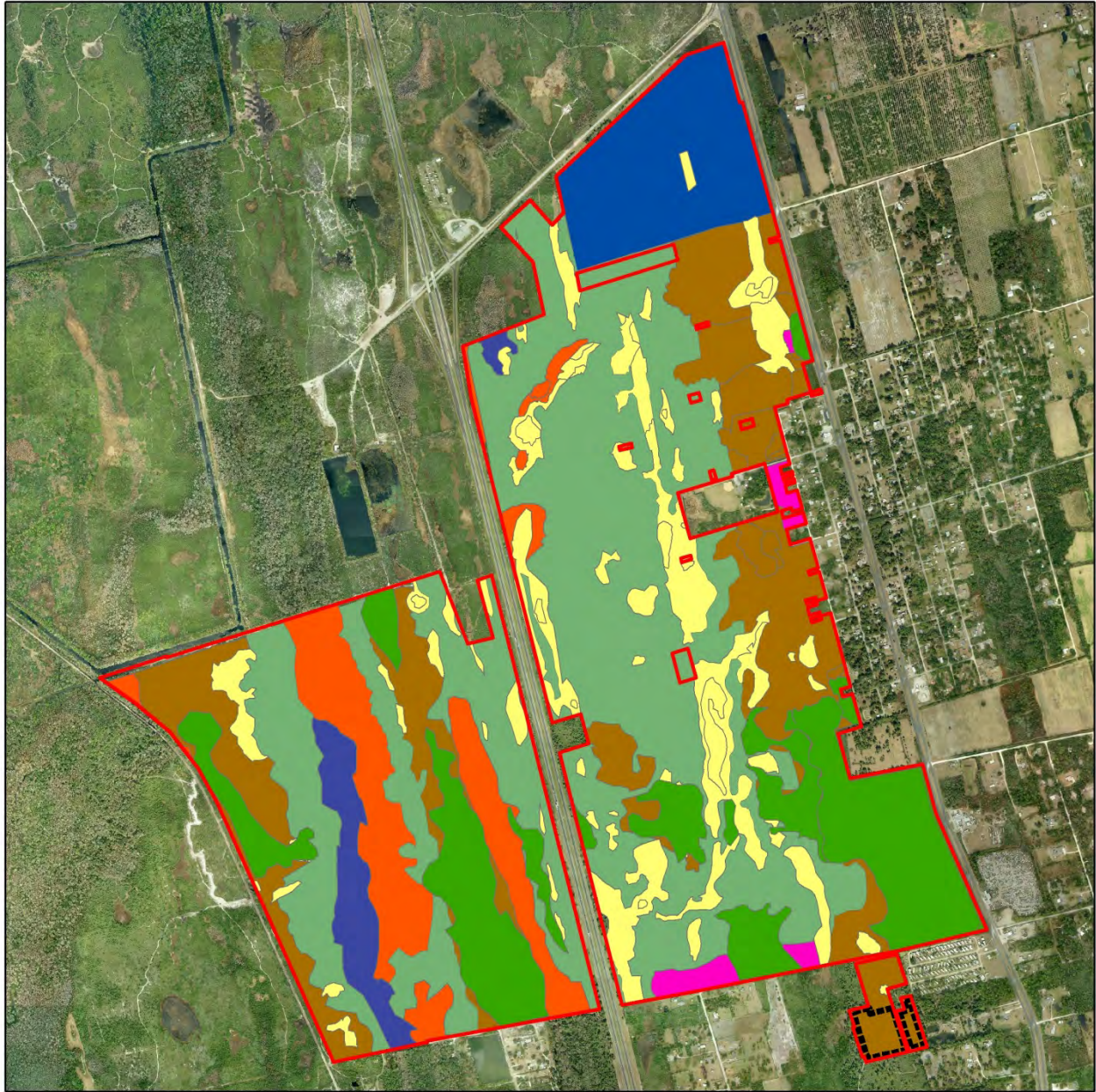
b. Flora

This section describes the preliminary plant communities identified within SFS. The vegetative communities are described using the Florida Natural Areas Inventory's *Guide to the Natural Communities of Florida* (2010) as shown in Figure 5. A preliminary list of the exotic plant species found on site is listed in the Management Constraints section of this management plan. A preliminary plant inventory conducted in June 2010-June 2011 by EEL Program staff and volunteers with assistance by members of the Florida Native Plant Society Sea Rocket Chapter can be found in Appendix G.

Historical aerial photographs were reviewed to determine changes to vegetative community type and structure, as well as man-induced changes in the past fifty years. Historical aerial photographs from 1943, 1958, 1972, 1983, 1993, and 2011 are provided as Figures 6, 7, 8, 9, 10, and 11, respectively. The natural community component of this property is rather diverse with excellent examples of the natural community transitions typical of this Atlantic Coastal Ridge system. Aerial photographs from 1943 to the present were examined to determine what changes have occurred within these plant communities.

After review of the historical aerial photographs, roadways including US 1 can be seen dating back to 1943 (Figure 6). By 1958, a retention pond or a borrow pit is visible in the northeastern portion of the property (Figure 7). Land clearing and development is also prevalent east of SFS.

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Legend

- | | | | |
|----------------------------|--------------------|--|------------------------|
| | Sanctuary Boundary | | Improved Pasture |
| | USAF Easement | | Mesic Flatwoods |
| Natural Communities | | | |
| | Cypress Swamp | | Oak-Saw Palmetto Scrub |
| | Depression Marsh | | Scrubby Flatwoods |
| | Floodplain Swamp | | Upland Mixed Forest |



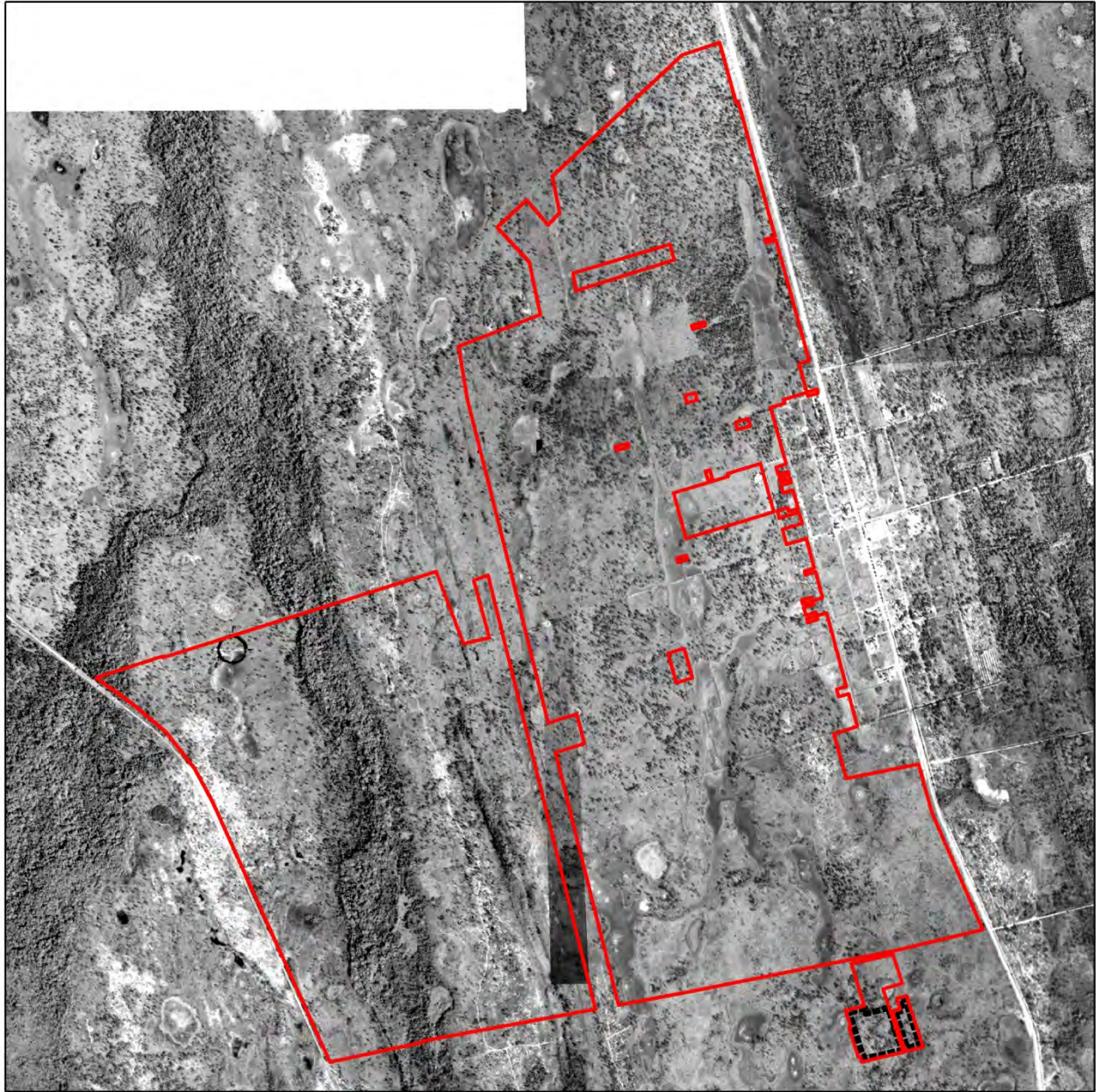
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Map updated on 09/05/2012 for Scottsmoor Flatwoods Sanctuary Management Plan.



Disclaimer: Calculated acreages indicated on the map are based solely on secondary mapping sources. No warranties or representations of accuracy are expressed or implied.

Source: Brevard County Natural Resources. 2002. Converted from FLUCCS. 1985 to FNAI 1990 classification.

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Legend

-  Sanctuary Boundary
-  USAF Easement



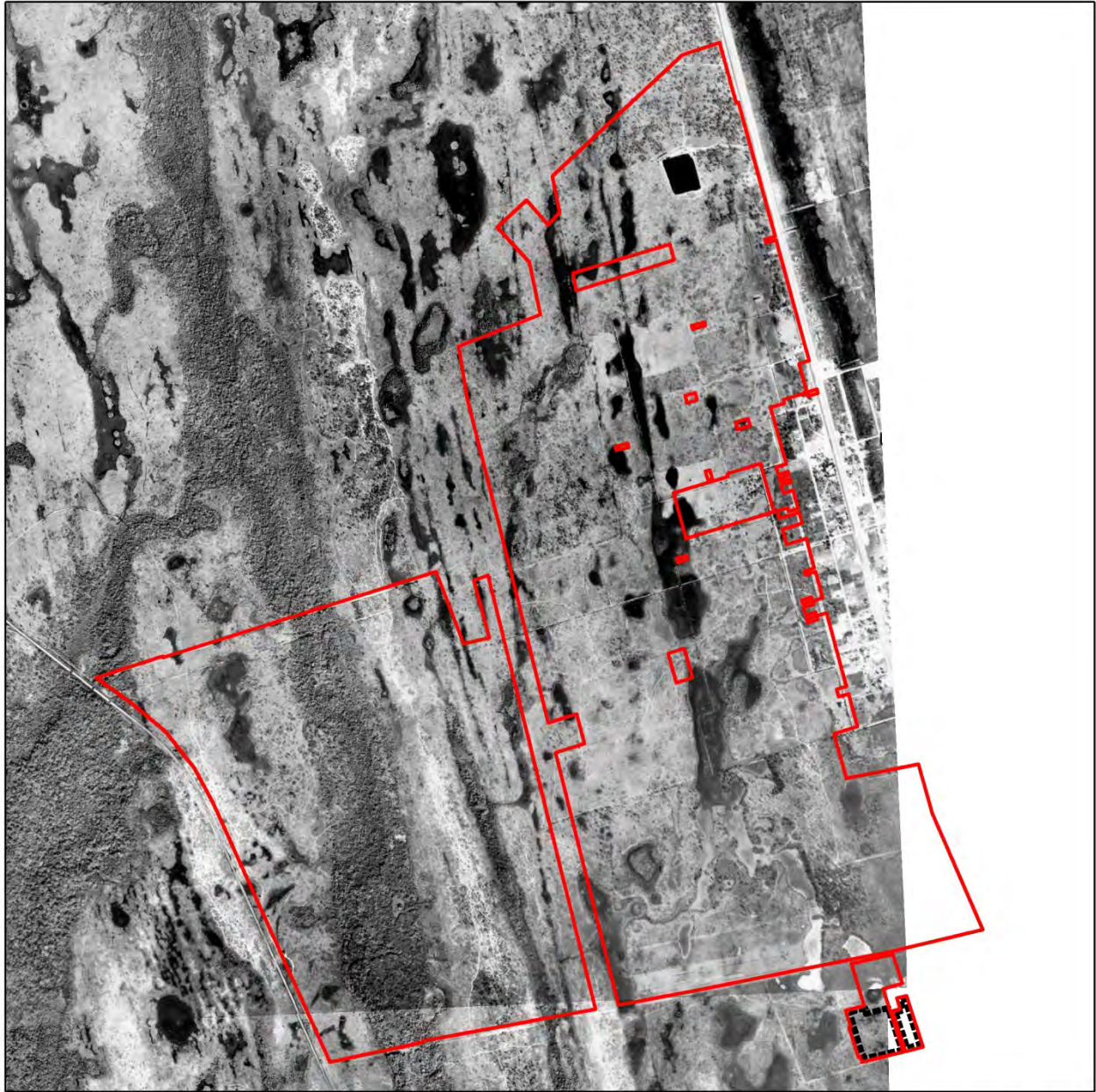
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Source: Florida Aerial Photography Archive Collection

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Legend

-  Sanctuary Boundary
-  USAF Easement



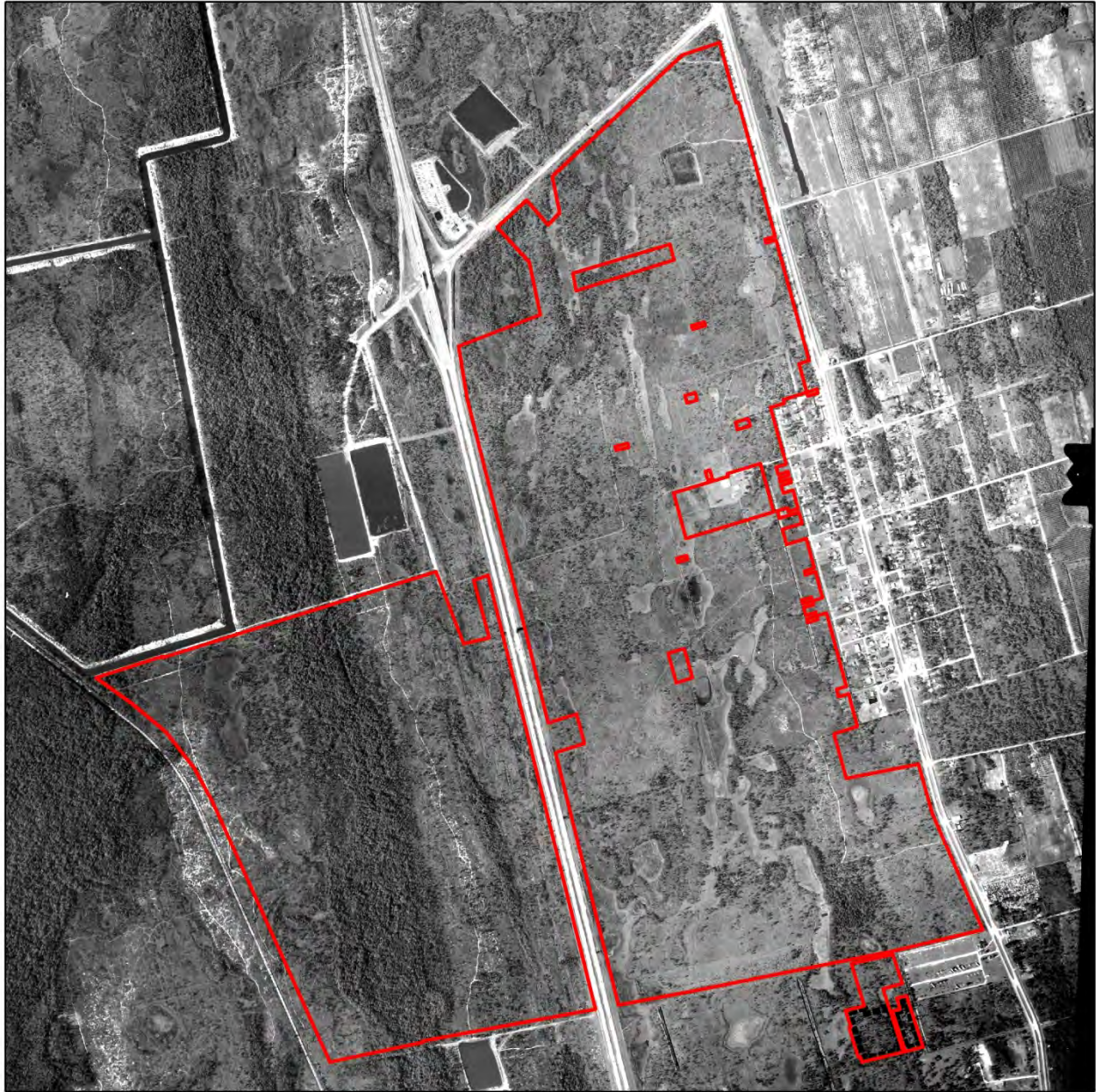
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Legend

-  Sanctuary Boundary
-  USAF Easement



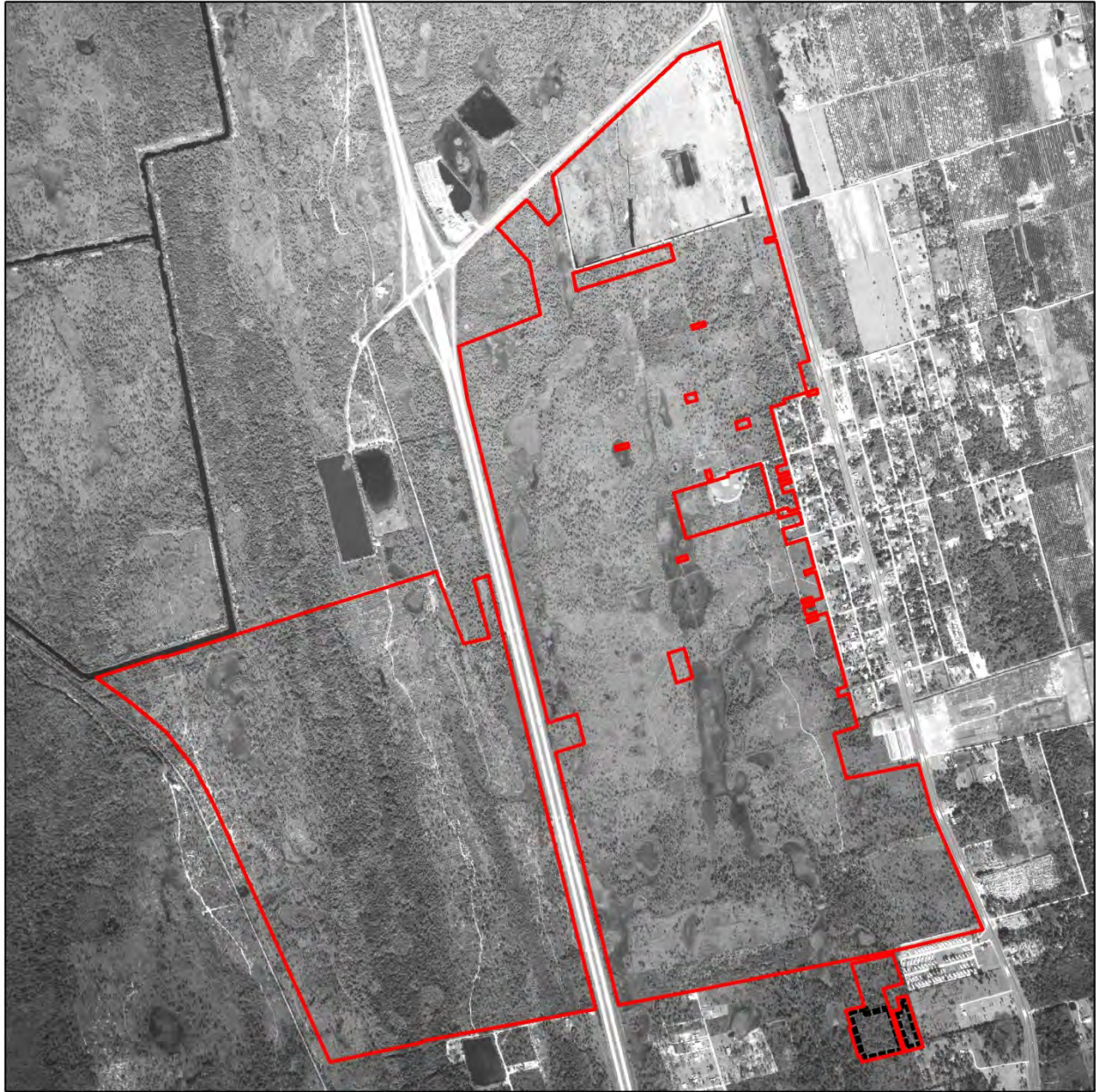
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Map updated on 09/05/2012 for
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
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Source: Florida Aerial Photography Archive Collection

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Legend

-  Sanctuary Boundary
-  USAF Easement



0 1,000 2,000 4,000 Feet

Map updated on 09/05/2012 for
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
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Source: Florida Aerial Photography Archive Collection

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Legend

-  Sanctuary Boundary
-  USAF Easement



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Map updated on 09/05/2012 for
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
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Source: Florida Aerial Photography Archive Collection

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Legend

-  Sanctuary Boundary
-  USAF Easement



0 1,000 2,000 4,000 Feet

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Source: Florida Aerial Photography Archive Collection

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By 1972, the neighborhood configuration had been finalized and continues to exist as present (Figure 8). Also completed is the construction of SR 5A to the north and I 95 running north and south through the property. A commercial service station is also visible at the I-95 and SR 5A interchange. Directly adjacent to the property on the southern boundary shows the development of a manufactured homes park. Large drainage ditches were installed north of the western portion of SFS. The 1983 aerial (Figure 9) shows the northeastern 111 acres converted to an improved pasture which still exists. Development continues to encroach to the south as International Dr. is now present on the aerial. By 1993 (Figure 10), development continues adjacent to the southern boundary west of I-95. Most of the property and adjacent areas remain unchanged by 2011 (Figure 11).

Upland Communities

Mesic Flatwoods (G4/S4) – This is the dominant community of SFS. The mesic flatwoods located east of I-95 consists of an open to close canopy of slash pine, longleaf pine and pond pine. Pond pine is more prevalent in the western portion of this area. The pine canopy of mesic flatwoods located west of I-95 generally lacks pond pines. Other species observed throughout the mesic flatwoods community include: saw palmetto, beggarticks (*Bidens alba*), Florida sensitive brier (*Mimosa quadrivalvis* var. *floridana*), beautyberry (*Callicarpa americana*), gallberry, shortleaf rosegentian (*Sabatia brevifolia*), Florida false sunflower (*Phoebanthus grandiflorus*), earleaf greenbrier, vanillaleaf (*Carphephorus odoratissimus*), dwarf pawpaw (*Asimina pygmaea*), shortleaf gayfeather (*Liatris tenuifolia* var. *quadriflora*), pinebarren goldenrod (*Solidago fistulosa*), splitbeard bluestem (*Andropogon ternarius*), and sand blackberry (*Rubus cuneifolius*). Reintroduction of fire and has been implemented within the mesic flatwood community.

Scrubby Flatwoods (G3/S3) – The scrubby flatwoods community located at SFS has a similar canopy and understory to the mesic flatwoods community with the addition of sand pine, Chapman's oak, sand live oak and myrtle oak. The understory consists of saw palmetto, Savannah milkweed (*Asclepias pedicellata*), velvet milkweed (*Asclepias tomentosa*), muscadine (*Vitis rotundifolia*), Chapman's goldenrod (*Solidago odora* var. *chapmanii*), purple passionflower (*Passiflora incarnata*), fourpetal St. John's-wort (*Hypericum tetrapetalum*), wiregrass, Florida scrub roseling (*Callisia ornata*), pinkscale gayfeather (*Liatris elegans*), summer farewell (*Dalea pinnata* var. *adenopoda*), Florida paintbrush (*Carphephorus corymbosus*), slender flattop goldenrod (*Euthamia caroliniana*), pricklypear (*Opuntia humifusa*), rusty staggerbush (*Lyonia ferruginea*), and fetterbush.

Oak-Saw Palmetto Scrub (G2/S2) – The oak-saw palmetto scrub community has an open canopy consisting of longleaf and slash pine with an understory of saw palmetto, sand live oak, myrtle oak, dwarf live oak (*Quercus minima*), gopher apple (*Licania michauxii*), giant ironweed (*Vernonia gigantea*), winged sumac, slender gayfeather (*Liatris gracilis*), skyblue lupine (*Lupinus diffusus*), coastalplain palaflox (*Palafloxia integrifolia*), Carolina jessamine (*Gelsemium sempervirens*), hairy chaffhead (*Carphephorus paniculatus*), and bigtop lovegrass (*Eragrostis hirsuta*).

Reintroduction of fire has been implemented within the oak-saw palmetto scrub and scrubby flatwood community. An increase in fire frequency will eventually exclude or reduce sand pines,

which do not sprout, and reproduce only from seed. Scrub oaks on the other hand will resprout after fire at intermediate (5-10 years) frequencies (Schmalzer and Hinkle 1992a, 1992b). Saw palmetto grows more rapidly after fire and initially dominates the >0.5 m layer in mixed stands but is temporary, as the scrub oaks will overtop saw palmetto with time (Schmalzer 2003). Scientific literature suggests that growth in long-unburned scrub is greater after initial chopping and burning compared to regularly burned scrub. Openings created by burning piled fuels do persist compared to openings in scrub burned without fuel piles which closed by 50% in seven years (Schmalzer and Adrian 2001). Therefore, this portion of the scrub community will have to be burned on a shorter return interval when a fire regime is reintroduced.

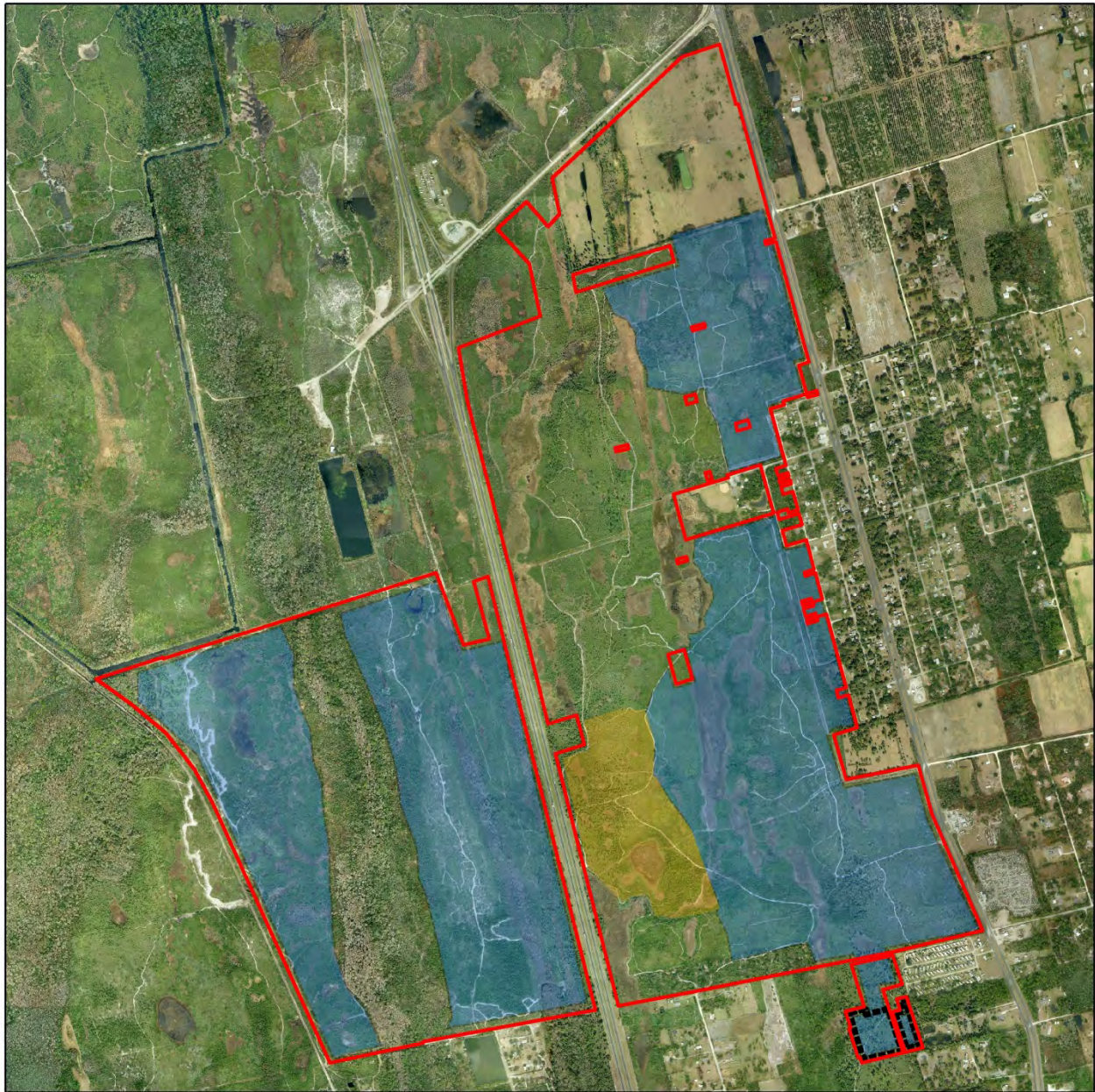
PROPOSED RESTORATION

Saw palmettos are a very important component of the scrub communities. A combination of a one-time mechanical treatment followed quickly with fire will accelerate the restoration of the oak-saw palmetto scrub and scrubby flatwood communities which have degraded by decades of fire suppression (Rickey et al. 2007). Initial restoration efforts will be concentrated on the oak-saw palmetto scrub and scrubby flatwood communities and will include mechanical treatment of upland areas (Figure 12). Mechanical treatment includes the reduction of the understory and will follow the scrub management guidelines developed for peninsular Florida by Kent and Kindell (2009) and approved by the SMC. Reduction of the understory includes all sand pines and overgrown scrub oaks. Cabbage palms located within 100 feet of firelines will also be cut and left in place. In addition, the oak-saw palmetto scrub and scrubby flatwood communities will be reduced to two slash and or longleaf pines per acre with an eventual target of one to two trees per acre. Trees or snags identified as hazardous for fire or recreation will be removed. A 1,000-foot buffer around potential Scrub-Jay territories will also be mechanically treated and thinned to 2 trees per acre (Kent and Kindell 2009) which will encroach into the mesic flatwoods community. The area south of the outparcel located along the east side I-95 will also be thinned to 2 trees per acre to serve as a corridor for Scrub-Jays to allow movement between the east and west sides of the sanctuary. Restoration efforts will then be focused on maintaining an adequate fire routine. In preparation for the safe application of fire, a 30-foot reduction of the edges is anticipated for any unit prior to the application of prescribed fire. Some portions of the mesic flatwoods have a closed pine canopy. If fire does not naturally reduce the pine density, the EEL Program may selectively thin dense areas to open the canopy.

Improved pasture: The pasture is currently used for cattle grazing. The improved pasture consists of an open canopy of longleaf and slash pine and an understory of scattered saw palmettos. The ground cover consists of various species of grass.

Upland mixed forest: This community is located only east of I-95 and consists of a canopy of live oak (*Quercus virginiana*), sand live oak, laurel oak (*Quercus laurifolia*), cabbage palm (*Sabal palmetto*), red cedar (*Juniperus virginiana*), with an understory of saw palmetto, sand blackberry and greenbrier.

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Legend

-  Sanctuary Boundary
-  USAF Easement
-  Scrub-Jay Territory Buffer
-  Scrub-Jay Corridor



0 1,000 2,000 4,000 Feet

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Source: Florida Aerial Photography Archive Collection

Wetland Communities

Depression Marsh (G4/S4) – Depression Marshes are characterized as a shallow, usually rounded depression in sand substrate with herbaceous vegetation often in concentric bands. Plants observed and recorded in the depression marshes at SFS include: grassy arrowhead (*Sagittaria graminea* var. *chapmanii*), roundpod St. Johns-wort (*Hypericum cistifolium*), redroot (*Lachnanthes carolina*), yellow hatpins (*Syngonanthus flavidulus*), soft rush (*Juncus effusus* subsp. *solutus*), common buttonbush (*Cephalanthus occidentalis*), starrush whitetop (*Rhynchospora colorata*), rose-rush (*Lygodesmia aphylla*), maidencane (*Panicum hemitomon*), Savannah meadowbeauty (*Rhexia alifanus*), pickerelweed (*Pontederia cordata*), Pink sundew (*Drosera capillaris*), American bluehearts (*Buchnera americana*), wax myrtle, common blue violet (*Viola sororia*), and bog white violet (*Viola lanceolata*)

Depression marshes occur as isolated wetlands within larger upland ecosystems and are of critical importance to many wetland and upland animals. Hydrological conditions vary, with most depression marshes drying in most years. Hydroperiods range widely from as few as 50 days or less to more than 200 days per year. Fire is important to maintaining this community type by restricting invasion of shrubs and trees and in the formation of peat. Fire frequency is often greatest around the periphery of the marsh and least toward the center. A severe peat fire can lower the ground surface and create a pond at the center of the marsh.

Floodplain Swamp (G4/S4) – Floodplain swamps occur on flooded soils along stream channels, in low spots and oxbows within river floodplains. The majority of the floodplain swamp at SFS is located west of I-95 while a small portion is located in the northern portion east of I-95. Floodplain swamp at SFS consists of a canopy of red maples (*Acer rubrum*), cabbage palm, hackberry (*Celtis laevigata*) with an understory of Carolina willow (*Salix caroliniana*), sea myrtle (*Baccharis halimifolia*), swamp fern (*Blechnum serrulatum*) and needle rush (*Juncus roemerianus*).

Soils of floodplain swamps are highly variable mixtures of sand, organic, and alluvial materials, although some sites, especially within sloughs or on smaller streams, may have considerable peat accumulation. Floodplain swamps are flooded for most of the year. Seasonal and often prolonged inundations restrict the growth of most shrubs and herbs, leaving most of the ground surface open or thinly mantled with leaf litter. These swamps are generally too wet to support fire.

Cypress Swamp The majority of cypress swamp at SFS is located west of I-95 in the center of the property running north and south. The canopy consists of pond-cypress (*Taxodium ascendens*), cabbage palm, hackberry, American elm (*Ulmus americana*) and swamp dogwood (*Cornus foemina*). Ground cover is nonexistent. The cypress swamp located in the northern portion east of I-95 consists of a canopy of pond cypress and dahoon (*Ilex cassine*) with an understory of maidencane and St. Johns wort.

c. Fauna

A complete comprehensive faunal survey has not been initiated for SFS. However, the natural community heterogeneity characterizing the site provides suitable habitat conditions for use by a

broad range of species. Beginning in October 2009, EEL staff with the assistance of the Florida Audubon Society conducted a formal yearlong bird survey at SFS on the east side of I-95. The survey was completed in September 2010 and a total of 97 species were recorded for the site (Appendix H). Additional surveys will be necessary to assess the variety species of mammals and reptiles present at SFS.

In accordance with Florida Statutes Section 388.4111, all environmentally sensitive and biologically highly productive lands are required to submit an arthropod control plan (Appendix I). Brevard County Mosquito Control will adulticide only when populations exceed landing rate thresholds, or when a potential for a mosquito-borne disease outbreak become sufficient for disease transmission or a quantifiable increase in numbers of pestiferous mosquitoes or other arthropods. Treatments will be in upland areas only. Spray Data from Brevard County Mosquito Control shows that SFS was treated zero times from 2005-2009. It is the understanding of the EEL Program that Mosquito Control will continue not to treat SFS unless one of the mentioned scenarios exists.

d. Translocation

Translocation involves the reintroduction of a designated species to previously occupied areas or the augmentation of existing populations. The EEL Program has created a translocation policy to guide the process for third party requests and internal EEL Program requests for plant and animal species translocations to EEL Sanctuaries. Since translocations may be a viable part of the long term reestablishment or maintenance of biological diversity on Sanctuary lands, the EEL Program has established a policy to guide the process of considering and deciding upon such activities. The EEL Program SMC favors a conservative, science-based approach when considering requests for translocation. This policy is not meant to serve as a means to provide public lands as "safe havens" for listed species in a way that would encourage habitat loss across private and public holdings. When considering translocation, many variables will exist for each request and each request shall be considered on a case-by-case basis. A majority vote by the SMC is required for approval of the translocation. A third party requesting a translocation to an EEL Program Sanctuary shall be responsible for obtaining and compliance with any permits required for translocation of a listed species. The EEL Program reserves the right to refuse any translocation proposal for lands managed by the EEL Program.

e. Designated Species

A primary goal of this management plan is to develop and implement strategies to enhance conservation of threatened, endangered, or endemic species. The following is information on existing listed species or species that may occur on SFS.

