Caloosahatchee Regional Park Land Stewardship Plan

2011 – 2021

Prepared by the Land Stewardship Section

Lee County Department of Parks and Recreation

Approved by the Lee County Board of County Commissioners on June 21, 2011.

Approved by the Division of State Lands, Office of Environmental Services on October 14, 2011.

I. EXECUTIVE SUMMARY

Lead Managing Agency: Board of County Commissioners of Lee County, Florida (Department of Parks and Recreation)

Common Name of the Property: Caloosahatchee Regional Park (CRP)

Location: Alva, Lee County, Florida

Acreage Total: 768 acres (718 acres under lease from the Board of Trustees of the Internal Improvement Trust Fund; 50 acres under lease from the South Florida Water Management District)

Acreage Breakdown:

FLUCCS Code	Class	Land Cover Classification	Acres*	% of CRP
1180	Urban and Built-Up	Rural Residential	61	8.04
3200	Rangeland	Shrub and Brushland	225	29.64
3300		Mixed Rangeland	179	23.58
4110	Upland Forests	Pine Flatwoods	93	12.25
4220		Brazilian Pepper	14	1.84
5110	Water	Natural River, Stream, Waterway	1	0.13
6170	Wetlands	Mixed Wetland Hardwoods	124	16.34
6210		Cypress	18	2.37
6250		Hydric Pine Flatwoods	11	1.45
6300		Wetland Forested Mixed	32	4.22
6410		Freshwater Marshes	1	0.13

**Due to rounding values, total acreages (and therefore percentages) may not equal the true acreage of CRP. These numbers are approximations.*

Lease: No. 3698 (Lands released from Lease No. 2460)

Use: **S**ingle use for conservation and preservation (and management as a resource-based public outdoor recreational area).

Management Responsibilities: Lee County Department of Parks and Recreation, Lead Management Agency

Designated Land Use: Single Use Management

Sublease(s): None

Contract(s): None

Encumbrances: Perpetual Pipeline and Spoil Easements (USACOE), Ingress/ Egress, Electrical, Drainage Easements

Type Acquisition: Land Acquisition Trust Fund (LATF): Fee Simple

Unique Features: 1.3 miles of undeveloped frontage along the Caloosahatchee River

Archaeological/Historical: One known archaeological site/ one known historical site

Management Needs: Significant restoration needed to restore/ create natural communities, exotic plant and animal control, shoreline protection and restoration.

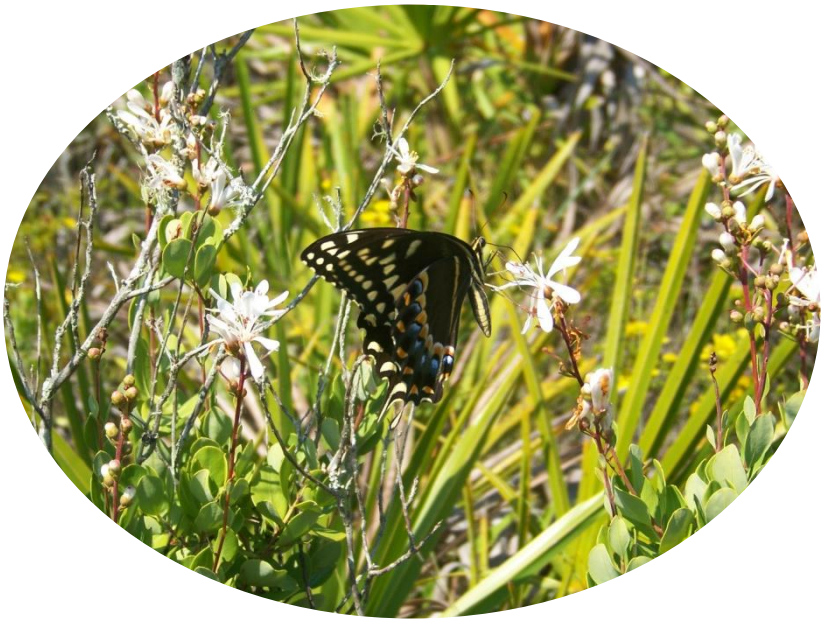
Acquisition Needs/Acreage: None

Surplus Lands/Acreage: None

Public Involvement: Management Plan Advisory Group meeting, Public Hearing, Meeting of the Lee County Board of County Commissioners.

