



Florida Department of
TRANSPORTATION

FLORIDA SCRUB-JAY HABITAT MITIGATION PLAN

FLORIDA DEPARTMENT OF TRANSPORTATION
DISTRICT 4

PROJECT DEVELOPMENT AND ENVIRONMENT STUDY
COUNTY ROAD 510/85 STREET
From County Road 512 (M.P. 0.0) to 58 Ave (M.P. 5.283),
Indian River County, Florida
ETDM Number: 14233
Financial Management Number: 405606-2-22-02
Federal Aid Project No.: 4984-004-S

The environmental review, consultation, and other actions required by applicable federal environmental laws for this project are being, or have been, carried out by the Florida Department of Transportation (FDOT) pursuant to 23 U.S.C. §327 and a Memorandum of Understanding dated December 14, 2016, and executed by the Federal Highway Administration and FDOT.

Prepared for
Florida Department of Transportation
District Four
3400 West Commercial Boulevard
Fort Lauderdale, FL 33309-3421

FEBRUARY 2017



Florida Department of
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Metric Engineering, Inc.
FEBRUARY 2017

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1.0 INTRODUCTION

The Florida Department of Transportation (FDOT) is conducting a Project Development and Environment (PD&E) Study to evaluate alternatives for mobility and safety improvements to County Road (C.R.) 510 in Indian River County, Florida. The project extends 5.27 miles along C.R. 510 from its intersection with C.R. 512/Sebastian Boulevard to 58 Avenue. A project location map is provided as **Figure 1-1**. C.R. 510 is primarily a two-lane roadway that is functionally classified as an Urban Principal Arterial for east-west traffic movements. There are three bridge structures along C.R. 510 and an open drainage system.

The Wabasso Scrub Conservation Area (WSCA) is located near the project's eastern terminus, north of C.R. 510 and west of 58th Avenue (**Figure 1-1**). The WSCA is owned and managed by Indian River County and contains occupied Florida scrub-jay (*Aphelocoma coerulescens*) habitat. The WSCA was established as part of the Sebastian Area-Wide Habitat Conservation Plan (HCP) and is managed for Florida scrub-jays. FDOT's recommended alternative completely avoids the WSCA (**Figure 1-2**) and includes commitments to further avoid and minimize secondary/indirect impacts. Though no direct impacts to scrub-jays or scrub habitat are anticipated, a projected 23 percent increase in traffic and 24-foot expansion of C.R. 510 to the south could cause incidental take due to secondary impacts from an increased chance of vehicle strikes. Mitigation is anticipated to be required sufficient to support a breeding pair of Florida scrub-jays. Based on consultation with U.S. Fish and Wildlife Service, approximately 12-18 acres of scrub habitat are anticipated to be required for mitigation. This Florida Scrub-Jay Habitat Mitigation Plan introduces multiple options for potential mitigation sites for the proposed expansion of C.R. 510.

Through coordination with FDOT District 4 staff, USFWS, and Indian River County staff, four potential mitigation options were proposed and are introduced in this mitigation plan. They are referred to as "Property 1- WSCA Proximate", "Property 2- Russel Grove", "Property 3- High Pointe Parcels", and "Property 4- Tippen Bay Scrub Conservation Bank". Properties 1 through 3 were inspected in the field on February 6, 2018 and information from the Indian River Property Appraiser is provided in **Table 1-1**. Section 2.0 of this document provides basic information on each potential mitigation site and Section 3.0 provides information to evaluate the desirability and usefulness of each potential mitigation site. Once a site is selected, a more detailed mitigation plan should be developed as part of ongoing consultation with USFWS.

Table 1-1 Indian River County Property Appraiser Information

Property # and Name	IRC Parcel #	Acreage	Location
Property 1- WSCA Proximate	31392900000300000008.0	25.38	9005 64 Avenue, Sebastian, FL
Property 2- Russel Grove	31381400000300000004.0	46.46	West of Gardenia St, Sebastian, FL
Property 3- High Pointe Parcels	See below	See below	65 th Street, Vero Beach, FL
Parcel A	32391000000500000001.0	69.18	-
Parcel B	323909000002001000001.0	60.0	-
Parcel C	32391000000700000017.0	.84	-
Parcel D	32391000000700000018.0	6.78	-
Parcel E	32391000000700000019.0	17.5	-
Property 4- Tippen Bay Conservation Bank	NA	NA	Near Arcadia, DeSoto County, FL

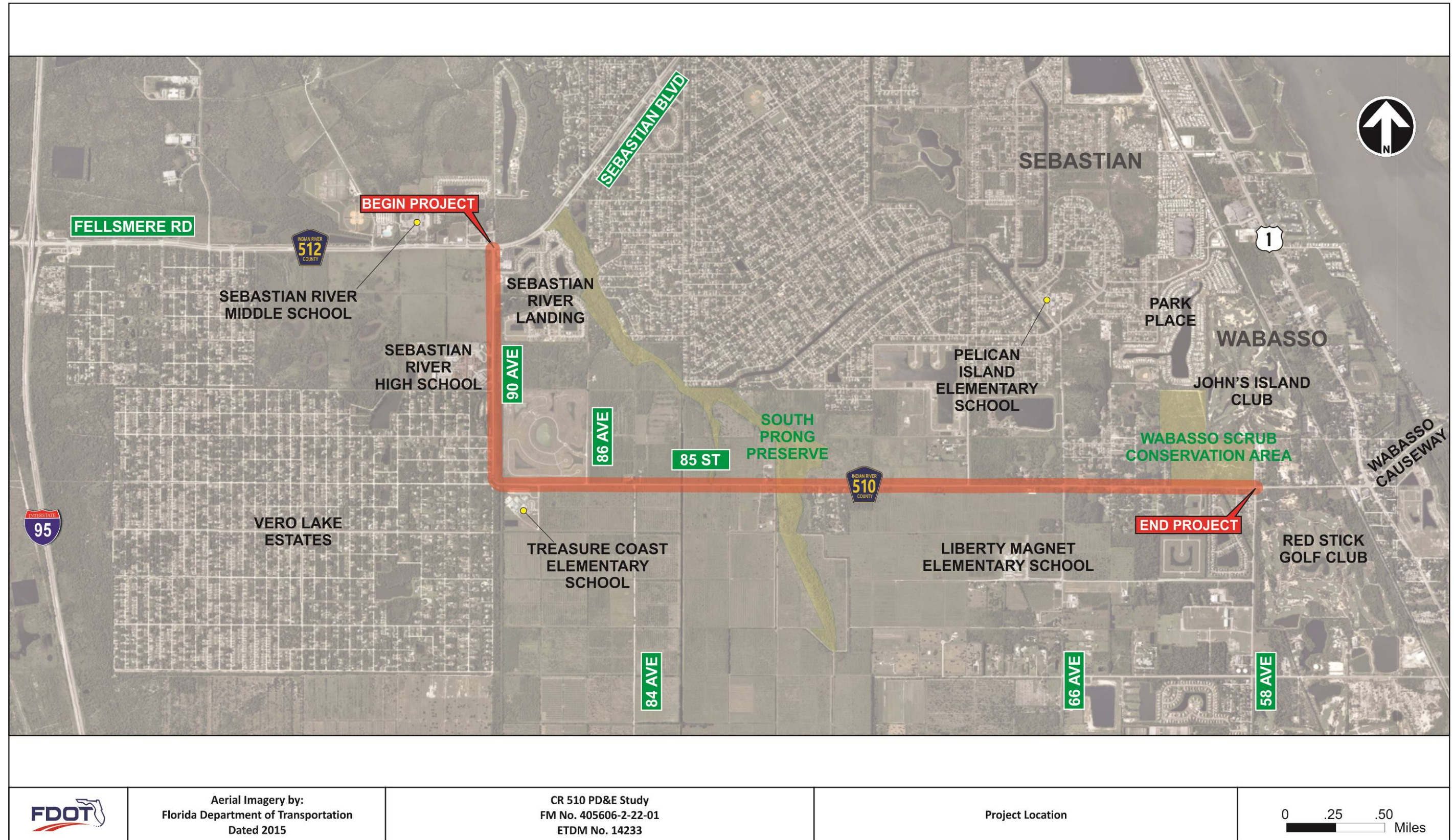
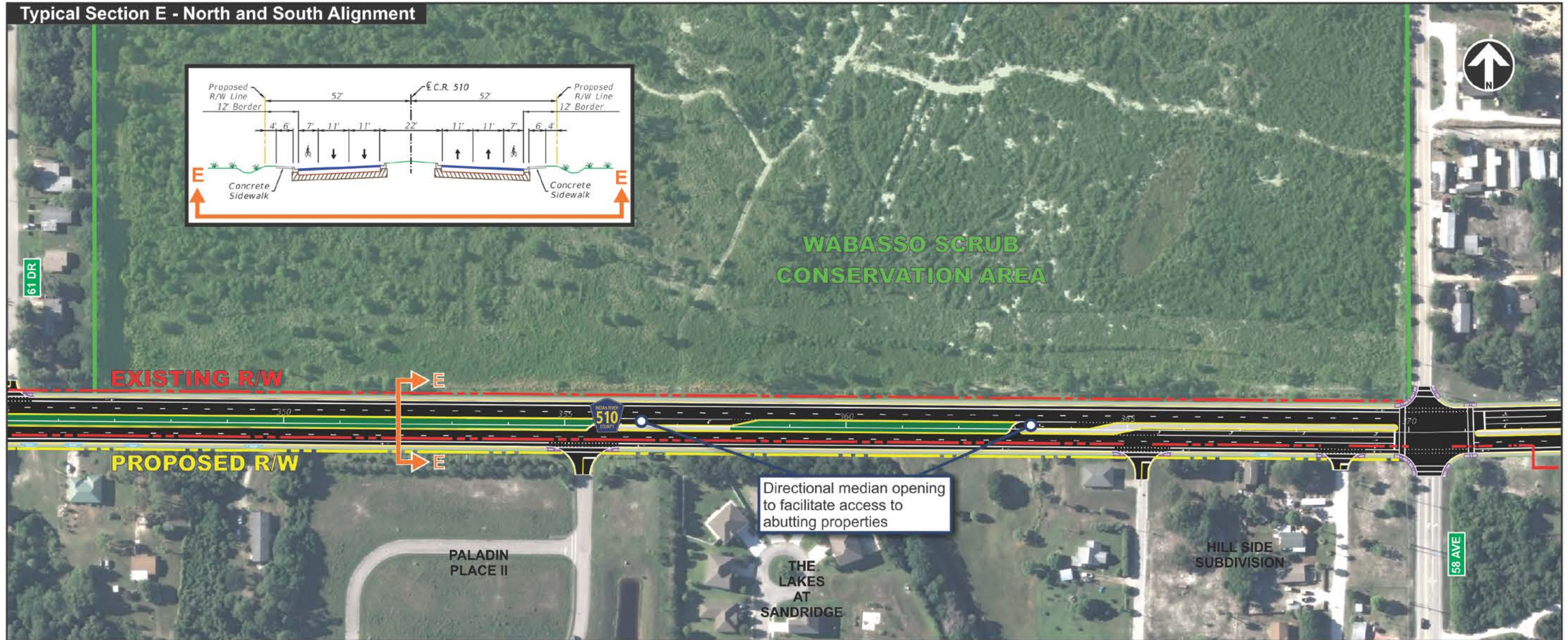


Figure 1-1 Project Location



	Aerial Imagery by: Florida Department of Transportation Dated 2015	CR 510 PD&E Study FM No. 405606-2-22-01 ETDM No. 14233	SEGMENT 4 - TYPICAL SECTION WITH ALIGNMENT FEATURES	0 100 200 Feet
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Figure 1-2 Proposed Improvements Adjacent to WCSA

2.0 POTENTIAL MITIGATION SITE INFORMATION

Property 1- WSCA Proximate

This 25.38-acre property is privately owned and located at 9005 64 Avenue, Sebastian, Florida. It is approximately 1,360 feet west of the WSCA, between Schuman Drive and 64 Avenue. It is the closest proposed property to the WSCA and could likely be easily incorporated into the existing management program for the WSCA.

Maps showing soil types as well as St. Johns River Water Management District (SJRWMD) land use types are provided in **Appendix A**. Land use types are reported by SJRWMD Florida Land Use and Cover Classifications System (FLUCCS) code and on Property 1 include Residential, Medium Density (FLUCCS 1200), Shrub and Brushland (FLUCCS 3200), Sand Pine (FLUCCS 4310), Upland Mixed Coniferous/Hardwood (FLUCCS 4340), and Australian Pine (FLUCCS 4370). However, the vast majority of Property 1 is mapped as Shrub and Brushland (FLUCCS 3200). Field inspections revealed that the eastern property edge, along 64 Avenue, contains significant stands of invasive Australian pine (*Casuarina equisetifolia*) (**Photograph 2-1**) and is bordered by a drainage ditch. Dirt roads border Property 1 along the north and east (**Photograph 2-2**) sides and may be practical for use as firebreaks. Property 1 is surrounded by residential development to the north, east, and west and by an undeveloped parcel to the south.



Photograph 2-1 Australian Pines at Property 1, facing south



Photograph 2-2 Road forming eastern boundary of Property 1, facing south

Property 2- Russel Grove

The Russel Grove property is located immediately west of Gardenia Street, south of Potomac Avenue and north of Dolphin Avenue, in Sebastian, Florida. Property 2 is approximately 3.6 miles northwest of the WSCA. It is 46.46 acres and was acquired by Indian River County in 2006 using funds from the Florida Department of Environmental Protection's Florida Forever program (**Photograph 2-3**). Because it is publicly owned and available to the public for recreation, Property 2 likely qualifies as a Section 4(f) resource.



Photograph 2-3 Entrance gate, signage, and kiosk at Property 2, facing west

Property 2 is a former citrus field that now contains regrowth of scrub and shrub vegetation (**Photograph 2-4**) as well as some relic citrus trees. The ground surface has been modified into raised beds separated by furrows, as is typical of citrus cultivation in the region. Several hiking trails are available and there is a kiosk near the entrance gate (**Photograph 2-3**) at the intersection of Potomac Avenue and Gardenia Street. The northwest portion of Property 2 borders the St. Sebastian River and it is identified as an “Undeveloped Greenway Parcel” in the St. Sebastian River Greenway Plan. It is bounded on two sides by residential areas and an undeveloped Boy Scouts of America property to the north. There is a wide mowed area along the northern perimeter that could act as a firebreak (**Photograph 2-3**). Multiple wells are located on Property 2 and would likely be useful in future vegetation management.

Land use and soil maps for Property 2 are provided in **Appendix B**. SJRWMD maps the majority of Property 2 as Citrus Groves (FLUCCS 2210), with smaller areas of Residential, Low Density (FLUCCS 1100), Upland Mixed Coniferous/Hardwood (FLUCCS 4340), Streams and Waterways (FLUCCS 5100), Mixed Wetland Hardwoods (FLUCCS 6170); and Freshwater Marshes (FLUCCS

6410). A management plan developed by Indian River County that covers Property 2- Russel Grove, is included as **Appendix C**.

During field inspections, multiple gopher tortoise burrows were observed on Property 2 and shrub and brushland was observed reclaiming former citrus cultivation areas (**Photograph 2-4**). Information from Indian River County indicates that Property 2 was occupied by Florida scrub-jays as recently as 2009. Efforts to restore scrub habitat at Property 2 have not begun by Indian River County due to reportedly high initial costs.



Photograph 2-4 Regrowth and Habitat at Property 2, facing south

Property 3- High Pointe Parcels

The High Pointe Parcels (collectively referred to as “Property 3”) are composed of five separate parcels currently owned by REO Funding Solutions IV, LLC and totaling 154.3 acres. One of those five parcels is 17.5 acres and may be of sufficient size for C.R. 510 mitigation needs. Property 3 is approximately 2.7 miles south of the WSCA. Land use and soil maps for Property 3 are provided **Appendix D**. SJRWMD maps the following land use types on Property 3: Residential, Low Density (FLUCCS 1100), Commercial and Services (FLUCCS 1400), Other Light Industrial (FLUCCS 1550); Citrus Groves (FLUCCS 2210); Shrub and Brushland (FLUCCS 3200); Pine Flatwoods (FLUCCS 4110); Upland Mixed Coniferous/Hardwood (FLUCCS 4340), and Wetland Forested Mixed (FLUCCS 6300). The majority of Property 3 is composed of areas mapped as Citrus Groves (FLUCCS 2210), Shrub and Brushland (FLUCCS 3200), and Pine

Flatwoods (FLUCCS 4110). Golf courses are located immediately south and west of Property 3 and there is a large, undeveloped parcel to the north and immediately west of the northern edge of the western property boundary. A railroad track runs along the eastern property boundary (**Photograph 2-5**). Shrub vegetation was apparent on this property during field inspections and is shown in **Photograph 2-6**.



Photograph 2-5 Railroad track and habitat along Property 3 eastern boundary, facing west



Photograph 2-6 Habitat in northern portion of Property 3, facing south

Property 4- Tippen Bay Conservation Bank

The Tippen Bay Conservation Bank is a pre-existing mitigation bank in DeSoto County, near the City of Arcadia. It is approximately 90 miles west of the WSCA. The Tippen Bay Conservation Bank offers mitigation credits for impacts to Florida scrub-jays and is part of the Briotheour/Fisheating Creek Conservation Corridor. It contains 78.6 acres of xeric oak scrub (Type I scrub-jay habitat) and 100.1 acres of palmetto prairie (Type II scrub-jay habitat), as well as additional habitats and protected wildlife movement corridors. It is currently occupied by Florida scrub-jays, is already permitted through USFWS for scrub-jay mitigation and was assigned a service area that includes the CR 510 project (**Appendix E**).

Coordination in January 2018 confirmed that the Tippen Bay Conservation Bank contains sufficient mitigation credits for the proposed C.R. 510 widening. Securing credits from the Tippen Bay Conservation Bank would involve a 10 percent deposit to reserve credits, which may serve as assurances to USFWS that mitigation through the Tippen Bay Conservation Bank is secured. Credits could likely be transferred within 24 hours of receipt of full payment.

3.0 EVALUATION OF POTENTIAL MITIGATION SITES

Properties 1 through 4 all provide sufficient acreage of uplands and potential scrub jay habitat that they may be suitable candidates for restoration and management for Florida scrub-jays. However, each property differs in its proximity to the WSCA, ownership, existing habitat conditions, and management necessary to achieve sufficient Florida scrub-jay habitat quality. Below is a discussion of some of the opportunities and constraints of each potential mitigation property.

Property 1 Evaluation

Property 1 is the closest proposed site to the WSCA. Ongoing management at the WSCA could likely be easily expanded to include Property 1 using the same crews and similar scheduling. There are relatively few barriers to movement to Florida scrub-jays from the WSCA to Property 1. Property 1 is currently privately owned and valued by the Indian River County Property Appraisers office at \$323,000. There is no guarantee that the current owner would be willing to sell the land.

According to Indian River County staff, necessary habitat restoration and management would likely include the removal of exotic vegetation, particularly Australian pines and Brazilian Pepper (*Schinus terebinthifolia*). Indian River County staff estimated up to 7.5 acres of Australian pines and 4.8 acres of Brazilian pepper would require removal, in addition to minor regrading following vegetation clearing. Replanting with native species may be necessary following the removal of invasive vegetation. Additional vegetation restoration would likely be necessary for up to four years before Indian River County would be prepared to assume long term management obligations.

Property 2 Evaluation

Property 2, Russel Grove, is 3.6 miles away and the third closest potential mitigation property to the WSCA. The majority of the land between Property 2 and the WSCA is under residential use and CR 512 and other streets form additional obstacles to movement of Florida scrub-jays from the WSCA. Property 2 is currently owned by Indian River County, was purchased using Florida Forever funds, is likely a Section 4(f) resource, and is already protected in perpetuity for conservation and recreation. Because Florida scrub-jays were documented inhabiting Property 2 in 2009 it can be assumed to be able to form suitable habitat; however, significant restoration and management is likely required to achieve and maintain large areas of suitable Florida scrub-jay habitat.

Through coordination with Indian River County staff, the following restoration and management needs were identified. The abandoned citrus groves would have to be removed, graded, and soil amendments added. Clearing of citrus and other undesirable vegetation would likely encompass 42.9 acres. Following clearing, plantings with native species would be necessary to encourage establishment of suitable scrub habitat. Indian River County staff estimated that extensive restoration efforts would likely be needed for 10 years before regular scrub habitat management activities became sufficient to maintain suitable habitat.

Property 3 Evaluation

Property 3 is the second closest proposed mitigation site to the WSCA. The area between Property 3 and the WSCA contains multiple golf courses, some undeveloped and vegetated areas, and several golf courses. Property 3 is composed of five privately owned parcels and the Indian River County Property Appraiser provides the estimated property values listed in **Table 2-1**. Property 3 is privately owned and there is no guarantee of land sale values or a willingness to sell the land for mitigation use.

Table 3-1 Property 3 Acreage and Values

Parcel	Acreage	Property Value
A	69.18	\$764,440
B	60.0	\$1,020,000
C	0.84	\$7,140
D	6.78	\$57,630
E	17.5	\$148,750

No cost or acreage estimates were available for restoration of Property 3 into suitable Florida scrub-jay habitat. However, it can be assumed that former citrus cultivation areas would require restoration similar to that identified for Property 2. Citrus and invasive vegetation would need to be removed and soil would likely require grading and amendments. Replanting and establishment of native vegetation would be necessary to achieve habitat suitability and prevent the re-establishment of invasive vegetation. Following restoration, regular management would be necessary and is assumed to be similar to ongoing management at the WSCA.

Property 4 Evaluation

Because the Tippen Bay Conservation Bank was previously approved by USFWS and contains existing credits for scrub-jay habitat, it offers the most streamlined and fastest option for securing mitigation for the proposed widening of C.R. 510. However, it is located much further than the other three potential mitigation sites and significant barriers to Florida scrub-jay movement exist between Property 4 and the WSCA. Therefore, it is unlikely that Property 4 would receive immigration from the WSCA or other conservation lands under the Sebastian Area-Wide HCP. Use of Property 4 would not require FDOT or Indian River County to perform any restoration or land management activities. It is possible that USFWS could require a 2:1 mitigation ratio for the purchase of credits from the Tippen Bay Conservation Bank. Discounts are available for credit purchases in excess of 10 credits and estimated total costs are anticipated to be between \$225,000 and \$450,000, depending on the level of take, available discounts, and required mitigation ratios.

Comparative Site Summary

Each potential mitigation property was evaluated for location and barriers to movement, initial costs, required restoration, associated time frames to achieve habitat suitability for Florida scrub-jay, and total cost. A summary of that information is provided in **Table 3-2**. Cost

estimates for restoration and management were provided by Indian River County for Property 1. Where restoration and a management costs were not available for other properties they were estimated based on the relative acreages and associated costs for Property 1.

Properties 1 through 3 are not currently managed for Florida-scrub jays and restoration of habitat would take an estimated four to ten years, depending on site conditions and level of effort applied to restoration. Property 1 is the closest to the WSCA and mitigating as close as possible to the site of impact is a common goal in any mitigation scenario. It does not appear to contain sufficient acreage to support multiple breeding pairs for Florida scrub-jay and may not offer enough potential habitat for use on other FDOT projects in addition to mitigation for the expansion of C.R. 510.