Plants

One of the initial management goals will be to conduct plant surveys to establish species presence, location and photographic documentation to detail the extent of coverage of any designated species. The location of designated species will be considered during the creation of public access trails and during other management efforts, including exotic plant removal and

Scottsmoor Flatwoods Sanctuary Draft Management Plan

prescribed fires. Continued efforts to remove invasive exotics plants and the use of prescribed fire will allow for the natural progression of native species.

Lacelip ladiestresses

Lacelip ladiestresses (*Spiranthes laciniata*) have been documented on the property by EEL Program staff and confirmed by Dr. Paul Schmalzer. Lacelip ladiestresses is not federally listed, but is considered Threatened by the Florida Department of Agriculture and Consumer Service Division of Plant Industry, which is responsible for the State listing (Coile and Garland 2003). This species is in rapid decline within the state, but which have not so decreased in such numbers as to cause them to be endangered (Wunderlin and Hansen 2003, Wunderlin and Hansen 2004).

Catesby's Lily/Pine Lily

Catesby's lily (*Lilium catesbaei*) has been documented on the property by EEL Program staff. Catesby's lily is not federally listed, but is considered Threatened by the Florida Department of Agriculture and Consumer Service Division of Plant Industry, which is responsible for the State listing (Coile and Garland 2003). This species is in rapid decline within the state due to habitat decline and fire suppression, but have not decreased in such numbers as to cause them to be endangered (Wunderlin and Hansen 2003, Wunderlin and Hansen 2004).

Snowy Orchid

Snowy Orchid (*Habenaria nivea*) has been documented on the property by EEL Program staff. The snowy orchid is not federally listed, but is considered Threatened by the Florida Department of Agriculture and Consumer Service Division of Plant Industry, which is responsible for the State listing (Coile and Garland 2003). This species is in rapid decline within the state due to habitat decline and fire suppression, but have not decreased in such numbers as to cause them to be endangered (Wunderlin and Hansen 2003, Wunderlin and Hansen 2004).

Yellow butterwort

Yellow butterwort (*Pinguicula lutea*) has been reported on the property by Dr. Schmalzer (Schmalzer 2006). Yellow butterwort is not federally listed, but is considered Threatened by the Florida Department of Agriculture and Consumer Service Division of Plant Industry, which is responsible for the State listing (Coile and Garland 2003). This species is in rapid decline within the state due to habitat decline and fire suppression, but have not decreased in such numbers as to cause them to be endangered (Wunderlin and Hansen 2003, Wunderlin and Hansen 2004).

Other listed species are likely to occur at SFS because of its size, habitat diversity and proximity to other large conservation tracts where listed species have been documented. Potential plant species include: Fall-flowering Ixia (*Nemastylis floridana*), Florida butterfly orchid (*Encyclia tampensis*), and green-fly orchid (*Epidendrum conopseum*). The EEL Program will not reveal the location of any listed species to ensure that the plants are not tampered with.

Animals

Scottsmoor Flatwoods Sanctuary Draft Management Plan

The USFWS and the State of Florida under the auspices of the Florida Fish and Wildlife Conservation Commission also compile lists of protected wildlife species considered to be under possible threat of extinction. These species are categorized as either endangered or threatened. The FWCC utilizes an additional category “Species of Special Concern” (SSC) for several animal species, which may ultimately be listed as endangered or threatened. This classification provides the SSC listed animal with a particular level of protection that varies from species to species.

Eastern Indigo Snake

Indigo snakes (*Drymarchon corais couperi*) have not been seen on the property. The USFWS and FWCC list the Indigo snake as a threatened species. It is uncertain whether there is a stable breeding population of indigo snakes in the area. Indigo snakes require large home ranges (370 to 2,500 acres) in order to maintain a stable population (Tennant 1997). Impacts from dogs, humans and roads cause habitat fragmentation and reduce indigo snake populations. Research by Breininger et al. (2004) suggested that the indigo snake population is greatly influenced by habitat fragmentation because indigo snakes readily enter urban areas and cross roads. This study recommends the protection of the indigo snake population in large upland ecosystem conservation lands that connect to other conservation land, while trying to keep the amount of roads and urban areas in the immediate vicinity low (Breininger et al. 2004). According to FNAI (Appendix J), SFS is likely to have Eastern Indigo Snakes.

Gopher Tortoise

Gopher tortoises (*Gopherus polyphemus*) have been documented on the site. The Florida Fish and Wildlife Conservation Commission changed the status of the gopher tortoise from Species of Special Concern to Threatened in September 2007. A formal survey has not yet been conducted to determine if the population is stable and in good health. Gopher tortoises utilize flatwoods as well as scrub habitat (Breininger et al. 1994), thus reintroduction of prescribed fire to these communities will enhance the habitat by opening up the understory thereby increasing the amount of habitat open to foraging and colonization.

American alligator

American alligators (*Alligator mississippiensis*) have been observed by EEL staff in the ditch in the northwestern portion of the property located west of I-95 and south of the ball field east of I-95. FWCC currently lists American alligators as Species of Special Concern. FWCC also lists habitat loss and pollution as the greatest environmental threats affecting the alligator population.

Florida Scrub-Jay

The Florida Scrub-Jay (*Aphelocoma coerulescens*) is listed as a threatened species by both the USFWS and FWC. EEL Program staff and volunteers reported two pairs of Florida Scrub-Jays located in the southeastern portion of the site along US 1 in 2008. In February and June 2009 the EEL Program burned a total of 136 acres both south and north of the existing Scrub-Jay territory

in an attempt to restore and expand their current habitat. Florida Scrub-Jays have also been reported by an EEL Program volunteer and EEL staff on and adjacent to the Sanctuary along the northeastern corner and along the southeastern boundary of the property in February 2009.

This subpopulation, however, has become significantly isolated from other subpopulations because of habitat destruction and degradation that translocation may be the only viable approach to recovery (Breininger 2008). An experimental translocation program is currently under development to use urban jays doomed to extinction because of habitat loss as sources of Scrub-Jays to recover restored sites that are likely to go extinct because of small population size without intervention (Fitzpatrick et al. 1991, Stith et al 1996, Root 1998, Breininger et al. 1998). Translocation of Scrub-Jays from other areas will be considered if it complies with all Federal and State regulations as well as the EEL Program Species Translocation Policy, including Selection and Management Committee approval. This program will only translocate Scrub-Jays from the same genetic unit as defined by Coulon et al. (2008) and carefully coordinated with the U.S. Fish and Wildlife Service and Florida Fish and Wildlife Conservation Commission.

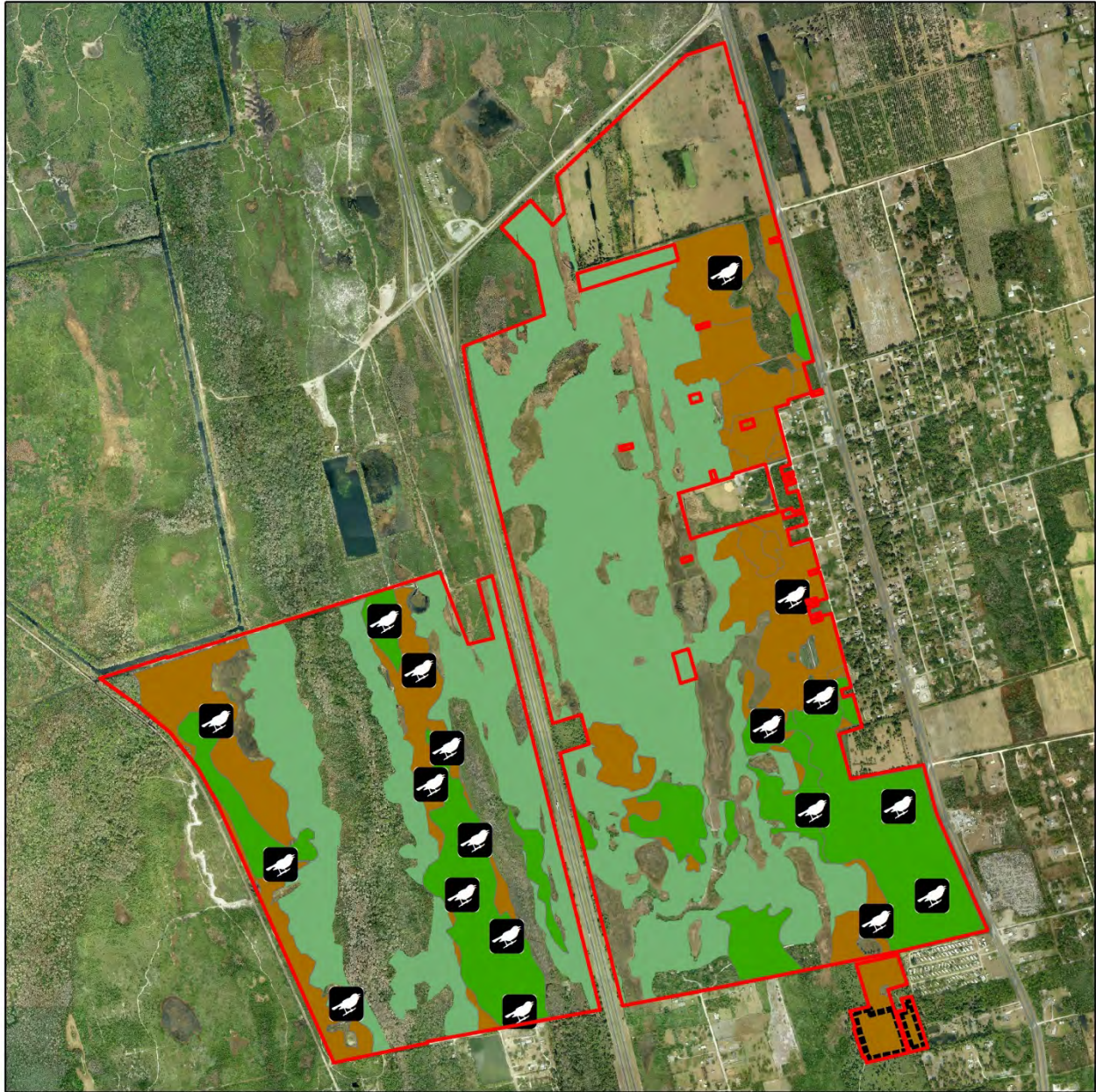
The portion of SFS located west of I-95 has enough oak-saw palmetto scrub and scrubby flatwoods habitat to support 11 families of Scrub-Jays while the east side of the sanctuary can support an additional 8 families (Figure 13). Currently, one family occupies a territory east of I-95 and one family west of I-95. Reintroduction of an adequate fire regime and tree thinning should make the site suitable for Florida Scrub-Jays. However, a long history of reduced fire due to anthropogenic fire regime alterations has led to long-term habitat degradation and population decline typical of the region (Stith et al. 1996, Breininger et al. 2003, Breininger et al. 2006). Conservation goals will be to restore habitat so that approximately 70% of the potential territories are optimal and therefore consistent with statewide recovery plans.

Other listed species are likely to occur at SFS because of its size, habitat diversity and proximity to other large conservation tracts where listed species have been documented. Potential avian species include: Limpkin (*Aramus guarauna*), and Roseate Spoonbill (*Ajaia ajaja*). Potential Mammal species include: Florida mouse (*Podomys floridanus*), Sherman's Fox Squirrel (*Sciurus niger shermani*), and the Florida black bear (*Ursus americanus floridanus*). Formal fauna surveys are planned to help identify additional listed species occurring at SFS.

f. Biological Diversity

Although data collection has begun to assess the Sanctuary's biological diversity, the compilation and statistical analysis have been limited. Additional data will be collected to assess the biological diversity for richness (the number of species found with a particular community) and evenness (the distribution of individuals among species) so data collected can form a baseline which future monitoring efforts can be compared. Methodologies will need to be established for all of the relevant taxonomic groups with researchers and staff assigned to address this particular need.

Scottsmoor Flatwoods Sanctuary Draft Management Plan



Legend

- Sanctuary Boundary
- USAF Easement
- Potential Scrub-Jay Territory
- Mesic Flatwoods
- Oak-Saw Palmetto Scrub
- Scrubby Flatwoods



0 1,000 2,000 4,000 Feet

Map updated on 09/05/2012 for Scottsmoor Flatwoods Sanctuary Management Plan.

Disclaimer: Calculated acreages indicated on the map are based solely on secondary mapping sources. No warranties or representations of accuracy are expressed or implied.

Source: Brevard County Natural Resources. 2002. Converted from FLUCCS. 1985 to FNAI 1990 classification.

C. Cultural

a. Archaeological

According to the Florida Master Site File (Appendix K), there are no recorded sites within the SFS. However, the site lies within a high probability zone for encountering archeological resources. Tom Penders, a volunteer archeologist working with the EEL Program, believes there are multiple Archeological Sites located within SFS with the majority located west of I-95. A thorough review of SFS to determine the presence of archaeologically significant sites is anticipated. A recon level survey will begin the preliminary survey for the site, followed by shovel tests.

b. Historical

The history of the area ranges from the Indian burial sites (6,000 BC) located several miles to the southeast at Windover, to the development of the space industry at Cape Canaveral during the 1950's, 1960's, and 1970's. In 1982, the developer of Windover Farms subdivision in Titusville unearthed one of the best-preserved indigenous burial sites discovered with skeletal remains approximately 8,000 years old (Wentz 2012). The Ais Indians would later occupy the region around Titusville (Shoffner 1995).

Ais Indians (1000BC – 1500 AD)

The first people to inhabit Florida arrived roughly 12,000 years ago, from the central and southern areas of North America, at the end of the last ice age. During this time, much of North America was still covered by glaciers. Sea level was 200 feet below its current level and much of the earth's water was stored in glaciers (Brown 1994). The Ais (pronounced "eyes") Indians were known to inhabit Brevard County in the 16th century during the exploration and colonization of Florida by Europeans. The Ais Indians did not exhibit the traditional nomadic existence of other Native Americans, as the semi-tropical climate provided for their needs without requiring them to travel great distances.

Turn of the Century to Present

During the late 1800's and early 1900's, naturalists were the primary visitors to Brevard County. Notable scientists came to this species-rich, semi-tropical region to collect specimens for natural history museums. These specimens included rare bird life such as the now extinct Carolina parakeet (*Conuropsis carolinensis*).

During the early 1900's, people came to Brevard County from around the country via the Florida East Coast Railway. There was an increase in settlement and development of towns brought about by the creation of railroads and canals. The increase in population was also the result of the 1916 Drainage Acts of Florida and the establishment of Mosquito Control measures beginning in 1927. The Drainage Acts altered natural drainage patterns that permanently lowered water tables in areas where standing water naturally existed for six or more months each year. The introduction of mosquito control (pesticide spraying) lowered the mosquito population to

acceptable levels for human settlement (Barille 1988; Woodward-Clyde consultants, 1994). Throughout the 1920s, improved roads such as Dixie Highway (US 1) brought more cars and people to Brevard County. In 1921, a bridge was erected over the Indian River Lagoon connecting the barrier island with the main land for the development of hotels and casinos. Once air conditioning was introduced, Florida quickly became known as the residential and tourist destination it remains today.

c. Land-Acquisition History

SFS encompasses +/- 1,541.41 acres east and west of I-95 in Scottsmoor, Brevard County, Florida. In September 2008, the EEL Program acquired 981.66 acres east of I-95 and 540 acres west of I-95 with Brevard County EEL Program funds and partially funded by a grant under the Florida Scrub-Jay Conservation Program Fund Memorandum of Understanding between the U.S. Fish and Wildlife Service and The Nature Conservancy. 852.66 acres east of I-95 was purchased from Scottsmoor Partners and 540 acres west of I-95 was purchased from Ag Ventures, LLC Honeybrook Development. An additional 129 acres was donated to the EEL Program east of I-95 by The Nature Conservancy. In October 2011, the EEL Program purchased an additional 19.75 acres east of I-95 with assistance from the United States Air Force 45th Space Wing. A conservation easement in favor of the US Air Force is located on 11.73 acres of the acquisition for future scrub mitigation purposes.

As part of the EEL Program goal towards long-term protection of essential natural resources, open space, green space, wildlife corridors and maintenance of natural ecosystem functions; the EEL Program has identified an optimal sanctuary boundary as shown in Figure 14.

d. Public Interest

SFS is proposed as a Category II Site. Trails leading to the property have been posted with EEL Program boundary signs. SFS opportunities for public access and recreation included hiking, nature observation, nature photography, mountain biking, horseback riding, and environmental education.

Although the majority of the site is relatively undisturbed, some past uses of the property have affected the existing natural resources and their functions. Past ATV use, partying activities, trash dumping and hunting have historically occurred on the site. The majority of the site east of I-95 has been fenced but vandalism still occurs allowing ATV use and hunting to continue. The property west of I-95 remains unfenced allowing all activities to occur on a continuous basis. The EEL Program is currently working on fencing this portion of the sanctuary which will reduce vandalism, poaching and vehicular access.




V. FACTORS INFLUENCING MANAGEMENT

Part V includes information regarding natural and human-induced trends, external influences, legal obligations, and constraints, management constraints, and public access and passive recreational activities.

Scottsmoor Flatwoods Sanctuary Draft Management Plan



Legend

-  Sanctuary Boundary
-  USAF Easement
-  Optimal Sanctuary Boundary



0 1,125 2,250 4,500 Feet

Map updated on 09/05/2012 for
Scottsmoor Flatwoods Sanctuary Management Plan.

Disclaimer: Calculated acreages indicated on the map
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or implied.

Source: Florida Aerial Photography Archive Collection.

A. Natural Trends

Global trends, like sea level rise and global warming, are potential threats that can alter ecosystem function and biological diversity but are difficult to assess. Natural trends associated with stochastic events (fire, flood, drought, freeze) are unpredictable but their occurrence can be documented through historic records and natural systems are usually able to respond and recover from such events. Altering natural stochastic events can negatively influence the biological and natural characteristics of the site, impacting resource values or management strategies. The primary variable that influences the formation and succession of Florida's vegetative communities is fire. If natural fires are not present, or are suppressed by man, less-fire-adapted species including invasive species can invade and alter the natural successional path of the community. In scrubby flatwoods, structural changes (height, growth, density) occur more rapidly than changes in species composition.

In systems such as scrub communities, lack of fire can profoundly affect the value and usability of the community for endemic and listed plant and animal species. To occur naturally, scrub fires require drier and hotter conditions than the flatwoods community (Myers and Ewel 1990). Land management practices developed for SFS must consider the re-introduction of a "natural" fire regime through the use of prescribed fire. Using prescribed fire as a management tool ensures that the natural ecological processes are restored and protected.

Another factor affecting the communities within SFS is hydroperiod. Changes in hydroperiod have the potential to significantly alter community structure. A decrease in hydroperiod could allow the invasion of nuisance or non-native species, while an increase in hydroperiod could surpass the inundation tolerances of species present.

B. Human-Induced Trends

a. Fire suppression

The last major wildfire at SFS occurred in February 2011, the Iron Horse Wildfire, which burned over 17,000 acres in North Brevard and Volusia Counties. Approximately 440-acres burned at SFS; 303-acres located west of I-95 and 137-acres east of I-95. Previously in June and July 1998, the Farmton Wildfire, burned 38,000 acres and destroyed 36 homes and businesses in North Brevard County before firefighting efforts and the return of a normal summer rainfall pattern reduced the threat. Fire suppression tends to result in plant and animal compositions that are different than what might have existed under more natural regimes. A more natural cycle under the prescribed burn plan will address this problem.

b. Hydroperiod alteration

The natural hydrologic regime and periodicity of SFS was previously altered by the construction of numerous small to large man-made drainage ditches and swales throughout the sanctuary. Further investigation into the natural hydroperiod as well as the existing hydroperiod will be undertaken to better understand and enhance the natural ecological processes.

Restoration efforts will be bound by certain limitations such as the economic feasibility, potential flood impact on the adjacent private property, potential for success, and the assurance of a sound scientific basis for the restoration. The EEL Program is exploring areas proposed for restoration which will be analyzed in the context of the vegetative community intended to be re-established, to ensure that the restoration is consistent with the principles set forth by the EEL Program and the primary goal of maintaining biological diversity. Ditch restoration will be investigated to ensure that there are no negative impacts to surrounding lands or private property and should be accomplished by backfilling using the soil that was previously excavated. Core soil samples will be collected to determine if any soil stratification existed. If such stratification is present, restoration will require recreating soil layers. Upon completion of the restoration, natural recruitment of native species will be monitored and any encroachment of exotic invasive species will be treated.

c. Trails and Firebreaks

An extensive web of trails created from plowlines during the 98 wildfires and roads are present at SFS, however, some of the existing roads will be utilized as firebreaks. Public access east of I-95 is currently provided through walkthrough gates located at the end of International Drive and north of Parrish Park. Portions of the existing trails will be re-routed around outparcels and new trails will be added to avoid trespassing. A designated loop trail would then allow public access on existing trails located throughout the Sanctuary.

Public access improvements west of I-95 are currently on hold until the site can be fenced. Once fenced, walkthrough gates will be installed by Blount Ridge Road and along the western boundary to potentially connect with the Rails-to-Trails corridor. An additional trail and/or a boardwalk will have to be installed to complete a loop trail. However, all of the ATVs trails will be closed to allow for the re-growth of natural vegetation.

The management goals set forth in Section V (Management Action Plan) provide strategies and actions for reduction of human-induced impacts and restoration and enhancement of natural resources. As part of the management plan implementation, methodologies for assessing carrying capacity of the natural resources on the site will be developed. In addition, strategies for visitor impacts analysis that consider species-level, natural community-level and ecosystem-level human influences will be developed and implemented.

C. External Influences

The site shows evidence of illegal dumping, which includes several vehicles, pieces of equipment, construction waste and boats and other debris dumped within the Sanctuary. The remaining smaller pieces of equipment and trash dumps located throughout the site can be removed up by the EEL Program staff and volunteers. In March and April 2009, EEL Program staff and volunteers removed over seven tons of trash scattered over the sanctuary east of I-95.

D. Legal Obligations and Constraints

The following is a list of possible legal constraints to management and public access on site.

a. The Nature Conservancy

Conditions of a grant received by the EEL Program from The Nature Conservancy for the purchase of SFS require that if any portion of property is conveyed for any purpose that is inconsistent with the conservation of the Florida Scrub-Jay, then Brevard County will be required to pay the entire sum of the money awarded back to TNC (Appendix L).

b. Florida Forest Service

The Florida Forest Service (FFS) issues permits for prescribed burns for land management to Land Managers with certified burn numbers. These permits will be secured by the EEL Program Fire Manager prior to all prescribed burns.

c. Easements

Easements at SFS are shown on Figure 15. The following easements are located within the legal description (Appendix B).

- Conservation Easement: 11.73 acres in favor of the US Air Force 45th Space Wing
- 40' FP&L Easement Per ORB 3200, Pg. 4408
- 50' FP&L Easement Per ORB 3200, Pg. 4409

d. Right of ways

Right of ways at SFS are shown on Figure 15. The following right of ways are located within the legal description (Appendix B).

e. Leases

The EEL Program currently has two revenue-generating leases on SFS.

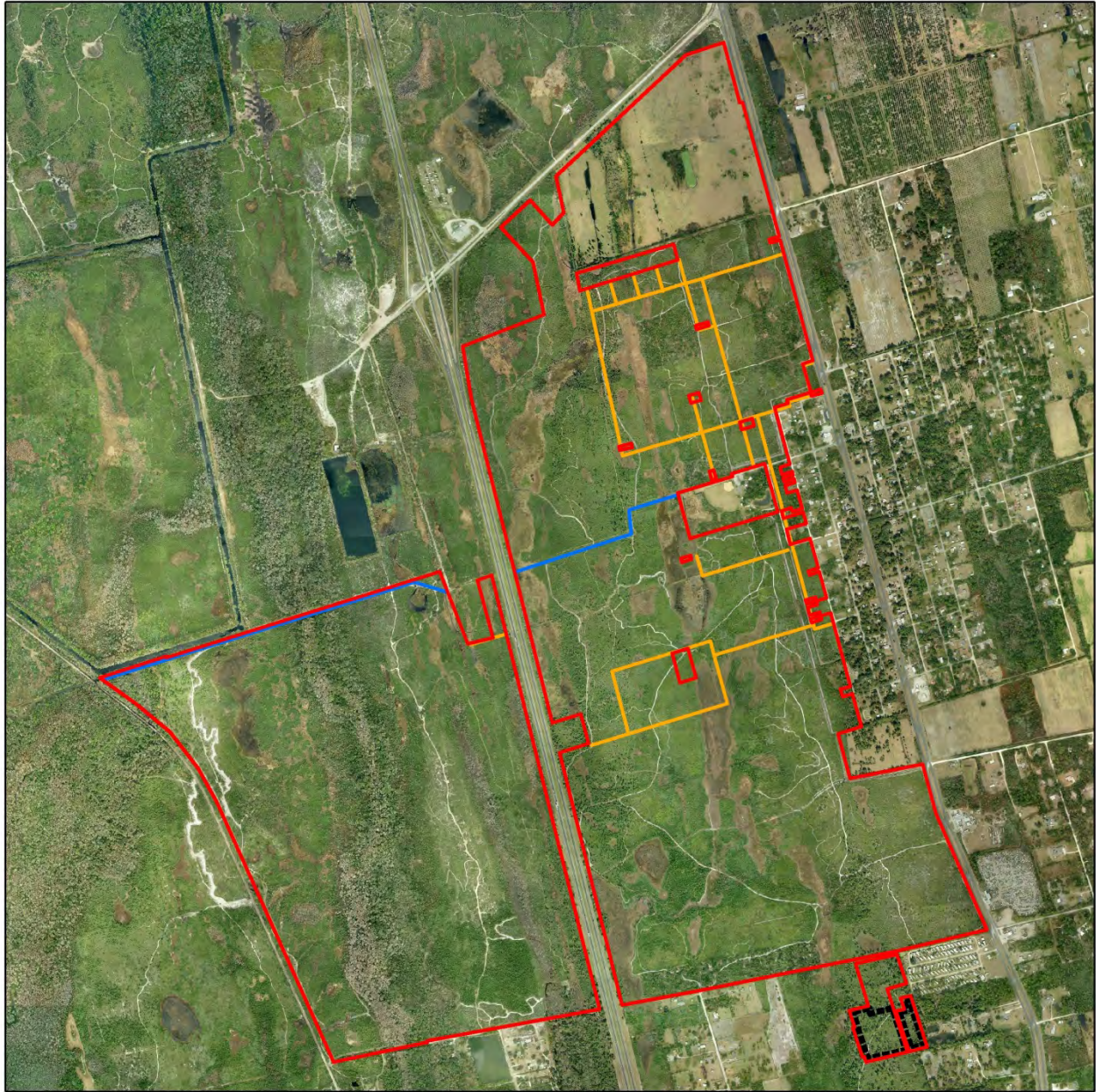
CATTLE LEASE

The lease agreement is effective December 13, 2011 for a term of one year between the Brevard County Board of County Commissioners and Roy F. Roberts & Son Groves, Inc. The parties may agree to extend this lease for additional one-year terms. The lease encompasses 112 acres of improved pasture for the purpose of cattle ranching. Annual revenue generated is \$1,878.24 which goes back into the program for management activities. A copy of the lease agreement can be found in Appendix M.

BILLBOARD LEASE

The lease agreement is effective November 9, 2010 for a term of three years between Brevard County Board of County Commissioners and Clear Channel Outdoor, Inc. The lease is for the purpose of maintaining, operating, posting, painting, repairing, or removing an existing outdoor advertising structure. Annual revenue generated is \$4,000.00 which goes back into the program for management activities. A copy of the lease agreement can be found in Appendix M.

Scottsmoor Flatwoods Sanctuary Draft Management Plan



Legend

-  Sanctuary Boundary
-  USAF Easement
-  FPL Easement
-  Right of Ways



0 1,000 2,000 4,000 Feet

Map updated on 09/05/2012 for
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Source: Florida Aerial Photography Archive Collection.

E. Management Constraints

Potential management constraints and challenges are associated with site security and limited on-site presence. There are no conflicts with any adjacent lands that would restrict the planned use of the property; however, the following is a description of the major management issues and constraints associated with the Sanctuary.

a. Fire

Natural communities within SFS were and will continue to be evaluated to determine any constraints upon the use of prescribed fire posed by natural site conditions and adjacent land uses. Existing (14 miles) and proposed (4.7 miles) firelines within the Sanctuary are shown on Figure 16. Reinstating a fire regime is needed in the oak-saw palmetto scrub, scrubby flatwoods, mesic flatwoods and depression marsh communities.

The Fire Management Plan (Appendix D) includes fire return intervals, desired habitat conditions and required preparations needed for each burn unit. In 2008 and 2009, 5.9 miles of firelines was installed by FFS at no cost to the county. In preparation for prescribed fire, vegetation along the edge of firelines may be reduced and ignition strips created within a fire unit to help carry fire. In 2012, 11.6 miles of firelines were installed and or widened by the EEL Program with FFS assistance.

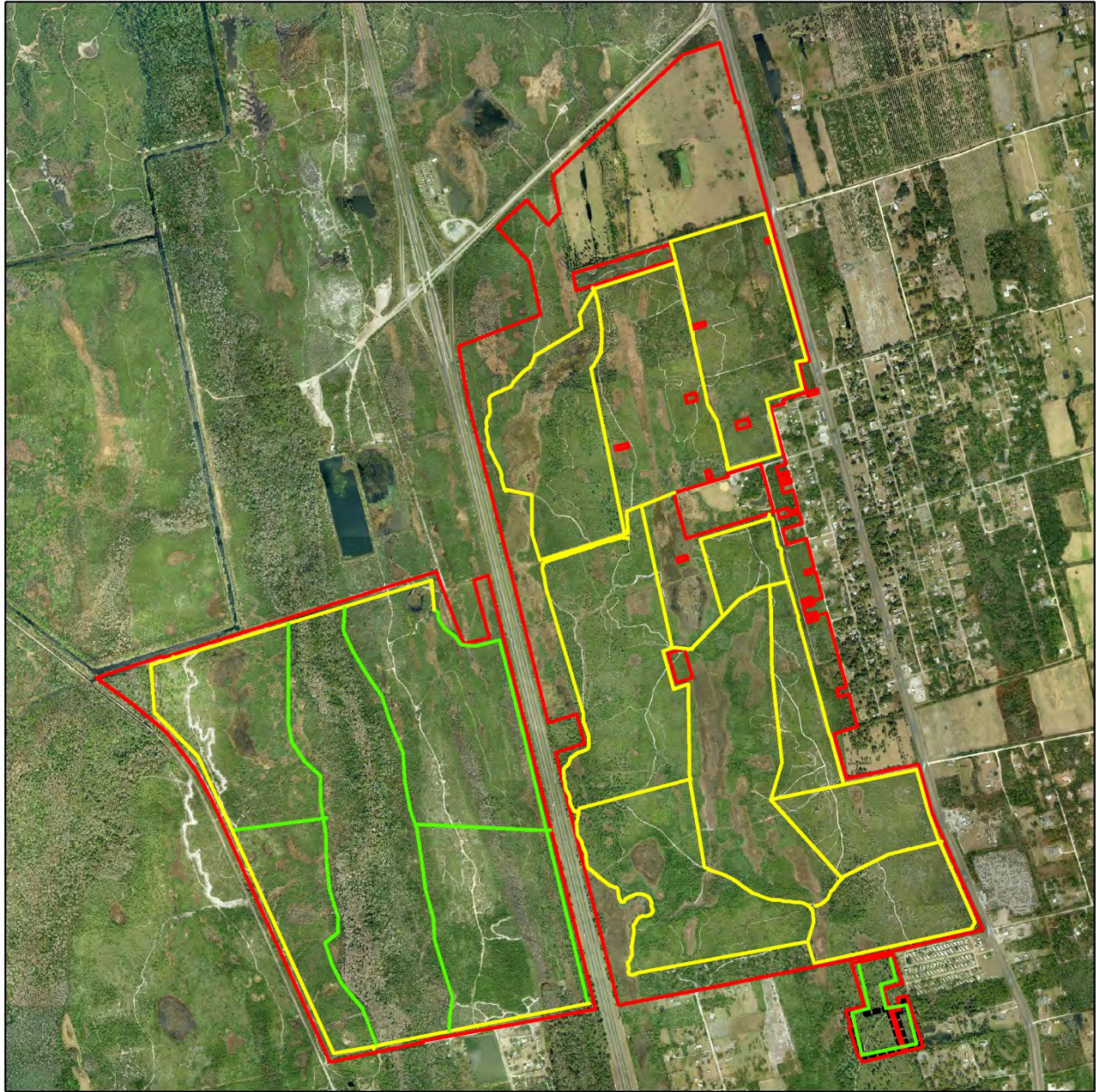
b. Exotic Species

Exotic, non-indigenous, non-native, and alien species are all terms used to describe plants and animals of foreign origin. Some exotic species can become invasive when they harm, displace or outcompete native species while altering native ecosystem function.

Plants

A list of exotic species identified thus far is provided in Table 1. SFS does not support a large number of invasive exotics. However, invasive exotics currently present in the Sanctuary should be treated and monitored to avoid spreading. Air Potato (*Dioscorea bulbifera*), Guinea Grass (*Panicum maximum*) and Caesarweed (*Urena lobata*) are the most prevalent invasive species found on the property and will be the first targeted for treatment. Isolated patches of Cogongrass (*Imperata cylindrica*) have also been found and treated on the property. It should also be noted that a detailed inventory of exotic/invasive/nuisance plants has not been conducted, and other exotic species are likely to exist on-site.

Scottsmoor Flatwoods Sanctuary Draft Management Plan



Legend

-  Sanctuary Boundary
-  USAF Easement
-  Existing Fireline
-  Proposed Fireline



0 1,000 2,000 4,000 Feet

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Scottsmoor Flatwoods Sanctuary Management Plan.

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or implied.

Source: Florida Aerial Photography Archive Collection

Table 1: SFS Exotic Plants Species List

Scientific Name	Common Name	Category
<i>Dioscorea bulbifera</i>	Air-Potato	I
<i>Imperata cylindrica</i>	Cogongrass	I
<i>Lantana camara</i>	Lantana	I
<i>Melaleuca quinquenervia</i>	Punktree	I
<i>Melinis repens</i>	Rose Natalgrass	I
<i>Panicum repens</i>	Torpedograss	I
<i>Schinus terebinthifolia</i>	Brazilian pepper	I
<i>Urena lobata</i>	Caesarweed	I
<i>Panicum maximum</i>	Guinea Grass	II

Category * (FEPPC 2009)

I - Invasive exotics that are altering native plant communities by displacing native species, changing community structures or ecological functions, or hybridizing with natives. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.

II - Invasive exotics that have increased in abundance or frequency but have not yet altered Florida plant communities to the extent shown by Category I species. These species may become ranked Category I, if ecological damage is demonstrated.

E- Exotics that are not or not yet in classified in any other Category.

Animals

Exotic animal species also have the potential to adversely affect ecosystem function and to significantly alter population levels of native animals through predation or displacement. The fire ant (*Solenopsis invicta*) and the nine-banded armadillo (*Dasypus novemcinctus*) have become a common throughout Central Florida. A significant population of feral hogs (*Sus scrofa*) has been documented on the property. Feral hogs can cause significant harm to vegetation and soils due to their rooting (Engeman et al. 2004, 2007; Jolley et al. 2010). In an attempt to avoid an increase in the hog population, the EEL Program is using the service of a volunteer hog trapper. Any feral cats and dogs found on the property will be removed.

Laurel Wilt Disease

Laurel Wilt Disease has been not been documented at SFS. Laurel Wilt disease is caused by a fungus introduced into plants of the Lauraceae family by the red bay ambrosia beetle (*Xyleborus glabratus*) which is native to Asia (Fraedrich et al. 2008; Mayfield et al. 2008). The fungus causing the vascular disease was a previously undescribed species of *Raffaealea*. Female red bay ambrosia beetles carry the spores of *Raffaealea* and transmit them into host trees by boring holes into the sapwood of stems and branches; restricting the flow of water and causing the leaves to wilt (Florida Department of Agriculture & Consumer Services 2008).

A list of non-indigenous animal species has not been collected. An investigation into the levels and impacts of these species needs to be conducted prior to the establishment of a control strategy.

F. Public Access and Passive Recreation

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Public access and opportunities for passive recreation will be provided at SFS pursuant to public use and recreational policies of the EEL Program Sanctuary Management Manual adopted by Brevard County Board of County Commissioners. It has been determined that passive recreational activities best support the EEL Program goals. The EEL Program Sanctuary Management Manual (SMM) defines passive recreation as follows:

“A recreational type of use, level of use and combination of uses that do not, individually or collectively, degrade the resource values, biological diversity, and aesthetic or environmental qualities of a site.”