Table of Contents

List of Figures



List of Tables

Approval by the Lee County Board of County Commissioners

This management (stewardship) plan was presented to the Lee County Board of County Commissioners (BoCC) during a Regular Board Meeting on Tuesday, June 21, 2011 (Administrative Agenda Item 9A) and approved by a 3-2 vote. The following County Commissioners were present for and voted on this item: Frank B. Mann, Chairman; John E. Manning, Vice Chairman; A. Brian Bigelow; Ray Judah and Tammy Hall. Alva resident, Keith Dean, spoke in favor of the Zip Line at the park during the allotted public comment period.

The following are the approved minutes from this portion of the meeting (BOOK - 2011R - B.O.C.C. pages 311 – 312). These minutes were obtained from the office of the Lee County Clerk of Courts. Please note: link to item #20110475 is a link to the actual stewardship plan presented to the BoCC.

9. **PARKS AND RECREATION**

A) **ACTION REQUESTED/PURPOSE:**
Determine whether to include the Zip Line within the Caloosahatchee Regional Park (CRP) Management (Stewardship) Plan 2011 - 2021, and then approve and forward the CRP Stewardship Plan to the State's Board of Trustees of the Internal Improvement Trust Fund (TIITF) via the Division of State Lands (Acquisition and Restoration Council) for final approval. (#20110475-PARKS AND RECREATION)
FUNDING SOURCE:
N/A
WHAT ACTION ACCOMPLISHES:
Approval of the CRP Management Plan establishes guidelines for the stewardship activities, restoration, and public use of the park for the next ten years and puts Lee County

----------APPROVED MINUTES OF 062111R----------

BOOK - 2011R - B.O.C.C.---------- PAGE: 312

in compliance with State requirements.
MANAGEMENT RECOMMENDATION:
To approve the new 10 year CRP Management Plan as written.

Public Parks and Recreation Director Barbara Manzo provided a summary overview of the Caloosahatchee Regional Park Management Plan and responded to specific questions on the proposed zip line. Following discussion, Commissioner Judah moved approval of the Plan as written, seconded by Commissioner Hall. Following a suggestion by Commissioners Mann and Bigelow to look at alternative sites for a zip line, the motion was called and carried with Commissioners Mann and Bigelow voting nay.

Approval by the FDEP, Division of State Lands

Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

October 14, 2011

Ms. Annisa Karim
Land Stewardship Coordinator
Lee County Department of Parks & Recreation
17980 State Road 80
Alva, FL 33920

RE: Caloosahatchee Regional Park – Lease # 3698

Dear Ms. Karim:

The Division of State Lands, Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund, hereby approves the Caloosahatchee Regional Park land management plan. The next management plan update is due October 14, 2021.

Approval of this land management plan does not waive the authority or jurisdiction of any governmental entity that may have an interest in this project. Implementation of any upland activities proposed by this management plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities. Pursuant to the conditions of your lease, please forward copies of all permits to this office upon issuance.

Sincerely,

Marianne S. Gengenbach
Office of Environmental Services
Division of State Lands

Letter of Compliance with Local Government Comprehensive Plan

LEE COUNTY
SOUTHWEST FLORIDA
BOARD OF COUNTY COMMISSIONERS

January 12, 2011

Annisa Karim
Lee County Parks and Recreation
3410 Palm Beach Boulevard
Fort Myers, FL 33916

Re: Letter of Comprehensive Plan Consistency
Caloosahatchee Regional Park

Dear Ms. Karim:

You have requested a statement of consistency for the Caloosahatchee Regional Park with the Lee County Comprehensive Plan, the Lee Plan. The Caloosahatchee Regional Park is designated as Conservation Uplands and Conservation Wetlands. These categories are intended to recognize land held for recreation and conservation purposes. As such, the intended use of the Regional Park as a passive recreation area is consistent with the Lee Plan.

If I can be of further assistance in this matter, do not hesitate to call me at (239) 533-8309.