Property 2 is already owned by Indian River County, so it has the lowest cost to initially acquire land (or credits), but requires substantial restoration. Because Property 2 was previously occupied by Florida scrub-jay, it is considered highly suitable as a candidate site for re-establishing Florida scrub-jay habitat. Property 2 also borders a river and proposed greenway, so it could form part of a larger network of connected conservation properties.

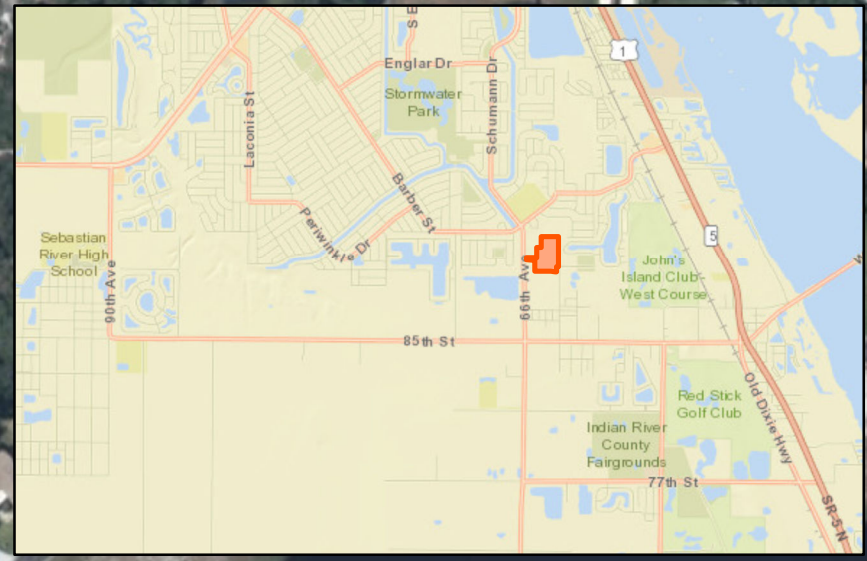
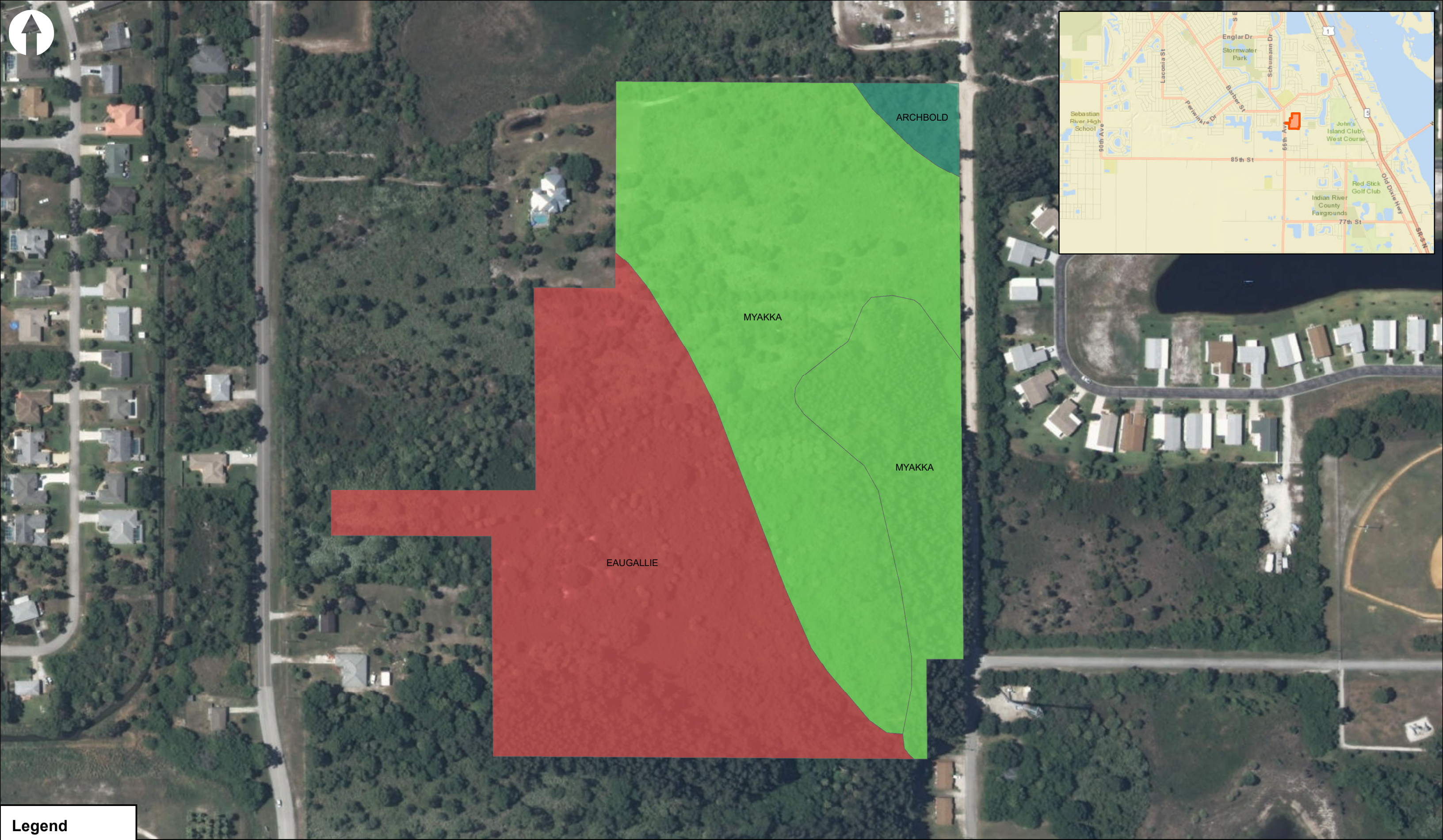
Property 3 is composed of multiple parcels, one of which is 17.5 acres. That parcel is likely appropriately sized for mitigation for the proposed expansion of C.R. 510. That 17.5-acre parcel has the lowest price for acquisition of land (or credits), but substantial restoration work would be necessary and would result in it being the second least expensive mitigation option. Neighboring parcels could also potentially be acquired for future FDOT mitigation needs.

Property 4 is the existing Tippen Bay Mitigation Bank. It potentially has the lowest cost (depending on mitigation ratios and amount of required mitigation) out of any proposed mitigation site. However, property 4 is approximately 90 miles from the WSCA and this distance greatly reduces its desirability for offsetting impacts from the proposed widening of C.R. 510. Property 4 offers the most straightforward and simple route to securing mitigation for the C.R. 510 project because credits can be released upon receipt of payment and no further restoration or planning would be required.

Table 3-2 Mitigation Property Site Summary

Property # and Name	Initial Cost (Property or Credit Purchase)	Estimated of Anticipated Maintenance Costs	Estimated Restoration Timeline to Achieve Suitable Habitat	Comments	Estimated Total Cost
1- WSCA Proximate	\$323,000	Vegetation removal: \$54,500	4 years	Closest in proximity to the C.R. 510 impacts; sufficient acreage for C.R. 510 impacts	\$424,500
		Firebreak Installation: \$6,000			
		Maintenance Efforts: \$2,500 annual (4 years) = \$10,000			
		Fencing/Long Term Protection: \$31,000			
2- Russell Grove	N/A, Indian River County-Owned	Vegetation removal: <i>information not available from IRC, estimated to be at least \$100,000 based on Property 1 estimate</i>	10 years	Can be restored to high quality habitat but will require extensive effort. Large enough to provide mitigation for additional FDOT projects beyond mitigation needs for C.R. 510 project. Already protected in perpetuity.	\$329,000
		Planting Efforts: \$177,000* (Based on 2017 PlantFinder prices and the Planting Plan for the Johns Island Golf HCP)			
		Maintenance Efforts: <i>Estimate based on Property 1 and increased for larger acreage: \$5,000 annual (4 years) = \$20,000</i>			
		Fencing/Long Term Protection: \$32,500			
3- High Pointe Parcels	\$148,750*-\$1,997,960 (*If USFWS would approve the 17.5-acre parcel alone as mitigation for C.R. 510)	Vegetation Removal: <i>information not available from IRC; estimated to be \$37,060 for 17.5-acre parcel based on Property 1 cost estimates</i>	10 years	Requires extensive restoration; 17.5-acre parcel may be available for C.R. 510 mitigation, additional parcels available for other FDOT needs. Private ownership does not guarantee willing seller or property prices	\$284,610 for 17.5-acre parcel only
		Planting Efforts: \$67,000 - \$590,000* (Based on 2017 PlantFinder prices and the Planting Plan for the Johns Island Golf HCP);			
		Maintenance Efforts: <i>information not available from IRC, Estimate based on Property 1 and adjusted for smaller acreage: \$1,700 per year for 4 years = \$6,800</i>			
		Fencing/Long Term Protection: \$25,000 - \$89,000			
4- Tippen Bay Conservation Bank	\$225,000 - \$450,000; 10% deposit for USFWS permit (\$22,500 - \$45,000)	\$0	Credit upon payment	90 miles from WSCA. Provides certainty on availability of credits, cost, and timelines. Does not involve ongoing restoration or management costs	\$225,000 - \$450,000

APPENDIX A: PROPERTY 1 SOIL AND LAND USE MAPS



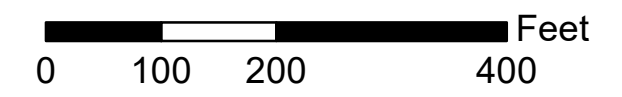
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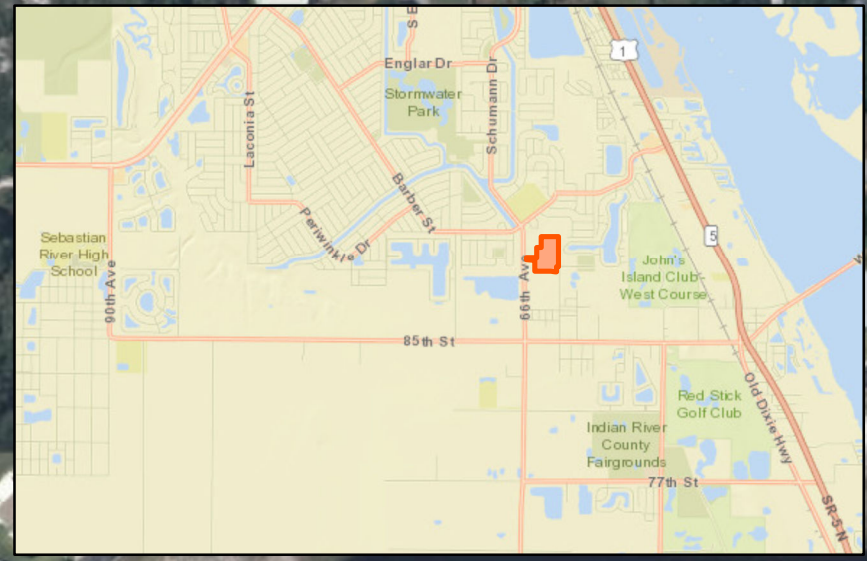
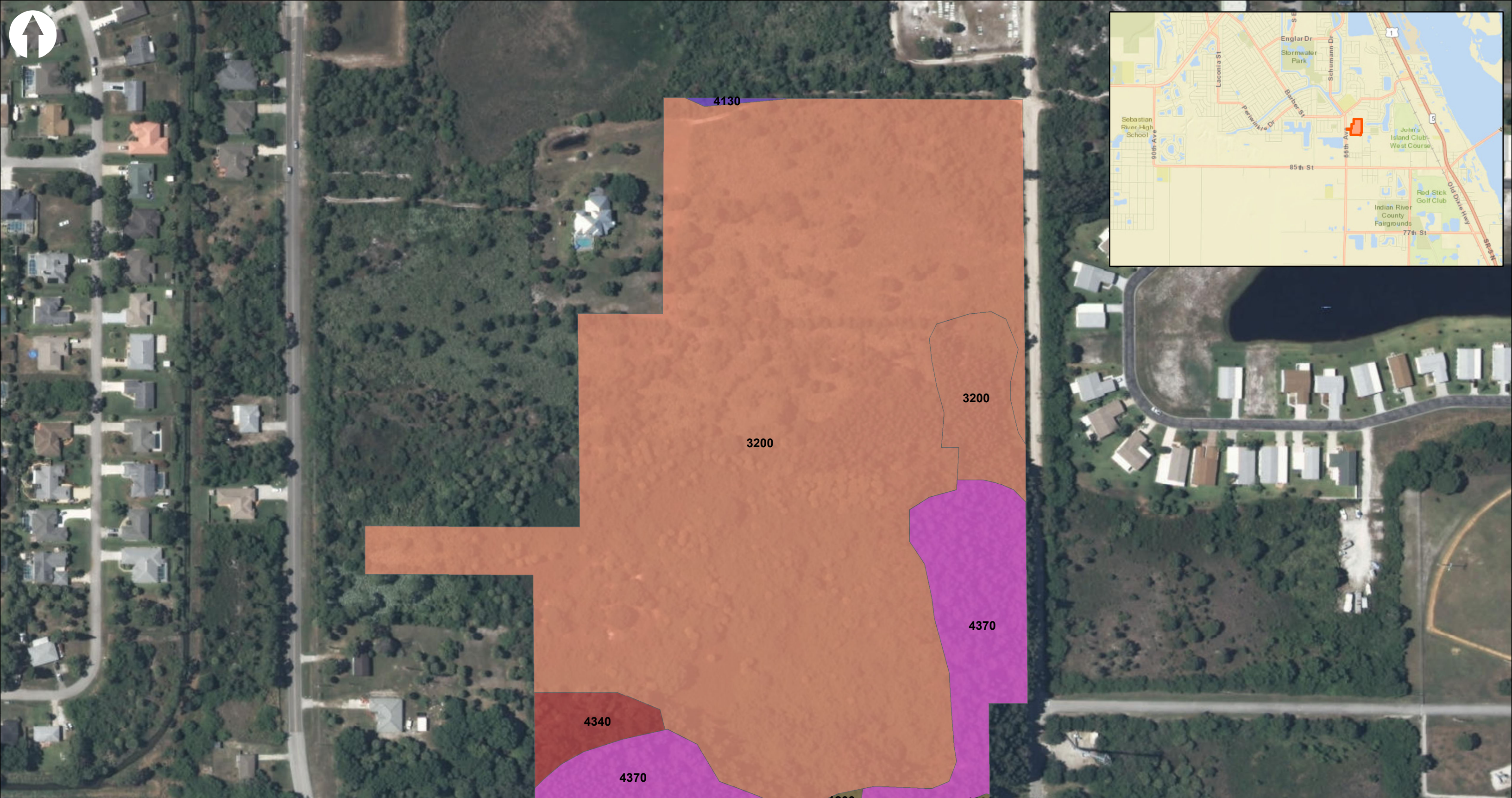
NRCS Soils (2012)

- ARCHBOLD
- EAUGALLIE
- MYAKKA

CR 510 PD&E
INDIAN RIVER COUNTY, FLORIDA
ETDM No. 14233

Florida Scrub Jay Mitigation Plan
Potential Property No. 1





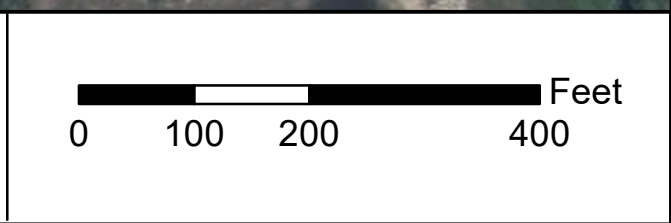
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SJRWMD Land Use (2012)

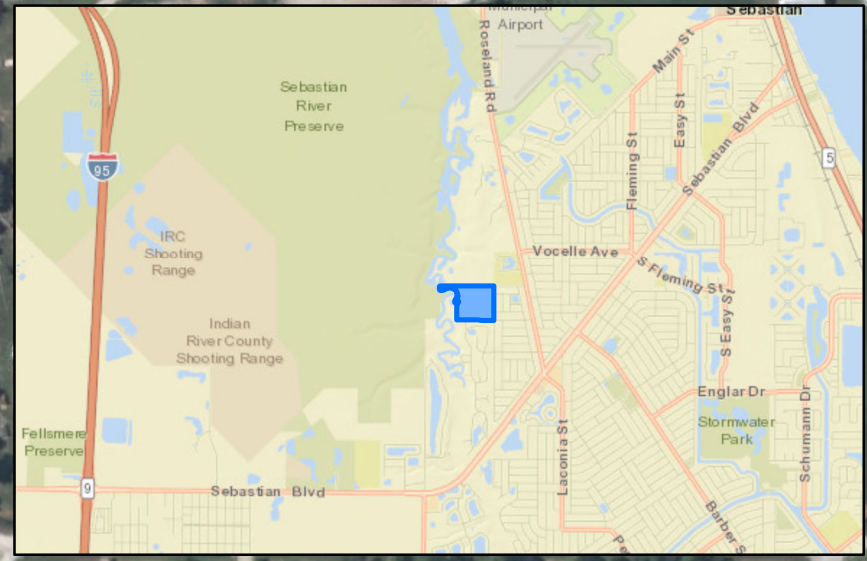
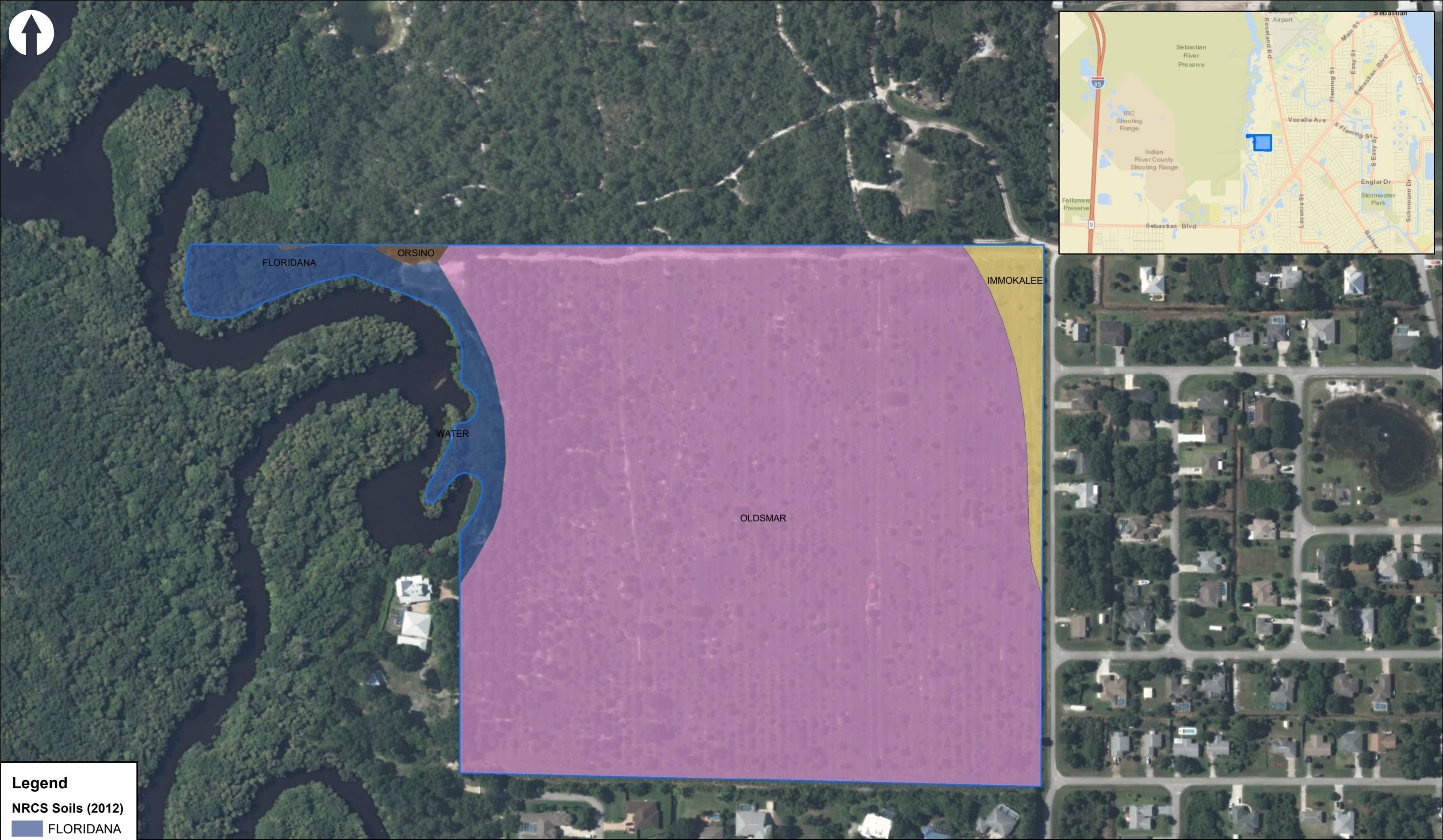
	1200: RESIDENTIAL, MEDIUM DENSITY
	3200: SHRUB AND BRUSHLAND
	4130: SAND PINE
	4340: UPLAND MIXED CONIFEROUS/HARDWOOD
	4370: AUSTRALIAN PINE