This site is proposed as a “Category 2 site” within the EEL Program and as such, minimal capital improvements will be allowed on-site. Activities that will be permitted include hiking, nature observation, environmental education, horseback riding and mountain biking. Firebreaks may also be used for these activities unless otherwise posted. Staff retains the ability to close off trails due to seasonal conditions, management activities or if unacceptable impacts result from use. With the exception of the two current revenue generating leases, no other alternative or multiple uses are being considered other than passive recreation, as they do not fit within the EEL Program goals.

By necessity, firebreaks are occasionally used as recreational trails on EEL sites. This minimizes the amount of habitat removed in order to properly manage for conservation while still providing public access. These dual-use trails are periodically impacted by maintenance and prescribed fire activities which include vehicle traffic, disking or tilling by tractor, and mechanically reducing adjacent vegetation. While staff attempts to minimize the extent and duration of impacts that may hinder recreational use, well-maintained firebreaks are vital to public safety and effective conservation management. At SFS, the 10 miles of hiking/biking trails shown in Figure 17, will not be used as firebreaks unless emergency circumstances arise. Alternatively, 4.1 miles of equestrian trails will utilize existing firebreaks. Firebreaks will be disked regularly to maintain a mineral soil fireline.

On August 11, 2011, a public meeting was held at the Mims Scottsmoor Public Library in Mims, FL to present the planned restoration and recreational assessment prepared by EEL Program staff to Sanctuary stakeholders including; neighbors, bikers, hikers, equestrians, birders, the St. Johns River Water Management District and tourists. Minutes from the meeting can be found in Appendix N.

On November 10, 2011, a public meeting was held at the EEL Program Office in Melbourne, FL with the EEL Program Recreation and Education Advisory Committee (REAC). Minutes from this meeting can be found in Appendix N. The SFS public access plan was presented to REAC, and the committee members moved to support the plan.

Scottsmoor Flatwoods Sanctuary Draft Management Plan



Legend

- Sanctuary Boundary
- USAF Easement
- Hiking Trail
- Equestrian Trail
- Proposed Hiking Trail
- Proposed Equestrian Trail



0 1,000 2,000 4,000 Feet

Map updated on 09/05/2012 for Scottsmoor Flatwoods Sanctuary Management Plan.

Disclaimer: Calculated acreages indicated on the map are based solely on secondary mapping sources. No warranties or representations of accuracy are expressed or implied.

Source: Florida Aerial Photography Archive Collection

a. Parking and Public Access

The main entrance to the Sanctuary east of I-95 will utilize the Parrish Park parking lot. West of I-95, a dirt parking area will need to be installed at the end of Blount's Ridge which will allow visitors access to the site and ultimately connect to the Rails-to-Trails corridor. Informational kiosks will be installed at access points to inform visitors about the site and provide an informational brochure highlighting hiking, mountain biking and equestrian trail options.

b. Hiking

Hiking trails will be designed to give visitors an opportunity to experience the diverse habitats within the Sanctuary. These hiking trails will take visitors through the diverse habitats of SFS from oak-saw palmetto scrub to depression marshes. Hiking will be encouraged on the designated trail system (Figure 17) and allowed on firelines located throughout the property. All trails will be developed as natural surface foot paths and will be adequately marked to facilitate easy navigation by visitors.

c. Bird Watching

Bird watching is a passive recreational activity that will be encouraged at the Sanctuary. Specific areas will be designated as overlooks for bird watching and some signage may be established along the hiking trails.

d. Mountain Biking

Mountain biking will be permitted on the designated trail and firelines located throughout the property.

e. Horseback Riding

Horseback riding will be permitted on all designated firelines. A designated equestrian loop will be marked with trail signs providing riders new to the site an overall sense of direction.

f. Hunting

Hunting will not be allowed within the Sanctuary. Hunting opportunities do exist at nearby Buck Lake Conservation Area and Salt Lake Wildlife Management Area

VI. MANAGEMENT ACTION PLANS

The following is a comprehensive outline of the goals, strategies, and actions necessary to manage SFS.

A. Goals

The *Sanctuary Management Manual* of the EEL Program provides the following management goals for SFS.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Documentation of historic public use
Conservation of ecosystem function
Conservation of natural (native) communities
Conservation of species (including endemic, rare, threatened and endangered species)
Documentation of significant archeological and historic sites
Provision of public access and responsible public use
Assessment of carrying capacity of natural resources with public use
Provision of environmental education programs
Opportunities for multiple uses and compatibility
General upkeep and security of the property

B. Strategies and Actions

The following is an outline of the specific management strategies and actions that are needed to meet the management goals for SFS.

GOAL: DOCUMENTATION OF HISTORIC PUBLIC USE

Strategy 1: Document historic public use

Actions:

Collect historic information (such as aerials, historic photos, interviews with previous landowners) regarding the types of activities that have occurred on-site;
Evaluate how historic use impacted the site's natural resources;
Consider historic use patterns in planning future public uses;
Map all existing trails using GIS/GPS.

GOAL: CONSERVATION OF ECOSYSTEM FUNCTION

Strategy 2: Protect, maintain, and restore native diversity, ecological patterns, and the processes that maintain diversity.

Actions:

Research and monitor baseline conditions of natural systems;
Install 4 baseline vegetation monitoring transects;
Research the connection of on-site natural resources with adjacent resources;
Research hydrologic patterns on and off-site;
Restore natural communities to improve efforts on enhancing native diversity;
Investigate the historic hydroperiod;
Install one photopoint in each habitat within SFS.

Strategy 3: Ensure that natural upland-wetland interfaces are protected and enhanced.

Actions:

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Collect data to analyze the public access on the natural resources;
Protect communities from deleterious impacts deriving from external influences;
Restore/enhance natural communities where and as possible.

GOAL: CONSERVATION OF NATURAL (NATIVE) COMMUNITIES

Strategy 4: Restore degraded, disturbed, or altered wetlands within SFS.

Actions:

Establish baseline conditions within wetlands;
Consult local experts and current literature regarding best scientific methods for wetland restoration;
Use native plants for restoration efforts (if needed);
Prioritize the wetland communities in need of restoration based upon ease of accomplishment, expected habitat value yield, or financial considerations;
Use off-site mitigation projects to fund on-site wetland restoration;
Assess possible impacts of proposed restoration on adjacent communities and offsite properties;
Implement the selected restoration activities (i.e., remove exotic species, restore natural hydrologic flood, etc.);
Monitor the effects of the restoration activities, evaluate the success of the restoration projects, and revise the restoration plan, as necessary;
Manage invasive exotic plant species at a maintenance level (0-5%); continue to periodically treat FLEPPC cat. 1 & 2 invasive exotic plant species.

Strategy 5: Restore degraded, disturbed, or altered uplands within SFS.

Actions:

Establish baseline conditions within the upland communities;
Consult local experts and current literature regarding best scientific methods for upland restoration;
Prioritize the upland communities in need of restoration based upon ease of accomplishment, expected habitat value yield, or financial considerations;
Assess possible impacts of proposed restoration on adjacent communities and offsite properties;
Implement the selected restoration activities (i.e., remove exotic species, restore natural disturbance regime, replant native species, etc.);
Monitor the effects of the restoration activities, evaluate the success of the restoration projects, and revise the restoration plan, as necessary;
Manage invasive exotic plant species at a maintenance level (0-5%), continue to periodically treat FLEPPC cat. 1 & 2 invasive exotic plant species;

Strategy 6: Design and implement a “natural” fire management program.

Actions:

Identify natural communities that require prescribed fire management;
Identify and evaluate individual proposed burn management units;
Identify the goal of the application of fire to each proposed burn unit;

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Document listed species within each burn unit;
Identify and plan perimeter and internal fire breaks;
Create a site-specific Fire Management Plan;
Develop and implement public education campaign including programs and literature regarding the need for periodic controlled burns;
Meet with local HOA's to help educate neighbors to the prescribed fire program;
Secure the necessary permits from the State Division of Forestry and other agencies;
Mechanical reduction of overgrown vegetation when necessary before fire implementation;
Begin prescribed fire management program;
Monitor the effects of the fire management activities, evaluate the success of the program, and revise the program strategies as needed;
Reintroduce and continue prescribed fire to fire adapted communities every 3-5 years or as needed.

GOAL: CONSERVATION OF SPECIES (INCLUDING ENDEMIC, RARE, THREATENED AND ENDANGERED)

Strategy 7: Protect on-site populations of endemic, rare, threatened and endangered species through the utilization of existing habitat management and species recovery plans.

Actions:

- Develop a methodology and work plan to accomplish the identification of designated plant and animal species;
- Survey for, and identify listed/protected plant and animal species;
- Plot the location of identified designated species within and/or adjacent to the sanctuary for use in the implementation, or re-distribution, of amenities or site improvements;
- Periodically update these baseline survey data to determine possible changes in designated species distribution or density;
- Review management plans for consistency with USFWS and FFWC guidance concerning listed species;
- Implement habitat restoration activities for listed species (i.e., removal of exotic/nuisance species, restoration of ecosystem function);
- Establish periodic monitoring of habitat suitability (where indices are available for a given species), species population levels, diversity levels, and exotic/nuisance species, as a means of evaluating the success of management strategies;
- Map gopher tortoise burrows post burns or once every five years.

GOAL: DOCUMENTATION AND RESTORATION OF SIGNIFICANT ARCHAEOLOGICAL AND HISTORIC SITES

Strategy 8: Survey and document archaeological and historical areas

Actions:

- Work with an Archaeologist to develop probability zones for potential sites;
- Conduct a Phase 1 survey of high probability sites;
- Review available maps and historic records for indications of past usage of the site;

Scottsmoor Flatwoods Sanctuary Draft Management Plan

- Map all archaeological and historic sites for future reference.

GOAL: PROVISION FOR PUBLIC ACCESS AND RESPONSIBLE PUBLIC USE

Strategy 9: Establish and enforce specific policies and management techniques for public access and responsible public use.

Actions:

- Plan appropriate public facilities by examining the site's natural and cultural resources and reviewing public input;
- Perform public access site assessment;
- Install boundary fence and post with EEL Program signage;
- Evaluate design and proposed public facilities for consistency with ADA guidelines;
- Establish social and environmental carrying capacities for proposed public facilities;
- Use daily or seasonal quotas, restricted access or limited parking to enforce established carrying capacities;
- Coordinate recreational use with the ecological burning strategies of the EEL Program;
- Minimize unauthorized trail expansion by establishing sufficient trails, constructing handrails, and the development of written guidelines;
- Install informational kiosks at the Sanctuary entrance and educational signage along approved trails.

GOAL: ASSESSMENT OF CARRYING CAPACITY OF NATURAL RESOURCES WITH PUBLIC USE

Strategy 10: Establish a monitoring program to assess effects of public usage on natural resources.

Actions:

- Establish and monitor 5 vegetation monitoring transects;
- Establish a methodology and record keeping system to document public use;
- Conduct regular monitoring to assess impacts of public use on natural habitats;
- Conduct regular "walk-throughs" over frequently used sites to assess the need for changes in routing/user types, or user intensity;
- Re-route users from sensitive areas or popular sites on a regular or as-needed basis;
- Re-align public use to avoid areas which observations or data indicate are too sensitive for the level of use originally planned.

GOAL: PROVISION OF ENVIRONMENTAL EDUCATION PROGRAMS

Strategy 11: Develop a plan to provide on-going environmental education programs to Brevard County residents and visitors.

Actions:

- Determine target audiences and types of programming best suited to those groups;
- Design and develop indoor and outdoor exhibits, signs and printed materials;

Scottsmoor Flatwoods Sanctuary Draft Management Plan

- Provide a trail brochure for visitors to the Sanctuary;
- Include educators, friends groups and other organizations in the design, development and delivery of programs;
- Develop and coordinate a docent program to assist in program delivery;
- Develop and provide training and site specific informational materials for use by docents and other educators;
- Develop criteria and process of evaluation for program review and refinement;
- Coordinate outreach and on-site programs for school-aged children with school board and area schools;
- Provide a “special collection” of books and other materials specifically related to the environmental and cultural character of the Sanctuary.

GOAL: OPPORTUNITIES FOR MULTIPLE USES AND COMPATIBILITY

Strategy 12: Provide opportunities for multiple use and compatibility when practical.

Actions:

- Use fire breaks for multi-use recreation trails when not needed for resource management;
- Reroute trails, where possible off firebreaks to provide improved public access;
- Include multiple benefits of natural community restoration efforts in education program.

GOAL: GENERAL UPKEEP AND SECURITY OF THE PROPERTY

Strategy 13: Secure and maintain the Sanctuary to the highest degree possible using EEL staff, Parks and Recreation staff, contract employees and volunteers.

Actions:

- Install perimeter fencing and or signs clearly marking the site’s boundary;
- Contract with outside contractors or with Brevard County, Parks and Recreation for maintenance of parking areas, fire breaks, trails, boardwalks, bridges, benches etc.;
- Coordinate daily maintenance tasks using staff and volunteers.

VII. PROJECTED TIMETABLE FOR IMPLEMENTATION

Part VII recommends a timeline for management plan implementation. The timeline has been divided into immediate, short-term and long-term time frames. Immediate is defined as within one year of the adoption of this management plan, short term is 1 to 5 years, and long-term is more than 5 years. Some actions are also defined as on-going, if the activity is required for the on-going maintenance of the Sanctuary.

ACTION	<u>ACTIVITY</u> <u>TIMELINE</u>
Strategy 1: Document historic public use	
Collect historic information (such as aerials, historic photos, interviews with previous landowners) regarding the types of activities that have occurred on-site	Completed
Evaluate how historic public use impacted the site’s natural resources	Completed

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Consider historic public use patterns in planning future public uses	Completed
Map all existing trails using GIS/GPS	Completed
Strategy 2: Protect, maintain, and restore native diversity, ecological patterns, and the processes that maintain diversity	
Research and monitor baseline conditions of natural systems	On-Going
Install 4 baseline vegetation monitoring transects	Short-Term
Research the connection of on-site natural resources with adjacent resources	On-Going
Research hydrologic patterns on and off-site	Short-Term
Restore natural communities to improve efforts on enhancing native diversity	Short-Term
Investigate the historic hydroperiod	Short-Term
Install one photopoint in each habitat	Short-Term
Strategy 3: Ensure that natural upland-wetland interfaces are protected and enhanced	
Collect data to analyze the public access on the natural resources	Short-Term
Protect communities from deleterious impacts deriving from external influences	On-Going
Restore/enhance natural communities where and as possible	On-Going
Strategy 4: Restore degraded, disturbed, or altered wetlands	
Establish baseline conditions within wetlands	Immediate
Consult local experts and current literature regarding best scientific methods for wetland restoration	Immediate
Use native plants for restoration efforts (if needed)	Immediate
Prioritize the wetland communities in need of restoration based upon ease of accomplishment, expected habitat value yield, or financial considerations	Immediate
Use off-site mitigation projects to fund on-site wetland restoration	Short-Term
Assess possible impacts of proposed restoration on adjacent communities and offsite properties	Immediate
Implement the selected restoration activities (i.e., remove exotic species, restore natural hydrologic flood, etc.)	On-Going
Monitor the effects of the restoration activities, evaluate the success of the restoration projects, and revise the restoration plan, as necessary	On-Going
Manage invasive exotic plant species at a maintenance level (0-5%), continue to periodically treat FLEPPC cat. 1 & 2 invasive exotic plant species	On-Going
Strategy 5: Restore degraded, disturbed or altered uplands	
Establish baseline conditions within the upland communities	Immediate
Consult local experts and current literature regarding best scientific methods for upland restoration	Immediate
Prioritize the upland communities in need of restoration based upon ease of accomplishment, expected habitat value yield, or financial considerations	On-Going
Assess possible impacts of proposed restoration on adjacent communities and offsite properties	On-Going
Implement the selected restoration activities (i.e., remove exotic species, restore natural disturbance regime, replant native species, etc.)	On-Going
Monitor the effects of the restoration activities, evaluate the success of the restoration projects, and revise the restoration plan, as necessary	Short-Term

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Manage invasive exotic plant species at a maintenance level (0-5%), continue to periodically treat FLEPPC cat. 1 & 2 invasive exotic plant species	On-going
Strategy 6: Design and implement a “natural” fire management program	
Identify natural communities that require prescribed fire management	Completed
Identify and evaluate individual proposed burn management units	Immediate
Identify the goal of the application of fire to each proposed burn unit	Completed
Document listed species within each burn unit	On-Going
Identify and plan perimeter and internal fire breaks	Immediate
Create a site-specific Fire Management Plan	Completed
Develop and implement public education campaign including programs and literature regarding the need for periodic controlled burns	On-Going
Meet with local HOA’s to help educate neighbors to the prescribed fire program	Completed
Secure the necessary permits from the State Division of Forestry and other agencies	On-Going
Mechanical reduction of overgrown vegetation when necessary before fire implementation	Immediate
Implement prescribed fire management program	Immediate
Monitor the effects of the fire management activities, evaluate the success of the program, and revise the program strategies as needed	On-Going
Reintroduce and continue prescribed fire to fire adapted communities every 3-5 years or as needed	On-Going
Strategy 7: Protect on-site populations of endemic, rare, threatened and endangered species through the utilization of existing habitat management and species recovery plans	
Develop a methodology and work plan to accomplish the identification of designated plant and animal species	On-Going
Survey for, and identify listed/protected plant and animal species	On-Going
Plot the location of identified designated species within and/or adjacent to the sanctuary for use in the implementation, or re-distribution, of amenities or site improvements	On-Going
Periodically update these baseline survey data to determine possible changes in designated species distribution or density	On-Going
Review management plans for consistency with USFWS and FFWC guidance concerning listed species	Short-Term
Implement habitat restoration activities for listed species (i.e., removal of exotic/nuisance species, restoration of ecosystem function)	On-Going
Establish periodic monitoring of habitat suitability (where indices are available for a given species), species population levels, diversity levels, and exotic/nuisance species, as a means of evaluating the success of management strategies	On-Going
Map gopher tortoise burrows post burns or once every five years	On-Going
Strategy 8: Survey and document archaeological and historical areas	
Work with an Archaeologist to develop probability zones for potential sites	On-Going
Conduct a Phase 1 survey of high probability sites	On-Going
Review available maps and historic records for indications of past usage of the site	Completed

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Map all archaeological and historic sites for future reference	On-Going
Strategy 9: Establish and enforce specific policies and management techniques for public access and responsible public use	
Plan appropriate public facilities by examining the site's natural and cultural resources and reviewing public input	Immediate
Perform public access site assessment	Completed
Install boundary fence and post with EEL Program signage	Short-Term
Evaluate design and proposed public facilities for consistency with ADA guidelines	Short-Term
Establish social and environmental carrying capacities for proposed public facilities	Short-Term
Use daily or seasonal quotas, restricted access or limited parking to enforce established carrying capacities	Short-Term
Coordinate recreational use with the ecological burning strategies of the EEL Program	Short-Term
Minimize unauthorized trail expansion by establishing sufficient trails, constructing handrails, and the development of written guidelines	Short-Term
Install informational kiosks at the Sanctuary entrance and educational signage along approved trails	Short-Term
Strategy 10: Establish a monitoring program to assess effects of public usage on natural resources	
Establish and monitor 5 vegetation monitoring transects	Short-Term
Establish a methodology and record keeping system to document public use	On-Going
Conduct regular monitoring to assess impacts of public use on natural habitats	On-Going
Conduct regular "walk-throughs" over frequently used sites to assess the need for changes in routing/user types, or user intensity	On-Going
Re-route users from sensitive areas or popular sites on a regular or as-needed basis	On-Going
Re-align public use to avoid areas which observations or data indicate are too sensitive for the level of use originally planned	On-Going
Strategy 11: Develop a plan to provide on-going environmental education programs to Brevard County residents and visitors	
Determine target audiences and types of programming best suited to those groups	Short-Term
Design and develop indoor and outdoor exhibits, signs and printed materials	Short-Term
Provide a trail brochure for visitors to the Sanctuary	Immediate
Include educators, friends groups and other organizations in the design, development and delivery of programs	Short-Term
Develop and coordinate a docent program to assist in program delivery	Short-Term
Develop and provide training and site specific informational materials for use by docents and other educators	Short-Term
Develop criteria and process of evaluation for program review and refinement	Short-Term
Coordinate outreach and on-site programs for school-aged children with school board and area schools	Long-Term

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Provide a “special collection” of books and other materials specifically related to the environmental and cultural character of the Sanctuary	Long-Term
Strategy 12: Provide opportunities for multiple use and compatibility when practical	
Use fire breaks for multi-use recreation trails when not needed for resource management	Short-term
Reroute trails, where possible off firebreaks to provide improved public access	Short-term
Include multiple benefits of natural community restoration efforts in education program	Short-Term
Strategy 13: Secure and maintain the Sanctuary to the highest degree possible using EEL staff, EEL Interns, Parks and Recreation staff, contract employees and volunteers	
Install perimeter fencing and or signs clearly marking the site’s boundary	Complete
Contract with outside contractors or with Brevard County, Parks and Recreation for maintenance of parking areas, fire breaks, trails, boardwalks, bridges, benches etc.	On-Going
Coordinate daily maintenance tasks using staff and volunteers	On-going

VIII. FINANCIAL CONSIDERATIONS

The Brevard County EEL Program receives land acquisition and management revenues from ad valorem revenues collected pursuant to the 2004 voter-approved EEL Referendum. The EEL Program allocates bond funds to capital land acquisition and one-time capital expenditures. Ad valorem revenue collected during each fiscal year that are not required for bond debt services can be used for any legal purpose within the EEL Program pursuant to §200.181 and §125.013 of the Florida Statutes. The EEL Program collected ad valorem revenues from the 1990 referendum until the Year 2011 and continues to collect as valorem revenue from the 2004 referendum until 2024, the sunset dates of the ad valorem collections, respectively.

Based on financial projections, the EEL Program shall annually appropriate a portion of the EEL Program ad valorem revenue not required for bond debt services to fund annual EEL Program capital and non-capital expenditures. Specific appropriations for SFS will be made each fiscal year as part of this overall annual budget process. The EEL Program budget will be reviewed and adopted annually as part of the Brevard County budget process and as authorized by the Board of County Commissioners. The Board of County Commissioners will consider other funding options and financial resources to address the long-term management responsibilities of the EEL Program.

A Land Manager has been hired to oversee maintenance, security and resource management for SFS and other properties located within the North Region Management Area. An Assistant Land Manager and two Land Management Technicians will assist the Land Manager with maintenance, security, and resource management for all properties in the north region. A Naturalist will design and develop interpretive signage based on the Sanctuaries natural resources, historical and archeological resources. The Fire Manager will be responsible for all fire related activities during ignition and mop-up of a prescribed fire. The cost estimate for personnel assumes that volunteers will be utilized to assist with maintenance and research. The maintenance and operations cost includes estimates for travel activities, office supplies, repair and maintenance services, printing and training. The cost estimate for resource management

Scottsmoor Flatwoods Sanctuary Draft Management Plan

includes activities such as research and monitoring contracts, developing and implementing the prescribed burn program, environmental education programs and exotic species removal.

The following is a breakdown of the general costs estimated for annual management operations of SFS:

Staff Salaries/ Benefits* (Staff also responsible for other North Region sites.)	
Land Manager (f.t.)	\$7,228.90 (incl. benefits)
Assistant Land Manager (f.t.)	\$5,881.80 (incl. benefits)
Two Land Management Technicians (f.t.)	\$9,767.30 (incl. benefits)

Management Activities	\$2,014.60
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(Exotic treatment, fire management, trails environmental education, boundary maintenance, etc.)

Total	\$24,892.60
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In addition to the on-going maintenance and operation costs estimate, the EEL Program has funding for the following capital start-up costs outlined below.

Capital Improvement

Heavy Equipment Rental	\$8,000.00
Kiosks and Signs	\$2,000.00
Fencing	\$88,000.00
Total	\$98,000.00

IX. BIBLIOGRAPHY

Part IX provides the following citations for original research or publications used to develop the Management Plan.

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Scottsmoor Flatwoods Sanctuary Draft Management Plan

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X. APPENDICES

Appendix A: Letter of Compliance

Appendix B: Legal Description

Appendix C: FEMA Map

Appendix D: Fire Management Plan

Appendix E: Timber Assessment

Appendix F: Surface Water Quality Classification

Appendix G: Plant Survey

Appendix H: Bird Survey

Appendix I: Arthropod Plan

Appendix J: Florida Natural Areas Inventory

Appendix K: Florida Master Site File

Appendix M: Property Leases

Appendix N: Public Meetings and Review

**Appendix A:
Letter of Compliance**



BREVARD COUNTY
BOARD OF COUNTY COMMISSIONERS

**INTER-OFFICE
MEMORANDUM**

TO: Michael Wielenga
North Region Assistant Land Manager
Environmentally Endangered Lands Program

FROM: Robin M. Sobrino, AICP *RS*
Director, Planning & Development Department

DATE: July 1, 2009

SUBJECT: Letter of Compliance for IRS, SFS, and FLS

IRS:

The subject property is situated within the unincorporated area of Brevard County. The property is zoned AU (Agricultural Residential). Section 62-1334 of the Zoning Regulations governing AU zoning states that parks and public recreational facilities are permitted uses.

The Future Land Use Map designates this property as Residential 1:2.5. This land use designation permits park and public recreational facilities. An amendment to the Future Land Use Map will be initiated during the next Comprehensive Plan amendment cycle to change the designation to Public Conservation.

SFS:

The subject property is situated within the unincorporated area of Brevard County. The property is zoned PUD (Planned Unit Development). Section 62-1443 of the Zoning Regulations governing PUD zoning states that parks and public recreational facilities are permitted uses.

The Future Land Use Map designates this property as Residential 1. This land use designation permits park and public recreational facilities. An amendment to the Future Land Use Map will be initiated during the next Comprehensive Plan amendment cycle to change the designation to Public Conservation.

FLS:

The subject property is situated within the unincorporated area of Brevard County. The property is zoned GU (General Use). Section 62-1331 of the Zoning Regulations governing GU zoning states that parks and public recreational facilities are permitted uses.

The Future Land Use Map designates this property as Agricultural and Residential 1:2.5. These land use designations permits park and public recreational facilities. An amendment to the Future Land Use Map will be initiated during the next Comprehensive Plan amendment cycle to change the designation to Public Conservation.

Also enclosed for your records are maps depicting the zoning and Future Land Use designations for these properties. If you have any questions, please do not hesitate to contact me.

enc.

**Appendix B:
Legal Description**

Scottsmoor Partners

PARCEL NO. 1

A PARCEL OF LAND BEING A PORTION OF THE GARVIN AND FOUNTAIN GRANTS, AS SHOWN ON THE PLAT OF "SCOTT'S MOOR LITTLE FARMS", AS RECORDED IN PLAT BOOK 3, PAGE 63 AND ALL OR PARTS OF SUBSEQUENT REPLATS THEREOF, AND ALSO BEING THOSE PORTIONS OF BLOCKS 2 AND 3, SECTION 2, LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 AND ALL OF BLOCKS 1 AND 4, TOGETHER WITH THOSE PORTIONS OF BLOCKS 2 AND 3, SECTION 3, LYING EAST OF THE EASTERLY RIGHT OF WAY LINE OF I-95 AS SHOWN ON THE PLAT OF "INDIAN RIVER PARK", AS RECORDED IN PLAT BOOK 2, PAGE 33 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH ALL PLATTED RIGHTS OF WAYS WITHIN SAID PARCEL, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE GARVIN GRANT AND THE NORTHWEST CORNER OF LOT 57 AS SHOWN ON THE PLAT OF "SCOTT'S MOOR LITTLE FARMS" AS RECORDED IN PLAT BOOK 3, PAGE 63 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.72°39'50"E., ALONG THE NORTH LINE OF SAID GARVIN GRANT AND THE NORTHERLY BOUNDARY OF LOTS 57 THROUGH 59 AS SHOWN ON SAID PLAT OF "SCOTT'S MOOR LITTLE FARMS", 915.30 FEET TO THE INTERSECTION WITH THE EASTERLY RIGHT OF WAY LINE OF I-95 (STATE ROAD NO. 9), AND SAID POINT BEING THE POINT OF BEGINNING OF THE LAND HEREIN DESCRIBED; THENCE CONTINUE N.72°39'50"E., ALONG SAID NORTH LINE OF THE GARVIN GRANT AND ALONG THE NORTH LINE OF LOTS 59 THROUGH 63 AS SHOWN ON SAID PLAT OF SCOTT'S MOOR LITTLE FARMS, 1574.16 FEET TO THE SOUTHWEST CORNER OF LOT 7 OF THE PABLO FONTAINE GRANT AND SAID POINT BEING THE NORTHEAST CORNER OF LOT 63 AS SHOWN ON THE AFORESAID PLAT OF "SCOTT'S MOOR LITTLE FARMS"; THENCE N.11°37'25"W., ALONG THE WEST LINE OF THE AFORESAID LOT 7 OF THE PABLO FONTAINE GRANT AS OCCUPIED BY THE AFORESAID PLAT OF "SCOTT'S MOOR LITTLE FARMS", 3210.75 FEET TO THE INTERSECTION WITH THE WESTERLY PROLONGATION OF THE NORTH LINE OF BLOCKS H, I, J AND K AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARMS 48, 49, 50, 51, 52, 53 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 84 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.72°53'39"E., ALONG SAID LINE, 1336.58 FEET TO THE SOUTHWEST CORNER OF LOT 4, BLOCK 76 AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARM 37 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 90 OF THE PUBLIC RECORDS OF BREVARD COUNTY FLORIDA; THENCE N.15°14'18"W., ALONG THE WESTERLY BOUNDARY OF SAID BLOCK 76, A DISTANCE OF 210.70 FEET TO THE NORTHWEST CORNER THEREOF; THENCE N.72°46'54"E., ALONG THE NORTH LINE OF BLOCKS 76, 77, 82, 83 AND 88 OF SAID PLAT OF "SUBDIVISION OF FARM 37 NORTH EXTENSION OF SCOTTSMOOR" AND ALONG THE SOUTHERLY RIGHT OF WAY LINE OF CORAL AVENUE, A DISTANCE OF 1350.55 FEET TO THE NORTHEAST CORNER OF LOT 22, BLOCK 88 OF SAID PLAT AND SAID POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE S.15°13'37"E., ALONG THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1, AND ALONG THE EAST LINE OF BLOCKS 88 AND 87 AS SHOWN ON THE PLATS RECORDED IN PLAT BOOK 4, PAGE 90 AND PLAT BOOK 4, PAGE 15 OF THE PUBLIC RECORDS OF BREVARD COUNTY,

Scottsmoor Flatwoods Sanctuary Draft Management Plan

FLORIDA, 737.84 FEET; THENCE S.72°52'03"W., 275.15 FEET; THENCE S.15°13'37"E., 1475.82 FEET; THENCE N.72°52'03"E., 140.13 FEET TO A POINT LYING ON THE WEST LINE OF LOTS 13 THROUGH 18, BLOCK 72 AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 8 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S.15°13'38"E., ALONG SAID LINE, 150.11 FEET TO THE NORTHEAST CORNER OF LOT 12, BLOCK 72 OF SAID PLAT OF "SUBDIVISION OF FARMS 44, 45, AND 46 NORTH EXTENSION OF SCOTTSMOOR"; THENCE S.72°52'04"W., ALONG THE NORTH LINE OF SAID LOT 12 AND ALONG THE NORTH LINE OF LOT 13, BLOCK 71 OF SAID PLAT OF "SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR", 320.08 FEET TO THE NORTHWEST CORNER OF SAID LOT 13; THENCE S.15°13'41"E., ALONG THE WEST LINE OF SAID LOT 13, A DISTANCE OF 50.00 FEET TO THE SOUTHWEST CORNER THEREOF; THENCE S.72°52'03"W., ALONG THE SOUTH LINE OF THE AFORESAID BLOCK 71 AND THE WESTERLY PROLONGATION THEREOF AND ALONG THE NORTHERLY RIGHT OF WAY LINE OF LUCERNE AVENUE, 185.05 FEET TO A POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF VERMONT STREET; THENCE S.15°13'43"E., ALONG THE WESTERLY RIGHT OF WAY LINE OF VERMONT STREET AS SHOWN ON THE PLATS RECORDED IN PLAT BOOK 4, PAGE 8, PLAT BOOK 3, PAGE 64, PLAT BOOK 3, PAGE 89 AND PLAT BOOK 8, PAGE 10, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 4294.90 FEET TO A POINT LYING ON THE SOUTH RIGHT OF WAY LINE OF PEARL STREET AND THE SOUTH LINE OF THE NORTH 1/2 OF THE GARVIN GRANT AS SHOWN ON THE PLAT OF "SCOTT'S MOOR LITTLE FARMS" AS RECORDED IN PLAT BOOK 3, PAGE 63 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S.72°40'23"W., ALONG SAID LINE, 320.05 FEET TO A POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF BERLIN STREET; THENCE S.15°13'46"E., ALONG THE SOUTHERLY PROLONGATION OF SAID WESTERLY RIGHT OF WAY LINE OF BERLIN STREET, 602.08 FEET TO A POINT LYING ON THE NORTH LINE OF LOT 4, BLOCK 2, SECTION 2 AS SHOWN ON THE PLAT OF "INDIAN RIVER PARK" AS RECORDED IN PLAT BOOK 2, PAGE 33 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.78°55'41"E., ALONG SAID LINE, 312.01 FEET; THENCE S.17°45'39"E., 1968.63 FEET; THENCE N.76°23'50"E., 750.00 FEET TO A POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE S.23°37'37"E., ALONG SAID RIGHT OF WAY LINE, 367.87 FEET TO A POINT LYING ON THE CENTERLINE OF A PLATTED 30.00 FOOT WIDE RIGHT OF WAY LYING SOUTH OF AND ADJACENT TO THE SOUTH LINES OF BLOCK 3, SECTION 2 AND BLOCKS 3 AND 4, SECTION 3 AS SHOWN ON THE AFORESAID PLAT OF "INDIAN RIVER PARK"; THENCE ALONG THE CENTERLINE OF SAID 30.00 FOOT WIDE RIGHT OF WAY, THE FOLLOWING THREE COURSES AND DISTANCES; THENCE S.76°23'51"W., 1190.11 FEET; THENCE S.78°48'10"W., 2641.67 FEET; THENCE S.79°22'24"W., 1010.72 FEET TO A POINT LYING ON THE EASTERLY RIGHT OF WAY LINE OF I-95 (STATE ROAD NO. 9); THENCE N.13°57'30"W., ALONG SAID RIGHT OF WAY LINE, 5855.46 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT FROM ALL OF THE ABOVE, THE FOLLOWING DESCRIBED PARCELS OF LAND:

LOT 12, BLOCK 74, LOT 12, BLOCK 75 AND LOT 16, BLOCK 88 AS SHOWN ON SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR, AS RECORDED IN PLAT BOOK 4, PAGE 15; LOTS 8 AND 9, BLOCK W AS SHOWN ON SUBDIVISION OF FARMS 48, 49, 50, 51, 52, 53 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLATBOOK 4, PAGE 84; LOT 11, BLOCK X AS SHOWN ON SUBDIVISION OF FARMS 54, 55 AND 56 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 92; LOT 18, BLOCK

Scottsmoor Flatwoods Sanctuary Draft Management Plan

115 AS SHOWN ON SUBDIVISION OF FARMS 64, 65, 66 WEST EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 92; LOTS 1 AND 2, BLOCK 66 AS SHOWN ON SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 8; LOT 5, BLOCK 3 AND THAT PART OF LOTS 11 AND 12, BLOCK 4 LYING EAST OF THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE 95 AS SHOWN ON SUBDIVISION OF FARMS 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116 AND 117 SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 90; LOTS 13, 14, 18, 19, 20, 21, 22, 23, 24, 25, 35, 36, 38, 40 AND 41, BLOCK 1 AND LOTS 15, 17, 18, 20, 24, 25, 26, 27 AND 35, BLOCK 7 AS SHOWN ON PLAN OF SCOTT'S-MOOR AS RECORDED IN PLATBOOK 3, PAGE 64; LOTS 11 AND 12, BLOCK 25 AS SHOWN ON SCOTTSMOOR ANNEX AS RECORDED IN PLAT BOOK 3, PAGE 89 ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

ALSO LESS AND EXCEPT FROM ALL OF THE ABOVE, THE FOLLOWING DESCRIBED PARCELS OF LAND:

LOT 17, BLOCK T, AS SHOWN ON SUBDIVISION OF FARMS 54, 55 AND 56 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 92. THE WEST 760 FEET OF LOT 67, AS SHOWN ON PLAT OF SCOTT'S MOOR LITTLE FARMS AS RECORDED IN PLAT BOOK 3, PAGE 63; LOT 11, BLOCK 2, AS SHOWN ON SUBDIVISION OF FARMS 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, AND 117 SCOTTSMOOR, AS RECORDED IN PLAT BOOK 4, PAGE 90; LOT 29, BLOCK 1, AS SHOWN ON PLAN OF SCOTT'S MOOR AS RECORDED IN PLAT BOOK 3, PAGE 64; LOTS 11 AND 12, BLOCK 13, SCOTTSMOOR ANNEX, AS RECORDED IN PLAT BOOK 3, PAGE 89; LOTS 10 AND 11, BLOCK 69, AS SHOWN ON SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 8, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

ALSO LESS AND EXCEPT FROM ALL OF THE ABOVE: THE SUBDIVISION OF PARRISH PARK AT SCOTTSMOOR AS RECORDED IN PLAT BOOK 45, PAGE 31 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

PARCEL NO. 2

A PARCEL OF LAND BEING A PART OF BLOCKS 2 AND 3, SECTION 2, AS SHOWN ON THE PLAT OF INDIAN RIVER PARK AS RECORDED IN PLAT BOOK 2, PAGE 33 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF PEARL STREET WITH THE WESTERLY RIGHT OF WAY LINE OF BERLIN STREET AS SHOWN ON THE PLAT OF "SCOTTSMOOR ANNEX" AS RECORDED IN PLAT BOOK 3, PAGE 89 OF THE PUBLIC RECORDS OF BREVARD COUNTY FLORIDA; THENCE S.15°13'46"E., ALONG THE SOUTHERLY PROLONGATION OF THE WESTERLY RIGHT OF WAY LINE OF BERLIN STREET, 602.08 FEET TO A POINT LYING ON THE NORTH LINE OF LOT 4, BLOCK 2, SECTION 2, AS SHOWN ON THE AFORESAID PLAT OF "INDIAN RIVER PARK"; THENCE N.78°55'41"E., ALONG SAID LINE, 312.01 FEET TO THE POINT OF BEGINNING OF THE LAND HEREIN DESCRIBED; THENCE S.17°45'39"E., 1968.63 FEET; THENCE N.76°23'50"E., 750.00 FEET TO A POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 (STATE ROAD NO. 5), A 143 FOOT WIDE RIGHT OF WAY; THENCE ALONG SAID RIGHT OF WAY LINE, THE FOLLOWING TWO COURSES AND DISTANCES; THENCE N.23°37'37"W., 1289.97 FEET; THENCE N.15°13'37"W., 664.74 FEET TO A POINT LYING ON THE NORTH LINE

Scottsmoor Flatwoods Sanctuary Draft Management Plan

OF LOT 3, BLOCK 2, SECTION 2, AS SHOWN ON THE AFORESAID PLAT OF INDIAN RIVER PARK; THENCE S.78°55'41"W., ALONG SAID LINE, 650.00 FEET TO THE POINT OF BEGINNING.