Sincerely,

DEPARTMENT OF COMMUNITY DEVELOPMENT

Paul O'Connor, AICP
Director of Planning

P.O. Box 398, Fort Myers, Florida 33902-0398 (239) 533-2111
lee-county.com

Management Plan Compliance Checklist - Natural Resource Lands

Requirements	**Page Numbers**
18-2.021 Acquisition and Restoration Council.	
1. Executive Summary (This should be included in the packet and should be the first page.)	i
Management Plans. Plans submitted to the division for ARC review under the requirements of Section 253.034 F.S.should be in a form and manner prescribed by rule by the board and in accordance with the provisions of S. 259.032 and should contain where applicable to the management of resources the following:	
2. The common name of the property.	I, 2
3. A map showing the location and boundaries of the property plus any structures or improvements to the property.	5
4. The legal description and acreage of the property.	Appendix A
5. The degree of title interest held by the Board, including reservations and encumbrances such as leases.	40, 41, 42
6. The land acquisition program, if any, under which the property was acquired.	i
7. The designated single use or multiple use management for the property, including other managing agencies.	61
8. Proximity of property to other significant State/local/federal land or water resources. **May be included in the map in item #2.**	Fig. 2, pg 4
9. A statement as to whether the property is within an Aquatic Preserve or a designated Area of Critical State Concern or an area under study for such designation. If yes, make sure appropriate managing agencies are notified of the plan.	14
10. The location and description of known and reasonably identifiable renewable and non-renewable resources of the property including, but not limited to, the following:	
A. Brief description of soil types, using U. S. D. A. maps when available;	10,11
B. Archaeological and historical resources*;	30, 31
C. Water resources including the water quality classification for each water body and the identification of any such water body that is designated as an Outstanding Florida Waters;	12 - 14
D. Fish and wildlife and their habitat;	16 - 29
E. State and federally listed endangered or threatened species and their habitat;	16 - 29
F. Beaches and dunes;	N/A
G. Swamps, marshes and other wetlands;	14, 22 - 25
H. Mineral resources, such as oil, gas and phosphate;	7 - 8

I. Unique natural features, such as coral reefs, natural springs, caverns, large sinkholes, virgin timber stands, scenic vistas, and natural rivers and streams; and	i, 3
J. Outstanding native landscapes containing relatively unaltered flora, fauna, and geological conditions.	20 - 22
11. A description of actions the agency plans, to locate and identify unknown resources such as surveys of unknown archeological and historical resources.	30, 31
12. The identification of resources on the property that are listed in the Florida Natural Areas Inventory. *Include letter from FNAI or consultant, where appropriate.*	Appendix E
13. A description of past uses, including any unauthorized uses of the property.	31 - 36
14. A detailed description of existing and planned use(s) of the property.	46 – 59
15. A description of alternative or multiple uses of the property considered by the managing agency and an explanation of why such uses were not adopted.	60
16. A detailed assessment of the impact of planned uses on the renewable and non-renewable resources of the property and a detailed description of the specific actions that will be taken to protect, enhance and conserve these resources and to mitigate damage caused by such uses.	60
17. A description of management needs and problems for the property.	81 - 82
18. Identification of adjacent land uses that conflict with the planned use of the property, if any.	38, 39
19. A description of legislative or executive directives that constrain the use of such property.	40 - 42
20. A finding regarding whether each planned use complies with the State Lands Management Plan adopted by the Trustees on March 17, 1981, and incorporated herein by reference, particularly whether such uses represent "balanced public utilization", specific agency statutory authority, and other legislative or executive constraints.	Bottom of pg. 45
21. An assessment as to whether the property, or any portion, should be declared surplus.	39
22. Identification of other parcels of land within or immediately adjacent to the property that should be purchased because they are essential to management of the property. **Clearly defined map of parcels can be used.**	39
23. A description of the management responsibilities of each agency and how such responsibilities will be coordinated, including a provision that requires that the managing agency consult with the Division of Archives, History and Records Management before taking actions that may adversely affect archaeological or historic resources.	30, 54
24. A statement concerning the extent of public involvement and local government participation in the development of the plan, if any, including a summary of comments and concerns expressed.	vi, 47, 61, Appendix F
Additional Requirements—Per Trustees	
25. Letter of Compliance of the management plan with the Local Government Comprehensive Plan. Letter from local government saying that the plan is in compliance with local government's comprehensive plan.	viii
253.034 State-Owned Lands; Uses. —Each entity managing conservation lands shall submit to the Division of State Lands a land management plan at least every 10 years in a form and manner prescribed by rule by the Board.	