**CR 510 PD&E
INDIAN RIVER COUNTY, FLORIDA
ETDM No. 14233**

**Florida Scrub Jay Mitigation Plan
Potential Property No. 1**



APPENDIX B: PROPERTY 2 SOIL AND LAND USE MAPS



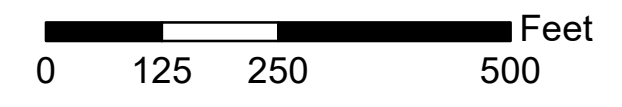
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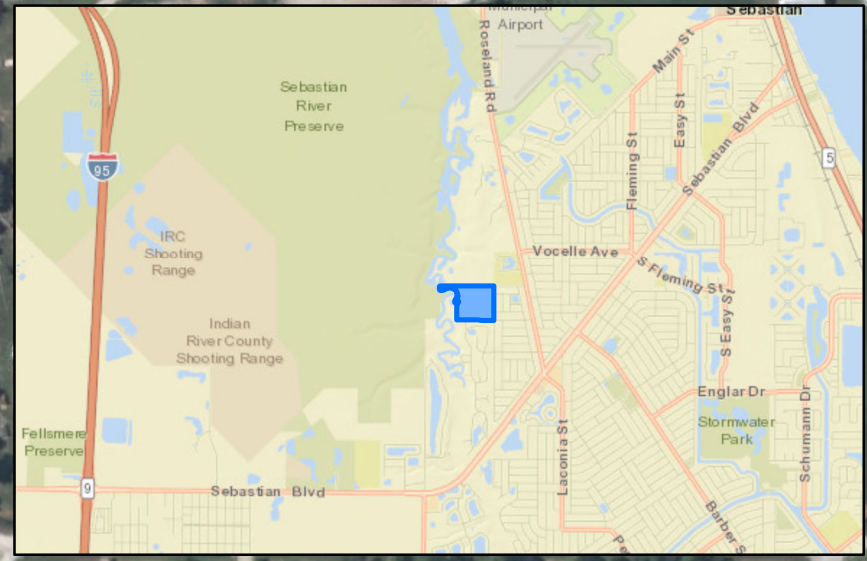
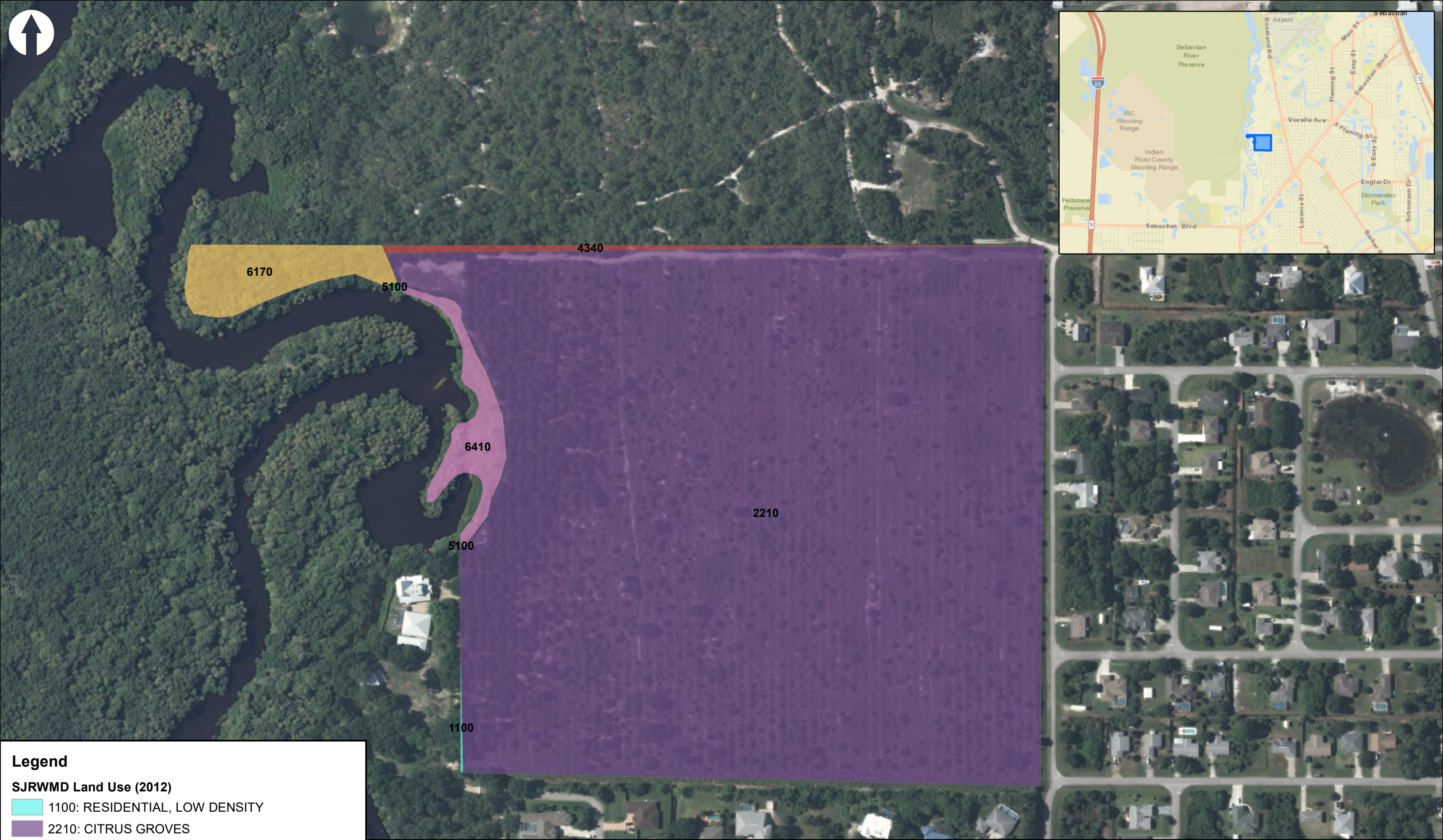
NRCS Soils (2012)

- FLORIDANA
- IMMOKALEE
- OLDSMAR
- ORSINO
- WATER

CR 510 PD&E
INDIAN RIVER COUNTY, FLORIDA
ETDM No. 14233







Florida Scrub Jay Mitigation Plan
Potential Property No. 2





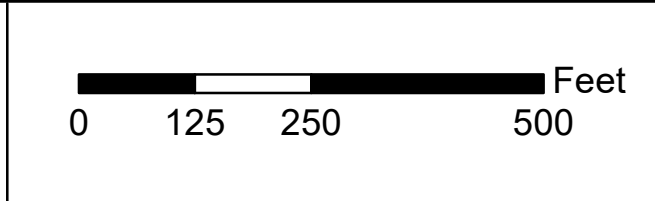
Legend

SJRWMD Land Use (2012)

	1100: RESIDENTIAL, LOW DENSITY
	2210: CITRUS GROVES
	4340: UPLAND MIXED CONIFEROUS/HARDWOOD
	5100: STREAMS AND WATERWAYS
	6170: MIXED WETLAND HARDWOODS
	6410: FRESHWATER MARSHES

CR 510 PD&E
INDIAN RIVER COUNTY, FLORIDA
ETDM No. 14233

Florida Scrub Jay Mitigation Plan
Potential Property No. 2



APPENDIX C: PROPERTY 2- RUSSEL GROVE, INDIAN RIVER COUNTY MANAGEMENT PLAN

Management Plan
for the
Russell Grove River Buffer Conservation Area
Indian River County, Florida

FCT Project Number

05-038-FF5

Prepared by:
FloridaAffinity, Inc.

For:
Indian River County, Florida
Board of County Commissioners

October, 2006

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SECTION I – INTRODUCTION

Indian River County (the County) recognizes the importance of preservation of natural resource areas and cultural sites within its jurisdiction. Policy directions incorporated in the County Comprehensive Plan define the types of resources to be protected through a variety of means, one of which will be outright purchase by the County. To carry out these policies, the County has developed a land acquisition program, managed by the Community Development Department and coordinated through an appointed Land Acquisition Advisory Committee of concerned citizens and County officials. With funding from the Indian River County Environmental Lands Bond program, funded by ad valorem taxes, the County is prepared to enter cost-sharing partnerships with the Florida Communities Trust (FCT) for land acquisitions under the State's Florida Forever land acquisition programs.

Grant funding from the Florida Communities Trust is requested for reimbursement for the County's acquisition costs for the Russell Grove River Buffer Conservation Area (Russell Grove). This plan was developed to meet the management plan requirements of the Florida Forever program and the Florida Communities Trust, to ensure that the property will be developed in accordance with the FCT Grant Award Agreement (Agreement #05-038-FF5) and in furtherance of the purposes of the grant application.

A. Location and Ownership

The Conservation Area is located north of County Road 512, west of Roseland Road, adjoining the city limits of Sebastian. Russell Grove lies between units of the Sebastian Highlands subdivision and the South Prong of the St. Sebastian River, north of the San Sebastian Springs subdivision. Access to the property from CR 512 is via Roseland Road north and Dolphin Avenue or Potomac Avenue to the west. Potomac Avenue and Gardenia Street, which parallels the eastern property boundary, are single-lane residential roads.

Indian River County purchased the property in early August 2006 from the Russell V W Family Limited Partnership.

B. Background Information

The Indian River County Future Land Use Map designation of the project site allows residential development of up to one unit per acre. Adjacent lands are zoned for residential uses to the north, east and south and conservation uses to the west. Camp Oklawaha, operated by the Gulf Stream Council, Boy Scouts of America, abuts the Conservation Area to the north. Residential development abuts the Conservation Area on the east and south.

The Conservation Area protects approximately 1,500 feet on the South Prong of the St. Sebastian River, a part of the Indian River – Malabar to Vero Beach State Aquatic Preserve. A 2 acre County canoe/kayak launch facility is located just north of CR 512, approximately 2 miles upstream, and two county parks with boat

ramps are located within one mile downstream from the Conservation Area. (See Figure B.) The St. Sebastian River Preserve State Park is located along the west side of the river across from the Conservation Area, and extends eastward along a peninsula directly across from the northwestern corner of the Russell Grove property.

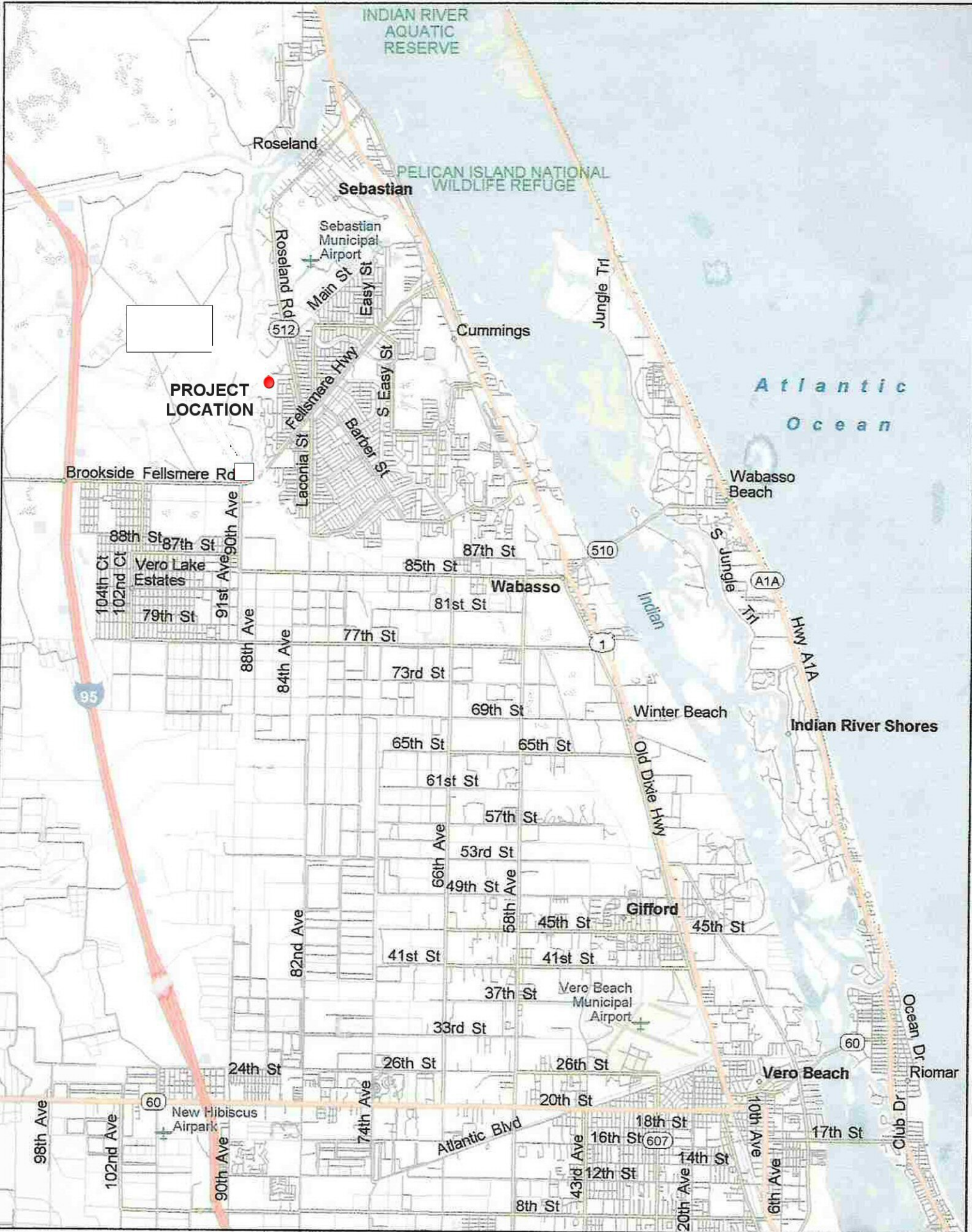
SECTION II – PURPOSE

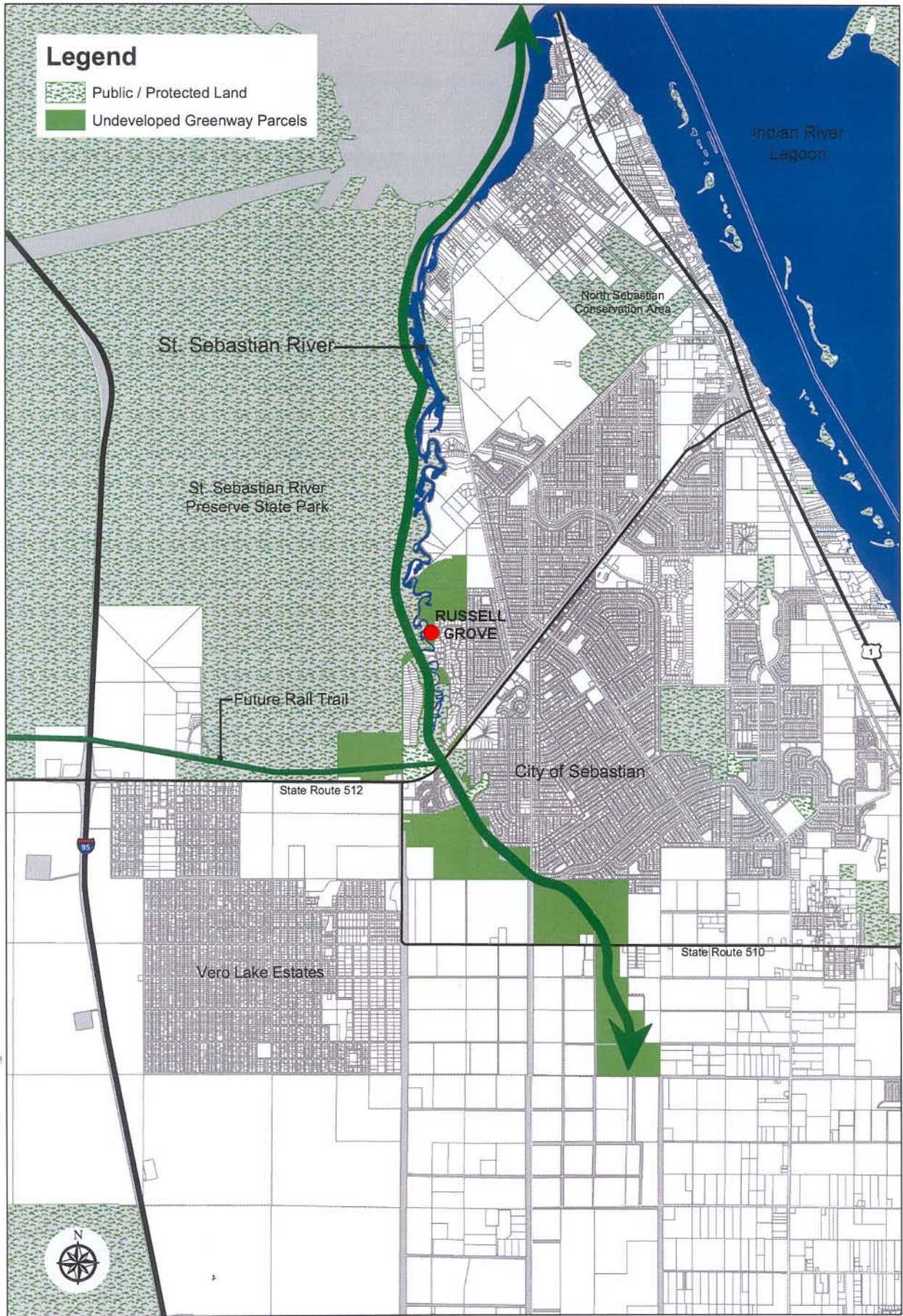
A. Purposes for Acquisition

The Russell Grove River Buffer Conservation Area will preserve native riverfront natural communities and provide an opportunity to restore derelict citrus groves to scrub community that may serve as habitat for endemic scrub species, such as the federally-listed Florida Scrub jay. The property was purchased to provide additional buffer for water quality protection in the watershed of the St. Sebastian River and the State aquatic preserve. The County acquisition is one small part of a multiple-phase land acquisition project that has been pursued by Indian River County, the Department of Environmental Protection (DEP) and the St. Johns River Water Management District (SJRWMD) for many years. The goal of these acquisition projects is to provide a substantial undeveloped buffer on the St. Sebastian River and the aquatic preserve to eliminate the potential for surface and groundwater quality degradation resulting from development.

A permanent recognition sign shall be maintained facing at the northeastern corner of the property. The sign shall acknowledge that the project site is open to the public and was purchased with funds from the Florida Communities Trust Florida Forever Program and Indian River County. The Conservation Area will be identified in all advertising and literature as acquired with funds for the Florida Communities Trust and operated as a conservation and outdoor recreation area by Indian River County.

FIGURE A - VICINITY MAP





0 0.25 0.5 0.75 1
Miles

St. Sebastian River Greenway - Concept Map

B. Management Objectives

The desired future conditions for the Russell Grove River Buffer Conservation Area will include the eradication of all invasive exotic plants and feral animals from the property. The blackwater stream, floodplain marsh and floodplain forest communities will be restored to conditions as nearly as possible replicating their states prior to human impacts that occurred through the 19th and 20th Centuries. Water quality impacts to the river from adjacent developed areas will be greatly reduced or eliminated. The upland Florida Scrub community that once existed where citrus grove now stands will be restored, to the extent feasible, given the difficulty and current lack of scientific understanding of methods needed to reach that goal. Wildlife and other natural and cultural resources on the property will be protected and interpreted for the visiting public. Visitors will find a modest level of recreational facility development that provides access to the river shoreline, and a cleared, but otherwise undeveloped, open play area located away from the river will provide space for an appropriate level of active recreation for the local population. The following management objectives have been identified to guide the County's management of the Conservation area toward these goals:

1. Compile thorough plant and animal species lists, identify locations of any listed plant and animal species and conduct a reconnaissance-level cultural resources survey of the property to guide decisions on future resource management and facilities development activities.
2. Work with the St. Johns River Water Management District and the Sebastian River Water Control District to protect and improve the quality and regulate the quantity of surface water runoff entering the St. Sebastian River from adjacent developed land.
3. Eradicate invasive exotic plant species and exotic or nuisance animals and maintain the site free of both exotic plants and animals in the future.
4. Work toward restoration of the river shoreline and grove area to the native floodplain marsh and scrub natural communities that existed prior to agricultural development.
5. Provide an open play area, wildlife observation, fishing and canoe access to the St. Sebastian River, low-impact visitor amenities and nature trails. Provide appropriate interpretation of the natural and cultural resources of the property and of adjacent publicly-owned lands.
6. Coordinate with federal, state and other county agencies who manage public land in the St. Sebastian River corridor to provide continuity in the management of natural and cultural resources, gain assistance with upland restoration efforts, and to connect recreational opportunities along the St. Sebastian River greenway corridor.

C. Comprehensive Plan Conformance

The Indian River County Comprehensive Plan provides specific policy directives regarding preservation of environmentally sensitive lands and cultural resource sites within the County. The Russell Grove River Buffer Conservation Area addresses the following specific policy goals and objectives of the County's Comprehensive Plan:

Recreation and Open Space Policy 1.1 - seeks to provide 4 acres of recreation area per 1,000 people in Indian River County.

Recreation and Open Space Policy 6.4 designating the St. Sebastian River as a greenway and waterway trail system.

Recreation and Open Space Objective 8 and Policy 8.1 – directs the County to increase public open space for passive recreation and historic sites.

Conservation Objective 6 - mandating the acquisition of upland native plant communities and Policy 6.1 to assist agencies in establishing regional preserves as wildlife corridors.

Conservation Policy 8.6 - directing that priority be given to acquiring lands that create new or enhanced ecological greenways and recreational trail opportunities.

Conservation Objective 12 and Policy 12.5 - establishing a conservation land management program and funding the restoration and enhancement of impacted wetland and upland areas and the eradication of nuisance exotic vegetation on acquired lands.

Coastal Management Objective 8 – directing an increase in the number of public access points to natural resources within the coastal zone, including the St. Sebastian River.

Coastal Management Objective 9, Policies 9.1 and 9.2 – directing protection of historic structures and archaeological sites.

Future Land Use Objective 16 and Policy 16.3 - to achieve a Class II water quality rating in the Indian River Lagoon and to support land acquisition in coastal conservation areas.

Stormwater Management Objective 7 – to adopt water quality level of service standards based on SJRWMD goals.

Portions of the project area lie within the 100-year flood plain. The acquisition supports the County's hazard mitigation strategy by directing future residential development elsewhere, to prevent community growth in an inappropriate area and reducing potential future losses.

Indian River County will amend the Future Land Use Classification for the Conservation Area on the next Comprehensive Plan amendment cycle after the approval of this management plan. The classification will be changed to Conservation land use, and rezoning of the area to the appropriate zoning designation will follow the amendment of the Comprehensive Plan. Monitoring of the development review process and enforcement of the provisions of the

County's land use, zoning and land development regulations on adjacent undeveloped land will serve to adequately buffer the project site from adverse impacts of future adjacent land uses.

SECTION III – NATURAL RESOURCES

A. Natural Communities

The Conservation Area supports 3 natural communities: blackwater stream, floodplain marsh and bottomland forest . The majority of the landscape (approximately 43 acres) are in abandoned citrus grove and cleared land, lying between the grove and the edge of the river, an area that supported scrub community before the grove development (See Figure C).