PARCEL NO. 3

A PARCEL OF LAND BEING A PART OF BLOCKS 72, 86 AND 87 TOGETHER WITH PORTIONS OF TRAVIS STREET, MARION AVENUE AND AVOCADO AVENUE, ALL AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 15, AND ALSO BEING A PART OF BLOCK 72 AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 8, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF LOT 22, BLOCK 88, AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARM 37 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 90 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA AND SAID POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 (STATE ROAD NO. 5), A 143.00 FOOT WIDE RIGHT OF WAY; THENCE S.15°13'37"E., ALONG SAID RIGHT OF WAY LINE AND ALONG THE EAST LINE OF THE AFORESAID BLOCK 88 AND ALONG THE EAST LINE OF BLOCKS 88 AND 87 AS SHOWN ON THE AFORESAID PLAT OF "SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR", A DISTANCE OF 737.84 FEET TO THE POINT OF BEGINNING OF THE LAND HEREIN DESCRIBED; THENCE S.72°52'03"W., 275.15 FEET; THENCE S.15°13'37"E., 1475.82 FEET; THENCE N.72°52'03"E., 140.13 FEET TO A POINT LYING ON THE WESTERLY LINE OF LOTS 13 THROUGH 21, BLOCK 72, AS SHOWN ON THE AFORESAID PLATS OF "SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR" AND "SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR"; THENCE N.15°13'38"W., ALONG SAID LINE, 235.89 FEET TO THE NORTHWEST CORNER OF THE AFORESAID LOT 21, BLOCK 72; THENCE N.72°52'13"E., ALONG THE NORTH LINE OF SAID LOT 21, A DISTANCE OF 135.03 FEET TO THE NORTHEAST CORNER THEREOF AND SAID POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE N.15°13'37"W., ALONG SAID RIGHT OF WAY LINE AND ALONG THE EAST LINE OF BLOCKS 72, 86 AND 87 OF THE AFORESAID PLAT OF "SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR", A DISTANCE OF 1239.93 FEET TO THE POINT OF BEGINNING.

PARCEL NO. 4

LOT 11, BLOCK 2, AS SHOWN ON SUBDIVISION OF FARMS 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116 AND 117 SCOTTSMOOR, AS RECORDED IN PLAT BOOK 4, PAGE 90; LOT 29, BLOCK 1, AS SHOWN ON PLAN OF SCOTT'S-MOOR AS RECORDED IN PLAT BOOK 3, PAGE 64; LOTS 11 AND 12, BLOCK 13, SCOTTSMOOR ANNEX, AS RECORDED IN PLAT BOOK 3, PAGE 89; LOTS 10 AND 11, BLOCK 69, AS SHOWN ON SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 8, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AND

LOT 15, BLOCK Y, AS SHOWN ON RESUBDIVISION OF FARM 56 NORTH EXTENSION OF SCOTTSMOOR, AS RECORDED IN PLAT BOOK 7, PAGE 44, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AND

Scottsmoor Flatwoods Sanctuary Draft Management Plan

LOT 13, BLOCK 72, SCOTTSMOOR RESUBDIVISION (AS RECORDED IN PLAT BOOK 4, PAGE 8, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA), LYING IN SECTION 41, TOWNSHIP 20G SOUTH, RANGE 34 EAST, BREVARD COUNTY, FLORIDA, AND

LOT 12, BLOCK 74, SCOTTSMOOR RESUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 4, PAGE 15, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AND

PARCEL NO. 5 (F/K/A ROBERTS PARCEL)

A PARCEL OF LAND BEING THAT PART OF THE PARCELS OF LAND DESCRIBED IN OFFICIAL RECORDS BOOKS 2201, PAGE 1934 AND 4311, PAGE 1072 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO.1 AND SOUTH OF THE SOUTHERLY RIGHT OF WAY LINE OF STUCK WAY ROAD (SR.5A), SAID PARCEL OF LAND BEING DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF THE PLAT OF SUBDIVISION OF FARM 47 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 82 B AND SAID POINT BEING THE SOUTHWEST CORNER OF THE NORTH 1/2 OF PARCEL NO.7 AS SHOWN ON THE SUBDIVISION OF THE SPANISH GRANT OF PABLO F. FONTAINE AS RECORDED IN DEED BOOK D, PAGE 525 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.11°37'25"W., ALONG THE WEST LINE OF SAID NORTH 1/2 OF PARCEL NO.7, A DISTANCE OF 1277.00 FEET TO A POINT LYING ON THE SOUTHERLY RIGHT OF WAY LINE OF STUCK WAY ROAD (SR.5A); THENCE N.46°46'30"E., ALONG SAID RIGHT OF WAY LINE, 2304.77 FEET TO A POINT LYING ON THE NORTH LINE OF THE MIDDLE 1/3 OF SAID PARCEL 7 AS SHOWN ON THE SUBDIVISION OF THE SPANISH GRANT OF PABLO F. FONTAINE AND SAID POINT BEING THE SOUTHWEST CORNER OF THE PARCEL OF LAND DESCRIBED AS PARCEL B IN OFFICIAL RECORDS BOOK 3626, PAGE 1707 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.72°42'54"E., ALONG THE SOUTH LINE OF SAID PARCEL B, 520.58 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL B AND SAID POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO.1; THENCE ALONG SAID WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO.1, THE FOLLOWING THREE COURSES AND DISTANCES; THENCE S.15°13'37"E., 809.36 FEET; THENCE N.74°46'23"E., 35.00 FEET; THENCE S.15°13'37"E., 1472.92 FEET TO THE INTERSECTION WITH THE SOUTH LINE OF THE AFORESAID NORTH 1/2 OF PARCEL NO.7 AS SHOWN ON THE SUBDIVISION OF THE SPANISH GRANT OF PABLO F. FONTAINE AND SAID LINE BEING THE NORTH RIGHT OF WAY LINE OF CORAL AVENUE AS SHOWN ON THE PLATS OF SUBDIVISION OF FARM 47 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 82B AND SUBDIVISION OF FARM 37 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 90 ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S.72°46'54"W., ALONG SAID RIGHT OF WAY LINE OF CORAL AVENUE AND ALONG SAID SOUTH LINE OF THE NORTH 1/2 OF SAID PARCEL NO.7, A DISTANCE OF 2672.14 FEET TO THE POINT OF BEGINNING.

**McINTOSH - AG VENTURES, LLC
HONEYBROOK DEVELOPMENT CORP.**

Parcel 1:

The North 1/2 of vacated road right-or-way lying South of Block 4, more particularly described as follows:

Scottsmoor Flatwoods Sanctuary Draft Management Plan

A portion of a 30 foot wide road right-of-way lying in Block 5, Section 4, Township 20 South, Range 34 East, INDIAN RIVER PARK SUBDIVISION, as recorded in Plat Book 2, Page 33, Public Records of Brevard County, Florida, lying 15 feet on both side of the following described centerline:

From the Northeast corner of Lot 2, Block 5 of said INDIAN RIVER PARK SUBDIVISION, run South 79 degrees 01' 04" West, along the Northerly line of said Lot 2, a distance of 280.00 feet; thence departing said Northerly line run North 16 degrees 57'36" west, 15.08 feet to the centerline of said 30 foot wide road right-of-way and the POINT of BEGINNING for the centerline of the right-of-way vacation herein described; thence South 79 degrees 01'04" West, along said centerline, 1245.69 feet, more or less, to the Easterly right-of-way of the Florida East Coast Railroad and the Point of Termination.

It is the intent of this description that the North and South sidelines of this right-of-way vacating terminate at the Easterly right-of-way line of said Florida East Coast Railroad right-of-way.

Parcel 2:

Lots 2 through 7, Block 2, and Lots 2 through 7, Block 3, lying West of Interstate 95, in Section 3 of INDIAN RIVER PARK SUBDIVISION, as recorded in Plat Book 2, Page 33, Public Records of Brevard County, Florida. Lying in Section 3, Township 20 South, Range 34 East.

Parcel 3:

Tract 4, Block 2, Section 3 of INDIAN RIVER PARK SUBDIVISION, as recorded in Plat Book 2, Page 33, Public Records of Brevard County, Florida. Lying in Section 3, Township 20 South, Range 34 East.

Parcel 4:

Lots 1 and 12, Block 5, excluding Interstate 95 Right-of-way in SCOTTSMOOR LITTLE TRACTS, according to the plat thereof, as recorded in Pat Book 4, Page 90, Public Records of Brevard County, Florida. Lying in Section 37, Township 20 South, Range 34 East.

Parcel 5:

All of Blocks 1 and 4, lying East of Railroad right-of-way, (also known as Block 1 of Greenwood Survey) Section 4 of INDIAN RIVER PARK SUBDIVISION, as recorded in Plat Book 2, Page 33, Public Records of Brevard County, Florida. Lying in Section 4, Township 29 South, Range 34 East.

Parcel 6:

That part of lot 5, lying east of Railroad right-of-way, SUBDIVISION OF THE PABLO FONTAINE GRANT, according to the plat thereof, as recorded in Plat Book 2, Page 43 Public Records of Brevard County, Florida. Lying in Section 41, Township 20 South, Range 34 East.

Parcel 7:

Tract 58, excluding Interstate 95 Right-of-Way in SCOTTSMOOR LITTLE FARMS, according to the plat thereof, as recorded in Plat Book 3, Page 63, Public Records of Brevard County, Florida. Lying in Section 37, Township 20 South, Range 34 East.

Parcel 8:

Lots 1,2 and 3, Block 4, lying West of Interstate 95 Right-of-Way in SCOOTSMOOR LITTLE TRACTS, according to the plat thereof, as recorded in Plat Book 4, Page 90, Public Records of Brevard County, Florida. Lying in Section 37, Township 20 South, Range 34 East.

Parcel 9:

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Lots 1,2,13 and 14, Block 1, except the Interstate 95 Right-of-way in SCOTTSMOOR LITTLE TRACTS, according to the plat thereof, as recorded in Plat Book 4, Page 90, Public Records of Brevard County, Florida. Lying in Section 37, Township 20 South, Range 34 East.

Parcel 10:

A parcel of land being a portion of that part of the South ½ of the Garvin Grant lying West of the Westerly right-of-way line of US Highway No. 1 and North of the North line of Indian River Park as recorded in Plat Book 2, Page 33 of the Public Records of Brevard County, Florida, being more particularly described as follows:

Beginning at the Southeast corner of Lot 5 of the Pablo Fontaine Grant as shown on the plat of Wisconsin-Florida Fruit Land Company as recorded in Plat Book 2, Page 43 of the Public Records of Brevard County, Florida; thence North 21 degrees 19'32" West, along the East line of said Lot 5 of the Pablo Fontaine Grant and along the West line of the Garvin Grant, a distance of 160.00 feet to the Northwest corner of the South ½ of the Garvin Grant as shown on the plat of Scottsmoor, recorded in Plat Book 4, Page 90 of the Public Records of Brevard County, Florida; thence North 72 degrees 40'23" East, along the North line of the South ½ of the Garvin Grant and along the South line of said plat of Scottsmoor 189.35 feet to a point lying on the Westerly right-of-way line of I-95 (State Road No. 9); thence South 13 degrees 57'30" East, along said right-of-way line, 178.30 feet to a point lying on the North line of Indian River Park as recorded in Plat Book 2, Page 33, of the Public Records of Brevard County, Florida; thence South 78 degrees 55'41" West along said North line of Indian River Park, 168.73 feet to the Point of Beginning.

THE NATURE CONSERVANCY

PARCEL B-5:

A PARCEL OF LAND LYING IN LOT 6, "FONTAINE GRANT" ACCORDING TO THE DEED THEREOF AS RECORDED IN DEED BOOK "D" PAGE 525 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; SAID "FONTAINE GRANT" LYING IN SECTION 41 , TOWNSHIP 20 SOUTH, RANGE 34 EAST, BREVARD COUNTY, FLORIDA, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
BEGINNING AT THE SOUTHEAST CORNER OF LOT 6 OF SAID "FONTAINE GRANT"; THENCE S 72°42'53" W 1573.29 FEET TO THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY 95; THENCE ALONG SAID EASTERLY RIGHT OF WAY LINE N 13°57'30" W 2267.10 FEET; THENCE CONTINUE ALONG SAID EASTERLY RIGHT OF WAY LINE N 07°26'19" W 704.56 FEET; THENCE N 68°48'41" E 1106.36 FEET; THENCE N 11°37'17" W 700 FEET; THENCE N 43°13'30" W 180.00 FEET; THENCE N 46°46'30" E 406.38 FEET; THENCE N 43°13'30" W 428.77 FEET TO THE SOUTHEASTERLY RIGHT OF WAY LINE OF THE STATE ROAD No. 5 (US 1) CONNECTOR ROAD; THENCE ALONG SAID SOUTHEASTERLY RIGHT OF WAY LINE N 46°46'30" E 209.88 FEET TO THE EAST LINE OF LOT 6 OF SAID "FONTAINE GRANT"; THENCE SOUTH ALONG SAID EAST LINE OF LOT 6 S 11°37'17" E 4225.15 FEET TO THE POINT OF BEGINNING. CONTAINING 125.72 ACRES, MORE OR LESS.

PARCEL B-3:

A PARCEL OF LAND LYING IN LOT 6, "FONTAINE GRANT" ACCORDING TO THE DEED THEREOF AS RECORDED IN DEED BOOK "D" PAGE 525 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; SAID "FONTAINE GRANT" LYING IN SECTION 41 , TOWNSHIP 20 SOUTH, RANGE 34 EAST, BREVARD COUNTY, FLORIDA, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:
COMMENCE AT THE SOUTHEAST CORNER OF LOT 6 OF SAID "FONTAINE GRANT"; THENCE RUN N 11°37'17" W ALONG THE EAST LINE OF SAID LOT 6 A DISTANCE OF 4728.59 FEET TO A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF STATE ROAD No. 5 (US 1) CONNECTOR ROAD; THENCE S 46°46'30" W ALONG SAID SOUTHEASTERLY RIGHT OF WAY LINE 776.89 FEET TO THE POINT OF BEGINNING; THENCE S 43°13'30" E 428.77 FEET; THENCE S

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46°46'30" W 203.19 FEET; THENCE N 43°13'30" W 428.77 FEET TO SAID CONNECTOR ROAD SOUTHEASTERLY RIGHT OF WAY LINE; THENCE N 46°46'30" E ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 203.19 FEET TO THE POINT OF BEGINNING. CONTAINING 2.00 ACRES, MORE OR LESS.

PARCEL B-4:

A PARCEL OF LAND LYING IN LOT 6, "FONTAINE GRANT" ACCORDING TO THE DEED THEREOF AS RECORDED IN DEED BOOK "D" PAGE 525 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; SAID "FONTAINE GRANT" LYING IN SECTION 41, TOWNSHIP 20 SOUTH, RANGE 34 EAST, BREVARD COUNTY, FLORIDA, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE SOUTHEAST CORNER OF LOT 6 OF SAID "FONTAINE GRANT"; THENCE RUN N 11°37'17" W ALONG THE EAST LINE OF SAID LOT 6 A DISTANCE OF 4728.59 FEET TO A POINT ON THE SOUTHEASTERLY RIGHT OF WAY LINE OF STATE ROAD No. 5 (US1) CONNECTOR ROAD; THENCE S 46°46'30" W ALONG SAID SOUTHEASTERLY RIGHT OF WAY LINE 573.70 FEET TO THE POINT OF BEGINNING; THENCE S 43°13'30" E 428.77 FEET; THENCE S 46°46'30" W 203.19 FEET; THENCE 43°13'30" W 428.77 FEET TO SAID CONNECTOR ROAD SOUTHEASTERLY RIGHT OF WAY LINE; THENCE N 46°46'30" E ALONG SAID RIGHT OF WAY LINE A DISTANCE OF 203.19 FEET TO THE POINT OF BEGINNING CONTAINING 2.00 ACRES, MORE OR LESS.

ALL OF THE ABOVE BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

DESCRIPTION BY SURVEYOR:

A PARCEL OF LAND LYING IN LOT 6, "FONTAINE GRANT" ACCORDING TO THE DEED THEREOF AS RECORDED IN DEED BOOK "D" PAGE 525 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; SAID "FONTAINE GRANT" LYING IN SECTION 41, TOWNSHIP 20 SOUTH, RANGE 34 EAST, BREVARD COUNTY, FLORIDA, SAID PARCEL OF LAND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGINNING AT THE SOUTHEAST CORNER OF LOT 6 OF SAID "FONTAINE GRANT"; THENCE S 72°42'53" W 1573.29 FEET TO THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE HIGHWAY 95; THENCE ALONG SAID EASTERLY RIGHT OF WAY LINE N 13°57'30" W 2267.10 FEET; THENCE CONTINUE ALONG SAID EASTERLY RIGHT OF WAY LINE N 07°26'19" W 704.56 FEET; THENCE N 68°48' 41" E 1106.36 FEET; THENCE N 11°37'17" W 700 FEET; THENCE N 43°13'30" W 608.77 FEET TO THE SOUTHEASTERLY RIGHT OF WAY LINE OF THE STATE ROAD No. 5 (US 1) CONNECTOR ROAD; THENCE ALONG SAID SOUTHEASTERLY RIGHT OF WAY LINE N 46°46'30" E 506.38 FEET; THENCE S 43°13'30" E 428.77 FEET; THENCE N 46°46'30" E 209.88 FEET TO THE EAST LINE OF LOT 6 OF SAID "FONTAINE GRANT"; THENCE SOUTH ALONG SAID EAST LINE OF LOT 6 S 11°37'17" E 4225.15 FEET TO THE POINT OF BEGINNING. CONTAINING 129.71 ACRES, MORE OR LESS.

Turnbill Farms

Alliant National Title Insurance Company

ALTA OWNER'S POLICY

Agent's File Number: 11-1271
FL1075-1102318

Owner's Policy Number: 502610

Schedule A, Continuation

A PORTION OF LOTS 1, 2, 7 AND 8 OF TRACT 5, GRANT SECTION 3 ACCORDING TO INDIAN RIVER PARK SUBDIVISION OF BERNARDO SEGUI GRANT AS RECORDED IN PLAT BOOK 2, PAGE 33B OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

BEGIN AT THE NORTHEAST CORNER OF LOT 1, TRACT 5, GRANT SECTION 3, INDIAN RIVER PARK AS RECORDED IN PLAT BOOK 2, PAGE 75, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, ON AN ASSUMED BEARING S. 79°01'04" W. A DISTANCE OF 25.14'; THENCE S. 17°00'00" E., A DISTANCE OF 25.14' TO THE POINT OF BEGINNING; THENCE CONTINUE S. 17°00'00" E., A DISTANCE OF 399.55'; THENCE S. 79°01'04" W. A DISTANCE OF 264.87'; THENCE S. 17°00'00" E. A DISTANCE OF 869.91'; THENCE S. 79°01'04" W., A DISTANCE OF 555.66'; THENCE N. 17°00'00" W., A DISTANCE OF 79.92'; THENCE S. 79°01'04" W., A DISTANCE OF 25.14'; THENCE N. 17°00'00" W., A DISTANCE OF 400.00'; THENCE N. 79°01'04" E., A DISTANCE OF 25.14'; THENCE N. 17°00'00" W., A DISTANCE OF 229.73'; THENCE N. 79°01'04" E., A DISTANCE OF 264.86'; THENCE N. 17°00'00" W., A DISTANCE OF 559.81'; THENCE N. 79°01'04" E., A DISTANCE OF 290.00'; THENCE N. 17°00'00" W., A DISTANCE OF 5.46'; THENCE N. 79°01'04" E., A DISTANCE OF 145.00'; THENCE S. 17°00'00" E., A DISTANCE OF 5.46'; THENCE N. 79°01'04" E., A DISTANCE OF 119.86' TO THE POINT OF BEGINNING.

TOGETHER WITH:

A PORTION OF LOTS 1, 2, 7 AND 8 OF TRACT 5, GRANT SECTION 3 ACCORDING TO INDIAN RIVER PARK SUBDIVISION OF BERNARDO SEGUI GRANT AS RECORDED IN PLAT BOOK 2, PAGE 33B OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF LOT 1, TRACT 5, GRANT SECTION 3, INDIAN RIVER PARK AS RECORDED IN PLAT BOOK 2, PAGE 75, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, ON AN ASSUMED BEARING S. 17°00'00" E., A DISTANCE OF 559.54' TO THE POINT OF BEGINNING; THENCE S. 17°00'00" E., A DISTANCE OF 709.92'; THENCE S. 79°01'04" W., A DISTANCE OF 239.73'; THENCE N. 17°00'00" W., A DISTANCE OF 559.92'; THENCE N. 79°01'04" E., A DISTANCE OF 119.87'; THENCE N. 17°00'00" W., A DISTANCE OF 150.00'; THENCE N. 79°01'04" E., A DISTANCE OF 119.86' TO THE POINT OF BEGINNING.

LESS AND EXCEPT THE FOLLOWING:

RIGHT OF WAY 1

A PORTION OF LOTS 1, 2, 7 AND 8 OF TRACT 5, GRANT SECTION 3 ACCORDING TO INDIAN RIVER PARK SUBDIVISION OF BERNARDO SEGUI GRANT AS RECORDED IN PLAT BOOK 2, PAGE 33B OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF LOT 1, TRACT 5, GRANT SECTION 3, INDIAN RIVER PARK AS RECORDED IN PLAT BOOK 2, PAGE 75, OF THE PUBLIC RECORDS OF BREVARD

Alliant National Title Insurance Company

ALTA OWNER'S POLICY

Agent's File Number: **11-1271**
FL1075-1102318

Owner's Policy Number: **502610**

COUNTY, FLORIDA, ON AN ASSUMED BEARING S. 79°01'04" W. A DISTANCE OF 25.14'; THENCE S. 17°00'00" E., A DISTANCE OF 25.14'; THENCE CONTINUE S. 17°00'00" E., A DISTANCE OF 399.55'; THENCE S. 79°01'04" W. A DISTANCE OF 264.88'; THENCE S. 17°00'00" E. A DISTANCE OF 870.00'; THENCE S. 79°01'04" W., A DISTANCE OF 555.66'; THENCE N. 17°00'00" W., A DISTANCE OF 79.92'; THENCE S. 79°01'04" W., A DISTANCE OF 25.14; THENCE N. 17°00'00" W., A DISTANCE OF 400.00'; THENCE N. 79°01'04" E., A DISTANCE OF 25.10; THENCE N. 17°00'00" W., A DISTANCE OF 229.69'; THENCE N. 79°01'04" E., A DISTANCE OF 264.86'; THENCE S. 17°00'00" E., A DISTANCE OF 150.00' TO THE POINT OF BEGINNING; THENCE N. 79°01'04" E., A DISTANCE OF 25.14' THENCE S. 17°00'00" E., A DISTANCE OF 160.00'; THENCE S. 79°01'04" W., A DISTANCE OF 25.14'; THENCE N. 17°00'00" W., A DISTANCE OF 160.00' TO THE POINT OF BEGINNING.

AND

RIGHT OF WAY 1



A PORTION OF LOTS 1, 2, 7 AND 8 OF TRACT 5, GRANT SECTION 3 ACCORDING TO INDIAN RIVER PARK SUBDIVISION OF BERNARDO SEGUI GRANT AS RECORDED IN PLAT BOOK 2, PAGE 33B OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCE AT THE NORTHEAST CORNER OF LOT 1, TRACT 5, GRANT SECTION 3, INDIAN RIVER PARK AS RECORDED IN PLAT BOOK 2, PAGE 75, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, ON AN ASSUMED BEARING S. 79°01'04" W. A DISTANCE OF 25.14'; THENCE S. 17°00'00" E., A DISTANCE OF 25.14'; THENCE CONTINUE S. 17°00'00" E., A DISTANCE OF 399.55'; THENCE S. 79°01'04" W. A DISTANCE OF 264.88'; THENCE S. 17°00'00" E. A DISTANCE OF 870.00'; THENCE S. 79°01'04" W., A DISTANCE OF 555.66'; THENCE N. 17°00'00" W., A DISTANCE OF 79.92'; THENCE S. 79°01'04" W., A DISTANCE OF 25.14; THENCE N. 17°00'00" W., A DISTANCE OF 400.00'; THENCE N. 79°01'04" E., A DISTANCE OF 25.10; THENCE N. 17°00'00" W., A DISTANCE OF 229.69'; THENCE N. 79°01'04" E., A DISTANCE OF 264.86'; THENCE N. 79°01'04" E., A DISTANCE OF 119.86' TO THE POINT OF BEGINNING; THENCE N. 79°01'04" E., A DISTANCE OF 25.14' THENCE N. 17°00'00" W., A DISTANCE OF 80.00'; THENCE S. 79°01'04" W., A DISTANCE OF 25.14'; THENCE S. 17°00'00" E., A DISTANCE OF 80.00' TO THE POINT OF BEGINNING.

**Appendix C:
FEMA Map**



Legend

-  Sanctuary Boundary
-  USAF Easement



0 1,000 2,000 4,000 Feet

Map updated on 09/05/2012 for
Scottsmoor Flatwoods Sanctuary Management Plan.

Disclaimer: Calculated acreages indicated on the map
are based solely on secondary mapping sources. No
warranties or representations of accuracy are expressed
or implied.

Source: FEMA Flood Map
Community Panel Number 25 & 100. April 1989

**Appendix D:
Fire Management Plan**

**SCOTTSMOOR FLATWOODS SANCTUARY
FIRE MANAGEMENT PLAN**

Introduction

Historically, fires have played a vital role in shaping and maintaining Florida's natural communities. The combination of past fuel conditions and specific fire events (wildfires, prescribed fires) shapes both the short term (seed germination, sprouting, mortality and species shifts) and long term (succession, aging, ecosystem composition) effects upon the landscape. Human culture and land use often influences fire/ecosystem dynamics and the nature and continuity of the fuel environment within the landscape (Pyne 1982, Guyette and Dey, 2000).

Sanctuary Fire Management Goals

- Restore, maintain and preserve fire-adapted communities with the reintroduction of fire
- Improve wildlife habitat
- Manage Threatened and Endangered species
- Reduce fire hazards by managing fuels and fire
- Control exotic vegetation

Smoke Management Issues

Transport winds, dispersal index and surface winds are of primary concern when trying to optimize the lofting and dispersal of smoke. To mitigate smoke impacts, burning should be conducted when mixing heights are in excess of 1,600 feet and transport winds greater than 9 mph (Southern Forest Laboratory 1976, Crow and Shilling 1983). Areas in close proximity of SFS that might be influenced by smoke include: Interstate 95, State Road 5A, US 1 and residential areas to the east and south.

Cooperation with Other Agencies

Personnel from Brevard County Fire/Rescue and Florida Forest Service may be utilized during the planning and implementation of prescribed fire. Other agencies that may be involved include the Florida Fish and Wildlife Conservation Commission, St. Johns River Water Management District, Florida Park Service and the Fish and Wildlife Service.

Desired fire return interval

Depression Marsh:	2-5 years.
Mesic Flatwoods:	2-5 years.
Oak-Saw Palmetto Scrub	2-5 years
Scrubby Flatwoods:	2-5 years.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Upland Mixed Forest:	10-20 years.
Floodplain Swamp:	50-100 years.
Cypress Swamp:	50-100 years.

Desired structural conditions of habitat

Depression Marsh:	Treeless, 75-100% of vegetation is herbaceous.
Mesic Flatwoods:	Open canopy of pines with a dense low understory of shrubs and grasses (FNAI 2010). Mesic flatwoods located within 1000 feet of scrubby flatwoods should have 2 pine trees per acre or less (Kent and Kindell 2009).
Oak-Saw Palmetto Scrub	70% of scrub oaks are 1.7 meters in height, one pine tree or less per acre and 10-50% bare sand or sparse herbaceous vegetation (Kent and Kindell 2009).
Scrubby Flatwoods:	70% of scrub oaks are 1.7 meters in height, one pine tree or less per acre and 10-50% bare sand or sparse herbaceous vegetation (Kent and Kindell 2009).
Upland Mixed Forest:	Open to partially closed canopy with widely spaced understory and dense groundcover. (FNAI 2010).
Floodplain Swamp:	Closed-canopy of hydrophytic trees with little to no understory (FNAI 2010).
Cypress Swamp:	Closed-canopy of Cypress with a sparse to moderate understory (FNAI 2010).

Burn Unit Descriptions

Figure A shows the location of each burn unit at SFS.

Unit 1: 82 acres

Habitat types

Depression Marsh, floodplain swamp, and mesic flatwoods.

Habitat Condition

Maintenance Stage /Low Fuel Load

Required preparations (firelines, timbering, vegetation reduction)

Widen existing firelines to minimum 25 feet.

Unit 2: 86 acres

Habitat types

Depression marsh, mesic and scrubby flatwoods.

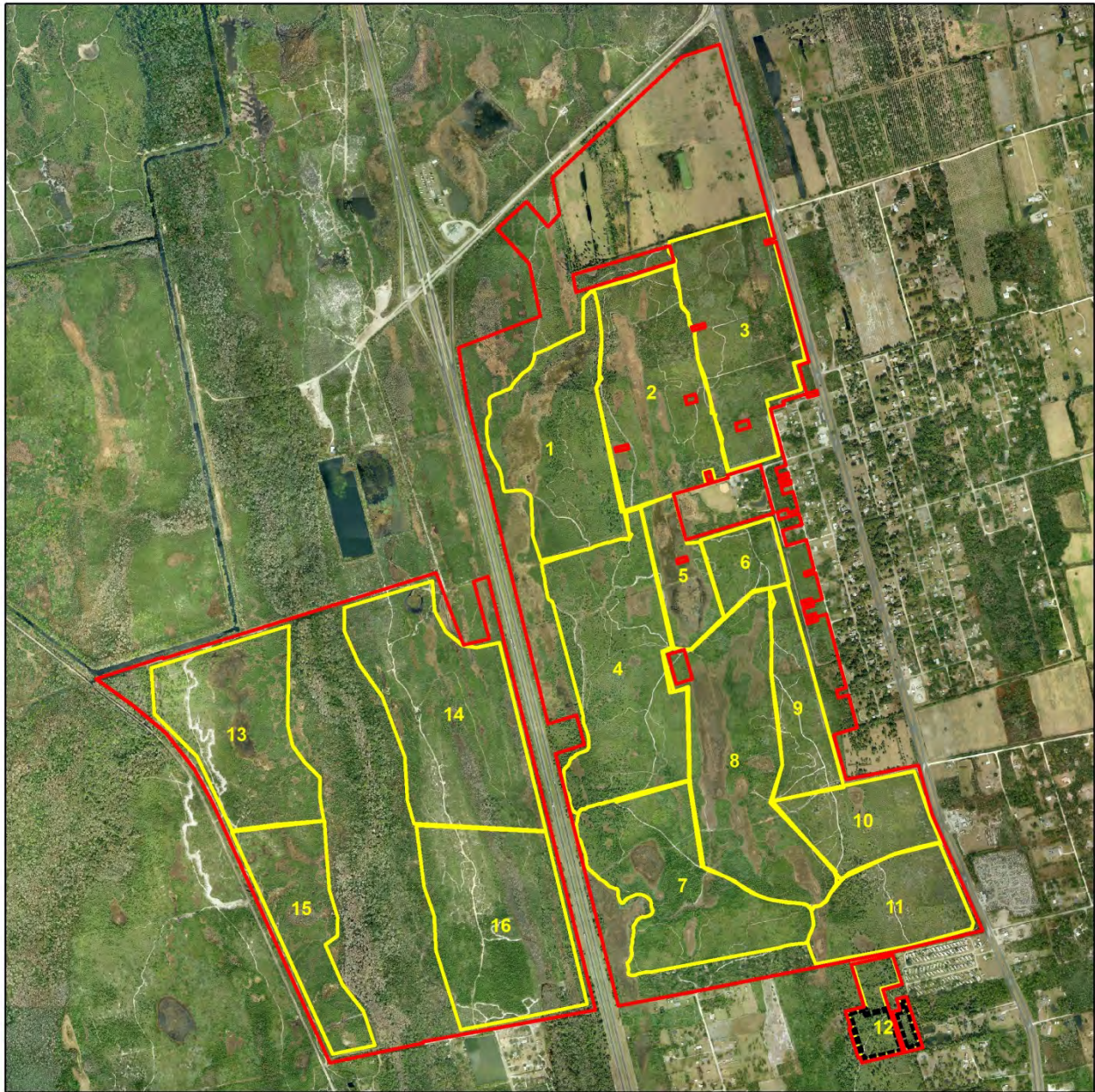
Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory. Widen existing firelines to minimum 25 feet.

Scottsmoor Flatwoods Sanctuary Draft Management Plan



Legend

-  Sanctuary Boundary
-  USAF Easement
-  Fire Units



0 1,000 2,000 4,000 Feet

Map updated on 09/05/2012 for
Scottsmoor Flatwoods Sanctuary Management Plan.

Disclaimer: Calculated acreages indicated on the map
are based solely on secondary mapping sources. No
warranties or representations of accuracy are expressed
or implied.

Source: Florida Aerial Photography Archive Collection

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Unit 3: 82 acres

Habitat types

Depression marsh, oak-saw palmetto scrub, scrubby flatwoods, and upland mixed forest.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Reduce understory of mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods if necessary. Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory. Widen existing firelines to minimum 25 feet.

Unit 4: 106 acres

Habitat types

Depression marsh, mesic and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory. Widen existing firelines to minimum 25 feet.

Unit 5: 26 acres

Habitat types

Depression marsh and mesic flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory. Widen existing firelines to minimum 25 feet.

Unit 6: 20 acres

Habitat types

Mesic and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 7: 87 acres

Habitat types

Depression marsh, mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Reduce understory of mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods if necessary. Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

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Unit 8: 104 acres

Habitat types

Depression marsh, mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 9: 35 acres

Habitat types

Depression marsh, mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 10: 40 acres

Habitat types

Mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 11: 49 acres

Habitat types

Depression marsh, mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 12: 17 acres

Habitat types

Depression marsh and scrubby flatwoods.

Habitat Condition

Overgrown/High Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Reduce understory of scrubby flatwoods if necessary. Install firelines to minimum 25 feet. Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 13: 82 acres

Habitat types

Depression marsh, mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

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Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Reduce understory of mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods if necessary. Install firelines to minimum 25 feet. Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 14: 112 acres

Habitat types

Depression marsh, floodplain swamp, mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Reduce understory of mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods if necessary. Install firelines to minimum 25 feet. Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 15: 52 acres

Habitat types

Depression marsh, mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Reduce understory of mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods if necessary. Install firelines to minimum 25 feet. Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Unit 16: 98 acres

Habitat types

Depression marsh, floodplain swamp, mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods.