26. All management plans, whether for single-use or multiple-use properties, shall specifically describe how the managing entity plans to identify, locate, protect and preserve, or otherwise use fragile nonrenewable resources, such as archaeological and historic sites, as well as other fragile resources, including endangered plant and animal species.	26 - 31, 54
27. The management plan shall provide for the conservation of soil and water resources and for the control and prevention of soil erosion.	74 - 77
28. Land management plans submitted by an entity shall include reference to appropriate statutory authority for such use or uses and shall conform to the appropriate polices and guidelines of the state land management plan.	Bottom of page 45
29. All land management plans for parcels larger than 1,000 acres shall contain an analysis of the multiple-use potential of the parcel, which analysis shall include the potential of the parcel to generate revenues to enhance the management of the parcel.	N/A
30. Additionally, the land management plan shall contain an analysis of the potential use of private managers to facilitate the restoration or management of these lands.	86
31. A physical description of the land.	3
32. A desired outcome	61
33. A quantitative data description of the land which includes an inventory of forest and other natural resources; exotic and invasive plants; hydrological features; infrastructure, including recreational facilities; and other significant land, cultural, or historical features.	16 – 29; 63 - 71
34. A detailed description of each short-term and long-term land management goal, the associated measurable objectives, and the related activities that are to be performed to meet the land management objectives. Each land management objective must be addressed by the land management plan, and where practicable, no land management objective shall be performed to the detriment of the other land management activities.	46 – 57; 71 - 80
35. A schedule of land management activities which contains short-term and long-term land management goals and the related measurable objectives and activities. The schedule shall include for each activity a timeline for completion, quantitative measures, and detailed expense and manpower budgets. The schedule shall provide a management tool that facilitates development of performance measures.	30, 31, 46 – 59, 71 - 80
36. A summary budget for the scheduled land management activities of the land management plan. For state lands containing or anticipated to contain imperiled species habitat, the summary budget shall include any fees anticipated from public or private entities for projects to offset adverse impacts to imperiled species or such habitats, which fees shall be used solely to restore, manage, enhance, repopulate, or acquire imperiled species habitat. The summary budget shall be prepared in such a manner that it facilitates computing an aggregate of land management costs for all state-managed lands using the categories described in s. 259.037(3).	85,85
37. Each management plan shall describe both short-term and long-term management goals, and include measurable objectives to achieve those goals. *Short-term and long-term management goals shall include measurable objectives for the following, as appropriate:* ***(A)*** *Habitat restoration and improvement;*	74
(B) *Public access and recreational opportunities;*	46 - 59
(C) *Hydrological preservation and restoration;*	74 - 77

(D) *Sustainable forest management;*	77, 78
(E) *Exotic and invasive species maintenance and control;*	78, 79
(F) *Capital facilities and infrastructure;*	79
(G) *Cultural and historical resources;*	30, 31
(H) *Imperiled species habitat maintenance, enhancement, restoration, or population restoration*	79, 80
259.032 Conservation And Recreation Lands Trust Fund; Purpose. —	
(10)(a) State, regional or local governmental agencies or private entities designated to manage lands under this section shall develop and adopt, with the approval of the Board of Trustees, an individual management plan for each project designed to conserve and protect such lands and their associated natural resources. Private sector involvement in management plan development may be used to expedite the planning process.	
39. Individual management plans required by s. 259.032(10)(b), for parcels over 160 acres, shall be developed with input from an advisory group - Management plan should list advisory group members and affiliations.	Appendix F
40. The advisory group shall conduct at least one public hearing **in each** county in which the parcel or project is located. Managing agency should provide DSL/OES with documentation showing date and location of public hearing.	Appendix F
41. Notice of such public hearing shall be posted on the parcel or project designated for management, advertised in a paper of general circulation, and announced at a scheduled meeting of the local governing body before the actual public hearing. Managing agency should provide DSL/OES with copy of notice.	Appendix F
42. The management prospectus required pursuant to 259.032 (9)(d) shall be available to the public for a period of 30 days prior to the public hearing.	Appendix F
43. Summary of Advisory Group Meeting should be provided to DSL/OES.	Appendix F
44. Individual management plans shall conform to the appropriate policies and guidelines of the state land management plan and shall include, but not be limited to:	
A. A statement of the purpose for which the lands were acquired, the projected use or uses as defined in s. 253.034, and the statutory authority for such use or uses.	46
B. Key management activities necessary to **achieve the desired outcomes, including, but not limited to, providing public access,** preserving and protecting natural resources, **protecting cultural and historical resources,** restoring habitat, **protecting threatened and endangered species,** controlling the spread of nonnative plants and animals, performing prescribed fire activities, and other appropriate resource management activities.	30, 31, 46 – 59, 71 - 80
C. A specific description of how the managing agency plans to identify, locate, protect, and preserve, or otherwise use fragile, nonrenewable natural and cultural resources.	30, 31, 79, 80