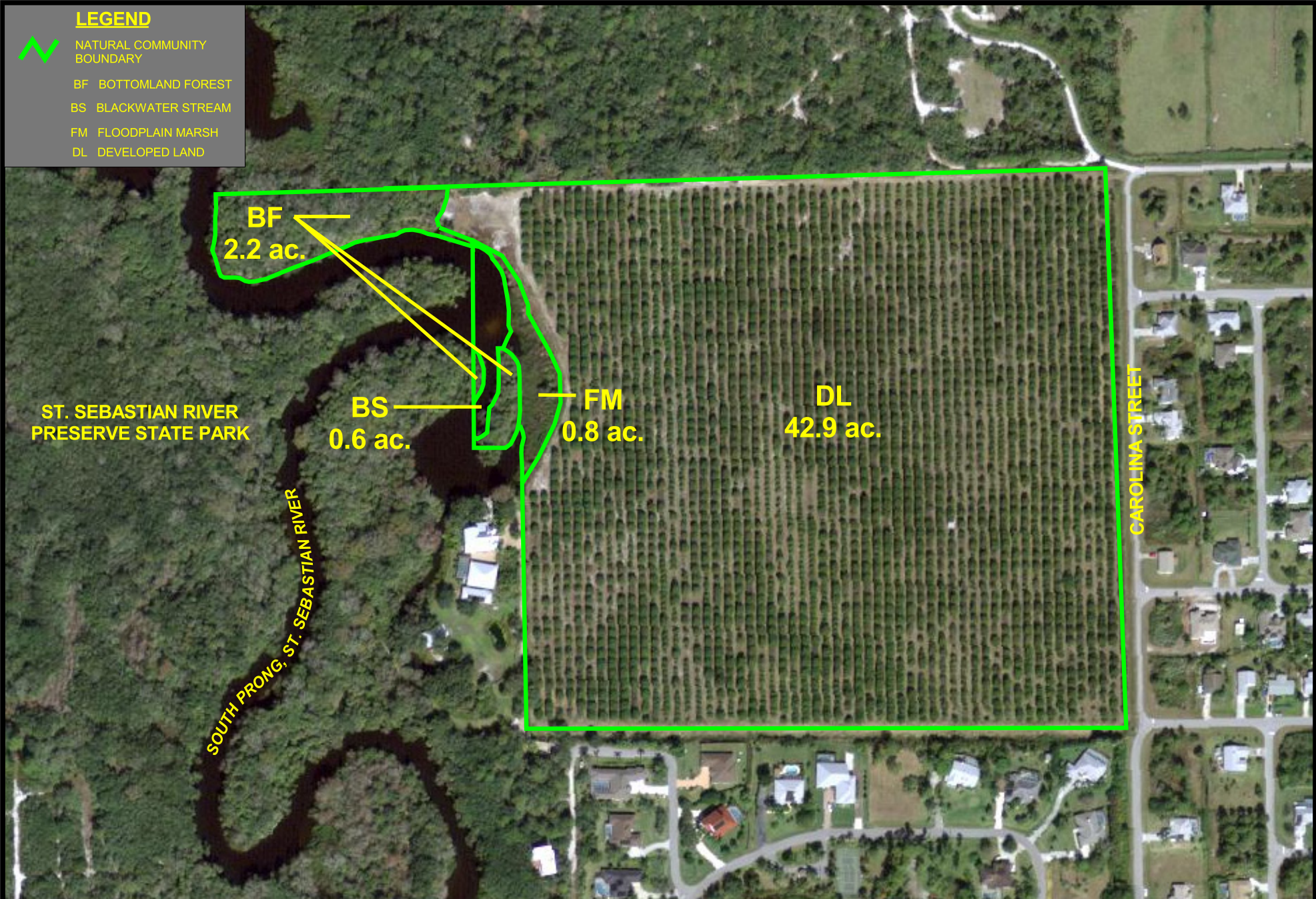
Blackwater Stream (approx. 0.6 acres)

Blackwater streams are characterized as perennial or intermittent seasonal watercourses originating deep in sandy lowlands where extensive wetlands with organic soils function as reservoirs, collecting rainfall and discharging it slowly to the stream. The tea-colored waters of Blackwater Streams are laden with tannins, particulates, and dissolved organic matter and iron derived from drainage through swamps and marshes. They generally are acidic (pH = 4.0 - 6.0), but may become circumneutral or slightly alkaline during low-flow stages when influenced by alkaline groundwater. Water temperatures may fluctuate substantially and are generally correlated with seasonal fluctuations in air temperature. The dark-colored water reduces light penetration and, thus, inhibits photosynthesis and the growth of submerged aquatic plants. Emergent and floating aquatic vegetation may occur along shallower and slower moving sections, but their presence is often reduced because of typically steep banks and considerable seasonal fluctuations in water level. Typical plants include golden club, smartweed, sedges, and grasses. Typical animals include river longnose gar, gizzard shad, threadfin shad, redbfin pickerel, chain pickerel, ironcolor shiner, Ohooppee shiner, weed shiner, blacktail shiner, chubsucker, channel catfish, banded topminnow, pygmy killifish mosquitofish, mud sunfish, flier, everglades pygmy sunfish, banded sunfish, redbreast sunfish, dollar sunfish, stumpknocker, spotted bass, black crappie, darters, Alabama waterdog, river frog, alligator, snapping turtle, alligator snapping turtle, river cooter, Florida cooter, peninsula cooter, stinkpot, spiny softshell, red-belly watersnake, brown watersnake, beaver, and river otter. (Florida Natural Areas Inventory (FNAI), Guide to the Natural Communities of Florida, 1990.)

At the Russell Grove River Buffer Conservation Area, the South Prong of the St. Sebastian River is blackwater stream community. The river is in good condition, at this time and will require minimal management activities to maintain its condition. Protection of water quality entering the stream and protection of the shoreline from physical disturbances are the primary management consideration for this community.

LEGEND

-  NATURAL COMMUNITY BOUNDARY
- BF BOTTOMLAND FOREST
- BS BLACKWATER STREAM
- FM FLOODPLAIN MARSH
- DL DEVELOPED LAND



RUSSELL GROVE RIVER BUFFER
CONSERVATION AREA
FIGURE C PAGE 8
NATURAL COMMUNITIES MAP

INDIAN RIVER COUNTY
BOARD OF COUNTY COMMISSIONERS
AUGUST, 2006



Floodplain marsh (approx. 0.8 acres)

Floodplain marsh occurs in a narrow band along the shoreline of the blackwater stream at Russell Grove. This community is maintained by periodic flooding of the river. Floodplain marsh is normally vegetated primarily by sand cordgrass, giant leather fern, and string-lily. Common buttonbush and pond apple also occur sporadically. Floodplain marsh on the Conservation Area is generally in very poor condition, having been affected by operation of the orange grove over the past half-century. The area has been invaded by wild taro, and exotic grasses, and will require extensive exotic plant removal and management actions to restore it to a natural state. The wetland enhancement project will encompass approximately 1.2 acres in area. (FNAI, Guide to the Natural Communities of Florida, 1990.)

Bottomland Forest (approx. 2.2 acres)

Bottomland forest is characterized as a low-lying, closed-canopy forest of tall, straight trees with either a dense shrubby understory and little ground cover, or an open understory and ground cover of ferns, herbs, and grasses. Typical plants include water oak, live oak, red maple, sweetgum, loblolly pine, white cedar, cabbage palm, diamond-leaf oak, southern magnolia, loblolly bay, swamp tupelo, spruce pine, American beech, dahoon holly, wax myrtle, swamp dogwood, Florida elm, stiffcornel dogwood, and American hornbeam. Typical animals include marbled salamander, mole salamander, three-lined salamander, slimy salamander, five-lined skink, ringneck snake, gray rat snake, eastern king snake, cottonmouth, wood duck, red-tailed hawk, turkey, yellow-billed cuckoo, screech-owl, great-horned owl, ruby-throated hummingbird, acadian flycatcher, pileated woodpecker, hermit thrush, cedar waxwing, yellow-throated warbler, bats, opossum, gray squirrel, flying squirrel, raccoon, gray fox, bobcat, and white-tailed deer.

Bottomland forest occurs on low-lying flatlands that usually border streams with distinct banks, such that water rarely overflows the stream channel to inundate the forest. They also occur in scattered low spots in basins and depressions that are rarely inundated, which allows typical upland species to survive. Soils are generally a mixture of clay and organic materials. The water table is high, but Bottomland Forests are inundated only during extreme floods or exceptionally heavy rains (i.e., not annually). Tree density and species diversity is relatively high.

The forest canopy is dense and closed. Thus, air movement and light penetration are generally low, making the humidity high and relatively constant. Because of these characteristics, Bottomland Forests rarely burn. Bottomland Forest is a very stable community that requires a hundred years or more to mature. (FNAI, Guide to the Natural Communities of Florida, 1990.)

At Russell Grove, a preliminary survey of plant species identified slash pine, rusty lyonia and scrub live oak (at the upper edge where the community originally transitioned to scrubby flatwoods and scrub communities), saw palmetto, wild grape, sumac, cherokee bean, wax myrtle, bracken fern, dog fennel, wild coffee, sensitive plant, live oak, tillandsia, cabbage palm and beauty berry. Exotic plants noted to occur were air potato and Brazilian pepper. Eradication of exotic plants and protection of the river shoreline from physical impacts will be the primary management activities needed to maintain this community in a healthy condition.

B. Invasive Exotic Plants

As abandoned agricultural land, Russell Grove now supports a range of exotic plants, from bahia grass and other exotic grasses and groundcovers, to Brazilian pepper and wild taro. Immediate steps will be taken to halt the spread of exotic plants within the former citrus grove. The initial effort may be to establish a regular mowing program to halt the maturation of the plants. Over time, restoration of natural communities will help address the invasive plant problem. However, a long-term commitment for a continuous maintenance program to identify and remove invasive plant species as they occur will be required.

During the first year of active management on the property, County staff will survey the entire property, identify the plant species involved, and proceed with a program to eliminate them over the long term. The Florida Pest Plant Council's List of Invasive Exotic Plants (Appendix B) will provide a guide for exotic plant management on the property. A combination of mechanical removal and herbicide treatment will be used, followed with careful monitoring on an annual cycle (at minimum) and follow-up treatment, as needed.

C. Upland Restoration

The largest challenge of management at the Conservation Area will be the effort to re-establish the original scrub community to approximately 34 acres of the upland property now cleared or supporting the abandoned citrus grove. Approximately 42.9 acres of the property (about 99 percent), originally supporting Florida oak scrub community, was cleared by the grove operation. The grove was established during the 1960's. That history of disturbance results in a landscape that now lacks nearly all of the unique plant species that compose scrub, providing no base on the site from which to begin the restoration effort.

Interim management measures for the property's upland areas will focus on control and eradication of invasive exotic plants. As mentioned above, mowing between the citrus trees will be considered as a method to hold the exotic plant populations at bay during the long process toward community restoration. Unless citrus canker infestation is identified in the grove, the citrus trees should be kept in place to provide shade for the young plants and seedlings that will be planted in future phases of the restoration effort.

During the initial year of management by the County, a restoration plan will be developed with the assistance of the US Fish and Wildlife Service (USFWS), the

Florida Fish and Wildlife Conservation Commission (FWC) and universities to provide long-term guidance and a funding strategy for this important effort. Little research has been conducted on the restoration of former agricultural lands to scrub community in Florida. The Russell Grove site may serve as an excellent research center to help expand the habitat for the Florida Scrub jay and other endangered scrub endemic species through restoration of potential scrub communities on this and other public lands in the region. As such, the site may have the potential to acquire funding or staff support from state, federal or sponsored research sources. It is clear that restoration of scrub community where the citrus grove now exists will be a long process, and one requiring a substantial investment of staff and financial resources.

Generally, species that will be established on the uplands of the Conservation Area will be those common to the oak scrub variant of Florida Scrub, including sand live oak, myrtle oak, Chapman's oak, scrub oak, saw palmetto, rosemary, rusty lyonia, ground lichens, scrub hickory, hog plum, silk bay, beak rush, milk peas, and stagger bush. Finding a source of plants or for these species will be one of the main challenges for this effort. County staff will work directly with the managers of adjacent DEP, SJRWMD and Brevard County scrub lands to seek a supply of plants and source of seeds for the ongoing effort. To document progress, the restoration effort shall include establishing a photo monitoring program at appropriate locations on the site.

D. Water Quality Protection

The greatest threat to the St. Sebastian River is degradation of the quality of water entering the system from adjacent uplands. The fact that the St. Sebastian River is part of the larger State aquatic preserve serves to elevate the level of water quality protection required for new development. County staff will work closely with all adjacent land developers on new projects and with owners of existing developments to assure that stormwater management regulations are followed. Staff will request that the State aquatic preserve or the St. Johns River Water Management District extend the collection of water quality data to the St. Sebastian River adjacent to the Conservation Area, to assist in monitoring changes in the water entering the site over time.

A drainage ditch is located just south of the Russell Grove property boundary that conveys runoff from the adjacent subdivisions directly to the floodplain of the St. Sebastian River. County staff will work with the SJRWMD to design and construct a stormwater treatment facility near the south boundary to intercept and treat water from the ditch before allowing its discharge to the river. The Conceptual Master Site Plan (Figure E) shows a potential location and shape for this facility, amounting to approximately 1.2 acres of the upland area. The actual size and configuration of the stormwater pond will be determined through a comprehensive drainage study and design process, and may differ from the shape and size depicted in this plan.

Water quality impacts from the public access facilities proposed in this plan are not anticipated, due to the small scale of development. Stormwater runoff from the small areas proposed for road and parking areas will be treated using shallow swales.

E. Feral Animal Program

There is little evidence of feral animal problems on the property at this time. Feral hogs may move into the Conservation Area along the river floodplain from the undeveloped area to the north. When noted, these destructive invaders will be removed by County animal control staff. Feral cats and dogs found on the site will be removed. County staff will work to inform adjacent residents of the damage stray cats and dogs can do to native wildlife populations and encourage compliance with existing animal control ordinances. The property will be fenced and feral animal control efforts will begin within six months after County staff begins active management of the property.

F. Listed Plant Species

Listed plants potentially found on the Conservation Area may include a variety of species common to bottomland forests and documented in the adjacent state park. Listed plants potentially occupying the bottomland forest on the site include hand fern.

A plant and animal survey will be conducted or contracted by the County during the first year of management will serve to identify and locate any listed plants on the property. Any listed species found on the property will be reported to the Florida Natural Areas Inventory (FNAI) using the prescribed form (see Appendix A).

County staff will monitor any listed plant populations and take appropriate actions to enhance the habitats the plants depend on. The management activities discussed in this plan for eradicating invasive exotic plants and improving water quality will serve to enhance the habitat for all natives, included listed species.

G. Listed Animal Species

Gopher tortoises are the only listed animal species known to inhabit the upland portions of the property at this time. These animals will be protected from construction activities and visitor disturbances, and will benefit and feral animal management programs to be implemented by the County. The plant and animal survey will include an effort to locate and map all active tortoise burrows to provide baseline data and allow staff to monitor the population of the species, over time. The Russell Grove property may be suitable as a relocation site for tortoises affected by development in the vicinity. County staff will work with the FWC to support the local Strategic Habitat Conservation Area for gopher tortoises and to establish a relocation program if that is determined to be beneficial. Any other listed animals found on the uplands site will be reported to the FNAI using the prescribed form (see Appendix A). Habitat for listed animal species will be

protected and enhanced through the County's efforts to eradicate exotic plants and animals and restore native habitat on the site.

A comprehensive survey to inventory and monitor the distribution and abundance of fishes and selected invertebrates of the St. Sebastian River was conducted in 1999-2000 (Paperno and Brodie 2000). Three notable species (slashcheek goby, opossum pipefish, and bigmouth sleeper) were found in the St. Sebastian River. They are among the few examples of euryhaline tropical freshwater species found in North America. The St. Sebastian River is thought to provide the only suitable habitat north of the Caribbean and Central America for these species because water temperatures are higher than in other freshwater tributaries of peninsular Florida. However, none of the above are protected species. No special management actions are needed at this time. As noted above, West Indian manatees use the St. Sebastian River and the Indian River Lagoon, and manatees are frequently sighted along the stretch of the river adjacent to the Conservation Area. Motorized boating activity in the blackwater stream community adjacent to the property will not be encouraged by the facilities or programs planned for the Russell Grove. Information will be included in the park's interpretive program to make visitors aware of the presence and protected status of the mammals.

H. Natural Communities Inventory and Monitoring

During the first year after approval of the management plan, a comprehensive plant and animal survey of the property will be conducted. Two monitoring periods will be scheduled to coincide with spring and fall flowering seasons for plant identification. Information gathered by the survey will inform further resource management planning and the process for determining trail locations.

Once the initial inventory has been completed, a monitoring program will be put in place to provide follow-up documentation of the conditions of the natural communities and the growth or decline of any listed plant or animal populations. Monitoring, again, will occur during spring and fall months. These inventory and monitoring efforts under the County's management will insure maximum protection of native biota on the project site.

I. Greenway and Blueway Management

The Russell Grove River Buffer Conservation Area is a small component of a much larger ecological greenway (see Figure B). Land managed by the St. Johns River Water Management District, the Florida Department of Environmental Protection and Brevard County contribute a much larger percentage of the area under protection in this area of Florida. County staff will provide all assistance possible to the other management agencies in coordinating large scale planning, resource management, inventorying and monitoring efforts. County staff will consult with experts from the other managing agencies in determining the best management practices that can be applied to the resources protected by the Conservation Area.

As discussed above, the St. Sebastian River is included in the Indian River Malabar to Vero Beach Aquatic Preserve. Recreational access to the waterways is provided by many public and private boating facilities, including public boat ramps on the east shoreline of the river's South Prong, and the County's canoe launch park located south of the Conservation Area, on the west shoreline. The plans for the Conservation Area support the goals of the aquatic preserve by buffering the river from future development, allowing a small amount of additional access for canoes and kayaks, and by providing a site for interpretation of the aquatic preserve, its relationship to upland ecology and the impacts of development. A wildlife overlook/fishing deck and a canoe/kayak launch are proposed at the Conservation Area to provide a passive recreational and interpretive access point to the river.

SECTION IV – Cultural Resources

A. Archaeological and Historic Resources Inventory and Protection

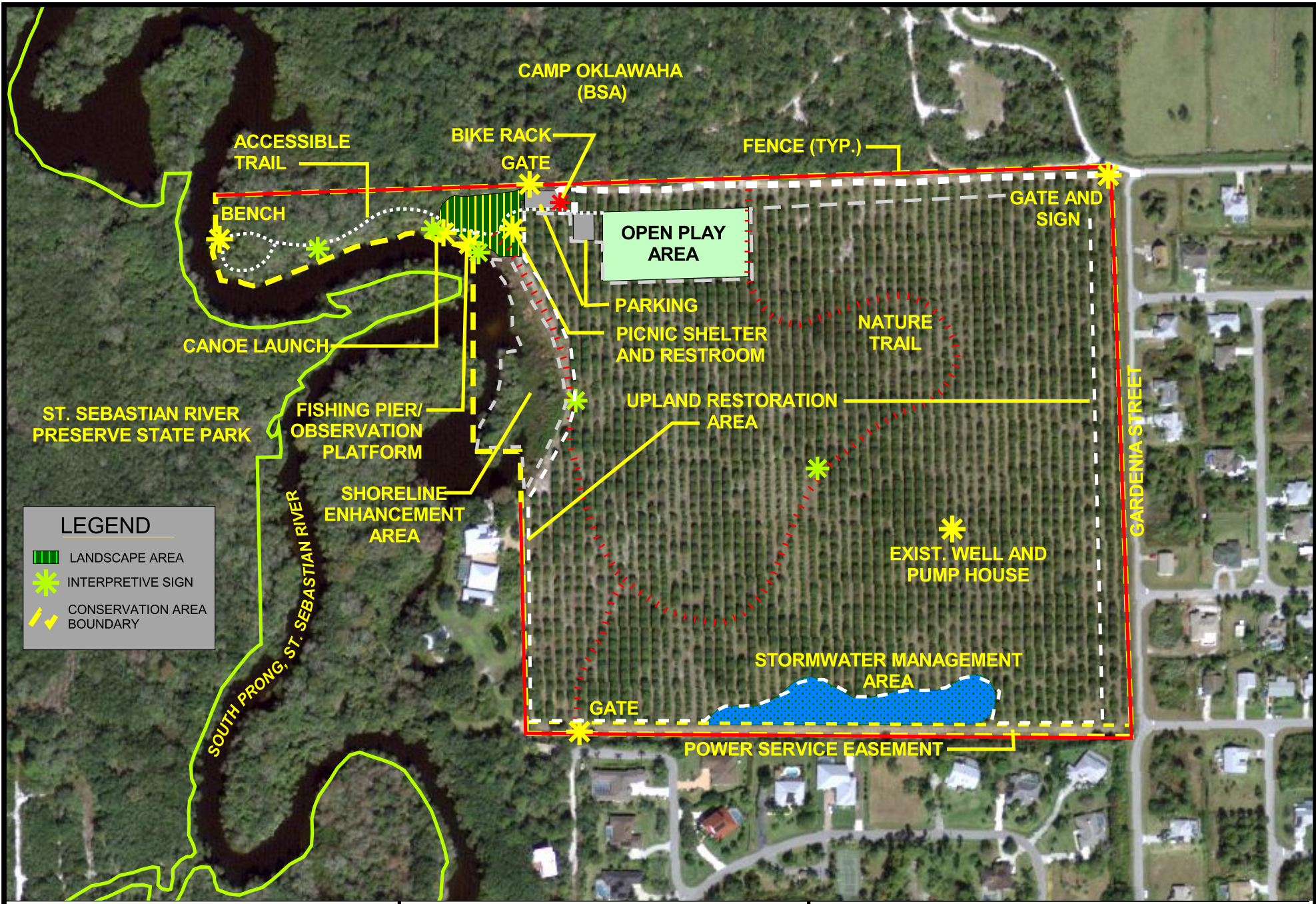
There are no known prehistoric or historic cultural sites on the property included in the Russell Grove River Buffer Conservation Area. A reconnaissance-level cultural resource survey will be conducted in the first year of active management of the property by the County. If recommended by the survey report, site-specific surveys by qualified archaeologists will be conducted for the proposed development sites during the design of the public access facilities discussed below. Reports containing the results of these surveys will be provided to the Department of State, Division of Historical Resources on completion of the studies.

The collection of artifacts or the disturbance of archaeological and historical sites at the site will be prohibited without authorization from the Department of State, Division of Historical Resources. Appropriate protective measures will be taken in the event cultural sites are discovered on the property in the future. Management of cultural resources will be coordinated with the Division of Historical Resources, and will comply with the provisions of Chapter 267 Florida Statutes, specifically sections 267.061 (2)(a) and (b).

SECTION V – Site Development and Improvement

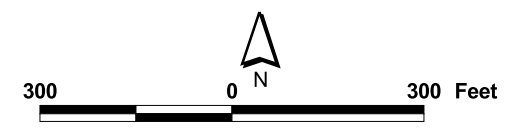
A. Existing Physical Improvements

Physical improvements existing on the property at this time include an unimproved jeep trail and fencing, in poor condition, located along the northern boundary and an agricultural well and pump house located in the middle of the citrus grove. An excavated ramp near the northern corner of the property was dug by the grove owner to provide access for hand-carried boats to the river.



**RUSSELL GROVE RIVER BUFFER
CONSERVATION AREA
FIGURE D PAGE 15
MASTER SITE DEVELOPMENT PLAN**

**INDIAN RIVER COUNTY
BOARD OF COUNTY COMMISSIONERS
AUGUST, 2006**



B. Proposed Physical Improvements

Improvements are proposed for the Conservation Area to provide a primarily passive level of recreational and interpretive access to the property. (See Figure D). A wildlife observation and fishing platform, approximately 100 square feet in size, is proposed to be built on the river near the northwestern corner. The adjacent owner-built ramp into the river will be maintained for access by canoe and kayak users. Split-rail fencing will be installed channel the visitor access away from the steep sides of the excavation, and healthy vegetative cover will be maintained on the sides and ramp area to avoid erosion.

A small picnic shelter, approximately 20' x 20' in size, and a small restroom, a drinking fountain and trash cans are proposed to allow a minimal level of visitor amenities at the Conservation Area. Since there is a sizable suburban population surrounding Russell Grove, an open play area approximately 55,000 square feet in size is proposed to allow local families and groups from the adjacent Boy Scouts of America camp to use the site for informal games and events. Pervious-surface parking for approximately 15 cars and a bicycle rack are recommended, the parking separated in two areas adjacent to the play field and the picnic shelter. Wheel stops and split rail fencing will serve to organize and control use of the area. A universally accessible trail connecting the play field, parking, picnic area, fishing pier and canoe launch, and continuing westward to the river's edge is proposed to allow access to the natural and recreational features of the park for visitors of all physical abilities. The proposed walkway is approximately 1,200 feet in length. A bench for seating overlooking the river is also recommended. An additional natural-surface nature trail approximately 3,200 feet long is proposed to explore the upland area of the park and connect to a gate allowing access to the property by residents living to the south. A second pedestrian gate is proposed adjacent to the picnic area to allow easy access to the facilities by participants at the adjacent Boy Scouts camp. Interpretive signs will be located on the observation platform and at the canoe launch, at a bench located at the western terminus of the accessible trail, and at 2 locations along the proposed nature trail.