Habitat Condition

Maintenance Stage/Low Fuel Load

Required preparations (fire lines, timbering, vegetation reduction)

Reduce understory of mesic flatwoods, oak-saw palmetto scrub and scrubby flatwoods if necessary. Install firelines to minimum 25 feet. Thin to 2 pine trees per acre within 1000 ft of the edge of potential Scrub-Jay territory.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Literature Cited

- Crow, A.B., and C. L. Shilling. 1983. Prescribed burning in Louisiana pinelands. State Univ. Coop. Ext. Serv. Pub. 1618
- Guyette, R.P. and D.C. Dey. 2000. Humans, topography, and wildland fire: The ingredients for long-term patterns in ecosystems. In D.A. Yaussy (ed.). Proceedings: Workshop on Fire, People, and the Central Hardwoods Landscape, 28-35. General Technical Report NE-274. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northeastern Research Station.
- Florida Natural Areas Inventory (FNAI). 2010. Guide to the natural communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, FL.
- Kent, A. and C. Kindell. 2009. Scrub management guidelines for peninsular Florida: using the scrub-jay as an umbrella species. Florida Fish and Wildlife Conservation Commission, Division of Habitat and Species Conservation, Tallahassee, FL
- Pyne, S.J. 1982. Fire in America: a cultural history of wildland and rural fire. Princeton, NJ: Princeton University Press. 654 pp.
- Southern Forests Fire Laboratory. 1976. Southern forestry smoke management guide book. USDA General Technical Report SE-10

**Appendix E
Timber Assessment**

**BREVARD COUNTY ENVIRONMENTALLY
ENDANGERED LANDS PROGRAM PROPERTIES
TIMBER MANAGEMENT ASSESSMENT**

Prepared by John T. Marshall
Region 5, Other Public Lands Forester
Florida Division of Forestry
Updated June 2009

Purpose

This document is intended to fulfill the timber assessment requirements for public lands in the state of Florida as required in section 253.036, Florida Statutes. It is being written for portions of the Brevard County Environmentally Endangered Lands (EEL) Program properties in Brevard County, Florida. The goal of this assessment is to evaluate the potential and feasibility of utilizing silvicultural techniques to help managers with their timber resources being managed for conservation and revenue generating purposes on the Brevard County EEL Program's property.

Forest Resource Background and History

The Brevard County Environmentally Endangered Lands Program was established in 1990 after citizens voted to increase their taxes to help purchase and maintain environmentally sensitive lands within the county. The initial length of this taxing period is for 20 years. Matching funds have been provided by the State of Florida through the Preservation 2000 and Florida Forever Acts for these types of purchases as well. The Brevard EEL Program also partners with other conservation and preservation organizations such as the St. Johns River Water Management District and the North American Wetlands Conservation Act to help with the purchase and management of sensitive lands.

Approximately 20,195 acres of environmentally sensitive lands across the county have been purchased at this time and are being managed under the EEL Program. This assessment will only cover a portion of these lands in the inland portion of the county. The properties included are the Helen and Allan Cruickshank Sanctuary, Malabar Scrub, Jordan Scrub, Micco Scrub, Grant Flatwoods Sanctuaries, Turkey Creek Sanctuary, Pine Island Conservation Area, Enchanted Forest Sanctuary, Dicerandra Scrub Sanctuary, North Buck Lake Scrub Sanctuary, Indian Mound Station Sanctuary, South Lake Conservation Area, Tico Scrub Sanctuary, Fox Lake Sanctuary and the Scottsmoor Property.

The Valkaria Scrub Sanctuary is also included and currently comprises approximately 7394 acres. This area was subdivided and sold as residential type lots. The EEL Program is in the acquisition phase on this property and due to the numerous landowners, the property is not all contiguous at this time. Present and future goals include purchasing as many of the lots as possible to secure this property into one manageable tract. It is difficult to discern the boundaries on the ground since no physical lot boundaries are evident. Only with the use of GIS is it possible to overlay

Scottsmoor Flatwoods Sanctuary Draft Management Plan

boundary lines with aerial photography and distinguish community types and property boundaries. The management options offered in this assessment may not be feasible at this time on all the property of the sanctuary. When more acquisitions are made and larger, more manageable blocks are created and defined, these options should prove valuable to the EEL Program resource managers.

Development in this part of the state is steadily increasing. These properties were purchased to protect and preserve environmentally sensitive lands and the plants and animals associated with them. They also provide educational opportunities and recreation.

Past land uses of much of the property in Brevard County has included naval stores operations and cattle grazing. The EEL Program properties have probably included both at some time in the past. Prescribed burning was an important part of both. Forage production and brush control was dependent on frequent fires. Historically, fire has always been part of the Florida ecosystem and many communities are dependant on fire to maintain their diversity. Lightning caused, low intensity fires burned frequently. Small shrubs and many hardwood species were kept from overtaking the pine forest because of frequent fires. Burning techniques have been revised over the years and more growing season burns are attempted as weather permits. If heavy fuel loads are allowed to accumulate, winter or cool season fuel reduction burns should be done first to minimize timber mortality before growing season burns are attempted again.

Management Goals and Objectives

The Brevard County EEL Program lands are acquired in an attempt to help preserve and restore diminishing natural communities. Their mission statement and primary management objective is to protect and preserve the biological diversity on these lands. These tracts are called sanctuaries and provide for conservation of natural resources, education, and recreation.

Ecological Trends

Human disturbances such as drainage, urbanization, and land use changes such as mining and crop production have occurred throughout the state causing the degradation or loss of many natural communities. Frequent fire that helped create and maintain many natural communities in Florida has been altered or removed. This has allowed an increase of both endemic and non-endemic plants to these once fire dependant communities. Timber management can be useful aid in the restoration of these sites by eliminating the overcrowding of naturally occurring trees and removing the species that are not typically found in these community types. By removing this additional fuel load, prescribed fire can be reintroduced safely to mimic the natural fire cycles that once existed. Timber management can also help develop multi-aged structures in stands that help maintain dynamic ecosystems. Opening the overstory will also increase the amount of sunlight reaching the forest floor, aiding in natural groundcover recovery and maintenance.

Timber Resources and Management Options

The majority of the timber resources on the EEL Program property that would benefit from silvicultural treatments exist in the pine flatwoods. Mesic, wet, and scrubby flatwoods all fall into this general category. Slash and longleaf pine are the dominant overstory species that currently exist with an understory of palmetto, gallberry, wiregrass, scrub oaks and other understory grasses and woody plants.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

General Timber Management Guidelines

Basal Area (BA) is a common measurement used to identify stand density. The basal area is measured on a tree four and one half feet above the ground, identified as diameter at breast height or DBH, and is expressed in square feet (ft.²). The BA is the total measure of the cross sectional area in square feet of the stems of trees occupying space on one acre of land. Fewer large diameter trees are needed to equal the same BA as many small diameter trees. For example, 509 evenly distributed six inch diameter trees over one acre has a BA of 100 ft.². Only 127 twelve inch diameter trees, evenly spaced on one acre, are needed to create the same 100 ft.² of BA.

Basal area can also be correlated to crown coverage. Basal areas around 50 square feet per acre of mature, healthy trees can help prescribed burning efforts by increasing the fuel dispersion and loads with needle cast. This needle cast should allow prescribed fires to carry across areas while still allowing adequate sunlight to reach the forest floor to maintain native grasses.

Current Timber Resources

The Brevard County EEL Program Lands encompass many thousands of acres. Identifying and defining individual stands and treatments for each stand is not the goal of this assessment. Detailed stand descriptions would be necessary to help plan for long term timber management on these sites. While timber management is not the primary goal for these properties, many of the silvicultural recommendations can be implemented along with preservation activities to maintain or restore these areas to their once natural condition.

The following are general descriptions and management recommendations. The diversity of the EEL Programs land and the management objectives for each will be the ultimate guiding principal. Areas with populations of gopher tortoises can sustain higher BA's than those being managed for scrub jays but less than some of the wetter flatwoods sites.

Natural Pine:

All of these areas have been harvested or have burned hot enough to reduce the standing timber to an unmerchantable volume. They all appear to have supported stands of large timber at one time, but the lack of any forestry type management in the past has converted these forest to fire-climax communities composed mainly of saw-palmetto that are fire hazards. The one exception is the North Buck Lake Scrub Sanctuary that has a fair stand of young sand pine. Saw-palmetto responds to fire by resprouting immediately and can return to preburn levels in as little as 1 year. This makes it very hard to regenerate a stand of trees because the seedlings have a hard time getting through the saw palmetto and if they do they stand a good chance burning up because of the volume of fuel produced by the saw-palmetto. If a forest community is desired, burning alone will not restore these communities to their original forested state. Saw-palmetto flourishes in full sun light but is also somewhat tolerant of shade. A complete overstory of trees creates shade and slows the growth. Shade with prescribe fire seems to keep it in check but some mechanical removal will be required to get the trees established.

Planted Pine:

There are 205 acres of planted pine in the Micco Scrub Sanctuary. It appears to be north Florida slash pine planted in an area that should have been planted in south Florida slash or longleaf. It was an old field, pasture, or had some heavy site preparation before it was planted as there is very little saw palmetto in the understory. The rows of trees were planted with about 8 feet between rows which is very close at today's standards. When the basal area reaches 100 this area should

Scottsmoor Flatwoods Sanctuary Draft Management Plan

be thinned. This could be done by removing every other row, every third row, or every third row and thinning in between, depending on the desired remaining stand.

In under stocked areas, longleaf pine can be planted if sites are suitable. This species is more adapted to fire and is longer lived than the other southern pines. A “rule of thumb” is that if palmetto is dominant, longleaf can be planted. If gallberry dominates, then it is probably too wet for longleaf and slash pine should be planted.

Access

Adequate access is a necessity for land management activities. Law enforcement patrol, prescribed burning activities and fire suppression are but a few of the activities that benefit from improved road access. Most of the EEL Program’s land is adjacent to a paved road of some sort. Internal access to some of the properties is limited by weather. Low areas become very wet and high areas become excessively dry depending on the season. Parts of the road system would need improvements to facilitate movement of heavy equipment for restoration or maintenance purposes. Widening current roads, installing culverts or low water crossings, or capping soft roads with shell, rock or clay are some of the possibilities for needed upgrades.

Economics

It is difficult to predict with any certainty the amount of revenue that can be derived through timber harvests on the Brevard County Environmentally Endangered Lands. Brevard County is approximately 100 miles to the nearest major wood processing facilities in Palatka, Florida. Market conditions, harvest prescriptions, product mix, logging conditions and distance to manufacturing facilities are factors in stumpage prices. Even though economics are hard to predict, they should be analyzed before making any management decisions.

Summary

There are approximately 10,000 acres in the EEL Program with current or future potential for timber management. Exclusive timber management would not meet the objectives for which this property was purchased, however, silviculture is a valuable tool to help restore and maintain native ecosystems, increase diversity and improve wildlife habitat. It is possible to manage nearly all of the sandhill, mesic flatwood, scrubby flatwood, and ruderal areas in order to retain their natural appearance and produce revenue from timber harvests. Currently a market does exist for timber products in the Brevard County area.

Road access within would need to be improved in some areas to allow for silvicultural activities. Public roads and highways to the park need to be monitored for weight restrictions on bridges.

**Appendix F:
Surface Water Quality Classification**



**Florida Department of
Environmental Protection**

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

March 30, 2009

Michael Wielenga
North Region Assistant Land Manager
Brevard County Environmentally Endangered Lands Program
Parks & Recreation Department
444 Columbia Blvd.
Titusville, FL 32780

RE: Land Use Plan for Scottsmoor Property

Dear Mr. Wielenga:

Thank you for your inquiry regarding the surface water quality classifications on and near Scottsmoor Property in Brevard County. There are no Outstanding Florida Waters (OFW) located on or immediately adjacent to the site (section 62-302.700, Florida Administrative Code (FAC)). Any surface waters on or immediately adjacent to these parcels are classified as Class III waters (subparagraph 62-302.400(12)(b)5., FAC), which is the statewide default classification.

If you have any questions or need additional information, please feel free to contact me at the letterhead address (mail station 6511), by phone at 850/245-8429, or via E-mail at Eric.Shaw@dep.state.fl.us.

Sincerely,

A handwritten signature in black ink that reads "Eric R. Shaw".

Eric R. Shaw
Environmental Manager
Standards and Assessments Section

Scottsmoor Flatwoods Sanctuary Draft Management Plan

**Appendix G
Plant Surveys**

List compiled by Margaret Hames (1991), Paul A. Schmalzer (2006, 2007) and EEL Program staff and Florida Native Plant Society (FNPS) volunteers in 2010. Additional species from FNPS field trip October 23, 2010.

CLASS	FAMILY	GENUS	SPECIES	VARIETY
a	Sapindaceae	Acer	rubrum	
a	Orobanchaceae	Agalinis	sp.	
a	Nartheciaceae	Aletris	lutea	
a	Asteraceae	Ambrosia	artemisiifolia	
a	Vitaceae	Ampelopsis	arborea	
a	Poaceae	Andropogon	spp.	
a	Araceae	Arisaema	triphillum	
a	Poaceae	Aristida	spiciformis	
a	Poaceae	Aristida	stricta	var. beyrichiana
a	Apocynaceae	Asclepias	lanceolata	
a	Apocynaceae	Asclepias	pedicellata	
a	Apocynaceae	Asclepias	tomentosa	
a	Annonaceae	Asimina	obovata	
a	Asteraceae	Baccharis	halimifolia	
a	Veronicaceae	Bacopa	caroliniana	
a	Ericaceae	Bejaria	racemosa	
a	Rhamnaceae	Berchemia	scandens	
a	Asteraceae	Bidens	alba	var. radiata
p	Blechnaceae	Blechnum	serrulatum	
a	Urticaceae	Boehmeria	cylindrica	
a	Orobanchaceae	Buchnera	americana	
a	Verbenaceae	Callicarpa	americana	
a	Commelinaceae	Callisia	ornata	
a	Cyperaceae	Carex	gigantea	
a	Cyperaceae	Carex	verrucosa	
a	Asteraceae	Carphephorus	corymbosus	
a	Asteraceae	Carphephorus	odoratissimus	
a	Juglandaceae	Carya	floridana	
a	Poaceae	Cenchrus	spinifex	
a	Fabaceae	Centrosema	virginianum	
a	Rubiaceae	Cephalanthus	occidentalis	
a	Fabaceae	Chamaecrista	fasciculata	
a	Fabaceae	Chamaecrista	nictitans	
a	Asteraceae	Cirsium	horridulum	

Scottsmoor Flatwoods Sanctuary Draft Management Plan

a	Fabaceae	Clitoria	mariana	
a	Commelinaceae	Commelina	erecta	
a	Cornaceae	Cornus	foemina	
a	Fabaceae	Crotolaria	rotundifolia	
a	Euphorbiaceae	Croton	glandulosus	
a	Convolvulaceae	Cuscuta	gronovii	
a	Cyperaceae	Cyperus	haspan	
a	Cyperaceae	Cyperus	retrosus	
a	Poaceae	Dichanthelium	spp.	
a	Rubiaceae	Diodia	teres	
a	Ebenaceae	Diospyros	virginiana	
a	Droseraceae	Drosera	capillaris	
a	Asteraceae	Elephantopus	elatus	
a	Asteraceae	Emilia	fosbergii	
a	Asteraceae	Erechtites	hieracifolia	
a	Asteraceae	Erigeron	quercifolius	
a	Asteraceae	Erigeron	vernus	
a	Eriocaulaceae	Eriocaulon	decangulare	
a	Apiaceae	Eryngium	yuccifolium	
a	Asteraceae	Eupatorium	capillifolium	
a	Asteraceae	Eupatorium	mikanioides	
a	Asteraceae	Eupatorium	mohrii	
a	Asteraceae	Eupatorium	rotundifolium	
a	Asteraceae	Euthamia	caroliniana	
a	Fabaceae	Galactia	elliottii	
a	Onagraceae	Gaura	angustifolia	
a	Ericaceae	Gaylussacia	dumosa	
a	Veronicaceae	Gratiola	hispida	
a	Orchidaceae	Habenaria	nivea	
a	Cistaceae	Helianthemum	nashii	
a	Asteraceae	Heterotheca	subaxillaris	
a	Asteraceae	Hieracium	megacephalon	
a	Araliaceae	Hydrocotyle	umbellata	
a	Araliaceae	Hydrocotyle	verticillata	
a	Clusiaceae	Hypericum	brachyphyllum	
a	Clusiaceae	Hypericum	cistifolium	
a	Clusiaceae	Hypericum	hypericoides	
a	Clusiaceae	Hypericum	mutilum	
a	Clusiaceae	Hypericum	reductum	
a	Clusiaceae	Hypericum	tetrapetalum	
a	Hypoxidaceae	Hypoxis	juncea	

Scottsmoor Flatwoods Sanctuary Draft Management Plan

a	Aquifoliaceae	Ilex	cassine	
a	Aquifoliaceae	Ilex	glabra	
a	Convolvulaceae	Ipomoea	cordatotriloba	
a	Convolvulaceae	Ipomoea	sagittata	
a	Iridaceae	Iris	sp.	
a	Iteaceae	Itea	virginica	
a	Juncaceae	Juncus	effusus	
g	Cupressaceae	Juniperus	virginiana	
a	Haemodoraceae	Lachnanthes	caroliniana	
a	Asteraceae	Lactuca	graminifolia	
a	Verbenaceae	Lantana	camara	
a	Cistaceae	Lechea	torreyi	
a	Asteraceae	Liatris	sp.	
a	Chrysobalanaceae	Licania	michauxii	
a	Liliaceae	Lilium	catesbaei	
a	Veronicaceae	Linaria	canadensis	
a	Altingiaceae	Liquidambar	styraciflua	
a	Campanulaceae	Lobelia	sp.	
a	Onagraceae	Ludwigia	peruviana	
a	Onagraceae	Ludwigia	sp.	
a	Fabaceae	Lupinus	diffusus	
a	Asteraceae	Lygodesmia	aphylla	
a	Ericaceae	Lyonia	ferruginea	
a	Ericaceae	Lyonia	fruticosa	
a	Ericaceae	Lyonia	lucida	
a	Magnoliaceae	Magnolia	grandiflora	
a	Magnoliaceae	Magnolia	virginiana	
a	Poaceae	Melinis	repens	
a	Cucurbitaceae	Melothria	pendula	
a	Asteraceae	Mikania	sp.	
a	Fabaceae	Mimosa	quadri-valis	var. floridana
a	Loganiaceae	Mitreola	petiolata	
a	Loganiaceae	Mitreola	sessilifolia	
a	Myricaceae	Myrica	cerifera	
a	Nymphaeaceae	Nymphaea	odorata	
a	Menyanthaceae	Nymphoides	aquatica	
a	Asteraceae	Oclemena	reticulata	
a	Cactaceae	Opuntia	humifusa	
a	Oleaceae	Osmanthus	americanus	
p	Osmundaceae	Osmunda	cinnamomea	
p	Osmundaceae	Osmunda	regalis	

Scottsmeer Flatwoods Sanctuary Draft Management Plan

a	Asteraceae	Palafoxia	feayi	
a	Asteraceae	Palafoxia	integrifolia	
a	Poaceae	Panicum	hemitomon	
a	Poaceae	Panicum	repens	
a	Caryophyllaceae	Paronchia	americana	
a	Vitaceae	Parthenocissus	quinquefolia	
a	Poaceae	Paspalum	notatum	var. notatum
a	Poaceae	Paspalum	notatum	var. saurae
a	Poaceae	Paspalum	setaceum	
a	Poaceae	Paspalum	urvillei	
a	Passifloraceae	Passiflora	incarnata	
a	Lauraceae	Persea	borbonia	
a	Lauraceae	Persea	palustris	
p	Polypodiaceae	Phlebodium	aureum	
a	Asteraceae	Phoebanthus	grandiflorus	
a	Verbenaceae	Phylla	nodiflora	
a	Euphorbiaceae	Phyllanthus	urinaria	
a	Solanaceae	Physalis	walteri	
a	Lamiaceae	Physostegia	purpurea	
a	Phytolaccaceae	Phytolacca	americana	
a	Lamiaceae	Piloblephis	rigida	
a	Lentibulariaceae	Pinguicula	lutea	
a	Lentibulariaceae	Pinguicula	pumila	
g	Pinaceae	Pinus	clausa	
g	Pinaceae	Pinus	elliottii	var. densa
g	Pinaceae	Pinus	palustris	
g	Pinaceae	Pinus	serotina	
a	Turneraceae	Piriqueta	cistoides	subsp. caroliniana
a	Asteraceae	Pityopsis	graminifolia	
p	Polypodiaceae	Pleopeltis	polypodioides	
a	Asteraceae	Pluchea	baccharis	
a	Euphorbiaceae	Poinsettia	cyatophora	
a	Polygalaceae	Polygala	balduinii	
a	Polygalaceae	Polygala	cruciata	
a	Polygalaceae	Polygala	cymosa	
a	Polygalaceae	Polygala	incarnata	
a	Polygalaceae	Polygala	lutea	
a	Polygalaceae	Polygala	nana	
a	Polygalaceae	Polygala	rugelii	
a	Polygalaceae	Polygala	setaceae	
a	Polygalaceae	Polygala	violaceae	

Scottsmoor Flatwoods Sanctuary Draft Management Plan

a	Polygonaceae	Polygonum	punctatum	
a	Buddlejaceae	Polypremum	procumbens	
a	Pontederiaceae	Pontederia	cordata	
a	Portulacaceae	Portulaca	pilosa	
a	Haloragaceae	Proserpinaca	pectinata	
p	Dennstaedtiaceae	Pteridium	aquilinum	
a	Asteraceae	Pterocaulon	pycnostachyum	
a	Fagaceae	Quercus	chapmanii	
a	Fagaceae	Quercus	geminata	
a	Fagaceae	Quercus	laurifolia	
a	Fagaceae	Quercus	minima	
a	Fagaceae	Quercus	myrtifolia	
a	Fagaceae	Quercus	nigra	
a	Fagaceae	Quercus	virginiana	
a	Melastomataceae	Rhexia	alifanus	
a	Melastomataceae	Rhexia	cubensis	
a	Anacardiaceae	Rhus	copallinum	
a	Cyperaceae	Rhynchospora	colorata	
a	Cyperaceae	Rhynchospora	fascicularis	
a	Cyperaceae	Rhynchospora	inundata	
a	Cyperaceae	Rhynchospora	megalocarpa	
a	Rubiaceae	Richardia	brasiliensis	
a	Rosaceae	Rubus	sp.	
a	Arecaceae	Sabal	palmetto	
a	Gentianaceae	Sabatia	brevifolia	
a	Gentianaceae	Sabatia	grandiflora	
a	Alismataceae	Sagittaria	graminea	var. chapmanii
a	Alismataceae	Sagittaria	lancifolia	
a	Salicaceae	Salix	caroliniana	
a	Adoxaceae	Sambucus	nigra	subsp. canadensis
a	Anacardiaceae	Schinus	terebinthifolia	
a	Melanthiaceae	Schoenocaulon	dubium	
a	Cyperaceae	Scleria	georgiana	
a	Cyperaceae	Scleria	triglomerata	
a	Veronicaceae	Scoparia	dulcis	
a	Arecaceae	Serenoa	repens	
a	Fabaceae	Sesbania	punicea	
a	Fabaceae	Sesbania	vesicaria	
a	Poaceae	Setaria	corrugata	
a	Malvaceae	Sida	rhombifolia	
a	Iridaceae	Sisyrinchium	angustifolium	

Scottsmeer Flatwoods Sanctuary Draft Management Plan

a	Smilacaceae	Smilax	auriculata	
a	Smilacaceae	Smilax	glauca	
a	Smilacaceae	Smilax	laurifolia	
a	Asteraceae	Solidago	fistulosa	
a	Asteraceae	Solidago	odora	var. chapmanii
a	Asteraceae	Sonchus	oleraceus	
a	Poaceae	Spartina	bakeri	
a	Rubiaceae	Spermacoce	verticillata	
a	Asteraceae	Sphagneticola	trilobata	
a	Caryophyllaceae	Stipulicida	setacea	
a	Asteraceae	Symphyotrichum	carolinianum	
a	Eriocaulaceae	Syngonanthus	flavidulus	
g	Cupressaceae	Taxodium	ascendens	
p	Thelypteridaceae	Thelypteris	sp.	
a	Bromeliaceae	Tillandsia	fasciculata	
a	Bromeliaceae	Tillandsia	utriculata	
a	Anacardiaceae	Toxicodendron	radicans	
a	Commelinaceae	Tradescantia	ohiensis	
a	Typhaceae	Typha	latifolia	
a	Ulmaceae	Ulmus	americana	
a	Lentibulariaceae	Utricularia	juncea	
a	Lentibulariaceae	Utricularia	purpurea	
a	Lentibulariaceae	Utricularia	subulata	
a	Ericaceae	Vaccinium	myrsinites	
a	Ericaceae	Vaccinium	stamineum	
a	Verbenaceae	Verbena	scabra	
a	Asteraceae	Vernonia	gigantea	
a	Vitaceae	Vitis	rotundifolia	
p	Blechnaceae	Woodwardia	virginica	
a	Olacaceae	Ximenia	americana	
a	Xyridaceae	Xyris	caroliniana	
a	Xyridaceae	Xyris	fimbriata	
a	Agavaceae	Yucca	filamentosa	
a	Rutaceae	Zanthoxylum	clava-herculis	

Scottsmoor Flatwoods Sanctuary Draft Management Plan

**Appendix H
Bird Survey**

Family	Genus	Species	Common Name
Accipitridae	<i>Accipiter</i>	<i>cooperii</i>	Coopers Hawk
Accipitridae	<i>Accipiter</i>	<i>striatus</i>	Sharp-shinned hawk
Accipitridae	<i>Buteo</i>	<i>jamaicensis</i>	Red-tailed Hawk
Accipitridae	<i>Buteo</i>	<i>lineatus</i>	Red-Shouldered Hawk
Accipitridae	<i>Elanoides</i>	<i>forficatus</i>	Swallow-tailed Kite
Accipitridae	<i>Haliaeetus</i>	<i>leucocephalus</i>	Bald Eagle
Accipitridae	<i>Pandion</i>	<i>haliaetus</i>	Osprey
Alcedinidae	<i>Ceryle</i>	<i>alcyon</i>	Belted Kingfisher
Anatidae	<i>Aix</i>	<i>sponsa</i>	Wood Duck
Anatidae	<i>Anas</i>	<i>fulvigula</i>	Mottled Duck
Apodidae	<i>Chaetura</i>	<i>pelagica</i>	Chimney Swift
Ardeidae	<i>Ardea</i>	<i>alba</i>	Great Egret
Ardeidae	<i>Ardea</i>	<i>herodias</i>	Great Blue Heron
Ardeidae	<i>Bubulcus</i>	<i>ibis</i>	Cattle Egret
Ardeidae	<i>Egretta</i>	<i>caerulea</i>	Little Blue Heron
Ardeidae	<i>Egretta</i>	<i>rufescens</i>	Reddish Egret
Ardeidae	<i>Egretta</i>	<i>thula</i>	Snowy Egret
Ardeidae	<i>Egretta</i>	<i>tricolor</i>	Tricolored Heron
Ardeidae	<i>Nycticorax</i>	<i>nycticorax</i>	Black-crowned Night-Heron
Bombycillidae	<i>Bombycilla</i>	<i>cedrorum</i>	Cedar Waxwing
Caprimulgidae	<i>Caprimulgus</i>	<i>carolinensis</i>	Chuck-will's-widow
Caprimulgidae	<i>Chordeiles</i>	<i>minor</i>	Common Nighthawk
Cardinalidae	<i>Cardinalis</i>	<i>cardinalis</i>	Northern Cardinal
Cardinalidae	<i>Passerina</i>	<i>caerulea</i>	Blue Grosbeak
Cathartidae	<i>Cathartes</i>	<i>aura</i>	Turkey Vulture
Cathartidae	<i>Coragyps</i>	<i>atratus</i>	Black Vulture
Cathartidae	<i>Zenaida</i>	<i>macroura</i>	Mourning Dove
Ciconiidae	<i>Mycteria</i>	<i>americana</i>	Wood Stork
Columbidae	<i>Columbina</i>	<i>passerina</i>	Common Ground-Dove
Columbidae	<i>Streptopelia</i>	<i>decaocto</i>	Eurasian Collared-Dove
Columbidae	<i>Zenaida</i>	<i>asiatica</i>	White Winged-Dove
Corvidae	<i>Aphelocoma</i>	<i>coerulescens</i>	Florida Scrub-Jay
Corvidae	<i>Corvus</i>	<i>ossifragus</i>	Fish Crow
Corvidae	<i>Cyanocitta</i>	<i>cristata</i>	Blue Jay
Emberizidae	<i>Aimophila</i>	<i>aestivalis</i>	Bachman's Sparrow

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Emberizidae	<i>Pipilo</i>	<i>erythrophthalmus</i>	Eastern Towhee
Falconidae	<i>Falco</i>	<i>columbarius</i>	Merlin
Falconidae	<i>Falco</i>	<i>peregrinus</i>	Peregrine Falcon
Falconidae	<i>Falco</i>	<i>sparverius</i>	American Kestrel
Fringillidae	<i>Carpodacus</i>	<i>mexicanus</i>	House Finch
Gruidae	<i>Grus</i>	<i>canadensis</i>	Sandhill Crane
Hirundinidae	<i>Cassidix</i>	<i>mexicanus</i>	Boat-tailed Grackle
Hirundinidae	<i>Hirundo</i>	<i>rustica</i>	Barn Swallow
Hirundinidae	<i>Progne</i>	<i>subis</i>	Purple Martin
Hirundinidae	<i>Tachycineta</i>	<i>bicolor</i>	Tree Swallow
Icteridae	<i>Agelaius</i>	<i>phoeniceus</i>	Red-winged Blackbird
Icteridae	<i>Mimus</i>	<i>polyglottos</i>	Northern Mockingbird
Icteridae	<i>Molothrus</i>	<i>ater</i>	Brown-headed Cowbird
Icteridae	<i>Quiscalus</i>	<i>quiscula</i>	Common Grackle
Icteridae	<i>Sturnella</i>	<i>magna</i>	Eastern Meadowlark
Laniidae	<i>Lanius</i>	<i>ludovicianus</i>	Loggerhead Shrike
Laridae	<i>Larus</i>	<i>atricilla</i>	Laughing Gull
Laridae	<i>Larus</i>	<i>delawarensis</i>	Ring Billed Gull
Mimidae	<i>Dumetella</i>	<i>carolinensis</i>	Grey Cat Bird
Mimidae	<i>Toxostoma</i>	<i>rufum</i>	Brown thrasher
Odontophoridae	<i>Colinus</i>	<i>virginianus</i>	Northern Bobwhite
Paridae	<i>Baeolophus</i>	<i>bicolor</i>	Tufted Titmouse
Parulidae	<i>Centurus</i>	<i>carolinus</i>	Red-bellied Woodpecker
Parulidae	<i>Dendroica</i>	<i>caerulescens</i>	Black-Throated Blue Warbler
Parulidae	<i>Dendroica</i>	<i>coronata</i>	Yellow-Rumped Warbler
Parulidae	<i>Dendroica</i>	<i>discolor</i>	Prairie warbler
Parulidae	<i>Dendroica</i>	<i>dominica</i>	Yellow Throated Warbler
Parulidae	<i>Dendroica</i>	<i>palmarum</i>	Palm Warbler
Parulidae	<i>Dendroica</i>	<i>pinus</i>	Pine Warbler
Parulidae	<i>Dendroica</i>	<i>striata</i>	Blackpoll Warbler
Parulidae	<i>Geothlypis</i>	<i>trichas</i>	Common Yellowthroat
Parulidae	<i>Parula</i>	<i>americana</i>	Northern Parula Warbler
Parulidae	<i>Vermivora</i>	<i>celata</i>	Orange-Crowned Warbler
Pelecaniformes	<i>Anhinga</i>	<i>anhinga</i>	Anhinga
Pelecaniformes	<i>Pelecanus</i>	<i>erythrorhynchos</i>	American White Pelican
Phalacrocoracidae	<i>Phalacrocorax</i>	<i>auritus</i>	Double-Crested Cormorant
Picidae	<i>Colaptes</i>	<i>auratus</i>	Northern Flicker
Picidae	<i>Dryocopus</i>	<i>pileatus</i>	Pileated Woodpecker

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Picidae	<i>Picoides</i>	<i>pubescens</i>	Downy Woodpecker
Picidae	<i>Polioptila</i>	<i>caerulea</i>	Blue-gray Gnatcatcher
Picidae	<i>Sphyrapicus</i>	<i>varius</i>	Yellow-bellied Sapsucker
Rallidae	<i>Gallinula</i>	<i>chloropus</i>	Common Moorhen
Rallidae	<i>Rallus</i>	<i>longirostris</i>	Clapper Rail
Recurvirostridae	<i>Himantopus</i>	<i>mexicanus</i>	Black-necked Stilt
Regulidae	<i>Regulus</i>	<i>calendula</i>	Ruby Crowned Kinglet
Regulidae	<i>Troglodytes</i>	<i>aedon</i>	House Wren
Charadriidae	<i>Charadrius</i>	<i>vociferus</i>	Killdeer
Scolopacidae	<i>Gallinago</i>	<i>delicata</i>	Wilson's Snipe
Sittidae	<i>Sitta</i>	<i>pusilla</i>	Brown-headed Nuthatch
Strigidae	<i>Bubo</i>	<i>virginianus</i>	Great Horned Owl
Strigidae	<i>Otus</i>	<i>asio</i>	Eastern Screech Owl
Sturnidae	<i>Sturnus</i>	<i>vulgaris</i>	European Starling
Threskiornithidae	<i>Eudocimus</i>	<i>albus</i>	White Ibis
Threskiornithidae	<i>Plegadis</i>	<i>falcinellus</i>	Glossy Ibis
Troglodytidae	<i>Thryothorus</i>	<i>ludovicianus</i>	Carolina Wren
Turdidae	<i>Sayornis</i>	<i>phoebe</i>	Eastern Phoebe
Turdidae	<i>Turdus</i>	<i>migratorius</i>	American Robin
Tyrannidae	<i>Myiarchus</i>	<i>crinitus</i>	Great Crested Flycatcher
Vireonidae	<i>Vireo</i>	<i>griseus</i>	White-eyed Vireo
Vireonidae	<i>Vireo</i>	<i>olivaceus</i>	Red-eyed Vireo
Vireonidae	<i>Vireo</i>	<i>philadelphicus</i>	Philadelphia Vireo
Vireonidae	<i>Vireo</i>	<i>solitarius</i>	Blue -headed Vireo

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Appendix I
Arthropod Plan



CHARLES H. BRONSON
COMMISSIONER

Florida Department of Agriculture and Consumer Services
Division of Agricultural Environmental Services

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

Chapters 388.4111, F.S. and 5E-13.042(4)(b), F.A.C.
Telephone: (850) 922-7011

For use in documenting an Arthropod control plan for lands designated by the State of Florida or any political subdivision thereof as being environmentally sensitive and biologically highly productive therein.

Name of Designated Land: Brevard County EELS Program – Sites include the following impoundments: From C-2 North, C-2 South, C-2A, Jefferson Marsh area, Crystal Lakes area, to Honest Johns Area.

Specific sites include:

- | | |
|-----------------------------|-------------------------------------|
| 1. Ocean Ridge Sanctuary | 15. Grant Flatwoods |
| 2. Coconut Point | 16. Indian Mound |
| 3. Hog Point Cove | 17. Indian River Sanctuary |
| 4. Washburn Cove | 18. Johnson (Hall Road) |
| 5. Maritime Hammock area | 19. Jordan Scrub Sanctuary |
| 6. Barrier Island Sanctuary | 20. Kabboord |
| 7. Hardwood Hammock | 21. Kings Park |
| 8. 1000 Islands | 22. Malabar Scrub Sanctuary |
| 9. Capron Ridge area | 23. Micco Scrub Sanctuary |
| 10. Crane Creek | 24. North Buck Lake Scrub Sanctuary |
| 11. Cruickshank | 25. Pine Island Conservation Area |
| 12. Dicerandra Scrub | 26. Scottsmoor Flatwoods Sanctuary |
| 13. Enchanted Forest | 27. Southlake Conservation Area |
| 14. Fox Lake | 28. Sykes Creek |

Is Control Work Necessary: Yes No

Location: Brevard County Florida

Land Management Agency: Environmentally Endangered Lands Program
Mike Knight, Program Manager
91 East Drive
Melbourne, FL 32904

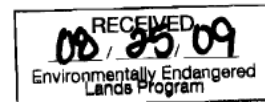
Are Arthropod Surveillance Activities Necessary? Yes No

If "Yes", please explain:

According to the Florida Administrative Code 5E-13 surveillance shall be conducted to determine the species and numbers of both pestiferous and disease bearing arthropods. Our surveillance program provides information as to species and amounts of mosquitoes which may require larviciding.

DACS-13668 07/08

- 1 -



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Which Surveillance Techniques Are Proposed?
Please Check All That Apply:

- Landing Rate Counts Light Traps Sentinel Chickens
 Citizen Complaints Larval Dips Other

If "Other", please explain:

Arthropod Species for Which Control is Proposed: *Aedes taeniorhynchus*
Aedes sollicitans
Culex nigripalpus (ground treatment only)
Culex salinarius

Proposed Larval Control:

- Number of dips per site: 3+ per location at specific site.
Proposed larval monitoring procedure: When 10% or more of the dips are positive for mosquito larvae, control action will typically be taken
Are post treatment counts being obtained: Yes No

Biological Control of Larvae:

- Might predacious fish be stocked: Yes No
Other biological controls that might be used:

Material to be Used for Larviciding Applications:

(Please Check All That Apply:)

- Bti (*Bacillus thuringiensis israeliensis*)
 Bs (*Bacillus sphaericus*)
 Methoprene
 Non-Petroleum Surface Film
 Other, please specify:

DACS-13668 07/08

- 2 -

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Please specify the following for each larvacide:

Chemical or Common name: BTI (=VectoBac)

Bs (= Vectolex)

Ground Aerial

Rate of application: 12 lb-18lb/acre = VectoBac

Method of application: liquid by hand or granular by air.

Proposed Adult Mosquito Control:

Aerial adulticiding Yes No

Ground adulticiding Yes No

Please specify the following for each adulticide: N/A

Chemical or common name: Dibrom/ Permethrin

Rate of application: 0.6 oz/acre (Dibrom), 0.5 oz/acre (Permethrin)

Method of application: Ultra low volume

Adult mosquito control will be conducted only if requested, or if populations are above background.

Proposed Modifications for Public Health Emergency Control:

BMCD may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities: Approval of this plan is intended as notification.

Records:

Are records being kept in accordance with Chapter 388, F.S.:

Yes No

Records Location: In District office Titusville.

How long are records maintained: 5+ Years

Vegetation Modification: Yes No

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?

Minor trail trimming for surveillance and for ground larviciding will be done as needed.

Some herbiciding with AquaStar, Reward or Rodeo for control of *exotic* vegetation will be carried out only as needed.

DACS-13668 07/08

- 3 -

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Proposed Land Modifications: Yes No

Is any land modification, *i.e.*, rotary ditching, proposed: Yes No

Include proposed operational schedules for water fluctuations: Impoundments managed under RIM program (Rotational Impoundment Management), controlling water levels in impoundments from June-Oct. (sometimes as early as May), depending on water level in Indian River Lagoon system. Impoundments open to the lagoon during other months of year.

List any periodic restrictions, as applicable, for example peak fish spawning times: NA

Proposed Modification of Aquatic Vegetation: Yes No

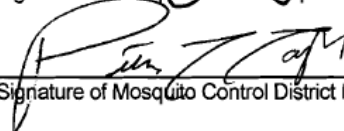
Land Manager Comments:

Arthropod Control Agency Comments:

Signature of Lands Manager or Representative Date

 8/12/09

Signature of Mosquito Control Department Director Date

 8/12/09

Signature of Mosquito Control District Director Date

Appendix: J
Florida Natural Areas Inventory



1018 Thomasville Road
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Tallahassee, FL 32303
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fax 850-681-9364
www.fnai.org

June 3, 2009

Michael Wielenga
Brevard County Environmentally Endangered Lands Program
444 Columbia Boulevard
Titusville, FL 32780

Dear Mr. Wielenga,

Thank you for your request for information from the Florida Natural Areas Inventory (FNAI). We have compiled the following information for your project area.

Project: Scottsmoor Flatwoods Sanctuary
Date Received: May 27, 2009
Location: Brevard County

Based on the information available, this site appears to be located on or very near a significant region of scrub habitat, a natural community in decline that provides important habitat for several rare species within a small area. Additional consideration should be given to avoid and/or mitigate impacts to these natural resources, and to design land uses that are compatible with these resources.

Element Occurrences

A search of our maps and database indicates that currently we have several Element Occurrences mapped within the vicinity of the study area (see enclosed map and element occurrence table). Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

The Element Occurrences data layer includes occurrences of rare species and natural communities. The map legend indicates that some element occurrences occur in the general vicinity of the label point. This may be due to lack of precision of the source data, or an element that occurs over an extended area (such as a wide ranging species or large natural community). For animals and plants, Element Occurrences generally refer to more than a casual sighting; they usually indicate a viable population of the species. Note that some element occurrences represent historically documented observations which may no longer be extant.

*Several of the species and natural communities tracked by the Inventory are considered **data sensitive**. Occurrence records for these elements contain information that we consider sensitive due to collection pressures, extreme rarity, or at the request of the source of the information. The Element Occurrence Record has been labeled "Data Sensitive." We request that you not publish or release specific locational data about these species or communities without consent from the inventory. If you have any questions concerning this please do not hesitate to call.*



Florida Resources
and Environmental
Analysis Center

Institute of Science
and Public Affairs

The Florida State University

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity

Tracking Florida's Biodiversity

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Michael Wielenga

Page 2

June 3, 2009

Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

FNAI habitat models indicate areas, which based on land cover type, offer suitable habitat for one or more rare species that is known to occur in the vicinity. Habitat models have been developed for approximately 300 of the rarest species tracked by the Inventory, including all federally listed species.

FNAI species range models indicate areas that are within the known or predicted range of a species, based on climate variables, soils, vegetation, and/or slope. Species range models have been developed for approximately 340 species, including all federally listed species.

The FNAI Biodiversity Matrix Geodatabase compiles Documented, Likely, and Potential species and natural communities for each square mile Matrix Unit statewide.

Florida Scrub-jay Survey – U.S. Fish and Wildlife Service

This survey was conducted by staff and associates of the Archbold Biological Station from 1992 to 1996. An attempt was made to record all scrub-jay (*Aphelocoma coerulescens*) groups, although most federal lands were not officially surveyed. Each map point represents one or more groups.

This data layer indicates that there are potential scrub-jay populations on or very near your site. For additional information:

Fitzpatrick, J.W., B. Pranty, and B. Stith, 1994, Florida scrub jay statewide map, 1992-1993. U. S. Fish and Wildlife Service Report, Cooperative Agreement no. 14-16-004-91-950.

Managed Areas

Portions of the site appear to be located within the Ag Ventures Property, and the Scottsmoor Partners Property both managed by Brevard County.

The Managed Areas data layer shows public and privately managed conservation lands throughout the state. Federal, state, local, and privately managed conservation lands are included.

The Inventory always recommends that professionals familiar with Florida's flora and fauna should conduct a site-specific survey to determine the current presence or absence of rare, threatened, or endangered species.

Please visit www.fnai.org/trackinglist.cfm for county or statewide element occurrence distributions and links to more element information.

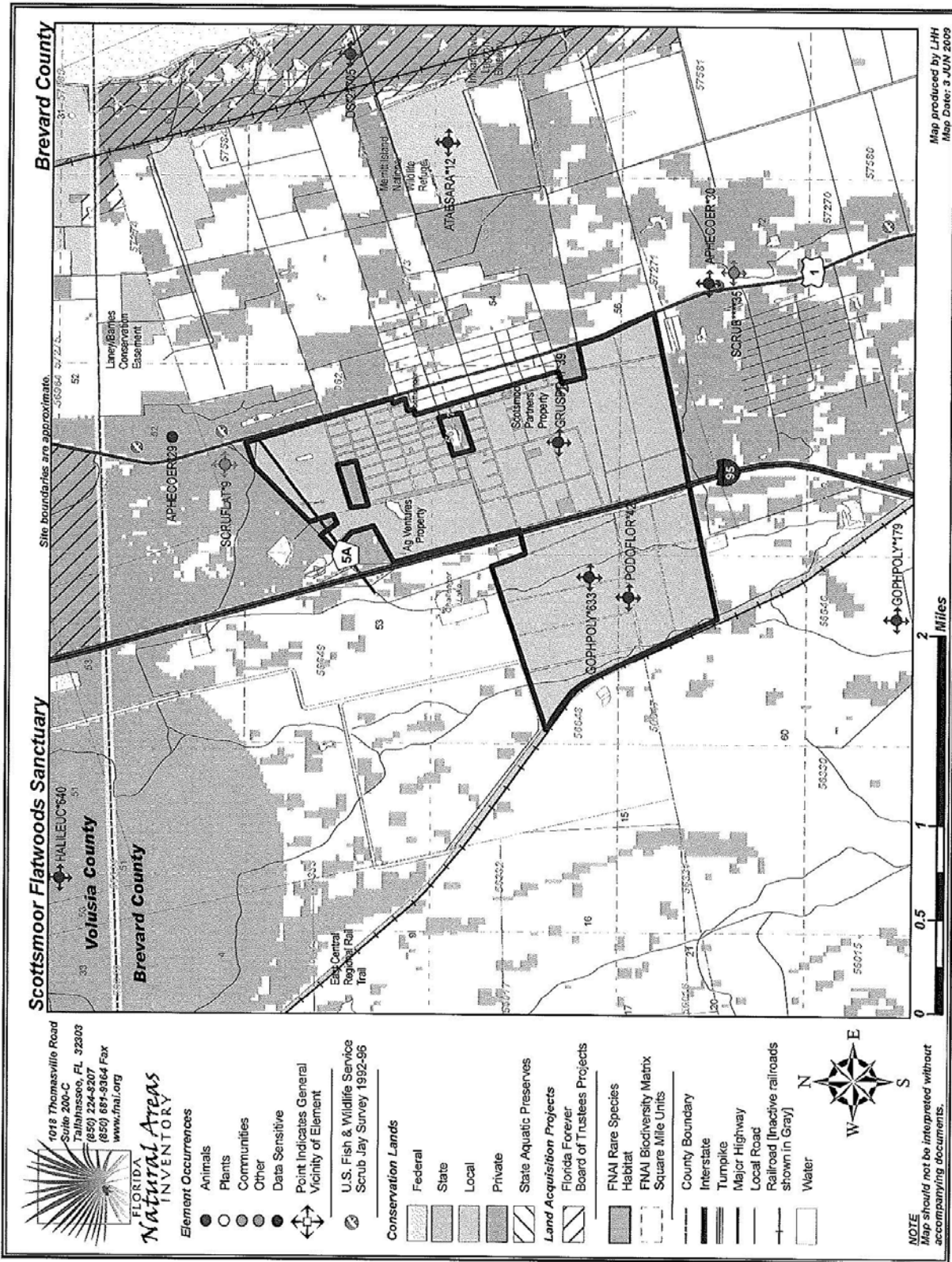
The database maintained by the Florida Natural Areas Inventory is the single most comprehensive source of information available on the locations of rare species and other significant ecological resources. However, the data are not always based on comprehensive or site-specific field surveys. Therefore, this information should not be regarded as a final statement on the biological resources of the site being considered, nor should it be substituted for on-site surveys. Inventory data are designed for the purposes of conservation planning and scientific research, and are not intended for use as the primary criteria for regulatory decisions.

Information provided by this database may not be published without prior written notification to the Florida Natural Areas Inventory, and the Inventory must be credited as an information source in these publications. FNAI data may not be resold for profit.

This report is made available at no charge due to funding from the Florida Department of Environmental Protection, Division of State Lands.

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR
 Scottsmoor Flatwoods Sanctuary



Global State Federal State Observation
 Rank Rank Status Listing Date Date
 Description

EO Comments

Map Label	Scientific Name	Common Name	Rank	Status	Listing	Date	Description	EO Comments	
GRUSPRAT*39	<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT	1990-pre	127 ACRES OF WET PRAIRIE INTERCONNECTED FOR THE MOST PART, AND TO BE PRESERVED.	REPORTED TO NEST ON SITE THOUGH NO NESTS WERE OBSERVED DURING THE 1990 SEASON.
PODOFLOR*42	<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS	1989	HIGH, SCRUBBY FLATWOODS, NORTHERN PORTION OF THE SANDY RIDGE RUNNING NORTH-SOUTH, AREA INCLUDING ADJ. WETLANDS TO BE PRESERVED. (13.8 ACRES XERIC, CA. 125 ACRES WETLAND HARDWOODS.)	HABITAT APPEARS SUITABLE IN SOUTHERN END WHERE GOPHER TORTOISES ALSO OCCUR BUT NO ANIMALS WERE TRAPPED. A LOCAL AREA WAS A COMMON DROP OFF POINT FOR ABANDONED HOUSECATS.
GOPHPOLY*633	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT	1989	HIGH SCRUBBY FLATWOODS, A NORTH-SOUTH RUNNING RIDGE OF ABOUT 13.8 ACRES, SURROUNDED BY CA. 125 ACRES OF WETLANDS, WITH THE EXCEPTION OF ONE ROAD CROSSING IT WILL ALL BE PRESERVED.	GOPHER TORTOISE POPULATIONS ON SITE ARE "LIGHT" AND MOST OCCUR IN THE AREA TO BE PRESERVED. PODOMYS FLORIDANUS ASSOC. WITH BURROWS IN MORE NORTHERN PART OF SITE.
SCRUB****35	Scrub		G2	S2	N	N	2004	OAK SCRUB	2004: Update to last obs date was based on interpretation of aerial photography (previous value was 1981-07-25) (U05FNA02FLUS). OCCURRENCE AT SITE
APHECOER*30	<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT	1981-07-25	OAK SCRUB	1981-07-25: 2 SCRUB JAYS
GOPHPOLY*179	<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT	1987-pre	IMPROVED PASTURE	1987-pre: REPORTED BY ANDY BECK (U86DIE01FLUS).
APHECOER*29	<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT	1991-07-15	SLASH PINE SCRUB [SCRUBBY FLATWOODS]	1981-08-21: 3 SCRUB JAYS (U81COX01). SNODGRASS ET AL., ESTIMATED SMALL ISOALATED POPULATION OF 0-5 FAMILY GROUPS. TWO ADULTS AND 1 JUVENILE REPORTED 1990-08-28; TWO JUVENILES REPORTED 1991-07-15 (U91SNO01).
DS*27705	Data Sensitive Element	Data Sensitive	G2	S2	N	LE	1990-08	Data Sensitive	Data Sensitive
SCRUFAT*9	Scrubby flatwoods		G3	S3	N	N	2004	SLASH PINE SCRUB [SCRUBBY FLATWOODS]	Update to last obs date was based on interpretation of aerial photography (previous value was 1981-07-15) (U05FNA02FLUS). OCCURRENCE AT SITE



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Florida Natural Areas Inventory

**ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR
 Scottsmoor Flatwoods Sanctuary**

Global State Federal State Observation

Map Label	Scientific Name	Common Name	Rank	Status	Listing	Date	Description	EO Comments
HALLLEUC*640	Haliaeetus leucocephalus	Bald Eagle	G5	S3	N	N	2003	No general description given Nest status 1999-2003: Active - 2003, 2001, 2000, 1999; Inactive - 2002; Status 1995-98: Continuously active. (U03FWC01FLUS). Previous data (note different format) NEST; 1995: PRODUCED 2 YOUNG; 1994: PRODUCED 2 YOUNG; 1993: PRODUCED 1 YOUNG; 1992: PRODUCE
ATAESARA*12	Ataenius saramani	Sand Pine Scrub Ataenius Beetle	G3G4	S3	N	N	2001-05-16	2001-05-16: No description given (N05LAM01FLUS).

GLOBAL AND STATE RANKS

Florida Natural Areas Inventory (FNAI) defines an **element** as any rare or exemplary component of the natural environment, such as a species, natural community, bird rookery, spring, sinkhole, cave, or other ecological feature. FNAI assigns two ranks to each element found in Florida: the **global rank**, which is based on an element's worldwide status, and the **state rank**, which is based on the status of the element within Florida. Element ranks are based on many factors, including estimated number of occurrences, estimated abundance (for species and populations) or area (for natural communities), estimated number of adequately protected occurrences, range, threats, and ecological fragility.

GLOBAL RANK DEFINITIONS

- G1* Critically imperiled globally 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.
- G2* Imperiled globally 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.
- G3* Either very rare and local throughout its range (21-100 occurrences or less than 10,000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
- G4* Apparently secure globally (may be rare in parts of range).
- G5* Demonstrably secure globally.
- GH?* Tentative rank (e.g., G2?)
- GHG#* Range of rank; insufficient data to assign specific global rank (e.g., G2G3)
- GH#T#* Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)
- GH#Q* Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)
- GH#T#Q* Same as above, but validity as subspecies or variety is questioned.
- GH* Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
- GNA* Ranking is not applicable because element is not a suitable target for conservation (e.g. as for hybrid species)
- GNR* Not yet ranked (temporary)
- GNR#TNR* Neither the full species nor the taxonomic subgroup has yet been ranked (temporary)
- GX* Believed to be extinct throughout range
- GXC* Extirpated from the wild but still known from captivity/cultivation
- GU* Unrankable. Due to lack of information, no rank or range can be assigned (e.g., GUT2).

STATE RANK DEFINITIONS

Definition parallels global element rank: substitute "S" for "G" in above global ranks, and "in Florida" for "globally" in above global rank definitions.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Florida Natural Areas Inventory Rank Explanations

February, 2007

FEDERAL AND STATE LEGAL STATUSES (U.S. Fish and Wildlife Service – USFWS) PROVIDED BY FNAI FOR INFORMATION ONLY.

For official definitions and lists of protected species, consult the relevant state or federal agency.

FEDERAL LEGAL STATUS

Definitions derived from U.S. Endangered Species Act of 1973, Sec. 3. Note that the federal status given by FNAI refers only to Florida populations and that federal status may differ elsewhere.

- LE** Listed as Endangered Species in the List of Endangered and Threatened Wildlife and Plants under the provisions of the Endangered Species Act. Defined as any species which is in danger of extinction throughout all or a significant portion of its range.
- LE,XN** A non essential experimental population of a species otherwise Listed as an Endangered Species in the List of Endangered and Threatened Wildlife and Plants. LE,XN for *Grus americana* (Whooping crane), Federally listed as XN (Non essential experimental population) refers to the Florida experimental population only. Federal listing elsewhere for *Grus americana* is LE.
- PE** Proposed for addition to the List of Endangered and Threatened Wildlife and Plants as Endangered Species.
- LT** Listed as Threatened Species, defined as any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- LT,PDL** Species currently listed Threatened but has been proposed for delisting.
- PT** Proposed for listing as Threatened Species.
- C** Candidate Species for addition to the list of Endangered and Threatened Wildlife and Plants, Category 1. Federal listing agencies have sufficient information on biological vulnerability and threats to support proposing to list the species as Endangered or Threatened.
- SAT** Threatened due to similarity of appearance to a threatened species.
- SC** Species of Concern, species is not currently listed but is of management concern to USFWS.
- N** Not currently listed, nor currently being considered for addition to the List of Endangered and Threatened Wildlife and Plants.

FLORIDA LEGAL STATUSES (Florida Fish and Wildlife Conservation Commission – FFWCC/ Florida Department of Agriculture and Consumer Services – FDACS)

Animals: Definitions derived from “Florida’s Endangered Species and Species of Special Concern, Official Lists” published by Florida Fish and Wildlife Conservation Commission - FFWCC, 1 August 1997, and subsequent updates.

- LE** Listed as Endangered Species by the FFWCC. Defined as a species, subspecies, or isolated population which is so rare or depleted in number or so restricted in range of habitat due to any man-made or natural factors that it is in immediate danger of extinction or extirpation from the state, or which may attain such a status within the immediate future.
- LT** Listed as Threatened Species by the FFWCC. Defined as a species, subspecies, or isolated population which is acutely vulnerable to environmental alteration, declining in number at a rapid rate, or whose range or habitat is decreasing in area at a rapid rate and as a consequence is destined or very likely to become an endangered species within the foreseeable future.
- LT*** Indicates that a species has LT status only in selected portions of its range in Florida. LT* for *Ursus americanus floridanus* (Florida black bear) indicates that LT status does not apply in Baker and Columbia counties and in the Apalachicola National Forest. LT* for *Neovison vison pop. 1* (Southern mink, South Florida population) state listed as Threatened refers to the Everglades population only (Note: species formerly listed as *Mustela vison mink pop. 1*. Also, priorly listed as *Mustela evergladensis*).
- LS** Listed as Species of Special Concern by the FFWCC, defined as a population which warrants special protection, recognition, or consideration because it has an inherent significant vulnerability to habitat modification,

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Florida Natural Areas Inventory Rank Explanations

February, 2007

environmental alteration, human disturbance, or substantial human exploitation which, in the foreseeable future, may result in its becoming a threatened species.

LS* Indicates that a species has LS status only in selected portions of its range in Florida. LS* for *Pandion haliaetus* (Osprey) state listed as LS (Species of Special Concern) in Monroe County only.

PE Proposed for listing as Endangered.

PT Proposed for listing as Threatened.

PS Proposed for listing as a Species of Special Concern.

N Not currently listed, nor currently being considered for listing.

Plants: Definitions derived from Sections 581.011 and 581.185(2), Florida Statutes, and the Preservation of Native Flora of Florida Act, 5B-40.001. FNAI does not track all state-regulated plant species; for a complete list of state-regulated plant species, call Florida Division of Plant Industry, 352-372-3505 or please visit: <http://DOACS.State.FL.US/PI/Images/Rule05b.pdf>

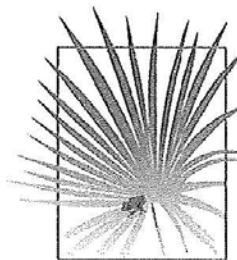
LE Listed as Endangered Plants in the Preservation of Native Flora of Florida Act. Defined as species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the Federal Endangered Species Act of 1973, as amended.

PE Proposed by the FDACS for listing as Endangered Plants.

LT Listed as Threatened Plants in the Preservation of Native Flora of Florida Act. Defined as species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered. LT* indicates that a species has LT status only in selected portions of its range in Florida.

PT Proposed by the FDACS for listing as Threatened Plants.

N Not currently listed, nor currently being considered for listing.



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Natural Areas
INVENTORY

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Tracking Florida's Biodiversity

Scottsmoor Flatwoods Sanctuary Draft Management Plan



1018 Thomasville Road
Suite 200-C
Tallahassee, FL 32303
(850) 224-8207
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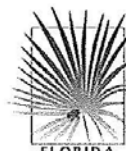
Florida Natural Areas Inventory
Biodiversity Matrix Report



Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 56647					
Likely					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
Scrub		G2	S2	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	G2	S2	N	LE
<i>Conradina grandiflora</i>	Large-flowered Rosemary	G3	S3	N	LT
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	G1	S1	LE	LE
<i>Deeringothamnus rugelii</i>	Rugel's Pawpaw	G1	S1	LE	LE
<i>Dicerandra thimicola</i>	Titusville Balm	G1Q	S1	N	LE
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Lechea divaricata</i>	Pine Pinweed	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sceloporus woodi</i>	Florida Scrub Lizard	G3	S3	N	N
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 56648					
Likely					
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
Scrub		G2	S2	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT
<i>Calamovilla curtissii</i>	Curtiss' Sandgrass	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE

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FLORIDA
Natural Areas
INVENTORY

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Biodiversity Matrix Report



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<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	G2	S2	N	LE
<i>Conradina grandiflora</i>	Large-flowered Rosemary	G3	S3	N	LT
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	G1	S1	LE	LE
<i>Deeringothamnus rugelii</i>	Rugef's Pawpaw	G1	S1	LE	LE
<i>Dicerandra thincicola</i>	Titusville Balm	G1Q	S1	N	LE
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Lechea divaricata</i>	Pine Pinweed	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE

Matrix Unit ID: 56649

Likely

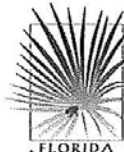
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Scrub		G2	S2	N	N

Potential

<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT
<i>Calamovilfa curtissii</i>	Curtiss' Sandgrass	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	G2	S2	N	LE
<i>Conradina grandiflora</i>	Large-flowered Rosemary	G3	S3	N	LT
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	G1	S1	LE	LE
<i>Deeringothamnus rugelii</i>	Rugef's Pawpaw	G1	S1	LE	LE
<i>Dicerandra thincicola</i>	Titusville Balm	G1Q	S1	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Lechea divaricata</i>	Pine Pinweed	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS

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<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 56960					
Likely					
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
Scrub		G2	S2	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calamovilfa curtissii</i>	Curtiss' Sandgrass	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	G2	S2	N	LE
<i>Conradina grandiflora</i>	Large-flowered Rosemary	G3	S3	N	LT
<i>Corynorhinus rafinesquii</i>	Rafinesque's Big-eared Bat	G3G4	S2	N	N
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	G1	S1	LE	LE
<i>Deeringothamnus rugelii</i>	Rugel's Pawpaw	G1	S1	LE	LE
<i>Dicerandra thimicola</i>	Titusville Balm	G1Q	S1	N	LE
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Lechea divaricata</i>	Pine Pinweed	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Sceloporus woodi</i>	Florida Scrub Lizard	G3	S3	N	N
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 56961					
Likely					
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
Scrub		G2	S2	N	N

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Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calamovilfa curtissii</i>	Curtiss' Sandgrass	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	G2	S2	N	LE
<i>Conradina grandiflora</i>	Large-flowered Rosemary	G3	S3	N	LT
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	G1	S1	LE	LE
<i>Deeringothamnus rugelii</i>	Rugel's Pawpaw	G1	S1	LE	LE
<i>Dicerandra thincicola</i>	Titusville Balm	G1Q	S1	N	LE
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Lechea divaricata</i>	Pine Pinweed	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina alopecarpha</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Warea carteri</i>	Carter's Warea	G3	S3	LE	LE
Matrix Unit ID: 56962					
Likely					
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
<i>Scrubby flatwoods</i>		G3	S3	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calamovilfa curtissii</i>	Curtiss' Sandgrass	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	G2	S2	N	LE
<i>Conradina grandiflora</i>	Large-flowered Rosemary	G3	S3	N	LT
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	G1	S1	LE	LE
<i>Deeringothamnus rugelii</i>	Rugel's Pawpaw	G1	S1	LE	LE
<i>Dicerandra thincicola</i>	Titusville Balm	G1Q	S1	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Lechea divaricata</i>	Pine Pinweed	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE

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Biodiversity Matrix Report



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<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
Matrix Unit ID: 57271					
Likely					
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Scrub		G2	S2	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cucularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calamovilfa curtissii</i>	Curtiss' Sandgrass	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	G2	S2	N	LE
<i>Conradina grandiflora</i>	Large-flowered Rosemary	G3	S3	N	LT
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	G1	S1	LE	LE
<i>Deeringothamnus rugelii</i>	Rugel's Pawpaw	G1	S1	LE	LE
<i>Dicerandra thimicola</i>	Titusville Balm	G1Q	S1	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Lechea divaricata</i>	Pine Pinweed	G2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulae</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE
Matrix Unit ID: 57272					
Likely					
<i>Aphelocoma coerulescens</i>	Florida Scrub-jay	G2	S2	LT	LT
<i>Drymarchon couperi</i>	Eastern Indigo Snake	G3	S3	LT	LT
<i>Glandularia tampensis</i>	Tampa Vervain	G2	S2	N	LE
<i>Grus canadensis pratensis</i>	Florida Sandhill Crane	G5T2T3	S2S3	N	LT

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<i>Mycteria americana</i>	Wood Stork	G4	S2	LE	LE
Scrub		G2	S2	N	N
Potential					
<i>Aimophila aestivalis</i>	Bachman's Sparrow	G3	S3	N	N
<i>Athene cunicularia floridana</i>	Florida Burrowing Owl	G4T3	S3	N	LS
<i>Calamovilfa curtissii</i>	Curtiss' Sandgrass	G3	S3	N	LT
<i>Calopogon multiflorus</i>	Many-flowered Grass-pink	G2G3	S2S3	N	LE
<i>Carex chapmanii</i>	Chapman's Sedge	G3	S3	N	LE
<i>Centrosema arenicola</i>	Sand Butterfly Pea	G2Q	S2	N	LE
<i>Chamaesyce cumulicola</i>	Sand-dune Spurge	G2	S2	N	LE
<i>Conradina grandiflora</i>	Large-flowered Rosemary	G3	S3	N	LT
<i>Deeringothamnus pulchellus</i>	Beautiful Pawpaw	G1	S1	LE	LE
<i>Deeringothamnus rugelii</i>	Rugel's Pawpaw	G1	S1	LE	LE
<i>Dendroica discolor paludicola</i>	Florida Prairie Warbler	G5T3	S3	N	N
<i>Dicerandra thinicola</i>	Titusville Balm	G1Q	S1	N	LE
<i>Gopherus polyphemus</i>	Gopher Tortoise	G3	S3	N	LT
<i>Heterodon simus</i>	Southern Hognose Snake	G2	S2	N	N
<i>Lechea cernua</i>	Nodding Pinweed	G3	S3	N	LT
<i>Lechea divaricata</i>	Pine Pinweed	G2	S2	N	LE
<i>Matelea floridana</i>	Florida Spiny-pod	G2	S2	N	LE
<i>Mustela frenata peninsulæ</i>	Florida Long-tailed Weasel	G5T3	S3	N	N
<i>Nemastylis floridana</i>	Celestial Lily	G2	S2	N	LE
<i>Nolina atopocarpa</i>	Florida Beargrass	G3	S3	N	LT
<i>Panicum abscissum</i>	Cutthroat Grass	G3	S3	N	LE
<i>Platanthera integra</i>	Yellow Fringeless Orchid	G3G4	S3	N	LE
<i>Podomys floridanus</i>	Florida Mouse	G3	S3	N	LS
<i>Pteroglossaspis ecristata</i>	Giant Orchid	G2G3	S2	N	LT
<i>Rana capito</i>	Gopher Frog	G3	S3	N	LS
<i>Salix floridana</i>	Florida Willow	G2	S2	N	LE

Definitions: Documented - Rare species and natural communities documented on or near this site.
 Documented-Historic - Rare species and natural communities documented, but not observed/reported within the last twenty years.
 Likely - Rare species and natural communities likely to occur on this site based on suitable habitat and/or known occurrences in the vicinity.
 Potential - This site lies within the known or predicted range of the species listed.

**Appendix K:
Florida Master Site File**



This record search is for informational purposes only and does NOT constitute a project review. This search only identifies resources recorded at the Florida Master Site File and does NOT provide project approval from the Division of Historical Resources. Contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333 for project review information.

August 31, 2009

Michael Wielenga
Environmentally Endangered Lands
444 Columbia Blvd.
Titusville, FL 32780
Email: Michael.wielenga@brevardparks.com



In response to your inquiry of March 17, 2009 the Florida Master Site File lists no previously recorded cultural resources in the following parcels of Brevard County:

T20S, R34E, Sections 53, 54, 56, and 60

When interpreting the results of this search, please consider the following information:

- **This search area may contain *unrecorded* archaeological sites, historical structures or other resources even if previously surveyed for cultural resources.**
- **Federal, state and local laws require formal environmental review for most projects. This search DOES NOT constitute such a review. If your project falls under these laws, you should contact the Compliance and Review Section of the Division of Historical Resources at 850-245-6333.**

Please do not hesitate to contact us if you have any questions regarding the results of this search.

Sincerely,

A handwritten signature in cursive script that reads "Erin Michelle Bailey".

Erin Michelle Bailey
Archaeological Data Analyst
Florida Master Site File

Appendix L
TNC Grant Agreement



FLORIDA'S SPACE COAST



TAMARA J. RICARD, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972

August 6, 2008

MEMORANDUM

TO: Don Lusk, Parks and Recreation Director, Attn: Mike Knight

RE: Item VIII.B.3, Grant Contract with The Nature Conservancy and Accept Donation for Acquisition of Scottsmoor Partners, LLC, and AG Ventures LLC, and Honeybrook Development Corp. Properties and Donation of Saddlebrook Tract of AG Ventures LLC Property

The Board of County Commissioners, in regular session on August 5, 2008, executed the standard Grant Contract with The Nature Conservancy (TNC); authorized the County Manager to execute any other standard documents and amendments required by TNC for the acceptance of grant funds for the acquisition of Scottsmoor Partners, LLC, and AG Ventures LLC and Honeybrook Development Corp. properties; and accepted donation of the Saddlebrook Tract of AG Ventures LLC from The Nature Conservancy. Enclosed for your action are original and copy of the Contract.

Your continued cooperation is always appreciated.

Sincerely yours,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Tamara Ricard, Deputy Clerk

/te

Encs. (2)

cc: Contracts Administration
Finance
Budget

*orig Mike w/enclosures (2)
cc: Agenda file (w/o enclosures)
Clerk file "
Herry*

11
M 8:47
11/1/08



PRINTED ON RECYCLED PAPER

Scottsmoor Flatwoods Sanctuary Draft Management Plan



The Nature Conservancy in Florida
222 S. Westmonte Drive, Suite 300
Altamonte Springs, FL 32714

tel [407] 682.3664
fax [407] 682.3077

nature.org/florida

July 11, 2008

Mike Knight, Program Manager
Environmentally Endangered Lands Program
Parks and Recreation Department
91 East Drive
Melbourne, Florida 32904

Re: Grant No. AGV-071108

Dear Mr. Knight:

We are very pleased to inform you that The Nature Conservancy (the "Conservancy") has agreed to make the following grants (the "Grants") to Brevard County, a political subdivision of the State of Florida ("Awardee"): (i) a donation of a certain parcel of land containing 129.6± acres as described in Exhibit "A" ("Parcel 1"), and (ii) a grant in the amount not to exceed \$1,000,000.00 to be used to partially fund the Awardee's purchase of a 540± acre tract from AG Ventures LLC and Honeybrook Development Corporation and a 852± acre tract from Scottsmoor Partners, LLC as described in Exhibit "B" ("Parcel 2"). Parcel 1 and Parcel 2 shall hereinafter collectively be referred to as the "Property" or individually, as appropriate.

The Grants are under the Florida Scrub-Jay Conservation Program Fund Memorandum of Understanding between U.S. Fish and Wildlife Service and The Nature Conservancy ("Prime Award") for creating a funding mechanism for the conservation of the Florida scrub-jay, dated March 29, 2006 ("Prime Award").

In accordance with the terms of the Prime Award, the Grants are subject to the following conditions.

1. The Property shall be managed by the Awardee in a manner consistent with the conservation of the Florida scrub-jay.
2. The Property shall be managed by the Awardee in accordance with the *Brevard County Environmentally Endangered Lands Program Sanctuary Management Manual* as adopted by the Brevard County Board of Commissioners on September 23, 1997. Any changes to these standards must be approved by The Nature Conservancy in writing prior to being implemented on the Property.
3. The Property shall be enrolled by the Awardee into any existing management plan for scrub-jays which the Awardee has or may develop.

Mike Knight, Program Manager
Environmentally Endangered Lands Program
July 11, 2008
Page 3

3. A final management plan for the Property within one year of acquisition of Parcel 2. The management plan shall be approved by the Brevard County Board of County Commissioners, identify species of special concern, incorporate specific strategies and actions for protection and enhancement of the natural resources occurring on the Property, and describe the relevant recovery plans and how they relate to on-site management needs.

A disbursement of \$1,000,000.00 will be made directly to the designated closing agent on or before the day of the closing of Awardee's acquisition of Parcel 2. Awardee must provide the escrow account number and contact information to the Conservancy at least ten days prior to closing.

At the closing of the conveyance of Parcel 1 to the Awardee, the Awardee shall reimburse the Conservancy for all the direct transaction expenses the Conservancy incurred in acquiring Parcel 1, not to exceed \$100,000. Awardee will be responsible for any costs associated with the transfer of Parcel 1 to Awardee. However, the Conservancy will have the survey and Phase 1 environmental site assessment which the Conservancy uses in its acquisition of Parcel 1 certified to Awardee for use in the donation transfer. Awardee's acceptance of these Grants includes authority for its staff to accept the donation of Parcel 1, subject to staff's review and approval of due diligence.

The Grants are subject to the "Grant Conditions" outlined on the attached form. Please indicate your acceptance of the terms of this letter and accompanying Grant Conditions by signing the enclosed copy of this letter and returning it to us. Following the Awardee's acquisition of Parcel 2 and the Conservancy's acquisition of Parcel 1, the Conservancy will contact the Awardee to coordinate the donation of Parcel 1 to the Awardee.

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Scottsmoor Flatwoods Sanctuary Draft Management Plan

Mike Knight, Program Manager
Environmentally Endangered Lands Program
July 11, 2008
Page 4

If you have any questions, please do not hesitate to contact me at (407) 682-3664.