Landscaping of approximately one-half acre in the northwestern corner of agricultural field is proposed to improve the aesthetic and comfort qualities of the public area. Tree and shrub species native to the Florida Scrub and scrubby flatwoods will be used at the upper (eastern) elevations, including Chapman's oak, scrub live oak, saw palmetto, slash pine and rusty lyonia. Tree species typically found in the floodplain forest, such as Southern magnolia, sabal palm, red cedar and loblolly bay may also be used for shade. The landscape project will be included in development of public facilities in year 2 of the County's management, if funding for development is available at that time.

The rank and file arrangement of the citrus trees of the grove visually represents a land use and lifestyle quickly disappearing from the Indian River and Brevard County region of Florida. As a physical remnant of the land uses that represent the economic and social lives of a defined group of people (Florida citrus farmers

and grove workers), the grove can be classified as a cultural landscape, worthy of protection as one of the unique resources of this property. To recognize the value of the cultural landscape and to interpret the history of citrus production in this region, it is proposed that a few rows of citrus trees along Gardenia Street and along the access road be maintained as part of the County's management program (see Figure D). This effort, costing little in the way of staff time or other resources, will do much to retain a unique visual character that has contributed to the sense of place of this place for over 50 years.

Infrastructure for the proposed development will include a well and septic tank to serve the restroom. The existing well located in the center of the citrus grove may be placed into service for this purpose. The location of the drainfield at an appropriate distance to the east of the current edge of the citrus grove, and the extremely high permeability of the soils on the site, will assure that no impact to water quality in the St. Sebastian River results. The existing jeep trail (approximately 1,300 feet long) will be useable for the low volume of traffic generated by the park without widening. Stabilization of the road with limerock, as needed, and construction of the proposed parking areas with pervious systems such as geoweb or turf pavers will reduce the need for treatment of stormwater to a minimum. Stormwater management will be accomplished by construction of shallow retention swales at appropriate locations. These areas will not require fencing to protect public safety. All developed facilities of the Conservation Area will be located, designed and managed to protect and enhance water quality in the St. Sebastian River, and to avoid or minimize any impacts on the site's other natural or cultural resources.

C. Acknowledgement Sign

A sign at least 3' x 4' in size, identifying the Conservation Area as a publicly-owned conservation area, open to the public, will be located near the intersection of Gardenia Street and the unimproved grove road. As noted above, the sign will inform the public that the acquisition of the property was made possible through funding by Indian River County and the Florida Communities Trust, Florida Forever Program.

D. Hazard Mitigation

Facilities at the Conservation Area will be located and constructed to minimize or eliminate the long term risk of storm damage or flooding. The minimal level of development proposed for this project will ensure few impacts will result from storm or flood conditions.

E. Permits

Indian River County building permits will be required for all structures. St. Johns River Stormwater Management District environmental resource permits will be required for the observation and fishing platform. Except for emergency response activities to secure the property or protect its natural resources following storm, flood or other disturbance, written approval from the Florida Communities Trust

will be requested before undertaking any site alterations or physical improvements that are not addressed in the approved management plan.

F. Easements, Concessions and Leases

An easement for overhead power lines and maintenance access exists along the southern property line of the Conservation Area, and will remain in effect under County ownership of the property. Indian River County has no intention at this time to grant any additional easements or to develop concessions, leases or other revenue-generating uses or agreements on the Russell Grove River Buffer Conservation Area. If such arrangements are considered in the future, County staff will provide notice and information at least 60 days in advance and acquire FCT approval prior to the execution of any lease of any interest, the operation of any concession, the granting of any easement, any sale or option, or any management contracts for the site, or any use of the property by any person other than in such person's capacity as a member of the general public. Any revenue generated at the project site will be placed in a separate account and go to the upkeep and maintenance of the project site in order to be within allowable limits set by the Internal Revenue Service.

Likewise, any revenues collected through the education programs at the conservation area will only be used for the upkeep and maintenance of the project site. County staff will update FCT in its annual report on the various educational activities, any revenues collected for such activities and will provide detailed accounts of how such revenues were expended.

SECTION VI – Interpretive Program

Interpretive signs will be located in at least 5 locations within the public use area and along the proposed trails of the Conservation Area. Interpretive topics will include the St. Sebastian River, the Aquatic Preserve and other publicly-managed lands in the vicinity, and the challenges of protecting these natural areas from impacts of suburban development. Manatees, gopher tortoises and the unique fish populations of the river will be discussed. Prehistoric inhabitants and their uses of the native landscape will be discussed, as will the cultural landscape of the citrus grove, a disappearing feature as Floridians continue to move from agricultural to urban lifestyles.

SECTION VII- Management Needs

A. Management Coordination

County staff will coordinate with adjacent landowners and will ensure buffering requirements and other protective measures contained in existing land use regulations are enforced as adjacent lands are developed. Special efforts will be made to encourage owners to eliminate invasive exotic plants from their lands adjacent to the Conservation Area and replace them with a buffer of native plant species.

Development of this plan has been coordinated with the FWC Office of Environmental Services to ensure the preservation of native wildlife species on the Conservation Area. Management for listed plant and animal species using the site will continue be coordinated with the FWC. The Florida Department of State, Division of Historical Resources, Bureau of Historic Preservation (DHR) will be an important source of information and guidance in the management of the cultural resources of the Conservation Area.

The closest management association on this project will be with the managers and staff of the St. Sebastian River Preserve State Park and the Indian River - Malabar to Vero Beach State Aquatic Preserve, both administered by the Florida Department of Environmental Protection, and staff of Boy Scouts of America Camp Oklawaha. The County's partnership with the DEP will provide valuable technical expertise and assistance in the management and enhancement of the natural resources of the property. Collaboration with the Boy Scouts camp will include work on control of exotic species, restoration, maintenance and general security.

B. Maintenance

Regular facilities maintenance, patrol, and trash collection at the site will be the responsibility of the Indian River County Parks Division and the Conservation Lands Manager.

C. Security

The Indian River County Sheriff's Department will provide surveillance and law enforcement authority at the property as needed. The Conservation Area hours of operation will be from 8:00 AM to sunset.

D. Staffing

The County Parks Division is staffed by 35 field employees to manage all units in the park system. In January, 2000, the County hired a full-time Conservation Lands Manager, employed in the Parks Division. The Manager works closely with both the County Planning Division's Environmental Planning Section and the Parks Division to accomplish the goals and objectives for all County conservation lands.

Indian River County will coordinate staff support for management and interpretation of the Conservation Area with the managers of the St. Sebastian River Preserve State Park and the Indian River - Malabar to Vero Beach State Aquatic preserve. Volunteer support to help provide public access, interpretive and educational activities, and resource management assistance will be encouraged and coordinated by the Conservation Lands Manager. Contract labor may be employed by the Parks Division, as needed.

Resource management activities will be the responsibility of the Conservation Lands Manager. County staff, contract labor and volunteer labor will be assigned to tasks such as exotic plant removal and restoration of native vegetation.

SECTION VIII – Cost Estimates and Funding Sources

The authors have attempted to provide the best estimate possible based on the information at hand, and the level of planning completed. Some adjustments in these estimates may be necessary as more detailed plans are developed. Over time, market conditions and prevailing rates of inflation in the general economy may act to increase or decrease actual costs for contract services and construction.

Five sources of funding have been identified for management and development of this project. Funding from the Indian River County Environmental Lands Acquisition bond program may be used to provide for property security and priority resource management improvements and activities. County mitigation accounts for upland and wetland mitigation projects may also be applied to the project. The County Land Clearing and Tree Removal Violations account is a third source of funds for resource management activities that may be particularly applicable to the upland restoration needs at Russell Grove. Operations, staffing and development funds will come from the County Parks Division budget. Additional funds may be acquired from grants and donations of cash, materials or labor by local businesses and citizens, and the Florida Recreational Development Assistance Program, administered by the DEP.

**TABLE 1
RUSSELL GROVE RIVER BUFFER CONSERVATION AREA
ESTIMATED MANAGEMENT AND DEVELOPMENT COSTS**

1. Resource Management*		
Plant/Animal Surveys and Mapping		\$3,000.00
Archaeological Survey		1,500.00
Exotic Plant Removal and Revegetation (Floodplain Marsh and Forest)		4,000.00
Exotic Plant Re-Treatment		500.00
Upland restoration		<u>Unknown</u>
	Subtotal	\$9,000.00
2. Public Access Improvements**		
Accessible trail (1,200 ft.)		\$20,000.00
Nature Trail (3,300 ft.)		9,900.00
Picnic shelter (400 s.f.)		40,000.00
Restroom		75,000.00
Observation/fishing platform (100 s.f.)		10,000.00
Interpretive signs (5)		2,500.00
Bench		300.00
Parking (15 cars)		10,000.00
Bicycle rack		500.00
Fencing (Boundary and rail fencing at canoe launch)		16,500.00
Gates (3)		400.00
Acknowledgement sign		<u>250.00</u>
	Subtotal	\$185,350.00
		Total Resource Management/Development Costs
		\$194,350.00
3. Annual Maintenance/Operations Costs**		
Resource Management (Exotic plant eradication, monitoring)		\$3,000.00
Routine facilities maintenance		<u>500.00</u>
	Total Annual Operational Costs	\$3,500.00

* Funding Sources: Environmental Lands Acquisition Bond Program, County Mitigation Accounts, County Tree Removal Violations Accounts, County Parks Division Operations Budget, , Volunteers and Donations.

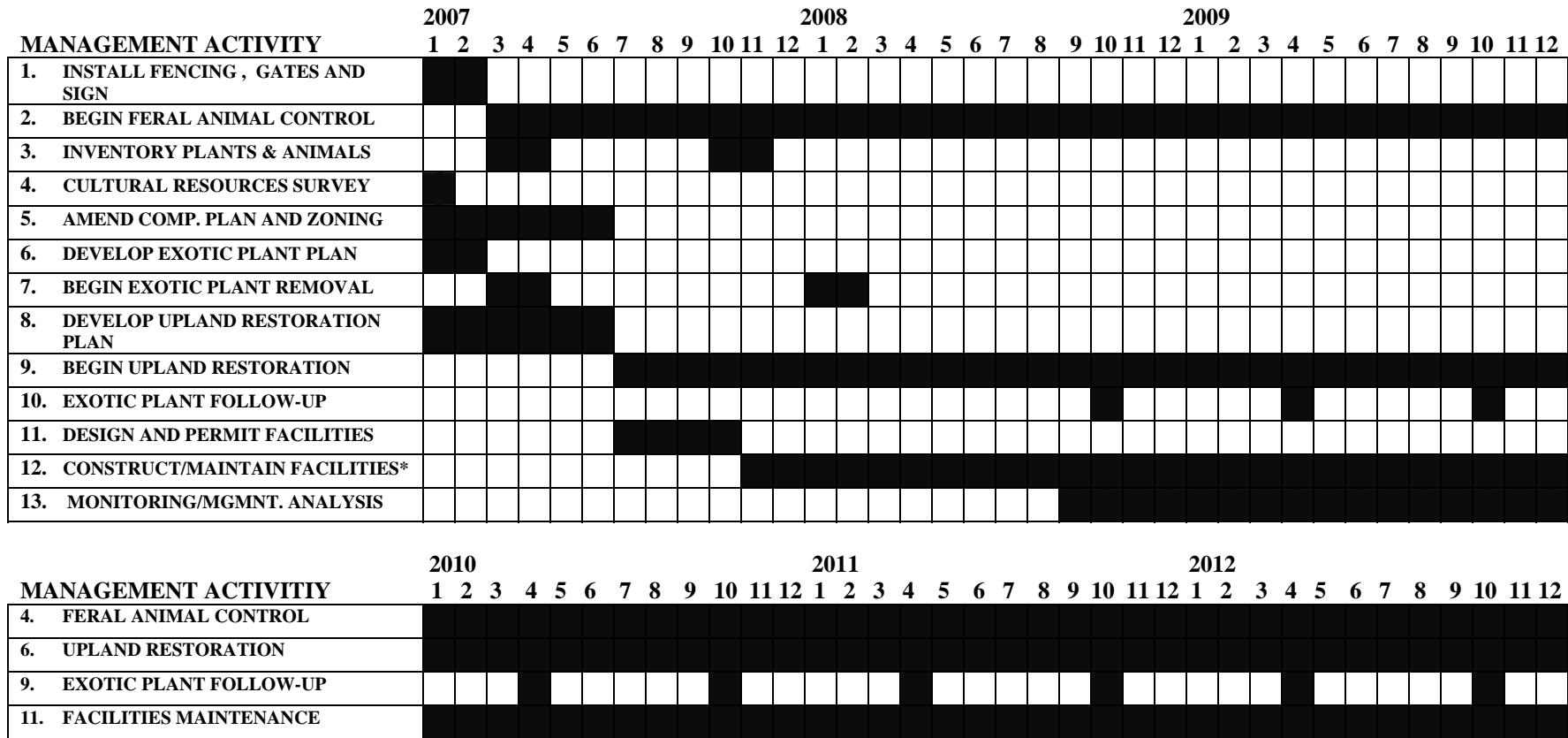
** Funding Sources: County and Parks Division Capital Improvements Budget, County Mitigation Accounts, County Tree Removal Violations Accounts, FRDAP and Grants and Donations of materials or labor from individuals or businesses in the local area

SECTION IX – Priority Schedule

The following list summarizes the management activities set forth in this management plan, in priority order. Figure E represents the management activities in a graphic timeline format, starting with the projected beginning date for implementation of the management plan by Indian River County. The County's schedule of activities is subject to adjustment, as the schedule depends on the availability of funding, staffing and inter-governmental assistance for the management of the project site.

1. Install fencing and gates.
2. Begin feral animal control efforts.
3. Inventory plant and animal species.
4. Contract reconnaissance level cultural resources survey.
5. Amend Comprehensive Plan and zoning designations.
6. Develop exotic plant removal and revegetation plan.
7. Begin exotic plant removal.
8. Develop upland vegetation restoration plan.
9. Begin upland restoration process
10. Implement follow-up treatment program for exotic plants.
11. Design and permit public use facilities.
12. Construct and begin maintenance of public facilities.
13. Monitor and analyze resource management programs.

**FIGURE E
RUSSELL GROVE RIVER BUFFER CONSERVATION AREA
PROJECTED MANAGEMENT ACTIVITIES TIMELINE**



* THE FACILITIES CONSTRUCTION PROJECT WILL INCLUDE THE PARKING AREAS, ROAD IMPROVEMENT, PLAY AREA, FISHING PIER, CANOE LAUNCH, PICNIC SHELTER, RESTROOM, ACCESSIBLE TRAIL, NATURE TRAIL, INTERPRETIVE SIGNS AND BIKE RACK.

SECTION X – MONITORING AND REPORTING

A. Annual Stewardship Report

An Annual Stewardship Report, due on October 30th of every year, will be compiled by County staff and submitted to the FCT beginning in October, 2007. The Annual Report will include a review of the provisions of this management plan and will serve to update the resource inventories for the property on file with the FCT. To provide an annual progress assessment, the Annual Report will provide numerical descriptions, where possible, of progress made in meeting the management objectives of this plan, such as acreage and percentage figures for exotic plant removal, native plant restoration, etc. County staff will forward listed species information to the Florida Natural Areas Inventory on appropriate forms, concurrently with filing the Annual Report. (See Appendix A.) The annual report will comply with the requirements of 9K-7.013 F.A.C.

Through the annual reports or by separate correspondence, the County will request written approval for revision of the management plan from the FCT. No site alterations or physical improvements that are not addressed in the approved management plan will be initiated without prior approval or plan revision.

Figure E is the current projected timeline for the activities recommended by this management plan. The priority goals set forth in the plan are the resource enhancement elements. After the initial inventories of plant and animal species utilizing the site have been completed, annual monitoring surveys of plant and animal species will be instituted to help evaluate progress toward the County's resource management goals.

Development of public facilities, although important, is dependent on the availability of funding through the County Parks budget, or through private donation. The progress of appropriations through the County budgetary process and fund-raising activities and results will be included in the Annual Report. Once development funding has been acquired, progress through the design, permitting and construction processes will be reported on a percent-complete basis. After facilities are developed, the Conservation Lands Manager will estimate annual visitation and include a narrative summary of use of the project site by organized groups in the Annual Report.

APPENDIX A

FNAI SPECIES REPORT FORMS

FLORIDA NATURAL AREAS INVENTORY
FIELD REPORT FORM FOR RARE PLANTS

Thank you for taking the time to complete and mail this form. Information from knowledgeable individuals such as yourself makes an important contribution to the FNAI Biological Conservation Database. If you need help with this form, or would like additional information, please call the FNAI Botanist at 850-224-8207.

Scientific name: _____ Common name: _____

Basis for identification/manual used: _____ Date(s) seen: _____

Photograph taken? _____ Specimen deposited at a herbarium? _____ Name of herbarium: _____

Quad name: _____ County: _____ Site or managed area name: _____ Directions
(please mark site on copy of USGS 7.5 minute quad map and attach to this form, or draw a detailed map on back of this page, or give
GPS coordinates):

Describe the site where the plant was seen: habitat/plant community; topography; hydrology; dominant species in tree, shrub, and
ground layers:

Estimated Size of Population (no. of individuals & size of area occupied):

Flowering? Yes__ No__ Fruiting? Yes__ No__ In bud? Yes__ No__ In leaf? Yes__ No__ Dormant? Yes__ No

Comments

Have you seen this species at the same location in the past? Yes__ No__ If yes, give dates: _____ If yes,
describe changes, if any, to site and population since last visit

Are there disturbances or threats (e.g. vehicle use, trash dumping, fire suppression, exotic species invasion) to the population?

If yes, please describe: _____ Is there
evidence (e.g., fire breaks, scorching) of fire at the site? Yes__ No__ if yes, describe and give dates of recent fires, if known

Other useful information concerning the population, its ecological conditions, management history, management needs, names of
individuals who might be helpful, etc.:

Your name: _____ Tel no.: _____ E-mail: _____

Address: _____

Please include any additional information on the back of this sheet. Please send this form to: Botanist, Florida Natural Areas
Inventory, 1018 Thomasville Rd., Suite 200-C, Tallahassee, FL 32303. THANK YOU!

Scientific Name: _____

County: _____

Common Name: _____

Date observed: _____

Basis for Identification: _____

Investigator: _____

Location of Animal (please attach map and give specific directions; if possible, mark site on copy of USGS 7.5 minute topo map or draw detailed map on back of this page):

Describe habitat/plant community, list dominant species:

Extent of this habitat at site that may support animal (e.g., acres, miles) _____

Number of individuals (or nests, burrows, etc.) seen: _____

Estimated no. of individuals in population: _____

Age/population structure (adults, young, etc.) _____

Ecological/behavioral notes (e.g., reproductive stage, activity type, feeding, flying, nesting):

Have you seen this species at the same location in the past? Yes _____ No _____

If yes, please give date(s): _____ Previous condition: _____

Is there evidence of disturbance at the site? Yes _____ No _____

If yes, please describe:

Owner(s) of site: _____

Is owner protecting this animal? Yes ___ No _____

Conservation/Management

Needs _____

Comments (other useful information concerning this animal and site - e.g., names and addresses of individuals who might be helpful, publications, museum specimen numbers, etc) _____

(please include any additional information on the back of this sheet.)

Additional forms may be obtained upon request. Please send completed field report forms to:

Submitted by: _____
Affiliation: _____
Address: _____
Phone _____ Date: _____

Zoologist
Florida Natural Areas Inventory
1018 Thomasville Rd., Suite 200-C
Tallahassee, FL 32303; ph. (850) 224-8207
Fax (850) 681-9364; dhipes@fnai.org

** note: each form should include only one species, one locality, and one date

APPENDIX B

FL EXOTIC PEST PLANT COUNCIL LIST OF EXOTIC PLANTS

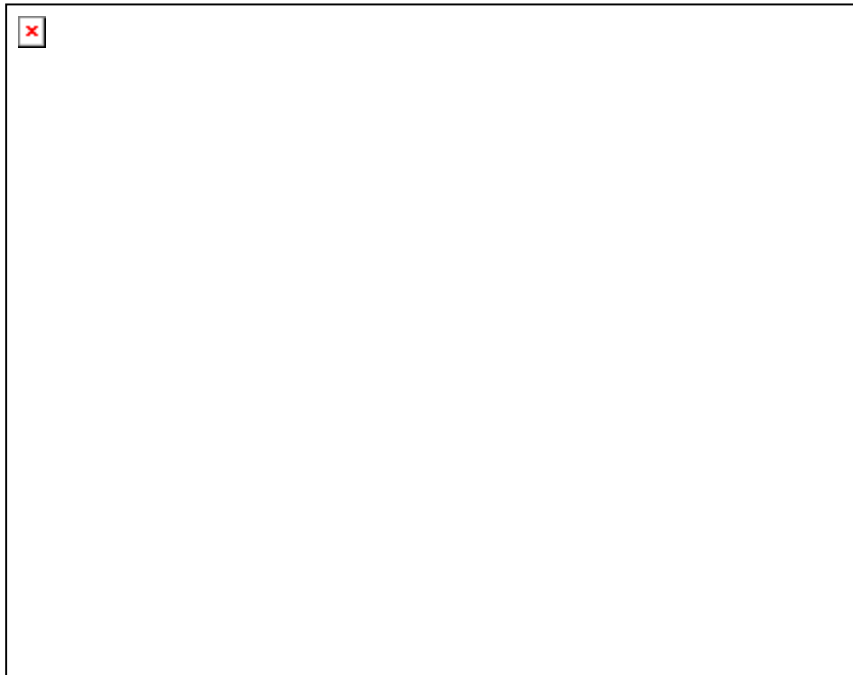
Florida Exotic Pest Plant Council's

2001

List of Invasive Species

Purpose of the List: *To focus attention on --*

- the adverse effects of exotic pest plants on Florida's biodiversity and ecosystems,
- the habitat losses from exotic pest plant infestations,
- the impacts on endangered species via habitat loss and alteration,
- the need to prevent habitat losses through pest-plant management,
- the socioeconomic impacts of these plants (e.g., increased wildfires in *Melaleuca* areas),
- changes in the seriousness of different pest plants over time,
- the need to provide information that helps managers set priorities for control programs.
-



DEFINITIONS: *Exotic*—a species introduced to Florida, purposefully or accidentally, from a natural range outside of Florida. *Native*—a species whose natural range included Florida at the time of European contact (1500 AD). *Naturalized exotic*—an exotic that sustains itself outside cultivation (it is still exotic; it has not "become" native). *Invasive exotic*—an exotic that not only has naturalized but is expanding on its own in Florida plant communities.

Abbreviations used:

for "Gov. list": **P** = Prohibited by Fla. Dept. of Environmental Protection, **N** = Noxious weed listed by Fla. Dept. of Agriculture & Consumer Services, **U** = Noxious weed listed by U.S. Department of Agriculture.

for "Reg. Dis.": **N** = north, **C** = central, **S** = south, referring to each species' current distribution in general regions of Florida (not its potential range in the state). See following map.

For additional information on distributions of particular species by county, visit the Atlas of Florida Vascular Plants web site, www.plantatlas.usf.edu

For other additional information on plants included in this list, see related links and pages at this web site on the [home page menu](#).

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

Scientific Name	Common Name	EPPC Cat.	Gov. list	Reg. Dist.
<i>Abrus precatorius</i>	rosary pea	I		C, S
<i>Acacia auriculiformis</i>	earleaf acacia	I		S
<i>Albizia julibrissin</i>	mimosa, silk tree	I		N, C
<i>Albizia lebbek</i>	woman's tongue	I		C, S
<i>Ardisia crenata</i> (= <i>A. crenulata</i>)	coral ardisia	I		N, C
<i>Ardisia elliptica</i> (= <i>A. humilis</i>)	shoebutton ardisia	I		S
<i>Asparagus densiflorus</i>	asparagus-fern	I		C, S
<i>Bauhinia variegata</i>	orchid tree	I		C, S
<i>Bischofia javanica</i>	bischofia	I		C, S
<i>Calophyllum antillanum</i> (= <i>C. calaba</i> ; <i>C. inophyllum</i> misapplied)	santa maria (names "mast wood," "Alexandrian laurel" used in cultivation)	I		S
<i>Casuarina equisetifolia</i>	Australian pine	I	P	N,C,S
<i>Casuarina glauca</i>	suckering Australian pine	I	P	C, S
<i>Cestrum diurnum</i>	day jessamine	I		C, S
<i>Cinnamomum camphora</i>	camphor-tree	I		N,C,S
<i>Colocasia esculenta</i>	wild taro	I		N,C,S
<i>Colubrina asiatica</i>	lather leaf	I		S
<i>Cupaniopsis anacardioides</i>	carrotwood	I	N	C, S
<i>Dioscorea alata</i>	winged yam	I	N	N,C,S
<i>Dioscorea bulbifera</i>	air-potato	I	N	N,C,S

<i>Eichhornia crassipes</i>	water-hyacinth	I	P	N,C,S
<i>Eugenia uniflora</i>	Surinam cherry	I		C, S
<i>Ficus microcarpa</i> (<i>F. nitida</i> and <i>F. retusa</i> var. <i>nitida</i> misapplied)	laurel fig	I		C, S
<i>Hydrilla verticillata</i>	hydrilla	I	P, U	N,C,S
<i>Hygrophila polysperma</i>	green hygro	I	P, U	N,C,S
<i>Hymenachne amplexicaulis</i>	West Indian marsh grass	I		C, S
<i>Imperata cylindrica</i> (<i>I. brasiliensis</i> misapplied)	cogon grass	I	N, U	N, C, S
<i>Ipomoea aquatica</i>	waterspinach	I	P, U	C
<i>Jasminum dichotomum</i>	Gold Coast jasmine	I		C, S
<i>Jasminum fluminense</i>	Brazilian jasmine	I		C, S
<i>Lantana camara</i>	lantana, shrub verbena	I		N,C,S
<i>Ligustrum lucidum</i>	glossy privet	I		N, C
<i>Ligustrum sinense</i>	Chinese privet, hedge privet	I		N,C,S
<i>Lonicera japonica</i>	Japanese honeysuckle	I		N,C,S
<i>Lygodium japonicum</i>	Japanese climbing fern	I	N	N,C, S
<i>Lygodium microphyllum</i>	Old World climbing fern	I	N	C, S
<i>Macfadyena unguis-cati</i>	cat's claw vine	I		N,C, S
<i>Manilkara zapota</i>	sapodilla	I		S
<i>Melaleuca quinquenervia</i>	melaleuca, paper bark	I	P, N, U	C, S
<i>Melia azedarach</i>	Chinaberry	I		N,C,S
<i>Mimosa pigra</i>	catclaw mimosa	I	P, N, U	C, S
<i>Nandina domestica</i>	nandina, heavenly bamboo	I		N
<i>Nephrolepis cordifolia</i>	sword fern	I		N,C,S
<i>Nephrolepis multiflora</i>	Asian sword fern	I		C, S
<i>Neyraudia reynaudiana</i>	Burma reed; cane grass	I	N	S
<i>Paederia cruddasiana</i>	sewer vine, onion vine	I	N	S
<i>Paederia foetida</i>	skunk vine	I	N	N,C,S
<i>Panicum repens</i>	torpedo grass	I		N,C,S
<i>Pennisetum purpureum</i>	Napier grass	I		C, S
<i>Pistia stratiotes</i>	water lettuce	I	P	N,C,S
<i>Psidium cattleianum</i> (= <i>P. littorale</i>)	strawberry guava	I		C, S
<i>Psidium guajava</i>	guava	I		C, S
<i>Pueraria montana</i> (= <i>P. lobata</i>)	kudzu	I	N, U	N,C, S
<i>Rhodomyrtus tomentosa</i>	downy rose-myrtle	I	N	C, S
<i>Rhoeo spathacea</i> (see <i>Tradescantia spathacea</i>)				

<i>Ruellia brittoniana</i>	Mexican petunia	I		N, C, S
<i>Sapium sebiferum</i>	popcorn tree, Chinese tallow tree	I	N	N, C, S
<i>Scaevola sericea</i> (= <i>Scaevola taccada</i> var. <i>sericea</i> , <i>S. frutescens</i>)	scaevola, half-flower, beach naupaka	I		C, S
<i>Schefflera actinophylla</i> (= <i>Brassia actinophylla</i>)	schefflera, Queensland umbrella tree	I		C, S
<i>Schinus terebinthifolius</i>	Brazilian pepper	I	P, N	N, C, S
<i>Senna pendula</i> (= <i>Cassia coluteoides</i>)	climbing cassia, Christmas cassia, Christmas senna	I		C, S
<i>Solanum tampicense</i> (= <i>S. houstonii</i>)	wetland night shade, aquatic soda apple	I	N, U	C, S
<i>Solanum viarum</i>	tropical soda apple	I	N, U	N, C, S
<i>Syngonium podophyllum</i>	arrowhead vine	I		C, S
<i>Syzygium cumini</i>	jambolan, Java plum	I		C, S
<i>Tectaria incisa</i>	incised halberd fern	I		S
<i>Thespesia populnea</i>	seaside mahoe	I		C, S
<i>Tradescantia fluminensis</i>	white-flowered wandering jew	I		N, C
<i>Tradescantia spathacea</i> (= <i>Rhoeo spathacea</i> , <i>Rhoeo discolor</i>)	oyster plant	I		S
<i>Urochloa mutica</i> (= <i>Brachiaria mutica</i>)	Pará grass	I		C, S

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

Scientific Name	Common Name	EPPC	Gov.	Reg.
		Cat.	list	Dist.
<i>Adenanthera pavonina</i>	red sandalwood	II		S
<i>Agave sisalana</i>	sisal hemp	II		C, S
<i>Aleurites fordii</i> (= <i>Vernicia fordii</i>)	tung oil tree	II		N, C
<i>Alstonia macrophylla</i>	devil-tree	II		S
<i>Alternanthera philoxeroides</i>	alligator weed	II	P	N, C, S
<i>Antigonon leptopus</i>	coral vine	II		N, C, S
<i>Aristolochia littoralis</i>	calico flower	II		N, C
<i>Asystasia gangetica</i>	Ganges primrose	II		C, S
<i>Begonia cucullata</i>	begonia	II		N, C

<i>Broussonetia papyrifera</i>	paper mulberry	II		N, C
<i>Callisia fragrans</i>	inch plant, spironema	II		C, S
<i>Casuarina cunninghamiana</i>	Australian pine	II	P	C, S
<i>Cordia dichotoma</i>	sebsten plum	II		S
<i>Cryptostegia madagascariensis</i>	rubber vine	II		C, S
<i>Cyperus involucratus</i> (<i>C. alternifolius</i> misapplied)	umbrella plant	II		C, S
<i>Cyperus prolifer</i>	dwarf papyrus	II		C
<i>Dalbergia sissoo</i>	Indian rosewood, sissoo	II		C, S
<i>Elaeagnus pungens</i>	thorny eleagnus	II		N, C
<i>Epipremnum pinnatum</i> cv. Aureum	pothos	II		C, S
<i>Ficus altissima</i>	false banyan	II		S
<i>Flacourtia indica</i>	governor's plum	II		S
<i>Flueggea virosa</i>	Chinese waterberry	II		S
<i>Hibiscus tiliaceus</i>	mahoe, sea hibiscus	II		C, S
<i>Hiptage benghalensis</i>	hiptage	II		S
<i>Jasminum sambac</i>	Arabian jasmine	II		S
<i>Koelreuteria elegans</i>	flamegold tree	II		C, S
<i>Leucaena leucocephala</i>	lead tree	II		N, C, S
<i>Limnophila sessiliflora</i>	Asian marshweed	II		N, C, S
<i>Melinis minutiflora</i>	molasses grass	II		S
<i>Merremia tuberosa</i>	wood-rose	II		S
<i>Murraya paniculata</i>	orange-jessamine	II		S
<i>Myriophyllum spicatum</i>	Eurasian water-milfoil	II	P	N, C, S
<i>Ochrosia elliptica</i> (= <i>O. parviflora</i>)	kopsia	II		C, S
<i>Oeceoclades maculata</i>	ground orchid	II		C, S
<i>Passiflora biflora</i>	twin-flowered passion vine	II		S
<i>Passiflora foetida</i>	stinking passion-flower	II		C, S
<i>Pennisetum setaceum</i>	green fountain grass	II		S
<i>Phoenix reclinata</i>	Senegal date palm	II		C, S
<i>Phyllostachys aurea</i>	golden bamboo	II		N, C
<i>Pteris vittata</i>	Chinese brake fern	II		N, C, S
<i>Ptychosperma elegans</i>	solitary palm	II		S
<i>Rhynchelytrum repens</i>	Natal grass	II		N, C, S
<i>Ricinus communis</i>	castor bean	II		N, C, S
<i>Sansevieria hyacinthoides</i>	bowstring hemp	II		C, S
<i>Sesbania punicea</i>	purple sesban, rattlebox	II		N, C, S
<i>Solanum diphyllum</i>	twinleaf nightshade	II		N, C, S
<i>Solanum jamaicense</i>	Jamiaca nightshade	II		C
<i>Solanum torvum</i>	susumber, turkey berry	II	N, U	N, C, S
<i>Syzygium jambos</i>	rose-apple	II		C, S

<i>Terminalia catappa</i>	tropical almond	II		C, S
<i>Terminalia muelleri</i>	Australian almond	II		C, S
<i>Tribulus cistoides</i>	puncture vine, bur-nut	II		N, C, S
<i>Urena lobata</i>	Caesar's weed	II		N, C, S
<i>Wedelia trilobata</i>	wedelia	II		N, C, S
<i>Wisteria sinensis</i>	Chinese wisteria	II		N, C
<i>Xanthosoma sagittifolium</i>	malanga, elephant ear	II		N, C, S

Citation example:

FLEPPC. 2001. List of Florida's Invasive Species. Florida Exotic Pest Plant Council. Internet: <http://www.fleppc.org/01list.htm>

*The 2001 list was prepared by the
FLEPPC Plant List Committee:*

Daniel F. Austin (**CO-CHAIR**)
Department of Biological Sciences
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APPENDIX C

FCT GRANT AWARD AGREEMENT

FCT Contract Number __-CT-_____
FLORIDA COMMUNITIES TRUST
05-038-FF5
RUSSELL GROVE RIVER BUFFER
CSFA # 52002

GRANT CONTRACT

THIS AGREEMENT is entered into by and between the FLORIDA COMMUNITIES TRUST (“FCT”), a non-regulatory agency within the State of Florida Department of Community Affairs, and INDIAN RIVER COUNTY, a local government of the State of Florida (“Recipient”).

THIS AGREEMENT IS ENTERED INTO BASED ON THE FOLLOWING FACTS:

WHEREAS, the intent of this Agreement is to impose terms and conditions on the use of the proceeds of certain bonds, hereinafter described, and the lands acquired with such proceeds (“Project Site”), that are necessary to ensure compliance with applicable Florida law and federal income tax law and to otherwise implement the provisions of Sections 259.105, 259.1051 and Chapter 380, Part III, Florida Statutes;

WHEREAS, Chapter 380, Part III, Fla. Stat., the Florida Communities Trust Act, creates a non-regulatory agency within the Department of Community Affairs (“Department”) which will assist local governments in bringing into compliance and implementing the conservation, recreation and open space, and coastal elements of their comprehensive plans or in conserving natural resources and resolving land use conflicts by providing financial assistance to local governments and nonprofit environmental organizations to carry out projects and activities authorized by the Florida Communities Trust Act;

WHEREAS, FCT is funded through either Section 259.105(3)(c), Fla. Stat. of the Florida Forever Act, which provides for the distribution of twenty-two percent (22%), less certain reductions, of the net Florida Forever Revenue Bond proceeds to the Department, or any other revenue source designated by the Florida Legislature to provide land acquisition grants to local governments and nonprofit environmental organizations for the acquisition of community-based projects, urban open spaces, parks and greenways to implement local comprehensive plans;

WHEREAS, the Florida Forever Revenue Bonds are issued as tax-exempt bonds, meaning the interest on the bonds is excluded from the gross income of bondholders for federal income tax purposes;

WHEREAS, Rule 9K-7, Florida Administrative Code (“F.A.C.”) sets forth the procedures for the evaluation and selection of lands proposed for acquisition and Rule 9K-8, F.A.C. sets forth the acquisition procedures;

WHEREAS, on **September 15, 2005** the FCT Governing Board scored, ranked and selected projects to receive approval for funding;

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WHEREAS, the Recipient's project, described in an application submitted for evaluation, was selected for funding in accordance with Rule 9K-7, F.A.C., and by executing this Agreement the Recipient reaffirms the representations made in its application;

WHEREAS, Rule 9K-7.009(1), F.A.C. authorizes FCT to impose conditions for funding on those FCT applicants whose projects have been selected for funding;

WHEREAS, Rule 9K-7.003(5) F.A.C., recognizes real property owned by the Recipient and included in the application as part of the Project Site as an eligible source of Match, provided that the real property is acquired by the Recipient within 18 months after the application deadline for which the application was made. The date of this application deadline was **May 5, 2005**;

WHEREAS, the Recipient will acquire fee simple title to the entire Project Site prior to _____ (*Insert date[s]*) from _____ (*Insert name[s]*);

WHEREAS, the Recipient will request disbursement of FCT Florida Forever Bond proceeds, subsequent to acquiring the Project Site, for the reimbursement of Project Costs expended by the Recipient for the acquisition of the Project Site; and

WHEREAS, the purpose of this Agreement is to set forth the conditions that must be satisfied by the Recipient prior to the disbursement of any FCT Florida Forever funds awarded, as well as the restrictions that are imposed on the Project Site subsequent to reimbursing the Recipient for Project Costs.

NOW THEREFORE, FCT and the Recipient mutually agree as follows:

I. PERIOD OF AGREEMENT

1. This Agreement shall begin upon the Recipient's project being selected for funding and shall end **June 15, 2006** ("Expiration Date"), unless extended as set forth below or unless terminated earlier in accordance with the provisions of Article XIII of this Agreement.

2. FCT may extend this Agreement beyond the Expiration Date if the Recipient demonstrates that significant progress is being made toward Project Plan approval or that extenuating circumstances warrant an extension of time. A request for an extension shall fully explain the reason for the delay and why the extension is necessary and shall be provided to FCT in accordance with paragraph V.1. prior to the Expiration Date. If the Recipient does not request an extension, or if a requested extension is not granted by FCT, the Recipient's award shall be rescinded and this Agreement shall terminate.

II. MODIFICATION OF AGREEMENT

1. Either party may request modification of the provisions of this Agreement at any time. Changes which are mutually agreed upon shall be valid only when reduced to writing and duly signed by each of the parties hereto. Such amendments shall be incorporated into this Agreement.

III. DEADLINES

1. At least two original copies of this Agreement shall be executed by the Recipient and returned to the FCT office at 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, as soon as possible and before **November 14, 2005**. If the Recipient requires more than one original document, the Recipient shall photocopy the number of additional copies needed and then execute each as an original document. Upon receipt of the signed Agreements, FCT shall execute the Agreements, retain one original copy and return all other copies that have been executed to the Recipient.

2. The Recipient and its representatives shall know of and adhere to all project deadlines and devise a method of monitoring the project. Deadlines stated in this Agreement, as well as deadlines associated with any FCT activity relating to the project, shall be strictly enforced. Failure to adhere to deadlines may result in delays in the project, allocation of time or resources to other recipients that respond timely or the termination of this Agreement by FCT.

3. The Recipient shall submit the documentation required by this Agreement to FCT as soon as possible so that the Project Costs may be reimbursed in an expeditious manner.

4. The Recipient shall provide a monthly status report to FCT of its progress towards reimbursement of the Project Costs.

5. The Recipient shall provide the appraisal(s) required by 9K-8.007, F.A.C. to FCT for review by a date not to exceed ninety (90) days after the Recipient's project is selected for funding. The appraisals shall be reviewed and, upon approval, the Maximum Approved Purchase Price ("MAPP"), as provided in Rule 9K-8.007(5) and (6), F.A.C., shall be determined.

IV. FUNDING PROVISIONS

1. The FCT Florida Forever award granted to the Recipient ("FCT Award") will in no event exceed the lesser of Forty-Five Percent (45%) of the final Project Costs, as defined in Rule 9K-7.002(29), F.A.C., or One Million Six Hundred and Eight Thousand Seven Hundred Fifty Dollars And Zero Cents (\$1,608,750.00), unless FCT approves a different amount after determination of the MAPP, which shall be reflected in an addendum to this Agreement.

The FCT Award is based on the Recipient's estimate of final Project Costs in its application, as well as the Limitation of Award provided in Rule 9K-7.003(3), F.A.C. and advertised in the Notice of Application. When disbursing the FCT Award, FCT shall recognize only those Project Costs consistent with the definition in Rule 9K-7.002(29), F.A.C. FCT shall participate in the

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land cost at either the actual purchase price or the MAPP, whichever is less, multiplied by the percent stated in the above paragraph.

2. The FCT Governing Board selected the Recipient's application for funding in order to acquire the entire Project Site identified in the application. FCT reserves the right to withdraw or adjust the FCT Award if the acreage that comprises the Project Site is reduced or the project design is changed so that the objectives of the acquisition cannot be achieved. FCT shall consider any request for Project Site boundary modification in accordance with the procedures set forth in Rule 9K-7.010, F.A.C.

If the Project Site is comprised of multiple parcels and multiple owners, an Acquisition Plan, as defined in 9K-7.002(2), F.A.C., was required in the application. FCT reserves the right to withdraw or adjust the FCT Award if the priority parcel(s) or a significant portion of the Project Site identified in the Acquisition Plan cannot be acquired.

3. The FCT Award shall be delivered either in the form of Project Costs prepaid by FCT to vendors or in the form of a State of Florida warrant to the Recipient. The FCT Award shall only be delivered after FCT approval of the Project Plan and Project Site acquisition terms. FCT shall prepare a grant reconciliation statement prior to the reimbursement that evidences the amount of Match provided by the Recipient, if any is required, and the amount of the FCT Award. Funds expended by FCT for Project Costs shall be recognized as part of the FCT Award on the grant reconciliation statement.

4. If a Match is required, it shall be delivered in an approved form as provided in Rule 9K-7.002(22), F.A.C. If the value of Pre-acquired land, as defined by Rule 9K-7.002(28), F.A.C., or donated land is the source of the Match, the MAPP shall determine the value of the Match. Funds expended by the Recipient for Project Costs shall be recognized as part of the Match on the grant reconciliation statement.

5. By executing this Agreement, the Recipient affirms that it is ready, willing and able to provide a Match, if any is required.

6. If the Recipient is the local government having jurisdiction over the Project Site, and an action by the Recipient subsequent to the FCT Governing Board selection meeting results in a governmentally derived higher Project Site land value due to an enhanced highest and best use, this Agreement shall be terminated unless the Recipient agrees that the appraisal(s) will be based on the highest and best use of the Project Site on or before the FCT Governing Board selection meeting.

7. FCT's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Florida Legislature, and is subject to any modification in accordance with Chapter 216, Fla. Stat. or the Florida Constitution.

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V. NOTICE AND CONTACT

1. All notices provided under or pursuant to this Agreement shall be in writing and delivered either by hand delivery or first class, certified mail, return receipt requested, to:

Florida Communities Trust
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100

2. All contact and correspondence from FCT to the Recipient shall be through the key contact. Recipient hereby notifies FCT that the following administrator, officer or employee is the authorized key contact on behalf of the Recipient for purposes of coordinating project activities for the duration of the project:

Name: _____

Title: _____

Address: _____

Phone: _____ Fax: _____

E-mail: _____

3. The Recipient authorizes the administrator, employee, officer or representative named in this paragraph to execute all documents in connection with this project on behalf of the Recipient, including, but not limited to, the Grant Contract or any addenda thereto, grant reconciliation statement, statements submitted as a part of the Project Plan and Declaration of Restrictive Covenants.

Name: _____

Title: _____

Address: _____

Phone: _____ Fax: _____

Email: _____

4. In the event that different representatives or addresses are designated for either paragraph 2. or 3. above after execution of this Agreement, notice of the changes shall be rendered to FCT as provided in paragraph 1. above.

5. The Recipient hereby notifies FCT that the Recipient's Federal Employer Identification Number(s) is _____.

VI. PROJECT PLAN APPROVAL; PRE-CLOSING REQUIREMENTS

1. Prior to the final disbursement of the FCT Award, the Recipient shall submit to FCT and have approved a Project Plan that complies with Rule 9K-8.011, F.A.C. The Project Plan shall not be considered by FCT unless it is organized with a table of contents and includes all of the following documents to ensure that the interest of the State of Florida will be protected:

a. Closing documents associated with the parcel(s):

- (1) A copy of the Purchase Agreement(s) for sale and purchase of the parcel(s) between Recipient and _____ (Insert name[s] of Seller[s]).
- (2) A copy of closing statements from Buyer(s) and Seller(s) for the purchase of the parcel(s).
- (3) A copy of the recorded deed(s) evidencing conveyance of title to the parcel(s) to the Recipient.
- (4) Certified survey(s) of the parcel(s) that meets the requirements of Rule 9K-8.006, F.A.C., and is dated within ninety (90) days of the date of acquisition of the parcel(s) by Recipient.
- (5) A copy of the title insurance policy(s) evidencing marketable title in Recipient to the parcel(s) and effective the date of acquisition of the parcel(s) by the Recipient, including a statement from the title insurer as to the minimum promulgated rate if premium was paid by Recipient, and all documents referenced in the title policy(s).
- (6) Environmental site assessment(s) of the parcel(s) certified to the Recipient, which meets the standards and requirements of ASTM Practice E 1527, and with a date of certification within ninety (90) days of the date of acquisition of the parcel(s) by Recipient, together with the statement required by Rule 9K-8.012(4), F.A.C.

- b. A letter from FCT indicating approval of the Management Plan written in accordance with Rule 9K-7.011, F.A.C. and as described in Article VII below.
- c. A statement of the Project Costs.
- d. A statement of the amount of the award being requested from FCT.
- e. Supporting documentation that the conditions imposed as part of this Agreement have been satisfied.
- f. A signed statement by the Recipient that the Recipient is not aware of any pending criminal, civil or regulatory violations imposed on the Project Site by any governmental agency or body.
- g. A signed statement by the Recipient that all activities under this Agreement comply will all applicable local, state, regional and federal laws and regulations, including zoning ordinances and the applicable adopted and approved comprehensive plan.
- h. Additional documentation as may be requested by FCT to provide Reasonable Assurance, as set forth in paragraph VII.4. below.