Sincerely,




Jeff Canter
Florida State Director

Attachment

JSR 7/11/08
Attorney Date


ACCEPTED AND AGREED TO:

ATTEST



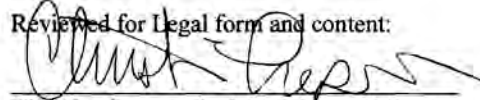
Scott Ellis, Clerk
(SEAL)

BOARD OF COUNTY
COMMISSIONERS OF BREVARD
COUNTY, FLORIDA

By: 
Truman Scarborough, Chairman

As approved by the Board on 08/05/2008

Reviewed for legal form and content:



Christine Lepore, Assistant County Attorney

Scottsmoor Flatwoods Sanctuary Draft Management Plan

The Nature Conservancy Grant Conditions

Below are conditions to which an Awardee must adhere in the expenditure or use of the funds provided by the Conservancy.

EXPENDITURE LIMITED TO DESIGNATED PURPOSES

Grant funds may be spent only in accordance with the provisions of the Awardee's funding request and budget submitted to the Conservancy. Expenditure of Grant funds is subject to modification only with the Conservancy's prior written approval. Any Grant funds not expended or committed for the purposes of this Grant must be returned to the Conservancy.

The Conservancy and United States Fish and Wildlife Service may monitor and evaluate the Awardee's activities, on the Property which may include visits by Conservancy and United States Fish and Wildlife Service personnel and agents, discussions with Awardee's personnel, and review of financial and other records and materials related to the activities financed by this Grant in an effort to determine whether Awardee's activities meet the Conservancy's and United States Fish and Wildlife Service funding objectives.

ACCOUNTS, AUDITS AND RECORDS

The Awardee agrees to maintain books, records, documents and other evidence pertaining to all costs and expenses incurred and revenues acquired under this Grant to the extent and in such detail as will properly reflect all costs and expenses for which reimbursement is claimed. These records shall be maintained for a period of one year after the final expenditure report is submitted. The books and accounts, files and other records of the Awardee pertaining to this Grant, shall at all times be available for inspection, review and audit by the Conservancy and the United States Fish and Wildlife Service and its representatives. The Awardee shall be responsible for reimbursing for any disallowance of any expenditures related to the work the Awardee has performed.

ACKNOWLEDGMENTS

The Awardee agrees to acknowledge the Conservancy's and the United States Fish and Wildlife Service support of the project, including funding contributions and sponsorship, on all media announcements, programs and publications.

ASSIGNMENT

This Grant may not be assigned by the Awardee in whole or in part without the prior written consent of the Conservancy.

NO AGENCY

No legal Partnership or agency is established by this Grant. Neither party is authorized or empowered to act as an agent, employee or representative of the other, nor transact business or incur obligations in the name of the other party or for the account of the other party. Neither party shall be bound by any acts, representations, or conduct of the other.

TERMINATION AND REMEDIES

If at any time the Prime Award is terminated, this Grant shall also be automatically terminated as of the termination date of the Prime Award.

The Conservancy shall have the right to terminate this Grant by giving 30 (thirty) days written notice to the Awardee of intent to terminate. Should this occur, payment for work satisfactorily completed will be adjusted accordingly. In addition, if in the judgment of the Conservancy the Awardee defaults in performance of Awardee duties under this Grant, whether for circumstances within or beyond the control of the Awardee, the Conservancy may immediately

terminate this Grant by written notice to the Awardee. Upon receipt of the termination notice from the Conservancy, the Awardee shall take all necessary action to cancel outstanding commitments relating to the work under this Grant. In the event of termination prior to the originally agreed upon expiration, the Conservancy shall pay of any obligations incurred by the Awardee that could not reasonably be canceled.

LIABILITY

To the extent allowed by law, the Awardee shall be solely responsible for the payment of any and all claims for loss, personal injury, death, property damage, or otherwise, arising out of any act or omission of its employees or agents in connection with the acquisition of the Property and its obligations under this Agreement. Nothing herein shall be considered a waiver of sovereign immunity contrary to the provisions of Section 768.28, Florida Statutes.

COMPLIANCE WITH U.S. LAWS AND REGULATIONS

The Awardee agrees, represents, and warrants that in connection with any business transaction contemplated by this Contract, the Awardee will comply with all U.S. laws and regulations (including, but not limited to anti bribery statutes) and will not take any actions that might cause The Nature Conservancy to be in violation of any U.S. laws and regulations (including, but not limited to anti-bribery statutes).

APPLICABLE LAW

This Grant shall be governed by and construed in accordance with the laws of the State of Florida, U.S.A. and applicable U.S. federal law.

ENTIRE GRANT, WAIVERS AND AMENDMENTS

This Grant constitutes the entire Grant between the Conservancy and the Awardee. No waiver, modification or amendment of any of the terms or conditions stated herein shall be effective unless set forth in writing and duly signed by the Conservancy and the Awardee.

EXHIBIT "A"

SADDLEBROOK - AG VENTURES, LLC

PARCEL B-5:

A parcel of land lying in Lot 6, "FONTAINE GRANT" according to the deed thereof as recorded in Deed Book "D" Page 525 of the Public Records of Brevard County, Florida; said "FONTAINE GRANT" lying in Section 41, Township 20 South, Range 34 East, Brevard County, Florida, said parcel of land being more particularly described as follows:

Beginning at the Southwest corner of Lot 6 of said "FONTAINE GRANT", thence S 72 degrees 42' 53" W 1573.29 feet to the Easterly right of way line of Interstate Highway 95; thence along said Easterly right of way line N 13 degrees 57' 30" W 2267.15 feet; thence continue along said Easterly right of way line N 07 degrees 26' 19" W 704.56 feet; thence N 68 degrees 48' 41" E 1106.36 feet; thence N 11 degrees 37' 17" W 700 feet; thence N 43 degrees 13' 30" W 150.00 feet; thence N 46 degrees 46' 30" E 406.38 feet; thence N 43 degrees 13' 30" W 428.77 feet to the Southeasterly right of way line of the State Road No. 5 (US 1) Connector Road; thence along said Southeasterly right of way line N 46 degrees 46' 30" E 100.00 feet; thence S 43 degrees 13' 30" E 428.77 feet; thence N 46 degrees 46' 30" E 209.88 feet to the East line of Lot 6 of said "FONTAINE GRANT"; thence South along said East line of Lot 6 S 11 degrees 37' 17" E 4225.15 feet to the POINT OF BEGINNING.

PARCEL B-3:

A parcel of land lying in Lot 6, "FONTAINE GRANT" according to the deed thereof as recorded in Deed Book "D" Page 525 of the Public Records of Brevard County, Florida; said "FONTAINE GRANT" lying in Section 41, Township 20 South, Range 34 East, Brevard County, Florida, said parcel of land being more particularly described as follows:

Commence at the Southeast corner of Lot 6 of said "FONTAINE GRANT", thence run N 11 degrees 37' 17" W along the East line of said Lot 6 a distance of 4728.59 feet to a point on the Southeasterly right of way line of State Road No. 5 (US 1) Connector Road; thence S 46 degrees 46' 30" W along said Southeasterly right of way line 776.89 feet to the POINT OF BEGINNING; thence S 43 degrees 13' 30" E 428.77 feet; thence S 46 degrees 46' 30" W 203.19 feet; thence N 43 degrees 13' 30" W 428.77 feet to said Connector Road Southeasterly right of way line; thence N 46 degrees 46' 30" E along said right of way line a distance of 203.19 feet to the POINT OF BEGINNING.

PARCEL B-4:

A parcel of land lying in Lot 6, "FONTAINE GRANT" according to the deed thereof as recorded in Deed Book "D" Page 525 of the Public Records of Brevard County, Florida; said "FONTAINE GRANT" lying in Section 41, Township 20 South, Range 34 East, Brevard County, Florida, said parcel of land being more particularly described as follows:

Commence at the Southwest corner of Lot 6 of said "FONTAINE GRANT", thence run N 11 degrees 37' 17" W along the East line of said Lot 6 a distance of 4728.59 feet to a point on the Southeasterly right of way line of State Road No. 5 (US 1) Connector Road; thence S 46 degrees 46' 30" W along said Southeasterly right of way line 573.70 feet to the POINT OF BEGINNING; thence S 43 degrees 13' 30" E 428.77 feet; thence S 46 degrees 46' 30" W 203.19 feet; thence N 43 degrees 13' 30" W 428.77 feet to said Connector Road Southeasterly right of way line; thence N 46 degrees 46' 30" E along said right of way line a distance of 203.19 feet to the POINT OF BEGINNING.

Exhibit B

**McINTOSH – AG VENTURES, LLC
HONEYBROOK DEVELOPMENT CORP.**

Parcel 1:

The North ½ of vacated road right-of-way lying South of Block 4, more particularly described as follows:

A portion of a 30 foot wide road right-of-way lying in Block 5, Section 4, Township 20 South, Range 34 East, INDIAN RIVER PARK SUBDIVISION, as recorded in Plat Book 2, Page 33, Public Records of Brevard County, Florida, lying 15 feet on both side of the following described centerline:

From the Northeast corner of Lot 2, Block 5 of said INDIAN RIVER PARK SUBDIVISION, run South 79 degrees 01'04" West, along the Northerly line of said Lot 2, a distance of 280.00 feet, thence departing said Northerly line run North 16 degrees 57'36" West, 15.08 feet to the centerline of said 30 foot wide road right-of-way and the POINT of BEGINNING for the centerline of the right-of-way vacation herein described; thence South 79 degrees 01'04" West, along said centerline, 1245.69 feet, more or less, to the Easterly right-of-way of the Florida East Coast Railroad and the Point of Termination.

It is the intent of this description that the North and South sidelines of this right-of-way vacation terminate at the Easterly right-of-way line of said Florida East Coast Railroad right-of-way.

Parcel 2:

Lots 2 through 7, Block 2, and Lots 2 through 7, Block 3, lying West of Interstate 95, in Section 3 of INDIAN RIVER PARK SUBDIVISION, as recorded in Plat Book 2, Page 33, Public Records of Brevard County, Florida. Lying in Section 3, Township 20 South, Range 34 East.

Parcel 3:

Tract 4, Block 2, Section 3 of INDIAN RIVER PARK SUBDIVISION, as recorded in Plat Book 2, Page 33, Public Records of Brevard County, Florida. Lying in Section 3, Township 20 South, Range 34 East.

Parcel 4:

Lots 1 and 12, Block 5, excluding Interstate 95 Right-of-Way in SCOTTSMOOR LITTLE TRACTS, according to the plat thereof, as recorded in Plat Book 4, Page 90, Public Records of Brevard County, Florida. Lying in Section 37, Township 20 South, Range 34 East.

Parcel 5:

All of Blocks 1 and 4, lying East of Railroad right-of-way, (also known as Block 1 of Greenwood Survey) Section 4 of INDIAN RIVER PARK SUBDIVISION, as recorded in Plat Book 2, Page 33, Public Records of Brevard County, Florida. Lying in Section 4, Township 20 South, Range 34 East.

Parcel 6:

That part of Lot 5, lying East of Railroad right-of-way, SUBDIVISION OF THE PABLO FONTAINE GRANT, according to the plat thereof, as recorded in Plat Book 2, Page 43, Public Records of Brevard County, Florida. Lying in Section 41, Township 20 South, Range 34 East.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

PARCEL NO. 1

A PARCEL OF LAND BEING A PORTION OF THE GARVIN AND FOUNTAIN GRANTS, AS SHOWN ON THE PLAT OF "SCOTT'S MOOR LITTLE FARMS", AS RECORDED IN PLAT BOOK 3, PAGE 63 AND ALL OR PARTS OF SUBSEQUENT REPLATS THEREOF, AND ALSO BEING THOSE PORTIONS OF BLOCKS 2 AND 3, SECTION 2, LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 AND ALL OF BLOCKS 1 AND 4, TOGETHER WITH THOSE PORTIONS OF BLOCKS 2 AND 3, SECTION 3, LYING EAST OF THE EASTERLY RIGHT OF WAY LINE OF I-95 AS SHOWN ON THE PLAT OF "INDIAN RIVER PARK", AS RECORDED IN PLAT BOOK 2, PAGE 33 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, TOGETHER WITH ALL PLATTED RIGHTS OF WAYS WITHIN SAID PARCEL, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE GARVIN GRANT AND THE NORTHWEST CORNER OF LOT 57 AS SHOWN ON THE PLAT OF "SCOTT'S MOOR LITTLE FARMS" AS RECORDED IN PLAT BOOK 3, PAGE 63 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.72°39'50"E., ALONG THE NORTH LINE OF SAID GARVIN GRANT AND THE NORTHERLY BOUNDARY OF LOTS 57 THROUGH 59 AS SHOWN ON SAID PLAT OF "SCOTT'S MOOR LITTLE FARMS", 915.30 FEET TO THE INTERSECTION WITH THE EASTERLY RIGHT OF WAY LINE OF I-95 (STATE ROAD NO. 9), AND SAID POINT BEING THE POINT OF BEGINNING OF THE LAND HEREIN DESCRIBED; THENCE CONTINUE N.72°39'50"E., ALONG SAID NORTH LINE OF THE GARVIN GRANT AND ALONG THE NORTH LINE OF LOTS 59 THROUGH 63 AS SHOWN ON SAID PLAT OF SCOTT'S MOOR LITTLE FARMS, 1574.16 FEET TO THE SOUTHWEST CORNER OF LOT 7 OF THE PABLO FONTAINE GRANT AND SAID POINT BEING THE NORTHEAST CORNER OF LOT 63 AS SHOWN ON THE AFORESAID PLAT OF "SCOTT'S MOOR LITTLE FARMS"; THENCE N.11°37'25"W., ALONG THE WEST LINE OF THE AFORESAID LOT 7 OF THE PABLO FONTAINE GRANT AS OCCUPIED BY THE AFORESAID PLAT OF "SCOTT'S MOOR LITTLE FARMS", 3210.75 FEET TO THE INTERSECTION WITH THE WESTERLY PROLONGATION OF THE NORTH LINE OF BLOCKS H, I, J AND K AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARMS 48, 49, 50, 51, 52, 53 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 84 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.72°53'39"E., ALONG SAID LINE, 1336.58 FEET TO THE SOUTHWEST CORNER OF LOT 4, BLOCK 76 AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARM 37 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 90 OF THE PUBLIC RECORDS OF BREVARD COUNTY FLORIDA; THENCE N.15°14'18"W., ALONG THE WESTERLY BOUNDARY OF SAID BLOCK 76, A DISTANCE OF 210.70 FEET TO THE NORTHWEST CORNER THEREOF; THENCE N.72°46'54"E., ALONG THE NORTH LINE OF BLOCKS 76, 77, 82, 83 AND 88 OF SAID PLAT OF "SUBDIVISION OF FARM 37 NORTH EXTENSION OF SCOTTSMOOR" AND ALONG THE SOUTHERLY RIGHT OF WAY LINE OF CORAL AVENUE, A DISTANCE OF 1350.55 FEET TO THE NORTHEAST CORNER OF LOT 22, BLOCK 88 OF SAID PLAT AND SAID POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE S.15°13'37"E., ALONG THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1, AND ALONG THE EAST LINE OF BLOCKS 88 AND 87 AS SHOWN ON THE PLATS RECORDED IN PLAT BOOK 4, PAGE 90 AND PLAT BOOK 4, PAGE 15 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, 737.84 FEET; THENCE S.72°52'03"W., 275.15 FEET; THENCE S.15°13'37"E., 1475.82 FEET; THENCE N.72°52'03"E., 140.13 FEET TO A POINT LYING ON THE WEST LINE OF LOTS 13 THROUGH 18, BLOCK 72 AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 8 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S.15°13'38"E., ALONG SAID LINE, 150.11 FEET TO THE NORTHEAST CORNER OF LOT 12, BLOCK 72 OF SAID PLAT OF "SUBDIVISION OF FARMS 44, 45, AND 46 NORTH EXTENSION OF SCOTTSMOOR"; THENCE S.72°52'04"W., ALONG THE NORTH LINE OF SAID LOT 12 AND ALONG THE NORTH LINE OF LOT 13, BLOCK 71 OF SAID PLAT OF "SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR", 320.08 FEET TO THE NORTHWEST CORNER OF SAID LOT 13; THENCE S.15°13'41"E., ALONG

Scottsmoor Flatwoods Sanctuary Draft Management Plan

THE WEST LINE OF SAID LOT 13, A DISTANCE OF 50.00 FEET TO THE SOUTHWEST CORNER THEREOF; THENCE S.72°52'03"W., ALONG THE SOUTH LINE OF THE AFORESAID BLOCK 71 AND THE WESTERLY PROLONGATION THEREOF AND ALONG THE NORTHERLY RIGHT OF WAY LINE OF LUCERNE AVENUE, 185.05 FEET TO A POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF VERMONT STREET; THENCE S.15°13'43"E., ALONG THE WESTERLY RIGHT OF WAY LINE OF VERMONT STREET AS SHOWN ON THE PLATS RECORDED IN PLAT BOOK 4, PAGE 8, PLAT BOOK 3, PAGE 64, PLAT BOOK 3, PAGE 89 AND PLAT BOOK 8, PAGE 10, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, A DISTANCE OF 4294.90 FEET TO A POINT LYING ON THE SOUTH RIGHT OF WAY LINE OF PEARL STREET AND THE SOUTH LINE OF THE NORTH 1/2 OF THE GARVIN GRANT AS SHOWN ON THE PLAT OF "SCOTT'S MOOR LITTLE FARMS" AS RECORDED IN PLAT BOOK 3, PAGE 63 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S.72°40'23"W., ALONG SAID LINE, 320.05 FEET TO A POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF BERLIN STREET; THENCE S.15°13'46"E., ALONG THE SOUTHERLY PROLONGATION OF SAID WESTERLY RIGHT OF WAY LINE OF BERLIN STREET, 602.08 FEET TO A POINT LYING ON THE NORTH LINE OF LOT 4, BLOCK 2, SECTION 2 AS SHOWN ON THE PLAT OF "INDIAN RIVER PARK" AS RECORDED IN PLAT BOOK 2, PAGE 33 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.78°55'41"E., ALONG SAID LINE, 312.01 FEET; THENCE S.17°45'39"E., 1968.63 FEET; THENCE N.76°23'50"E., 750.00 FEET TO A POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE S.23°37'37"E., ALONG SAID RIGHT OF WAY LINE, 367.87 FEET TO A POINT LYING ON THE CENTERLINE OF A PLATTED 30.00 FOOT WIDE RIGHT OF WAY LYING SOUTH OF AND ADJACENT TO THE SOUTH LINES OF BLOCK 3, SECTION 2 AND BLOCKS 3 AND 4, SECTION 3 AS SHOWN ON THE AFORESAID PLAT OF "INDIAN RIVER PARK"; THENCE ALONG THE CENTERLINE OF SAID 30.00 FOOT WIDE RIGHT OF WAY, THE FOLLOWING THREE COURSES AND DISTANCES; THENCE S.76°23'51"W., 1190.11 FEET; THENCE S.78°48'10"W., 2641.67 FEET; THENCE S.79°22'24"W., 1010.72 FEET TO A POINT LYING ON THE EASTERLY RIGHT OF WAY LINE OF I-95 (STATE ROAD NO. 9); THENCE N.13°57'30"W., ALONG SAID RIGHT OF WAY LINE, 5855.46 FEET TO THE POINT OF BEGINNING.

LESS AND EXCEPT FROM ALL OF THE ABOVE, THE FOLLOWING DESCRIBED PARCELS OF LAND:

LOT 12, BLOCK 74, LOT 12, BLOCK 75 AND LOT 16, BLOCK 88 AS SHOWN ON SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR, AS RECORDED IN PLAT BOOK 4, PAGE 15; LOTS 8 AND 9, BLOCK W AS SHOWN ON SUBDIVISION OF FARMS 48, 49, 50, 51, 52, 53 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLATBOOK 4, PAGE 84; LOT 11, BLOCK X AS SHOWN ON SUBDIVISION OF FARMS 54, 55 AND 56 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 92; LOT 18, BLOCK 115 AS SHOWN ON SUBDIVISION OF FARMS 64, 65, 66 WEST EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 92; LOTS 1 AND 2, BLOCK 66 AS SHOWN ON SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 8; LOT 5, BLOCK 3 AND THAT PART OF LOTS 11 AND 12, BLOCK 4 LYING EAST OF THE EASTERLY RIGHT OF WAY LINE OF INTERSTATE 95 AS SHOWN ON SUBDIVISION OF FARMS 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116 AND 117 SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 90; LOTS 13, 14, 18, 19, 20, 21, 22, 23, 24, 25, 35, 36, 38, 40 AND 41, BLOCK 1 AND LOTS 15, 17, 18, 20, 24, 25, 26, 27 AND 35, BLOCK 7 AS SHOWN ON PLAN OF SCOTT'S-MOOR AS RECORDED IN PLATBOOK 3, PAGE 64; LOTS 11 AND 12, BLOCK 25 AS SHOWN ON SCOTTSMOOR ANNEX AS RECORDED IN PLAT BOOK 3, PAGE 89 ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

ALSO LESS AND EXCEPT FROM ALL OF THE ABOVE, THE FOLLOWING DESCRIBED PARCELS OF LAND:

LOT 17, BLOCK T, AS SHOWN ON SUBDIVISION OF FARMS 70 AND 71 EAST EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 92; THE WEST 760 FEET OF LOT 67, AS

Scottsmoor Flatwoods Sanctuary Draft Management Plan

SHOWN ON PLAT OF SCOTT'S MOOR LITTLE FARMS AS RECORDED IN PLAT BOOK 3, PAGE 63; LOT 11, BLOCK 2, AS SHOWN ON SUBDIVISION OF FARMS 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, AND 117 SCOTTSMOOR, AS RECORDED IN PLAT BOOK 4, PAGE 90; LOT 29, BLOCK 1, AS SHOWN ON PLAN OF SCOTT'S MOOR AS RECORDED IN PLAT BOOK 3, PAGE 64; LOTS 11 AND 12, BLOCK 13, SCOTTSMOOR ANNEX, AS RECORDED IN PLAT BOOK 3, PAGE 89; LOTS 10 AND 11, BLOCK 69, AS SHOWN ON SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 8, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

ALSO LESS AND EXCEPT FROM ALL OF THE ABOVE: THE SUBDIVISION OF PARRISH PARK AT SCOTTSMOOR AS RECORDED IN PLAT BOOK 45, PAGE 31 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA.

PARCEL NO. 2

A PARCEL OF LAND BEING A PART OF BLOCKS 2 AND 3, SECTION 2, AS SHOWN ON THE PLAT OF INDIAN RIVER PARK AS RECORDED IN PLAT BOOK 2, PAGE 33 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE INTERSECTION OF THE SOUTHERLY RIGHT OF WAY LINE OF PEARL STREET WITH THE WESTERLY RIGHT OF WAY LINE OF BERLIN STREET AS SHOWN ON THE PLAT OF "SCOTTSMOOR ANNEX" AS RECORDED IN PLAT BOOK 3, PAGE 89 OF THE PUBLIC RECORDS OF BREVARD COUNTY FLORIDA; THENCE S.15°13'46"E., ALONG THE SOUTHERLY PROLONGATION OF THE WESTERLY RIGHT OF WAY LINE OF BERLIN STREET, 602.08 FEET TO A POINT LYING ON THE NORTH LINE OF LOT 4, BLOCK 2, SECTION 2, AS SHOWN ON THE AFORESAID PLAT OF "INDIAN RIVER PARK"; THENCE N.78°55'41"E., ALONG SAID LINE, 312.01 FEET TO THE POINT OF BEGINNING OF THE LAND HEREIN DESCRIBED; THENCE S.17°45'39"E., 1968.63 FEET; THENCE N.76°23'50"E., 750.00 FEET TO A POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 (STATE ROAD NO. 5), A 143 FOOT WIDE RIGHT OF WAY; THENCE ALONG SAID RIGHT OF WAY LINE, THE FOLLOWING TWO COURSES AND DISTANCES; THENCE N.23°37'37"W., 1289.97 FEET; THENCE N.15°13'37"W., 664.74 FEET TO A POINT LYING ON THE NORTH LINE OF LOT 3, BLOCK 2, SECTION 2, AS SHOWN ON THE AFORESAID PLAT OF INDIAN RIVER PARK; THENCE S.78°55'41"W., ALONG SAID LINE, 650.00 FEET TO THE POINT OF BEGINNING.

PARCEL NO. 3

A PARCEL OF LAND BEING A PART OF BLOCKS 72, 86 AND 87 TOGETHER WITH PORTIONS OF TRAVIS STREET, MARION AVENUE AND AVOCADO AVENUE, ALL AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 15, AND ALSO BEING A PART OF BLOCK 72 AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 8, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHEAST CORNER OF LOT 22, BLOCK 88, AS SHOWN ON THE PLAT OF "SUBDIVISION OF FARM 37 NORTH EXTENSION OF SCOTTSMOOR" AS RECORDED IN PLAT BOOK 4, PAGE 90 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA AND SAID POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1 (STATE ROAD NO. 5), A 143.00 FOOT WIDE RIGHT OF WAY; THENCE S.15°13'37"E., ALONG SAID RIGHT OF WAY LINE AND ALONG THE EAST LINE OF THE AFORESAID BLOCK 88 AND ALONG THE EAST LINE OF BLOCKS 88 AND 87 AS SHOWN ON THE AFORESAID PLAT OF "SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR", A DISTANCE OF 737.84 FEET TO THE POINT OF BEGINNING OF THE LAND HEREIN DESCRIBED; THENCE S.72°52'03"W., 275.15 FEET; THENCE S.15°13'37"E., 1475.82 FEET; THENCE N.72°52'03"E., 140.13 FEET TO A POINT LYING ON THE WESTERLY LINE OF LOTS 13

Scottsmoor Flatwoods Sanctuary Draft Management Plan

THROUGH 21, BLOCK 72, AS SHOWN ON THE AFORESAID PLATS OF "SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR" AND "SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR"; THENCE N.15°13'38"W., ALONG SAID LINE, 235.89 FEET TO THE NORTHWEST CORNER OF THE AFORESAID LOT 21, BLOCK 72; THENCE N.72°52'13"E., ALONG THE NORTH LINE OF SAID LOT 21, A DISTANCE OF 135.03 FEET TO THE NORTHEAST CORNER THEREOF AND SAID POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO. 1; THENCE N.15°13'37"W., ALONG SAID RIGHT OF WAY LINE AND ALONG THE EAST LINE OF BLOCKS 72, 86 AND 87 OF THE AFORESAID PLAT OF "SUBDIVISION OF FARMS 38, 39, 40, 41, 42, 43 NORTH EXTENSION OF SCOTTSMOOR", A DISTANCE OF 1239.93 FEET TO THE POINT OF BEGINNING.

PARCEL NO. 4

LOT 11, BLOCK 2, AS SHOWN ON SUBDIVISION OF FARMS 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116 AND 117 SCOTTSMOOR, AS RECORDED IN PLAT BOOK 4, PAGE 90; LOT 29, BLOCK 1, AS SHOWN ON PLAN OF SCOTT'S-MOOR AS RECORDED IN PLAT BOOK 3, PAGE 64; LOTS 11 AND 12, BLOCK 13, SCOTTSMOOR ANNEX, AS RECORDED IN PLAT BOOK 3, PAGE 89; LOTS 10 AND 11, BLOCK 69, AS SHOWN ON SUBDIVISION OF FARMS 44, 45 AND 46 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 8, ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AND

LOT 15, BLOCK Y, AS SHOWN ON RESUBDIVISION OF FARM 56 NORTH EXTENSION OF SCOTTSMOOR, AS RECORDED IN PLAT BOOK 7, PAGE 44, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AND

LOT 13, BLOCK 72, SCOTTSMOOR RESUBDIVISION (AS RECORDED IN PLAT BOOK 4, PAGE 8, PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA), LYING IN SECTION 41, TOWNSHIP 20G SOUTH, RANGE 34 EAST, BREVARD COUNTY, FLORIDA, AND

LOT 12, BLOCK 74, SCOTTSMOOR RESUBDIVISION, ACCORDING TO THE PLAT THEREOF, AS RECORDED IN PLAT BOOK 4, PAGE 15, OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA, AND

PARCEL NO. 5 (F/K/A ROBERTS PARCEL)

A PARCEL OF LAND BEING THAT PART OF THE PARCELS OF LAND DESCRIBED IN OFFICIAL RECORDS BOOKS 2201, PAGE 1934 AND 4311, PAGE 1072 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA LYING WEST OF THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO.1 AND SOUTH OF THE SOUTHERLY RIGHT OF WAY LINE OF STUCK WAY ROAD (SR.5A), SAID PARCEL OF LAND BEING DESCRIBED AS FOLLOWS: BEGINNING AT THE NORTHWEST CORNER OF THE PLAT OF SUBDIVISION OF FARM 47 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 82 B AND SAID POINT BEING THE SOUTHWEST CORNER OF THE NORTH 1/2 OF PARCEL NO.7 AS SHOWN ON THE SUBDIVISION OF THE SPANISH GRANT OF PABLO F. FONTAINE AS RECORDED IN DEED BOOK D, PAGE 525 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.11°37'25"W., ALONG THE WEST LINE OF SAID NORTH 1/2 OF PARCEL NO.7, A DISTANCE OF 1277.00 FEET TO A POINT LYING ON THE SOUTHERLY RIGHT OF WAY LINE OF STUCK WAY ROAD (SR.5A); THENCE N.46°46'30"E., ALONG SAID RIGHT OF WAY LINE, 2304.77 FEET TO A POINT LYING ON THE NORTH LINE OF THE MIDDLE 1/3 OF SAID PARCEL 7 AS SHOWN ON THE SUBDIVISION OF THE SPANISH GRANT OF PABLO F. FONTAINE AND SAID POINT BEING THE SOUTHWEST CORNER OF THE PARCEL OF LAND DESCRIBED AS PARCEL B IN OFFICIAL RECORDS BOOK 3626, PAGE 1707 OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE N.72°42'54"E., ALONG THE SOUTH LINE OF SAID PARCEL B, 520.58 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL B AND SAID POINT LYING ON THE WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO.1; THENCE ALONG SAID

Scottsmoor Flatwoods Sanctuary Draft Management Plan

WESTERLY RIGHT OF WAY LINE OF U.S. HIGHWAY NO.1, THE FOLLOWING THREE COURSES AND DISTANCES; THENCE S.15°13'37"E., 809.36 FEET; THENCE N.74°46'23"E., 35.00 FEET; THENCE S.15°13'37"E., 1472.92 FEET TO THE INTERSECTION WITH THE SOUTH LINE OF THE AFORESAID NORTH 1/2 OF PARCEL NO.7 AS SHOWN ON THE SUBDIVISION OF THE SPANISH GRANT OF PABLO F. FONTAINE AND SAID LINE BEING THE NORTH RIGHT OF WAY LINE OF CORAL AVENUE AS SHOWN ON THE PLATS OF SUBDIVISION OF FARM 47 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 82B AND SUBDIVISION OF FARM 37 NORTH EXTENSION OF SCOTTSMOOR AS RECORDED IN PLAT BOOK 4, PAGE 90 ALL OF THE PUBLIC RECORDS OF BREVARD COUNTY, FLORIDA; THENCE S.72°46'54"W., ALONG SAID RIGHT OF WAY LINE OF CORAL AVENUE AND ALONG SAID SOUTH LINE OF THE NORTH 1/2 OF SAID PARCEL NO.7, A DISTANCE OF 2672.14 FEET TO THE POINT OF BEGINNING.

**Appendix M:
Property Leases**

FIFTH AMENDMENT TO CATTLE LEASE

THIS FIFTH AMENDMENT TO CATTLE LEASE (the "Fifth Amendment") made this 13th day December of 2011, between BREVARD COUNTY, FLORIDA, a political subdivision of the State of Florida, located at 2725 Judge Fran Jamieson Way, Building C, Viera, Florida, 32940 ("Owner") and ROY F. ROBERTS & SON GROVES, INC., a Florida Corporation, whose address is Post Office Box 504, Scottsmoor, Florida 32775-0504 ("Lessee").

WHEREAS, the Owner purchased certain real property located in Scottsmoor that is subject to a Cattle Lease between Scottsmoor Partners, LLC and the Lessee. The Owner's acquisition is more particularly described in Exhibit "A", attached and incorporated by reference herein, and contains approximately 112 acres. Copies of the Cattle Lease, dated December 20, 2005, and Amendment to Cattle Lease, dated January 31, 2007, and Second Amendment to Cattle Lease, dated October 31, 2007, and Third Amendment to Cattle Lease, dated August 5, 2008, and Forth Amendment to Cattle Lease, dated October 26, 2010 are attached as Composite Exhibit "B" and incorporated by reference herein; and

WHEREAS, the Environmentally Endangered Lands Program staff has determined that allowing Lessee to continue using that portion of the property which is already disturbed and fenced is beneficial to the County for controlling regrowth of invasive species until the management plan can be implemented. This limited area is referred to as the "Property" and is more particularly described in Exhibit "C"; and

NOW, therefore, for good and valuable consideration, the receipt of which is hereby acknowledged, the Parties reaffirm the obligations under the Cattle Lease and amend and modify the same as follows:

1. Paragraph 1. PROPERTY is amended to read:

In consideration of the rents, covenants and agreements hereinafter reserved and contained on the part o the Lessee to be observed and performed, the Owner demises and leases to the Lessee, and the Lessee rents from the Owner the Property described in Exhibit "C". This lease and the rights of the Priest set forth herein shall create the relationship of "Owner" and "lessee" only between Owner and Lessee.

2. Paragraph 2. TERM is amended to read:

The term of the Lease shall commence on the effective date of the Lease and expire on December 29, 2012, unless sooner terminated (the "Lease Term"). Should either party desire to terminate the Lease at any time during the Lease Term, then the terminating party shall provide the other party with 75 days prior written notice.

1 1 5 2012
LP

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The Parties may agree to extend this Lease for up to two additional one-year terms. Any extensions must be approved in writing by both Parties prior to termination of this Lease.

3. Paragraph 3. RENTAL CONSIDERATION is amended to read:

For the term of this Lease, Lessee agrees to pay Owner \$16.77 per acre for a total of \$1,878.24 on or before December 20th of each year for the term of this Lease. Said sum shall be paid to Owner in lawful money of the United States of America, which shall be legal tender at the time of payment, at the office of Owner or to such other person or at such place as Owner may from time to time designate in writing. In the event Owner exercises its right to terminate the lease as set forth in section 2 above, during any calendar year for which the annual rent has been paid, the Owner will, upon vacation and surrender of possession of the Property by Lessee, reimburse Lessee any excess rent paid in advance for the balance of the applicable calendar year. The amount to be reimbursed to Lessee shall be calculated by taking the annual rental amount and dividing the same by 365 and multiplying the resulting daily rental amount by the number of days remaining in the calendar year at the time of surrender of the Property by Lessee.

4. Paragraph 7. FENCING is amended to read:

Lessee shall be responsible for the costs of construction and maintenance of the fencing around the perimeter of the Property to allow for the grazing of the cattle. Should Owner note that any maintenance or repairs to the fencing is required, it shall immediately notify Lessee of same.

5. Paragraph 8. ALTERATIONS is amended to read:

With the exception of emergency repairs required to contain cattle on the Property, Lessee shall not make any alterations or improvements to the Property without prior written consent of the Owner. Lessee shall present to Owner plans and specifications for such work at the time approval is sought. If Lessee is permitted to make alterations, Lessee shall furnish to Owner, upon completion of same, a certified statement showing the total cost of such alterations and satisfactory evidence that payment for same has been made in full. As to any work performed by Lessee, Lessee shall indemnify and hold Owner harmless from any liens, claims or other liabilities that may be filed on or made against Owner or the Property as a result of such work performed by Lessee. Any alterations or improvements made by Lessee shall become a part of the realty and be the sole property of Owner unless Lessee elects to remove such alterations and improvements and such removal can be done without damage or injury to the Property.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

6. Paragraph 9. ASSIGNMENT is amended to read:

This Lease is not assignable.

7. Paragraph 10. INDEMNITY is amended to read:

Except for losses, damages and claims arising out of the acts or omissions of Owner or Owner's agents, contractors and employees, Lessee shall indemnify and hold harmless Owner from and against any and all claims arising from Lessee's use of the Property, or from the conduct of Lessee's business or from any activity, work or things done by Lessee in or about the Property and shall further indemnify and hold harmless Owner from and against any and all claims arising from any breach or default in the performance of any obligations on Lessee's part to be performed under the terms of this Lease, or arising from any negligence of the Lessee, or any such claim or any such action or proceeding brought thereon; and in case any action or proceeding be brought against Owner by reason of any such claim, Lessee, upon notice from Owner, shall defend the same at Lessee's expense by counsel acceptable to Owner. Likewise, Owner shall indemnify and hold harmless Lessee from and against any and all claims arising from any activity, work or things done, permitted or suffered by Owner in or about the Property to the extent that such claims, damages, losses, or expenses are caused solely by the negligent or wrongful acts of the Owner or its employees. Nothing contained herein shall constitute a waiver by either party of its sovereign immunity or the provisions of Section 768.28, Florida Statutes. Nothing herein shall be construed as consent to be sued by third parties.

8. Paragraph 13. EMINENT DOMAIN is deleted.

9. Paragraph 16. NOTICES is amended to read:

Any notice, demand, request or other instrument which may be or required to be given under this Lease, shall be delivered in person, via facsimile, sent by United States Certified or Registered Mail, postage prepaid, or sent by a reputable overnight courier service and shall be addressed to either party at the address as hereinabove given. Any notice shall be deemed delivered upon hand delivery or three (3) days after depositing such notice in postal receptacles, return-receipt requested or one (1) day after depositing such notice with a reputable overnight courier service. Either party may designate such other address as shall be given by written notice as follows:

If to Owner: Mike Knight
 EEL Program
 91 East Drive
 Melbourne, Florida 32904

Scottsmoor Flatwoods Sanctuary Draft Management Plan

If to Lessee: Roy F. Roberts & Son Groves, Inc.
Post Office Box 504
Scottsmoor, Florida 32775-0504

10. Paragraph 17, ATTORNEY'S FEES AND COSTS is created to read:

In the event of any legal action to enforce the terms of this Lease, each party shall bear its own attorney's fees and costs.

IN WITNESS WHEREOF, the parties hereto have signed and seal this Fifth Amendment to Cattle Lease as of the day and year first above written.

Signed, sealed and delivered
in the presence of:

"OWNER"

BREVARD COUNTY BOARD OF COUNTY
COMMISSIONERS

By: Chuck Nelson

Name: Commissioner Chuck Nelson

Its: Chairperson

As approved by the Board on 12/13/2011

Attest:

Mitch Needelman
Mitch Needelman, Clerk

Approved for Legal Form and Content

By: Christine Lepore

Christine Lepore, Assistant County Attorney

"LESSEE"

ROY F. ROBERTS & SON GROVES, INC., a
Florida Corporation

By: Roy F. Roberts, Jr.

Name: Roy F. Roberts, Jr.

Its: President

Robert Phelps
Name: Robert Phelps
Joseph Houston
Name: Joseph Houston



LEASE # 13728
BOARD #3160
COUNTY Brevard

Daytona Beach/Melbourne
Lease Agreement

1. This Lease Agreement ("Lease") # **13728** is effective **November 9, 2010** and entered into between **Brevard County Board of Commissioners** ("Landlord") and CLEAR CHANNEL OUTDOOR, INC., a Delaware Corporation ("Tenant"). Landlord hereby leases to Tenant the real estate commonly known as **I-95 ES 1.3mi S/O CR 5A CCO Display 3160** in the County of **Brevard** in the State of **Florida** ("Property"). The Property is leased for the purpose of maintaining, operating, posting, painting, repairing, or removing an existing outdoor advertising structure, including, panels, the existing sign, copy and any equipment and accessories as Tenant may place thereon (collectively, the "Structure"). The Structure may not be upgraded, and must remain as a wooden pole structure as it is currently designed. The Structure may not include any lighting. Access to the billboard will be restricted to the access road identified on the attached map marked Exhibit A.

2. This Lease shall be in effect for a term of three (3) years, commencing on **The date of approval by the County Commission**. At the end of this initial term, the lease will automatically terminate unless renewed by the Landlord.

3. This Lease rent shall commence at the rate of **\$4,000.00 per year payable in twelve (12) equal monthly installments**. Tenant will pay Landlord accrued rental money from the time of their purchase (September 24, 2008) through the date of approval of this lease by the County Commission (November 9, 2010) totaling \$6,500.00, and additionally the tenant will pay the landlord back rent that was due to the previous owner from June 2005 through September 24, 2008 totaling an additional \$9,750.00, within 30 days of execution of this Agreement.

Tenant shall not license or otherwise allow to be displayed on the Structure any advertising related to alcohol, tobacco, firearms, adult entertainment, other churches or religious organizations or any depiction of violence, sex (or of a sexual nature), politically inflammatory or offensive speech. Tenant further agrees not to display advertising that Landlord deems offensive to the moral standards of the community, or (b) is false, misleading or deceptive, or (c) is in violation of applicable laws. Tenant shall defend, indemnify and hold Landlord harmless from, any and all losses, reasonable costs, liabilities, claims and demands of any kind or nature arising from, out of or in connection with the style, character, content or subject matter displayed on the property.

4. This Lease shall continue in full force and effect for a term of 3 years. At the end of the Lease term, the Lease will automatically terminate as noted in paragraph 2 above. If ownership of the Property changes, Landlord shall promptly notify Tenant of such change. Prior to transferring ownership of the Property, Landlord shall furnish the new owner with a copy of this Lease.

If either party fails or refuses to perform any of the provisions of this Agreement or otherwise fails to timely satisfy the contract provisions, either may notify the other party in writing of the nonperformance and terminate the Agreement or such part of the Agreement as to which there has been delay or a failure to properly perform. Such termination is effective upon the other party's receipt of the Notice of Termination.

5. Tenant is the owner of the Structure and has the right to remove the Structure at any time or within 72 hours following the termination of this Lease. If for any reason, Tenant's Structure is removed, or destroyed, all rent payments shall cease until the Structure is rebuilt, if the Structure can lawfully be rebuilt. If the Structure is removed for any reason, all portions of the Structure must be promptly removed from the property. Tenant has the sole right to make any necessary applications with, and obtain permits from, governmental entities for the construction, use and maintenance of the Structure, and Landlord hereby grants Tenant a limited power of attorney for this purpose. All such permits shall remain the property of Tenant. Neither Landlord or Tenant

Scottsmoor Flatwoods Sanctuary Draft Management Plan

shall have any obligation to pursue any zoning matter or to continue to maintain any permit. Any such action shall be at Tenant's option.

This Lease does NOT allow for the installation of an upgraded billboard structure, including the type of sign surface area. This Lease is limited to the existing wood pole structure only, and only allows for maintenance or repairs that are consistent with its current design. Nothing in this Lease shall constitute or be construed as a waiver of any county ordinances.

The Structure shall be maintained and/or repaired at Tenant's sole expense in accordance with all applicable local, state and federal codes and regulations and in a manner consistent with Landlord's primary use of the property on which the Structure is located

6. Landlord and Landlord's tenants, agents, employees or other persons acting on Landlord's behalf, shall not place or maintain any object on the Property or any neighboring property owned or controlled by Landlord which, would unreasonably obstruct the view of the advertising copy on the Structure. If Landlord fails to remove the obstruction within five (5) days after notice from Tenant, due to the fact that it would be inconsistent with the Site Specific Management Plan or the Conservation Goals for the property, Tenant may cancel this Lease, remove the Structure, and receive all pre-paid rent for any unexpired term of this Lease. Tenant may not trim any trees and vegetation currently on the Property and on any neighboring property owned or controlled by the Landlord without approval from Landlord.

7. If, in Tenant's sole opinion: (a) the view of the Structure advertising copy becomes entirely or partially obstructed; (b) the Property cannot safely be used for the maintenance of the Structure for any reason; (c) the Property becomes unsightly; (d) there is a diversion, reduction or change in directional flow of traffic from the street or streets currently adjacent to or leading to or past the Property; (e) the Structure value for advertising purposes is diminished; (f) Tenant is unable to obtain or maintain any necessary permit for the erection, use and/or maintenance of the Structure; or (g) the Structure use is prevented or restricted by law, or Tenant is required by any governmental entity to reduce the number of billboards operated by it in the city, county or state in which the Structure are located; then Tenant may immediately cancel this Lease and receive all pre-paid rent for any unexpired term of this Lease.

8. If the Structure or the Property, or any part thereof, is condemned by proper authorities; taken by inverse condemnation, whether permanently or temporarily; or any right-of-way from which the Structure is visible is relocated, Tenant shall have the right to terminate this Lease upon not less than thirty (30) days' notice and to receive all pre-paid rent for any unexpired term of this Lease. Tenant shall be entitled to all compensation and other remedies provided by law, including, without limitation, just compensation for the taking of the Structure and Tenant's leasehold interest in this Lease, and/or relocation assistance. Landlord shall assert no rights in such interests, with the exception of the right to claim damages for the loss of income associated with termination of the lease. If condemnation proceedings are initiated, Landlord shall use its best efforts to include Tenant as a party thereto. If the property is transferred to the State of Florida for the purposes of financial reimbursement for future land acquisitions, the Landlord reserves the right to terminate the lease with thirty (30) days written notice so as not to prevent the transfer of the property to the State.

9. During prescribed burn operations, Landlord's fire crews will take all necessary steps to protect the billboard structure from fire damage. Burn operations are weather dependent. Landlord's fire crews will notify Tenant at least two days in advance of a prescribed fire. In the event the sign material is not removed, the prescribed fire operations will not be delayed and Landlord will not be responsible for any sign material damage. Tenant's maintenance of the access roadway (fill, grading, vegetation trimming, mowing, etc.), must be approved in writing, in advance, by the EEL Program Land Manager. Tenant is responsible for removing any and all debris associated with its sign structure or daily operations of such.

10. Landlord represents that it is the owner (or owner's authorized agent) of the Property and has the authority to enter into this Lease.

11. NOTICE and PAYMENTS: Notice and Payments under this agreement shall be given to the Landlord by certified mail or hand delivery as follows: Brevard County Environmentally Endangered Lands Program, 91 East Drive, Melbourne, FL 32904, Attention Program Manager, and Notice shall be given to Tenant by certified mail or hand delivery as follows: Clear Channel Outdoor, 2890 Harper Road, Melbourne, FL 32904.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

12. Tenant shall indemnify and hold Landlord harmless from all injuries to the Property or third persons caused by Tenant, Tenant's employees, agents, licensees and contractors. To the extent allowed by law, Landlord agrees to indemnify and hold harmless Tenant against all claims, damages, losses, and expenses, including attorney's fees, arising out of or resulting from Landlord's use of the Property, if such claims, damages, losses, or expenses are caused solely by the negligent or wrongful acts of Landlord. Nothing contained in this Agreement shall be construed as a waiver of Landlord's right to sovereign immunity under Section 768.28, *Florida Statutes*, or other limitations imposed on Landlord's potential liability under state or federal law.

13. This Lease is binding upon the heirs, assigns and successors of both Landlord and Tenant. Tenant shall have the right to assign or sublet this Lease, subject to the written approval of Landlord, which will not be unreasonably withheld.

14. Any notice to any party under this Lease shall be in writing by certified or registered mail, and shall be effective on the earlier of (a) the date when delivered and received for by a person at the address specified within this Lease, or (b) the date which is three (3) days after mailing (postage prepaid) by certified or registered mail, return receipt requested, to such address; provided that in either case notices shall be delivered to such other address as shall have been specified in writing by such party to all parties hereto prior to the notice being delivered.

15. In the event of any legal action to enforce the terms of this Lease each party shall bear its own attorney's fees and costs.

16. Neither Landlord nor Tenant shall be bound by any terms, conditions or oral representations that are not set forth in this Lease. This Lease represents the entire agreement of Tenant and Landlord with respect to the Structure and the Property and supercedes any previous agreement. Landlord hereby grants Tenant all rights necessary to record a memorandum of this Lease without Landlord's signature, including a limited power of attorney for such purpose.

17. In the performance of this Lease, Tenant shall keep books, records, and accounts of all activities, related to this Agreement, in compliance with generally accepted accounting procedures. Books, records and accounts related to the performance of this agreement shall be open to inspection during regular business hours by an authorized representative of Landlord and shall be retained by Tenant for a period of three (3) years after termination of the agreement. All records, books and accounts related to the performance of this Lease shall be subject to the applicable provisions of the Florida Public Records Act, Chapter 119, Florida Statutes.

18. This Lease shall be deemed to have been executed and entered into the State of Florida and this Agreement, and any dispute arising hereunder, shall be governed, interpreted and construed according to the laws of the State of Florida.

19. Venue for any legal action brought by any party to this Agreement to interpret, construe or enforce this agreement shall be in a court of competent jurisdiction in and for Brevard County, Florida, and any trial shall be non-jury.


20. If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void, or unenforceable, the remaining provisions shall nevertheless continue in full force without being impaired or invalidated in any way.

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Clear Channel Outdoor, Inc.

By:  Date: 12/10
Larry McHityre

Its: President

 Date: 12/10/10
Witness

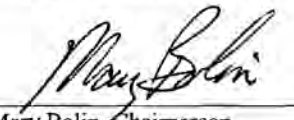
 Date: 12/10/10
Witness

Branch Address: 2890 Harper Road, Melbourne, FL 32904; Tel No 321-726-6611

**Board of County Commissioners
Of Brevard County, Florida**

Attest:


Scott Ellis, Clerk of Court


Mary Bolin, Chairperson
As approved by the Board on
November 9, 2010

Reviewed for legal form and content:

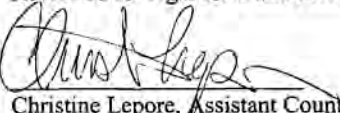



Christine Lepore, Assistant County Attorney

Exhibit A



Legend

-  Sanctuary Boundary
-  Proposed Access

0 750 1,500 3,000 Feet





FLORIDA'S SPACE COAST



TAMARA J. VAN FOSSAN, Clerk to the Board, 400 South Street • P.O. Box 999, Titusville, Florida 32781-0999

Telephone: (321) 637-2001
Fax: (321) 264-6972

November 10, 2010

MEMORANDUM

TO: Jack Masson, Interim Parks and Recreation Director

RE: Item III.B.10, Billboard Lease Agreement with Clear Channel Outdoor, Inc. for Scottsmoor Flatwoods Sanctuary

The Board of County Commissioners, in regular session on November 9, 2010, approved a billboard Lease Agreement with Clear Channel Outdoor, Inc. for an existing billboard on the Scottsmoor Flatwoods Sanctuary managed by EEL; and authorized the Chairman to execute the billboard Lease Agreement. Enclosed is the original and executed copy of the Lease Agreement. Upon execution by Clear Channel Outdoor, Inc., please return the original Lease Agreement to this office for inclusion in the official minutes of the Board.

Your continued cooperation is greatly appreciated.

Sincerely yours,

BOARD OF COUNTY COMMISSIONERS
SCOTT ELLIS, CLERK

Tammy Etheridge
for Tamara Van Fossan, Deputy Clerk
/te

orig w/ 2 end - Mike
PC Agenda file
Clerk file

Encls. (2)

cc: EEL Program Manager
Contracts Administration
Finance
Budget

**Appendix N:
Public Meeting Minutes**



**ENVIRONMENTALLY ENDANGERED LANDS PROGRAM
Scottsmoor Flatwoods Sanctuary
Public Access Plan Review Public Meeting
August 11, 2011
Minutes**

CALL TO ORDER:

Mike Knight, EEL Program Manager, welcomed the group at 5:00 PM and he thanked everyone for their interest in the Scottsmoor Flatwoods Sanctuary.

He explained that the purpose of the meeting was to provide a review of the conceptual public access plan for the Sanctuary to the public, and to receive citizen's questions and comments which would be included as part of the documentation required for Management Plan. He also explained that copies of the draft Management Plan would be available at area libraries during the 30 day draft Management Plan public review period, and that staff would everyone of upcoming meetings related to the Scottsmoor Flatwoods Sanctuary Management Plan if they would provide their contact information on the sign in sheet.

Mike provided a brief overview of the Management Plan process and introduced Xavier de Seguin des Hons, the EEL Program's North Region Land Manager.

PRESENTATION:

Xavier de Seguin des Hons explained that the EEL Program was established in 1990 through a voter approved referendum to acquire and protect conservation lands with the primary goal of protecting the biodiversity of Brevard County. The Program also has secondary goals of providing environmental education and passive recreation. During the Program's 20 year history, over 20,000 acres of land have been acquired for preservation and each Sanctuary's Management Plan is reviewed and updated every 10 years.

The Scottsmoor Flatwoods Sanctuary includes 1,521 acres which are located both east and west of I-95 in northern Brevard County. The eastern section is located directly south of SR 5A (Stuckway Road) and runs to the northern terminus of International Avenue on it's southern border. In some areas, it extends eastward to US1. The western section begins a bit south of SR 5A, extends to Rose Marie Place on the southern side and is bordered on the west by the proposed Rail Trail. Approximately 100 acres of the northeast corner of the eastern section is currently leased for cattle grazing. There are plans to continue this lease until the Program is ready to begin restoration of this section, as the cattle grazing helps prevent the expansion of exotic plants.

Xavier also gave a presentation which included the following information:

- EEL Program Mission Statement: To Protect and Preserve Biodiversity Through Responsible Stewardship of Brevard County's Natural Resources.
- Highlights of EEL Program Vision Statement
 - Acquire, protect, and maintain endangered lands

*Scottsmoor Flatwoods Sanctuary Public Access Plan Meeting
August 11, 2011
Page 1 of 6*

Scottsmoor Flatwoods Sanctuary Draft Management Plan

- Protect Brevard County's biodiversity
- Provide passive recreation and education opportunities
- Support active volunteers and community support
- Management Regions
 - North Region – 5,368 acres
 - Central Region – 2,002 acres
 - South Beach Region – 328 acres
 - South Region – 6,695 acres
- North Region Sanctuaries
 - Enchanted Forest Sanctuary - (471 acres, includes existing trails)
 - Dicerandra Scrub Sanctuary - (44 acres, includes existing trails)
 - Indian Mound Station Sanctuary - (85 acres, includes existing trails)
 - Buck Lake Conservation Area - (300 acres of scrub habitat managed jointly with SJRWMD, includes existing trails)
 - Fox Lake Sanctuary - (2,568 acres, includes existing trails)
 - Scottsmoor Flatwoods Sanctuary - (1,521 acres, includes existing trails)
 - Indian River Sanctuary - (43 acres, access to be determined)
- Land Management Tools
 - Prescribed Fire
 - Exotics Control
 - Native Plantings
 - Public Access
- Scottsmoor Flatwoods Sanctuary Management Plan Approval Process
 - Interim Management Plan drafted and approved by Selection and Management Committee
 - Public Access Site assessment completed by EEL Program staff
 - Conceptual Public Access Plan drafted by EEL Program Staff
 - **Reviewed at Public Meeting (August 11, 2011)**
 - Reviewed by Recreation and Education Advisory Committee (REAC)
 - Management Plan Draft review
 - Prepared by EEL Program Staff
 - SMC review and approval
 - 30 day public review
 - Final SMC review and approval
 - Final Board of County Commissioners (BOCC) review and approval
- Recreation Assessment
 - Resources identified
 - Protected Species
 - Gopher tortoise
 - Florida Scrub-Jay
 - Sand Hill Crane
 - Snowy and laceiptresses orchids
 - Pine Lily

*Scottsmoor Flatwoods Sanctuary Public Access Plan Meeting
August 11, 2011
Page 2 of 6*

Scottsmoor Flatwoods Sanctuary Draft Management Plan

- Likely Indigo snake, Wood Stork
 - Ecosystems – seven different ecosystems
 - Existing trails
- Natural Communities
 - Cypress Swamp
 - Depression Marsh
 - Floodplain Swamp
 - Improved Pasture
 - Mesic Flatwoods
 - Scrubby Flatwoods
 - Upland Mixed Forest
- Recreation Assessment
 - Passive Recreation Activities Identified
 - Hiking
 - Horseback riding
 - Birding/Wildlife observation
 - Mountain biking (non-motorized)
- Recreation Plan
 - Parking area with kiosk and walkthrough gates at Parrish Park, Scottsmoor
 - Equestrian parking with kiosk being considered for:
 - Blounts Ridge and Rose Marie
 - Along US1 by the cattle pasture (may require deceleration lane which could be cost prohibitive)
 - South of Magoon in between Berlin and Vermont Road
 - 8 miles of trails

Additional Discussion

- A map was presented which showed how the 17,000 acre Iron Horse Wildfire, which started in Volusia County was significantly curtailed as it reached areas within the Scottsmoor Flatwoods Sanctuary that had been treated with prescribed fire.
- Clarification was provided that the EEL Program has existing firebreaks along US1.
- Clarification was provided that the EEL Program is a willing seller program and it does not use eminent domain under any circumstances to acquire land.
- Clarification was provided that most of the illegal ATV use in the area currently occurs north of 5A and outside of the Sanctuary boundaries.
- Clarification was provided that the trail on the western border of the western portion of the Sanctuary would be separate from the Rails to Trails trail, but there were plans for an eventual connection to the Rails to Trails, with the EEL Program trail being considered a spine trail, not a primary access point to the Rail Trail.
- Clarification was provided that the EEL Program does fence the Sanctuaries, but this is done to delineate boundaries, and there are several access points for each site.

Scottsmoor Flatwoods Sanctuary Public Access Plan Meeting

August 11, 2011

Page 3 of 6

Scottsmoor Flatwoods Sanctuary Draft Management Plan

- Clarification was provided that the recently acquired, 3,000 acre Fox Lake Sanctuary, which is adjacent to Fox Lake Park in Titusville, will also include equestrian trails.
- Clarification was provided that attempts to arrange for a wildlife overpass on I-95 between the two sections of the Sanctuary have been unsuccessful so far, but efforts will continue to see if this can be arranged.
- Xavier stated that if citizens were experiencing difficulties getting horses through established access points, they should contact him and the entrances would be reevaluated.
- COMMENT: Debra Gray stated her opinion that fire lines are frequently considered to be suitable for equestrian use.
- CONCERN: Barbara Morehead stated her opinion that hikers and horses on the same trails may be problematic.
- CONCERN: Barbara Morehead stated her opinion that some of the property the EEL Program had purchased was not valuable for conservation and she did not understand why it had been purchased, or why the Program would want to spend any money on them. She also suggested that available funding be used for management instead of acquiring additional property.
 - Clarification was provided that some sites do require restoration before they can be returned to their original state.
- QUESTION: David Ely asked if the property in the northwest corner of the property east of I-95 was owned by the EEL Program.
 - Mike confirmed that this area is in private ownership, although the Program has had received a willing seller application from the owner and there have been some negotiations related to a possible purchase.
- CONCERN: David Ely expressed his concern that if people who currently run ATVs within the Sanctuary are prevented from doing so in the future, they may run them through the streets of Scottsmoor.
- QUESTION: Clarification was requested to determine if there are any plans to allow ATV use on this Sanctuary.
 - Mike confirmed that early on in the Program, Program's Sanctuary Management Manual, which was approved by the Board of County Commissioners, confirmed that ATV use was an incompatible activity on EEL Program sanctuaries as it is detrimental to the natural habitats.
- SUGGESTION: Kim Lukes suggested ATV's be allowed to continue to pass north/south through the portion of the Sanctuary west of I-95, in order to access the riding area north of 5A.
- CONCERN: Debra Gray expressed her concern that if access for ATV's, horses, etc., is taken away, then those users, especially young people, will need something else to do.

*Scottsmoor Flatwoods Sanctuary Public Access Plan Meeting
August 11, 2011
Page 4 of 6*

Scottsmoor Flatwoods Sanctuary Draft Management Plan

- SUGGESTION: Louis Morehead suggested keeping horse trailers out of Scottsmoor Parrish Park to be sure they do not cause any disturbance to nearby homeowners.
- SUGGESTION: Louis Morehead stated his opinion that the Scottsmoor Flatwoods Sanctuary could be a benefit to tourism in the area.
- SUGGESTION: Barbara Morehead stated her opinion that there should be ATV access on at least part of the Sanctuary, if not all of it.
- SUGGESTION: Barbara Morehead suggested that Mike should ensure that contractors who perform work on EEL Program sites should be required to only hire Americans who speak English.
- CONCERN: Louis Morehead expressed his concern that there may be coyotes on the Indian River Sanctuary and that he felt they may have an impact on cows located on land he is leasing near the sanctuary.
- COMMENT: David Ely expressed his opinion that he would rather have the property near his home purchased by the EEL Program than built out by developers. Several members of the audience agreed.
- SUGGESTION: David Ely suggested formation of a Citizen's Patrol group to assist with monitoring trails and site activities.
- SUGGESTION: Debra Gray suggested a signage plan that makes it obvious to everyone that the sanctuary is open to the public.
- CONCERN: Debra Gray expressed her concern related to the unknown potential impact of additional equestrian users coming in to use the site, especially if they had trailers.
- SUGGESTION: Barbara Morehead suggested consideration of using 5A pasture as a potential tent camping area for equestrian users.
- SUGGESTION: Debra Gray suggested consideration of using the pond on the 5A pasture to water horses, and of keeping horses away from ATVs and I-95 as many are skittish around motorized vehicles.

Mike and Xavier explained that if anyone would like to provide additional comments, which would also be included in the appendix of the Management Plan, they could be e-mailed to them, and if they would like any additional information, they could contact them they distributed business cards to those citizens who requested them.

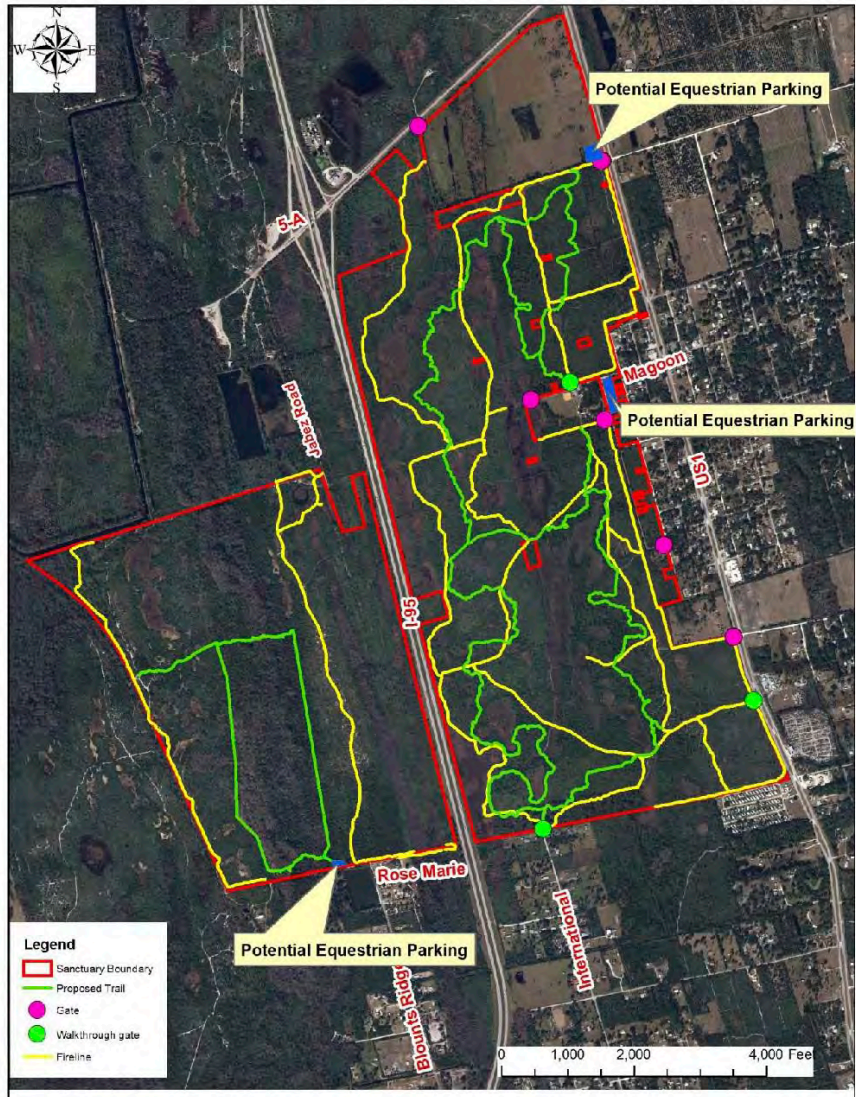
Xavier thanked everyone for coming, and for their interest in the Scottsmoor Flatwoods Sanctuary.

ADJOURNED:

The meeting was adjourned at 6:52 PM.

*Scottsmoor Flatwoods Sanctuary Public Access Plan Meeting
August 11, 2011
Page 5 of 6*

Scottsmoor Flatwoods Sanctuary Proposed Public Access Plan
August 11, 2011 Public Access Plan Public Meeting



Scottsmoor Flatwoods Sanctuary Public Access Plan Meeting
August 11, 2011
Page 6 of 6



**ENVIRONMENTALLY ENDANGERED LANDS (EEL) PROGRAM
RECREATION AND EDUCATION ADVISORY COMMITTEE (REAC)
November 10, 2011
Attendance List**

RECREATION AND EDUCATION ADVISORY COMMITTEE MEMBERS

Bob Champaigne
Jim Durocher
Murray Hann
Beverly Morgan
Mark Nathan
Ayn Samuelson
Doug Sphar

SUB-COMMITTEE MEMBERS

Paul Schmalzer, Selection and Management Committee

EEL PROGRAM STAFF

Laura Clark
Xavier de Seguin des Hons
Brad Manley

GUESTS

John White, citizen

*"Protecting and Preserving Biological Diversity
Through Responsible Stewardship of Brevard County's Natural Resources"
November 10, 2011
Approved August 9, 2012*



**ENVIRONMENTALLY ENDANGERED LANDS (EEL) PROGRAM
RECREATION AND EDUCATION ADVISORY COMMITTEE
November 10, 2011
Meeting Minutes**

CALL TO ORDER:

Doug Sphar, Chairman, called the meeting to order at 6:10 PM.

PUBLIC COMMENT:

None.

MINUTES:

The March 3, July 14, August 18, and October 2, 2011 minutes were presented for approval.

March 3, 2011

Doug asked for comments to the March 31, 2011 minutes.

- Paul Schmalzer provided the following comments:
 - Pg 3, 12th bullet: double negative used.
 - Staff confirmed sentence would be reworded as "Final approval for the Fox Lake Sanctuary Management Plan will come from the Board of County Commissioners as no partnership funding from the State was used for this acquisition."
 - Page 4, paragraph 2: Clarification needed regarding the number of privately held inholdings in the Fox Lake Sanctuary.
 - Staff confirmed there are four (4) privately held in holdings in this sanctuary.

MOTION ONE

Bob Champaigne moved to approve the March 3, 2012 minutes as amended.

Ayn Samuelson seconded the motion.

The motion carried unanimously.

July 14, 2011

Doug asked for comments to the July 14, 2011 minutes.

- Jim Durocher noted that there were two places where the year date of 1990 had been written as 1900 in error.
 - Staff provided clarification the typo would be corrected.
- Jim also asked if the Page 5 reference to the total for EEL Program uncollected revenue from the 1990 and 2004 referendums, which was listed as \$29.5 million dollars, was accurate.
 - Paul Schmalzer confirmed that if the millage had been collected at 100% of the voter approved maximum for the time period stated in the spreadsheet,

EEL Program Recreation and Education Advisory Committee Meeting

November 10, 2011

Page 1 of 4

Approved August 9, 2012

Scottsmoor Flatwoods Sanctuary Draft Management Plan

an additional \$29.5 million dollars in funding would have been collected for the Program.

Confirmation was provided that additional information on this topic is included the May 2011 SMC minutes, which are posted on the EEL Program's Web Site.

MOTION TWO

Murray Hann moved to approve the July 14, 2011 minutes as amended.

Jim Durocher seconded the motion.

The motion carried unanimously.

August 18, 2011

Doug asked for comments to the August 18, 2011 minutes.

- Staff provided clarification that the final minutes would include a copy of the REAC committee's letter to the Board of County Commissioners, which had been finalized at that meeting.
- Murray suggested consideration of rewording a section of text on Page 2 related to his request that staff consider closing a gate at the Jordan Scrub Sanctuary.
 - Staff confirmed the sentence would be reworded as follows: "Murray Hann requested staff consider removing the Jordan Scrub Sanctuary gate which is located on a County right of way, behind the Harris Building off US 1, as there are alternate ways into the sanctuary and he felt that the gate in question does not present an attractive access point."

MOTION THREE

Jim Durocher moved to approve the August 18, 2011 minutes as amended.

Murray Hann seconded the motion

The motion carried unanimously.

Additional Discussion

Brad confirmed there are plans to make that entrance point more attractive, hopefully before next summer.

October 2, 2011

Doug asked for comments to the October 2, 2011 minutes.

- Clarification was provided that Mary Sphar, citizen, had attended the meeting, but her name had not been included on the attendance sheet.
 - The attendance sheet in the minutes will be revised.
- Paul noted two points:
 - Paragraph 4, line 1. Change verb to....."two locations for an equestrian trailhead are being considered."
- Paragraph 5, line 2: remove extraneous comma after "Xavier".
 - Confirmation was provided that the minutes will be revised accordingly.

EEL Program Recreation and Education Advisory Committee Meeting

November 10, 2011

Page 2 of 4

Approved August 9, 2012

Scottsmoor Flatwoods Sanctuary Draft Management Plan

Additional Discussion

Doug Sphar mentioned that the trailer which staff had provided for use by the committee during the field trip had made the trip very enjoyable.

MOTION FOUR

Bob Champaigne moved to approve the October 2, 2011 minutes as amended.

Mark Nathan seconded the motion.

The motion carried unanimously.

ADMINISTRATIVE REVIEW AND ADDITIONAL DISCUSSION:

Xavier de Seguin des Hons mentioned that a celebration of the EEL Program's 20 year history is being combined with the Enchanted Forest's annual Forest Festival celebration on November 19, 2011 and he invited everyone to attend the event.

Doug Sphar provided information on the Space Coast Birding and Wildlife Festival's 2011 event which includes trips to several EEL Program sanctuaries.

Brad Manley explained that the EEL Program had been selected to receive the 2011 Carl N. Becker award for conservation.

Xavier noted that a public access plan public meeting had recently been held for the Fox Lake Sanctuary and that trail clearing at the Indian Mound Station Sanctuary was almost complete.

Paul commented that the engineering plans for the Malabar Scrub Sanctuary Paved Trail had also been recently completed and that the SMC had approved the sanctuary's management plan at their October meeting.

Brad stated staff was working to get trails off fire lines in general for most EEL Program sanctuaries.

Jim Durocher noted that during a recent canoe/kayak event trip he was leading, he had noticed that some of the trails at the Thousand Islands could benefit from additional clearing and he offered to recruit volunteers when staff was ready to work the site.

AGENDA ITEMS:

Scottsmoor Flatwoods Sanctuary Public Access Plan

The Scottsmoor Flatwoods Sanctuary consists of approximately 1,500 acres just south of SR 5A and I-95 in north Brevard. He added that the EEL Program held a public meeting on August 11, 2011 at the Scottsmoor Library in order to provide information and receive citizen's comments related to the proposed Scottsmoor Flatwoods Sanctuary Public Access Plan, and that the REAC held a field trip to the site on October 2, 2011.

The following additional information was noted:

- Approximately 1,000 acres are on the east side of I-95 with approximately 500 acres on the west side.
- The Rails to Trails trail is the western boundary of the property.
- Staff is in the process of marking trails and identifying fire lines.
- The site currently has public access.
- 7 ecosystems, primary habitat is flatwoods, cypress swamps on site.

EEL Program Recreation and Education Advisory Committee Meeting

November 10, 2011

Page 3 of 4

Approved August 9, 2012

Scottsmoor Flatwoods Sanctuary Draft Management Plan

- Extensive trail network existed at the time of purchase.
- Passive recreational activities planned for this site include: hiking, equestrian use, birding and other wildlife observation, mountain biking. (No motorized vehicles).
- 60 – 70 tons of trash was removed from the east side after the property was acquired.
- It is anticipated that trash removal will begin on the west side as soon as the property can be secured.
- There has been some historic ATV use on this site. ATVs are not included in passive recreation use due to the large amount of damage that they cause, especially in wetland areas.
- Confirmation was provided that the historic ATV use was not done by people who owned the property.
- During the Iron Horse Wildfire, when the fire reached the western edge of the eastern portion of the sanctuary where prescribed fires had already been completed, the wildfire generally went out. This provided a safety net for the neighboring homes.

Public Comment and Additional Discussion

A citizen who was in attendance at the meeting mentioned that he was not fond of riding near cypress swamps, as the cypress knees sometimes blocked a clear trail. He added that it has been his experience that horses can be spooked by mountain bike riders and he knows that there are areas where equestrian riders need to be especially cautious if a clear view of the trail ahead is not possible.

Murray mentioned that it has been his experience that if a bike rider pulls off the trail, removes their helmet and speaks to the horse rider, the horse may be less surprised, and that is what he always recommends.

MOTION FIVE

Murray Hann moved to approve the Scottsmoor Flatwoods Sanctuary proposed Public Access Plan as presented by staff.

Jim Durocher seconded the motion.

The motion carried unanimously.

NEXT MEETING

To be determined.

ADJOURNED:

The meeting was adjourned at 8:00 PM.

SUMMARY OF MEETING MOTIONS:

- Motion to approve the March 3, 2011 minutes as amended.
- Motion to approve the July 14, 2011 minutes as amended.
- Motion to approve the August 18, 2011 minutes amended.
- Motion to approve the October 2, 2011 minutes amended.
- Motion to support the Scottsmoor Flatwoods Sanctuary proposed Public Access Plan as presented by staff.

EEL Program Recreation and Education Advisory Committee Meeting

November 10, 2011

Page 4 of 4

Approved August 9, 2012