2. FCT shall approve the terms under which the interest in land is acquired pursuant to Section 380.510(3), Fla. Stat. Such approval is deemed given when FCT approves the Project Plan containing a copy of the document(s) vesting title to the Project Site in the Recipient.

3. All real property shall be obtained through a Voluntarily-Negotiated Transaction, as defined in Rule 9K-7.002(41). The use of or threat of condemnation is not considered a Voluntarily-Negotiated Transaction.

4. All invoices for Project Costs, with proof of payment, shall be submitted to FCT and be in a detail sufficient for a proper audit thereof.

5. The Recipient may, and is strongly encouraged to, request a courtesy review of its Project Plan prior to its submission for approval.

6. Reimbursement for Project Costs shall not occur until after FCT approval of the Project Plan.

VII. MANAGEMENT PLAN; ANNUAL STEWARDSHIP REPORT

1. Prior to approval of the Project Plan and final disbursement of the FCT Award, the Recipient shall submit to FCT and have approved a Management Plan that complies with Rule

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9K-7.011, F.A.C. and addresses the criteria and conditions set forth in Articles VII, VIII, IX, X, and XI herein.

2. The Management Plan explains how the Project Site will be managed to further the purposes of the project and meet the terms and conditions of this Agreement. The Management Plan shall include the following:

- a. An introduction containing the project name, location and other background information relevant to management.
- b. The stated purpose for acquiring the Project Site as proposed in the application and a prioritized list of management objectives.
- c. The identification of known natural resources including natural communities, listed plant and animal species, soil types, and surface and groundwater characteristics.
- d. A detailed description of all proposed uses including existing and proposed physical improvements and the impact on natural resources.
- e. A detailed description of proposed restoration or enhancement activities, if any, including the objective of the effort and the techniques to be used.
- f. A scaled site plan drawing showing the Project Site boundary, existing and proposed physical improvements and any natural resource restoration or enhancement areas.
- g. The identification and protection of known cultural or historical resources and a commitment to conduct surveys prior to any ground disturbing activity, if applicable.
- h. A description of proposed educational displays and programs to be offered, if applicable.
- i. A description of how the management will be coordinated with other agencies and public lands, if applicable.
- j. A schedule for implementing the development and management activities of the Management Plan.
- k. Cost estimates and funding sources to implement the Management Plan.

3. If the Recipient is not the proposed managing entity, the Management Plan shall include a signed agreement between the Recipient and the managing entity stating the managing

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entity's willingness to manage the site, the manner in which the site will be managed to further the purpose(s) of the project and the identification of the source of funding for management.

In the event that the Recipient is a partnership, the Recipient shall also provide FCT with the interlocal agreement that sets forth the relationship among the partners and the fiscal and management responsibilities and obligations incurred by each partner for the Project Site as a part of its Project Plan.

4. To ensure that future management funds will be available for the management of the site in perpetuity pursuant to Section 259.105 and Chapter 380, Part III, Fla. Stat., the Recipient(s) shall be required to provide FCT with Reasonable Assurance, pursuant to Rule 9K-7.002(32), F.A.C., that it has the financial resources, background, qualifications and competence to manage the Project Site in perpetuity in a reasonable and professional manner. Where the Recipient does not include at least one Local Government, FCT may require the Recipient to do one, or more, of the following: post a performance or other bond in an amount sufficient to ensure that the Project Site shall be reasonably and professionally managed in perpetuity; establish an endowment or other fund in an amount sufficient to ensure performance; provide a guaranty or pledge by the Local Government, in whose jurisdiction the Project Site is located, which shall require the Local Government to take over the responsibility for management of the Project Site in the event the Recipient is unable to, and may require the Local Government to be a named co-signer on the Declaration of Restrictive Covenants; or provide such other assurances as the Governing Board may deem necessary to adequately protect the public interest.

5. The Recipient shall, through its agents and employees, prevent the unauthorized use of the Project Site or any use thereof not in conformity with the Management Plan approved by FCT.

6. All buildings, structures, improvements and signs shall require the prior written approval of FCT as to purpose. Further, tree removal, other than non-native species, and major land alterations shall require the written approval of FCT. The approvals required from FCT shall not be unreasonably withheld upon sufficient demonstration that the proposed structures, buildings, improvements, signs, vegetation removal or land alterations will not adversely impact the natural resources of the Project Site. FCT's approval of the Recipient's Management Plan addressing the items mentioned herein shall be considered written approval from FCT.

7. As required by Rule 9K-7.013, F.A.C., each year after FCT reimbursement of Project Costs the Recipient shall prepare and submit to FCT an annual stewardship report that documents the progress made on implementing the Management Plan.

VIII. SPECIAL MANAGEMENT CONDITIONS

In addition to the Management Plan conditions already described in this Agreement, which apply to all sites acquired with FCT funds, the Management Plan shall address the following conditions that are particular to the Project Site and result from either commitments made in the application

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that received scoring points or observations made by FCT staff during the site visit described in Rule 9K-7.009(1), F.A.C.:

1. Two or more resource-based outdoor recreational facilities including a nature trail and fishing pier shall be provided. The facilities shall be developed in a manner that allows the general public reasonable access for observation and appreciation of the natural resources on the project site without causing harm to those resources.

2. A permanent recognition sign, a minimum size of 4' x 6', shall be maintained in the entrance area of the project site. The sign shall acknowledge that the project site was purchased with funds from the Florida Communities Trust Florida Forever Program and the Recipient.

3. Interpretive signage shall be provided to educate visitors about the natural resources and unique history of the Project Site.

4. A survey of the natural communities and plant species on the project site shall be conducted prior to the development of the project site. The survey shall be used during development of the site to ensure the protection, restoration, and preservation of the natural communities on the project site

5. The natural communities that occur on the project site shall be preserved and appropriately managed to ensure the long-term viability of these communities.

6. The project site shall be managed in a manner that will protect and enhance the listed and non-listed native wildlife species and their habitat. The development of the management plan shall be coordinated with the Fish and Wildlife Conservation Commission's Office of Environmental Services to ensure the preservation and viability of listed and non-listed native wildlife species and their habitat. Periodic surveys shall be conducted of listed species using the project site.

7. The water quality and natural hydrology of St. Sebastian River shall be protected and enhanced through the implementation of appropriate watershed management techniques.

8. Any proposed stormwater facility for the project site shall be designed to provide recreation open space or wildlife habitat.

9. A comprehensive landscaping plan shall be developed for the project site. The landscaping plan will make significant use of native plants.

10. Approximately 39 acres of degraded uplands shall be restored in terms of biological composition and ecological function.

11. The degraded wetland communities along the shoreline shall be restored the in

terms of biological composition and ecological function.

12. An ongoing monitoring and control program for invasive vegetation including exotic (non-native) and nuisance native plant species shall be implemented at the project site. The objective of the control program shall be the elimination of invasive exotic plant species and the maintenance of a diverse association of native vegetation. The management plan shall reference the Exotic Pest Plant Council's List of Florida's Most Invasive Species to assist in identifying invasive exotics on the project site.

13. A feral animal removal program shall be developed and implemented for the project site.

14. Management of the project site shall be coordinated with the land managers of the adjacent conservation lands.

15. Prior to the commencement of any proposed development activities, measures will be taken to determine the presence of any archaeological sites. All planned activities involving known archaeological sites or potential site areas shall be closely coordinated with the Department of State, Division of Historic Resources in order to prevent the disturbance of significant sites.

16. The location and design of the parking facility shall be designed to have minimal impacts on natural resources. The parking area shall incorporate pervious material wherever feasible.

17. Pedestrian and bicycle access to the project site shall be promoted through the provision of pedestrian oriented walkways and bicycle facilities that link the project site with adjacent residential neighborhoods.

18. The development and management of the project site shall be coordinated with the agencies managing conservation lands in the St. Sebastian River Corridor, to ensure the project site is protected and managed as part of a linked conservation lands and recreation opportunities.

19. Proposed site improvements shall be designed and located to minimize or eliminate the long-term risk of storm damage or flooding in conjunction with appropriate hazard mitigation agencies or experts.

20. The requirements imposed by other grant program funds that may be sought for activities associated with the project site shall not conflict with the terms and conditions of this award.

IX. DECLARATION OF RESTRICTIVE COVENANTS REQUIREMENTS IMPOSED BY CHAPTER 259 AND CHAPTER 380, PART III, FLA. STAT.

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1. Each parcel in the Project Site to which the Recipient acquires title shall be subject to a Declaration of Restrictive Covenants describing the parcel and containing such covenants and restrictions as are, at a minimum, sufficient to ensure that the use of the Project Site at all times complies with Sections 375.051 and 380.510, Fla. Stat.; Section 11(e), Article VII of the Florida Constitution; the applicable bond indenture under which the Bonds were issued; and any provision of the Internal Revenue Code or the regulations promulgated thereunder that pertain to tax exempt bonds. The Declaration of Restrictive Covenants shall contain clauses providing for the conveyance of title to the Project Site to the Board of Trustees of the Internal Improvement Trust Fund (“Trustees”), or a nonprofit environmental organization or government entity, upon failure to comply with any of the covenants and restrictions, as further described in paragraph 3. below.

2. The Declaration of Restrictive Covenants shall also restate the conditions that were placed on the Project Site at the time of project selection and initial grant approval. The Declaration of Restrictive Covenants shall be executed by FCT and the Recipient at the time of reimbursement of Project Costs and shall be recorded by the Recipient in the county(s) in which the Project Site is located.

3. If any essential term or condition of the Declaration of Restrictive Covenants is violated by the Recipient or by some third party with the knowledge of the Recipient, the Recipient shall be notified of the violation by written notice given by personal delivery, registered mail or registered expedited service. The recipient shall diligently commence to cure the violation or complete curing activities within thirty (30) days after receipt of notice of the violation. If the curing activities can not be reasonably completed within the specified thirty (30) day time frame, the Recipient shall submit a timely written request to the FCT Program Manager that includes the status of the current activity, the reasons for the delay and a time frame for the completion of the curing activities. FCT shall submit a written response within thirty (30) days of receipt of the request and approval shall not be unreasonably withheld. It is FCT’s position that all curing activities shall be completed within one hundred twenty (120) days of the Recipient’s notification of the violation. However, if the Recipient can demonstrate extenuating circumstances exist to justify a greater extension of time to complete the activities, FCT shall give the request due consideration. If the Recipient fails to correct the violation within either (a) the initial thirty (30) day time frame or (b) the time frame approved by FCT pursuant to the Recipient’s request, fee simple title to all interest in the Project Site shall be conveyed to the Trustees unless FCT negotiates an agreement with another local government, nonprofit environmental organization, the Florida Division of Forestry, the Florida Fish and Wildlife Conservation Commission, the Department of Environmental Protection or a Water Management District, who agrees to accept title and manage the Project Site. FCT shall treat such property in accordance with Section 380.508(4)(e), Fla. Stat.

X. GENERAL OBLIGATIONS OF THE RECIPIENT AS A CONDITION OF PROJECT FUNDING

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1. The interest acquired by the Recipient in the Project Site shall not serve as security for any debt of the Recipient.

2. If the existence of the Recipient terminates for any reason, title to the Project Site shall be conveyed to the Trustees unless FCT negotiates an agreement with another local government, nonprofit environmental organization, the Florida Division of Forestry, the Florida Fish and Wildlife Conservation Commission, the Department of Environmental Protection or a Water Management District who agrees to accept title and manage the Project Site.

3. Following the reimbursement of Project Costs, the Recipient shall ensure that the future land use designation assigned to the Project Site is for a category dedicated to open space, conservation or outdoor recreation uses, as appropriate. If an amendment to the applicable comprehensive plan is required, the amendment shall be proposed at the next comprehensive plan amendment cycle available to the Recipient subsequent to the reimbursement of Project Costs.

4. FCT staff or its duly authorized representatives shall have the right at any time to inspect the Project Site and the operations of the Recipient at the Project Site.

XI. OBLIGATIONS OF THE RECIPIENT RELATING TO THE USE OF BOND PROCEEDS

1. FCT is authorized by Section 380.510, Fla. Stat. to impose conditions for funding on the Recipient in order to ensure that the project complies with the requirements for the use of Florida Forever Bond proceeds including, without limitation, the provisions of the Internal Revenue Code and the regulations promulgated thereunder as the same pertain to tax exempt bonds.

2. The Recipient agrees and acknowledges that the below listed transactions, events, and circumstances, collectively referred to as the “disallowable activities,” may be disallowed on the Project Site as they may have negative legal and tax consequences under Florida law and federal income tax law. The Recipient further agrees and acknowledges that these disallowable activities may be allowed up to a certain extent based on guidelines or tests outlined in the Federal Private Activity regulations of the Internal Revenue Service:

- a. any sale or lease of any interest in the Project Site to a non-governmental person or organization;
- b. the operation of any concession on the Project Site by a non-governmental person or organization;
- c. any sales contract or option to buy or sell things attached to the Project Site to be severed from the Project Site with a non-governmental person or organization;

- d. any use of the Project Site by a non-governmental person other than in such person's capacity as a member of the general public;
- e. any change in the character or use of the Project Site from that use expected at the date of the issuance of any series of Bonds from which the disbursement is to be made;
- f. a management contract for the Project Site with a non-governmental person or organization; or
- g. such other activity or interest as may be specified from time to time in writing by FCT to the Recipient.

3. If the Project Site, after its acquisition by the Recipient and/or the Trustees, is to remain subject to any of the disallowable activities, the Recipient shall provide notice to FCT, as provided for in paragraph V.1., at least sixty (60) calendar days in advance of any such transactions, events or circumstances, and shall provide FCT such information as FCT reasonably requests in order to evaluate for approval the legal and tax consequences of such disallowable activities.

4. In the event that FCT determines at any time that the Recipient is engaging, or allowing others to engage, in disallowable activities on the Project Site, the Recipient shall immediately cease or cause the cessation of the disallowable activities upon receipt of written notice from FCT. In addition to all other rights and remedies at law or in equity, FCT shall have the right to seek temporary and permanent injunctions against the Recipient for any disallowable activities on the Project Site.

DELEGATIONS AND CONTRACTUAL ARRANGEMENTS BETWEEN THE RECIPIENT AND OTHER GOVERNMENTAL BODIES, NONPROFIT ENTITIES OR NON GOVERNMENTAL PERSONS FOR USE OR MANAGEMENT OF THE PROJECT SITE WILL IN NO WAY RELIEVE THE RECIPIENT OF THE RESPONSIBILITY TO ENSURE THAT THE CONDITIONS IMPOSED HEREIN ON THE PROJECT SITE AS A RESULT OF UTILIZING BOND PROCEEDS TO ACQUIRE THE PROJECT SITE ARE FULLY COMPLIED WITH BY THE CONTRACTING PARTY.

XII. RECORDKEEPING; AUDIT REQUIREMENTS

1. The Recipient shall maintain financial procedures and support documents, in accordance with generally accepted accounting principles, to account for the receipt and expenditure of funds under this Agreement. These records shall be available at all reasonable times for inspection, review or audit by state personnel, FCT and other personnel duly authorized by FCT. "Reasonable" shall be construed according to the circumstances, but ordinarily shall mean the normal business hours of 8:00 a.m. to 5:00 p.m., local time, Monday through Friday.

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2. If the Recipient expends a total amount of State financial assistance equal to or in excess of \$500,000 in any fiscal year of such Recipient, the Recipient must have a State single or project-specific audit for such fiscal year in accordance with Section 215.97, Fla. Stat., the applicable rules of the Executive Office of the Governor and the Comptroller and Chapter 10.550 (local government entities) or Chapter 10.650 (nonprofit organizations), Rules of the Auditor General. In determining the State financial assistance expended in its fiscal year, the Recipient shall consider all sources of State financial assistance, including State funds received from FCT, other state agencies and other non-state entities. State financial assistance does not include Federal direct or pass-through awards and resources received by a non-state entity for Federal program matching requirements. The funding for this Agreement was received by FCT as a grant appropriation.

In connection with the audit requirements addressed above, the Recipient shall ensure that the audit complies with the requirements of Section 215.97(7), Fla. Stat. This includes submission of a reporting package as defined by Section 215.97(2)(d), Fla. Stat. and Chapters 10.550 (local government entities) or 10.650 (nonprofit organizations), Rules of the Auditor General.

3. If the Recipient expends less than \$500,000 in State financial assistance in its fiscal year, an audit conducted in accordance with the provisions of Section 215.97, Fla. Stat. is not required. If the Recipient elects to have an audit conducted in accordance with the provisions of Section 215.97, Fla. Stat., the cost of the audit must be paid from non-State funds (i.e., the cost of such an audit must be paid from Recipient funds not obtained from a State entity).

4. The annual financial audit report shall include all management letters, the Recipient's response to all findings, including corrective actions to be taken, and a schedule of financial assistance specifically identifying all Agreement and other revenue by sponsoring agency and agreement number. Copies of financial reporting packages required under this Article shall be submitted by or on behalf of the Recipient directly to each of the following:

Department of Community Affairs (at each of the following addresses):

Office of Audit Services
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

and

Florida Communities Trust
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

State of Florida Auditor General at the following address:

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Auditor General's Office
Room 401, Claude Pepper Building
111 West Madison Street
Tallahassee, Florida 32302-1450

5. If the audit shows that any portion of the funds disbursed hereunder were not spent in accordance with the conditions of this Agreement, the Recipient shall be held liable for reimbursement to FCT of all funds not spent in accordance with the applicable regulations and Agreement provisions within thirty (30) days after FCT has notified the Recipient of such non-compliance.

6. The Recipient shall retain all financial records, supporting documents, statistical records and any other documents pertinent to this Agreement for a period of five (5) years after the date of submission of the final expenditures report. However, if litigation or an audit has been initiated prior to the expiration of the five-year period, the records shall be retained until the litigation or audit findings have been resolved.

7. The Recipient shall have all audits completed in accordance with Section 215.97, Fla.Stat. performed by an independent certified public accountant ("IPA") who shall either be a certified public accountant or a public accountant licensed under Chapter 473, Fla. Stat. The IPA shall state that the audit complied with the applicable provisions noted above.

XIII. DEFAULT; REMEDIES; TERMINATION

1. If the necessary funds are not available to fund this Agreement as a result of action by the Florida Legislature or the Office of the Comptroller, or if any of the events below occur ("Events of Default"), all obligations on the part of FCT to make any further payment of funds hereunder shall, if FCT so elects, terminate and FCT may, at its option, exercise any of its remedies set forth herein, but FCT may make any payments or parts of payments after the happening of any Events of Default without thereby waiving the right to exercise such remedies, and without becoming liable to make any further payment. The following constitute Events of Default:

- a. If any warranty or representation made by the Recipient in this Agreement, any previous agreement with FCT or in any document provided to FCT shall at any time be false or misleading in any respect, or if the Recipient shall fail to keep, observe or perform any of the terms or covenants contained in this Agreement or any previous agreement with FCT and has not cured such in timely fashion, or is unable or unwilling to meet its obligations thereunder;
- b. If any material adverse change shall occur in the financial condition of the Recipient at any time during the term of this Agreement from the financial condition revealed in any reports filed or to be filed with FCT, and the

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Recipient fails to cure said material adverse change within thirty (30) days from the date written notice is sent to the Recipient by FCT;

- c. If any reports or documents required by this Agreement have not been timely submitted to FCT or have been submitted with incorrect, incomplete or insufficient information; or
- d. If the Recipient fails to perform and complete in timely fashion any of its obligations under this Agreement.

2. Upon the happening of an Event of Default, FCT may, at its option, upon thirty (30) calendar days from the date written notice is sent to the Recipient by FCT and upon the Recipient's failure to timely cure, exercise any one or more of the following remedies, either concurrently or consecutively, and the pursuit of any one of the following remedies shall not preclude FCT from pursuing any other remedies contained herein or otherwise provided at law or in equity:

- a. Terminate this Agreement, provided the Recipient is given at least thirty (30) days prior written notice of such termination. The notice shall be effective when placed in the United States mail, first class mail, postage prepaid, by registered or certified mail-return receipt requested, to the address set forth in paragraph V.2. herein;
- b. Commence an appropriate legal or equitable action to enforce performance of this Agreement;
- c. Withhold or suspend payment of all or any part of the FCT Award;
- d. Exercise any corrective or remedial actions, including, but not limited to, requesting additional information from the Recipient to determine the reasons for or the extent of non-compliance or lack of performance or issuing a written warning to advise that more serious measures may be taken if the situation is not corrected; or
- e. Exercise any other rights or remedies which may be otherwise available under law, including, but not limited to, those described in paragraph IX.3.

3. FCT may terminate this Agreement for cause upon written notice to the Recipient. Cause shall include, but is not limited to: fraud; lack of compliance with applicable rules, laws and regulations; failure to perform in a timely manner; failure to make significant progress toward Project Plan and Management Plan approval; and refusal by the Recipient to permit public access to any document, paper, letter, or other material subject to disclosure under Chapter 119, Fla.Stat., as amended. Appraisals, and any other reports relating to value, offers and counteroffers are not available for public disclosure or inspection and are exempt from the

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provisions of Section 119.07(1), Fla. Stat. until a Purchase Agreement is executed by the Owner(s) and Recipient and conditionally accepted by the Trust, or if no Purchase Agreement is executed, then as provided for in Sections 125.355(1)(a) and 166.045(1)(a), Fla. Stat.

4. FCT may terminate this Agreement when it determines, in its sole discretion, that the continuation of the Agreement would not produce beneficial results commensurate with the further expenditure of funds by providing the Recipient with thirty (30) calendar days prior written notice.

5. The Recipient may request termination of this Agreement before its Expiration Date by a written request fully describing the circumstances that compel the Recipient to terminate the project. A request for termination shall be provided to FCT in a manner described in paragraph V.1.

XIV. LEGAL AUTHORIZATION

1. The Recipient certifies with respect to this Agreement that it possesses the legal authority to receive funds to be provided under this Agreement and that, if applicable, its governing body has authorized, by resolution or otherwise, the execution and acceptance of this Agreement with all covenants and assurances contained herein. The Recipient also certifies that the undersigned possesses the authority to legally execute and bind the Recipient to the terms of this Agreement.

XV. STANDARD CONDITIONS

1. This Agreement shall be construed under the laws of the State of Florida, and venue for any actions arising out of this Agreement shall lie in Leon County. If any provision hereof is in conflict with any applicable statute or rule, or is otherwise unenforceable, then such provision shall be deemed null and void to the extent of such conflict and shall be severable, but shall not invalidate any other provision of this Agreement.

2. No waiver by FCT of any right or remedy granted hereunder or failure to insist on strict performance by the Recipient shall affect or extend or act as a waiver of any other right or remedy of FCT hereunder, or affect the subsequent exercise of the same right or remedy by FCT for any further or subsequent default by the Recipient. Any power of approval or disapproval granted to FCT under the terms of this Agreement shall survive the terms and life of this Agreement as a whole.

3. The Recipient agrees to comply with the Americans With Disabilities Act (Public Law 101-336, 42 U.S.C. Section 12101 et seq.), if applicable, which prohibits discrimination by public and private entities on the basis of disability in the areas of employment, public accommodations, transportation, State and local government services, and in telecommunications.

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4. A person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime or on the discriminatory vendor list may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit lease bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with a public entity, and may not transact business with any public entity in excess of Category Two for a period of 36 months from the date of being placed on the convicted vendor list or on the discriminatory vendor list.

5. No funds or other resources received from FCT in connection with this Agreement may be used directly or indirectly to influence legislation or any other official action by the Florida Legislature or any state agency.

This Agreement embodies the entire agreement between the parties.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement.

INDIAN RIVER COUNTY

By: _____

Print Name: _____

Title: _____

Date: _____

Approved as to Form and Legality:

By: _____

Print Name: _____

FLORIDA COMMUNITIES TRUST

By: _____

Kimball Love

Division Director of Housing &
Community Development

Date: _____

Approved as to Form and Legality:

By: _____

Trust Counsel

APPENDIX D

RECORDED DEED

2

This Document Prepared By and Return to:
Bruce D. Barkett, Esquire
Collins, Brown, Caldwell,
Barkett & Garavaglia, Chartered
756 Beachland Blvd.
Vero Beach, FL 32963

Parcel ID Number: 31-38-14-00000-3000-00004.0

Warranty Deed

This Indenture, Made this 8 day of August, 2006 A.D., Between
The Virginia W. Russell Family Limited Partnership, a Florida limited
partnership a/k/a The Virginia Walker Russell Family Limited
Partnership, a Florida limited partnership
of the County of Indian River, State of Florida, grantor, and
Indian River County, a political subdivision of the State of Florida

whose address is: c/o 1840 25th Street, Vero Beach, Florida 32960

of the County of Indian River, State of Florida, grantee.

Witnesseth that the GRANTOR, for and in consideration of the sum of
-----TEN DOLLARS (\$10)----- DOLLARS,
and other good and valuable consideration to GRANTOR in hand paid by GRANTEE, the receipt whereof is hereby acknowledged, has
granted, bargained and sold to the said GRANTEE and GRANTEE'S heirs, successors and assigns forever, the following described land, situate,
lying and being in the County of Indian River State of Florida to wit:

SEE EXHIBIT "A" ATTACHED FOR LEGAL DESCRIPTION

Subject to restrictions, reservations and easements of record, if any, and taxes subsequent to December 31, 2005.

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

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

Signed, sealed and delivered in our presence:

The Virginia W. Russell Family Limited Partnership

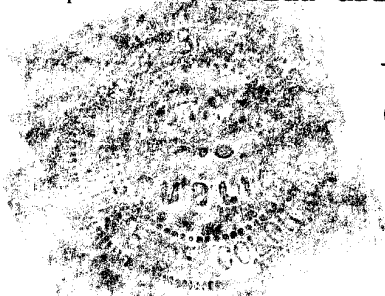
Walter L. Foy By Virginia Walker Russell (Seal)
Printed Name: Walter L. Foy Virginia Walker Russell
Witness General Partner
P.O. Address: P.O. Box 1236, Vero Beach, FL 32961

Greg Brunson
Printed Name: Greg Brunson
Witness

STATE OF Colorado
COUNTY OF GUNNISON

The foregoing instrument was acknowledged before me this 7 day of August, 2006 by
Virginia Walker Russell as General Partner of The Virginia W. Russell
Family Limited Partnership, a Florida limited partnership a/k/a
The Virginia Walker Russell Family Limited Partnership, a Florida
limited partnership

she is personally known to me or she has produced her Florida driver's license as identification.



Greg Brunson
Printed Name: Greg Brunson
Notary Public
My Commission Expires: 10/7/09

EXHIBIT "A" LEGAL DESCRIPTION

PARCEL 1:

The Southeast one-quarter (1/4) of the Northwest one-quarter (1/4) and the East 100 feet of the Southwest one-quarter (1/4) of the Northwest one-quarter (1/4) of Section 14, Township 31 South, Range 38 East, lying in Indian River County, Florida.

PARCEL 2:

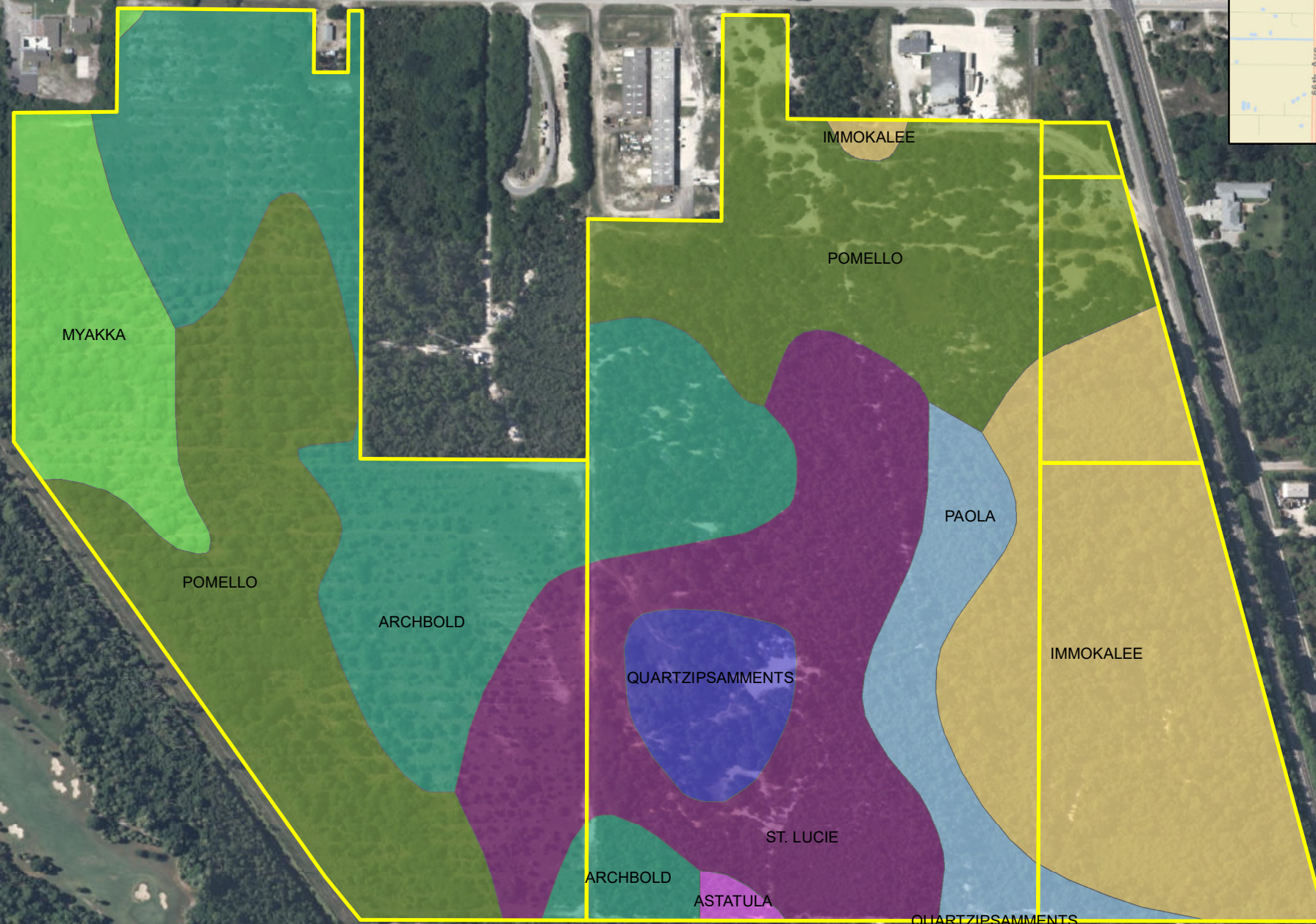
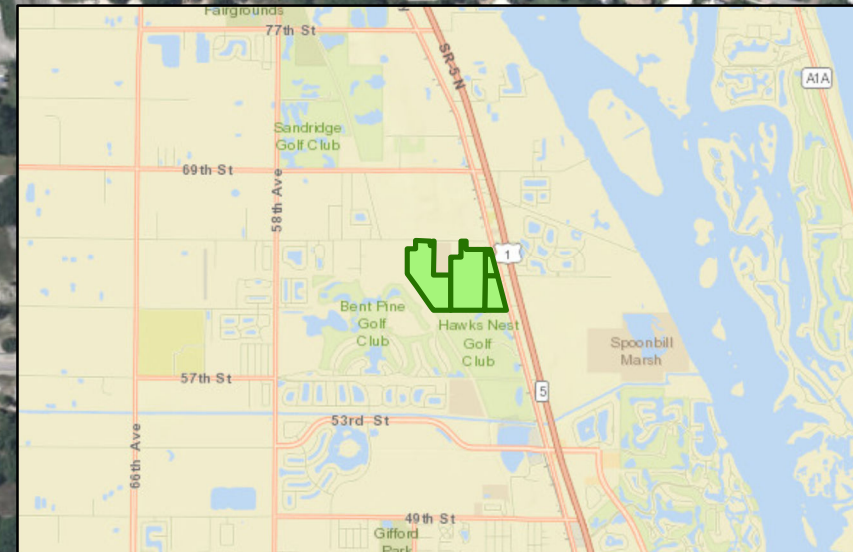
A portion of the Southwest one-quarter of the Northwest one-quarter of Section 14, Township 31 South, Range 38 East, lying Northerly and Easterly of the South prong of the St. Sebastian River and Westerly of the Easterly 100 feet of said Southwest one-quarter of the Northwest one-quarter; said parcel being more particularly described as follows: Commencing at the Northeast corner of the Southeast one-quarter of the Northwest one-quarter of Section 14, Township 31 South, Range 38 East, Indian River County, Florida, run North 89 degrees 25'12" West (assumed) along the North line of said Southeast one-quarter of the Northwest one-quarter a distance of 1325.62 feet to the Northeast corner of the Southwest one-quarter of the Northwest one-quarter of Section 14, Township 31 South, Range 38 East; thence continue North 89 degrees 25'12" West along the North line of said Southwest one-quarter of the Northwest one-quarter a distance of 100.03 feet to a point of intersection with the Westerly line of the East 100 feet of said Southwest one-quarter of the Northwest one-quarter and the Point of Beginning; from said Point of Beginning run South 00 degrees 56'40" East along the West line of said East 100 feet a distance of 294.21 more or less to the intersection with apparent mean high water line of the South Fork of the South prong of the St. Sebastian River; thence meander Northerly and Westerly along said apparent mean high water line the following twenty courses and distances: North 24 degrees 12'16" West a distance of 99.09 feet; North 54 degrees 36'05" West a distance of 46.42 feet; North 54 degrees 32'56" West a distance of 66.11 feet; North 85 degrees 04'44" West a distance of 65.50 feet; North 85 degrees 32'35" West a distance of 35.26 feet; North 87 degrees 20'22" West a distance of 33.48 feet; South 81 degrees 42'15" West a distance of 53.49 feet; South 75 degrees 15'48" West a distance of 67.90 feet; South 71 degrees 56'15" West a distance of 68.95 feet; South 72 degrees 57'54" West a distance of 61.31 feet; South 57 degrees 18'08" West a distance of 23.38 feet; South 65 degrees 03'47" West a distance of 43.23 feet; South 66 degrees 47'32" West a distance of 56.49 feet; North 60 degrees 51'42" West a distance of 36.70 feet; North 58 degrees 15'29" West a distance of 58.88 feet; North 04 degrees 02'59" East a distance of 51.54 feet; North 01 degrees 49'33" East a distance of 55.27 feet; North 09 degrees 04'17" East a distance of 49.05 feet; North 18 degrees 50'50" East a distance of 24.08 feet; North 16 degrees 09'26" East a distance of 26.78 feet more or less to the intersection with the aforementioned North line of the Southwest one-quarter of the Northwest one-quarter; thence run South 89 degrees 27'19" East along said North line a distance of 668.67 feet to the Point of Beginning.

And, together with all private uplands (non-sovereign) lying within the West 125 feet of the East 225 feet of the Southwest one-quarter of the Northwest one-quarter of said Section 14 (less the South 635 feet thereof), lying Southerly of the above described parcel.

Less and except any portion of property lying within the St. Sebastian River.

All lying and being in Indian River County, Florida.

APPENDIX D: PROPERTY 3 SOIL AND LAND USE MAPS



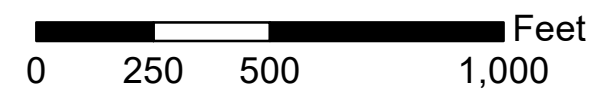
Legend

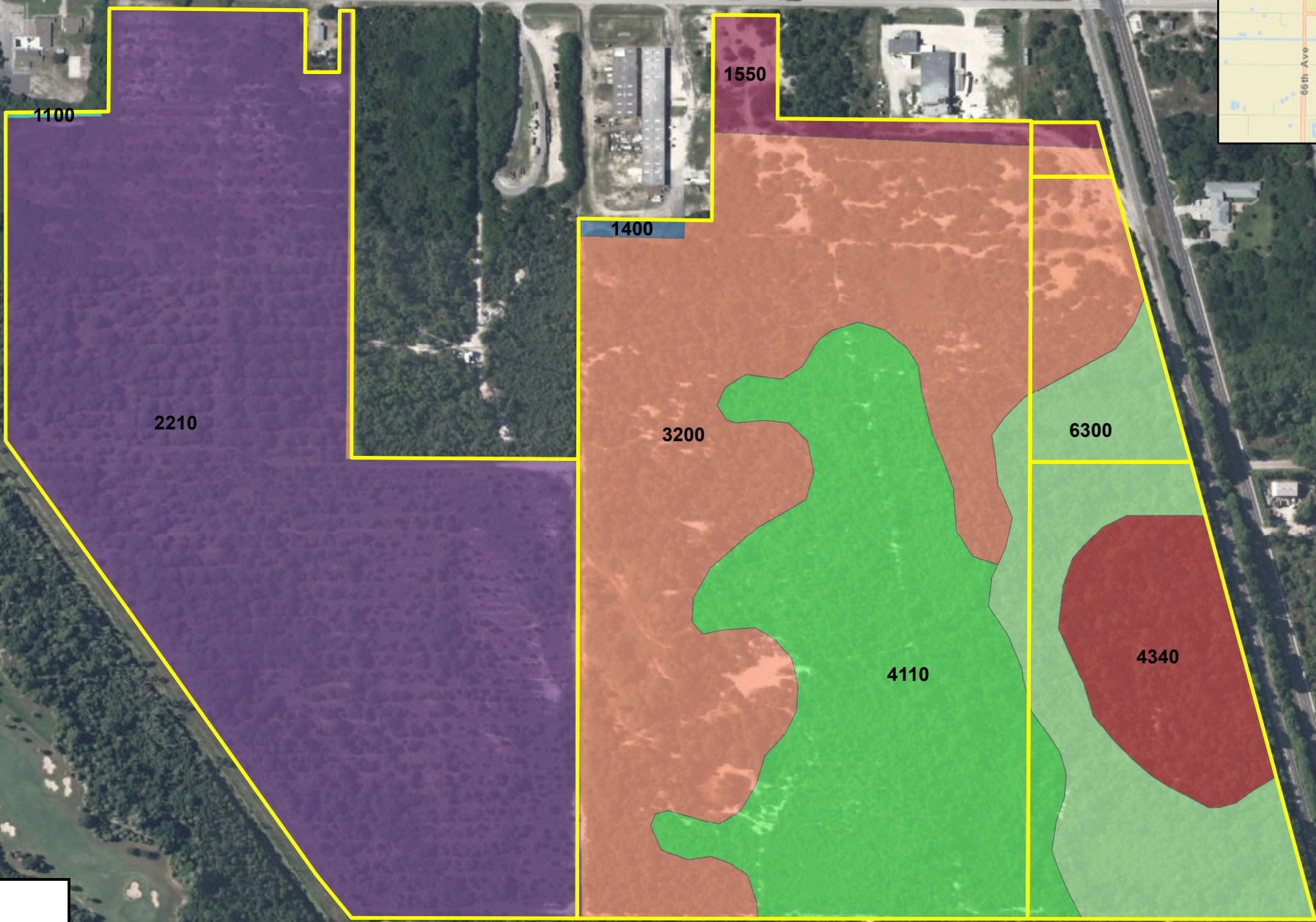
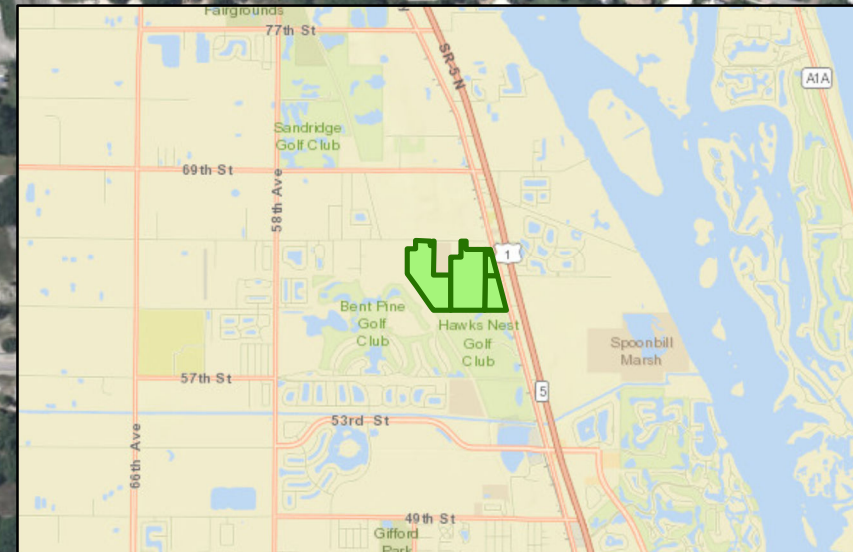
NRCS Soils (2012)

- ARCHBOLD
- ASTATULA
- IMMOKALEE
- MYAKKA
- POMELLO
- QUARTZIPSAMMENTS
- ST. LUCIE

CR 510 PD&E
INDIAN RIVER COUNTY, FLORIDA
ETDM No. 14233

Florida Scrub Jay Mitigation Plan
Potential Property No. 3





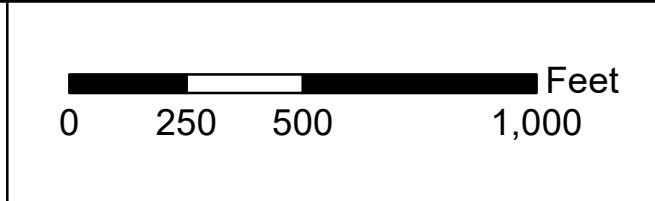
Legend

SJRWMD Land Use (2012)

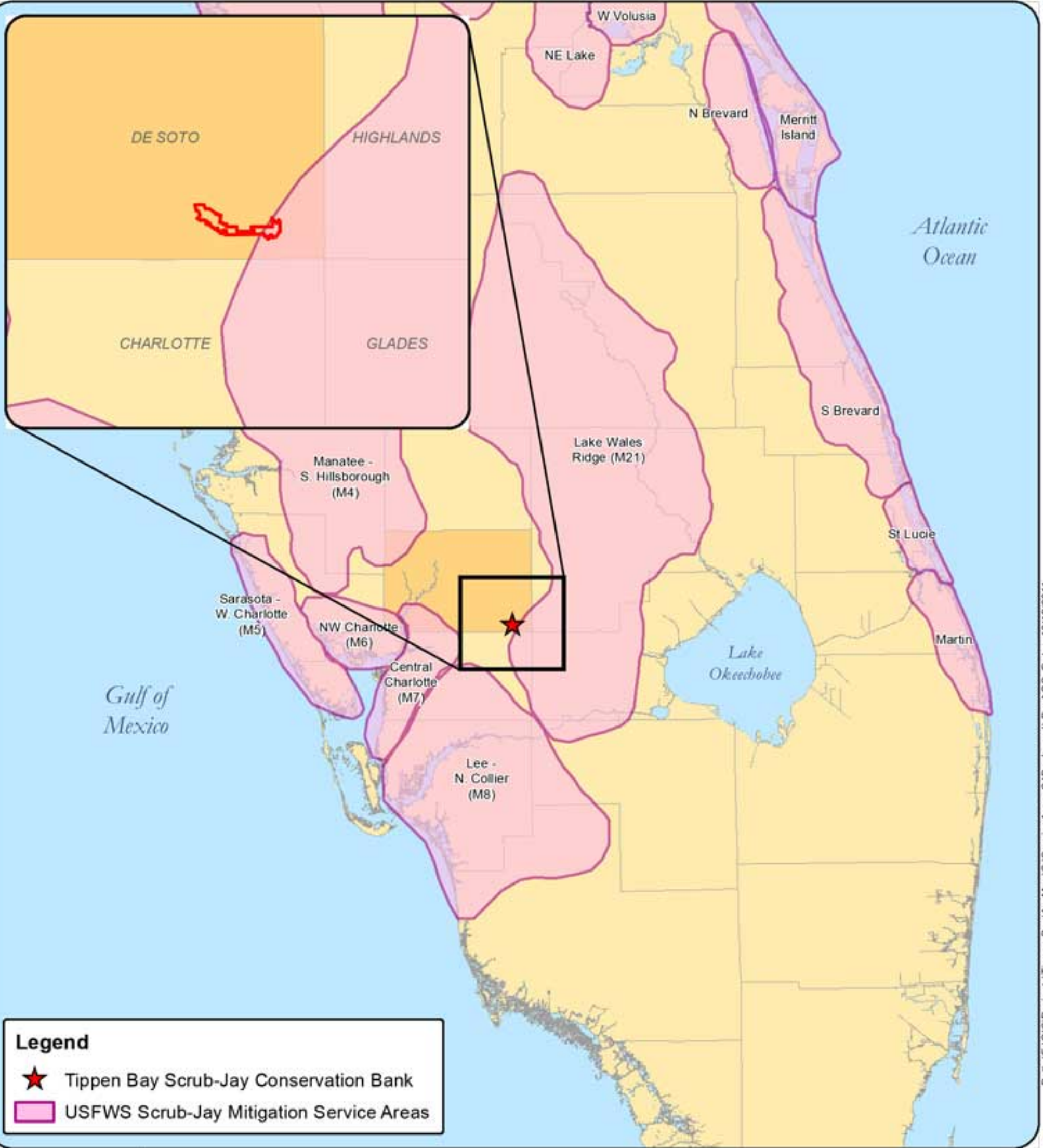
	1100: RESIDENTIAL, LOW DENSITY
	1400: COMMERCIAL AND SERVICES
	1550: OTHER LIGHT INDUSTRIAL
	2210: CITRUS GROVES
	3200: SHRUB AND BRUSHLAND
	4110: PINE FLATWOODS
	4340: UPLAND MIXED CONIFEROUS/HARDWOOD
	6300: WETLAND FORESTED MIXED

**CR 510 PD&E
INDIAN RIVER COUNTY, FLORIDA
ETDM No. 14233**

**Florida Scrub Jay Mitigation Plan
Potential Property No. 3**



APPENDIX E: PROPERTY 4- TIPPEN BAY CONSERVATION BANK SERVICE AREA MAP



Legend

- ★ Tippen Bay Scrub-Jay Conservation Bank
- USFWS Scrub-Jay Mitigation Service Areas



QUEST
ecology

735 Lakeview Drive
Wimauma, FL 33598
Tel. 813.642.0799
Fax 813.642.0380

**Tippen Bay Scrub-Jay Conservation Bank
DeSoto County, Florida**

USFWS Scrub-Jay Mitigation Service Area



0 20
Miles