D. A priority schedule for conducting management activities, based on the purposes for which the lands were acquired. **The schedule must include a goal, an objective, and a time frame for completion.**	71 - 81
E. A cost estimate for conducting priority management activities, to include recommendations for cost-effective methods of accomplishing those activities. *Using categories as adopted pursuant to 259.037, F.S., is suggested. These are: (1) Resource Management; (2) Administration; (3) Support; (4) Capital Improvements; (5) Visitor Services/Recreation; and (6) Law Enforcement.*	Table 13
F. A cost estimate for conducting other management activities which would enhance the natural resource value or public recreation value for which the lands were acquired. The cost estimate shall include recommendations for cost-effective methods of accomplishing those activities. *Using categories as adopted pursuant to 259.037, F.S., is suggested. These are: (1) Resource Management; (2) Administration; (3) Support; (4) Capital Improvements; (5) Visitor Services/Recreation; and (6) Law Enforcement.(Example #10)* ***Include approximate monetary cost and cost effective methods. Can be placed in the appendix.***	Table 13
45. A determination of the public uses and public access that would be consistent with the purposes for which the lands were acquired.	60
259.036 Management Review Teams.—	
46. The managing agency shall consider the findings and recommendations of the land management review team in finalizing the required 10-year update of its management plan. ***Can be addressed in the body of the plan or addressed in an appendix. If not in agreement, the managing agency should reply in a statement in the appendix.***	61
Other Requirements	
47. This checklist table at front of plan (pursuant to request of ARC and consensus agreement of managing agencies.)	ix - xiii
48. Accomplishments (implementation) from last plan (format variable by agency)	61 - 63
49. FNAI-based natural community maps (may differ from FNAI in some cases)	17
50. Fire management plans (either by inclusion or reference)(259.032)	72, 73
51. A statement regarding incompatible uses [ref. Ch. 253.034 (9)]	60
52. Cultural resources, including maps of all sites except Native American sites*	30, 31
53. Arthropod control plan	Appendix H

Vision Statement

The vision for Caloosahatchee Regional Park is to offer and promote appropriate, state-approved, resource-based, recreational activities while maintaining the over-arching goal of natural and cultural resource protection. Safeguarding and enhancing the environmental integrity and biological diversity of the site will be the guiding principle for the stewardship and operation of this park.

Continuing stewardship activities aim to restore disturbed portions of the park, including the shoreline and spoil deposit area, to stable and productive systems that contribute to the biological diversity of the entire site. Interpretive programs and materials will strive to allow the visitor to develop a "sense of place" and to understand the basic concepts that can be applied to their everyday life. ***"For in the end, we will conserve only what we love. We will love only what we understand. We will understand only what we are taught." -Baba Dioum***

The Caloosahatchee Regional Park will be managed to the standards of the Land Stewardship section of the Lee County Department of Parks and Recreation and will maintain compliance with Chapters 253 and 259, Florida Statutes, and Chapters 18-2 and 18-4, Florida Administrative Code

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Acknowledgements

I would like to thank the following people for their assistance in the development and review of the Caloosahatchee Regional Park Land Stewardship Plan: Roger Clark, Debbie Derums, Kathleen Loomis, Cathy Olson, Kathryn Ball, Laura Estabrook Carr, Dan Calvert and other Lee County staff. I would also like to express gratitude to the Florida Mudcutters and the Caloosa Saddle Club for volunteering their time to help maintain the trails on the north side of Caloosahatchee Regional Park.

Annisa Karim
Land Stewardship Coordinator

II. INTRODUCTION

The following management (stewardship) plan for the ***Caloosahatchee Regional Park*** was submitted for review to the Lee County Board of County Commissioners (BoCC) on June 21, 2011 and approved by a vote of 3-2 (Agenda Item A9A). This plan was then submitted to the State of Florida Board of Trustees of the Internal Improvement Trust Fund (TIITF) for final approval through the Florida Department of Environmental Protection's (FDEP), Division of State Lands pursuant to Chapters 253 and 259, Florida Statutes (FS), and Chapters 18-2 and 18-4, Florida Administrative Code (FAC). Acting as representatives of the TIITF and the Division of State Lands - Office of Environmental Services, the Acquisition and Restoration Council (ARC) made the final decision on the approval of this plan. Format and content were drafted (1) to meet statutory [Sections 253.034(5) and 259.032(10), F.S.] and rule requirements, and (2) in accordance with Lee County Department of Parks and Recreation (LCPR) requirements of management plans outlined in the Land Stewardship Operations Manual. The ARC unanimously approved this plan on October 14, 2011. ***This document serves as the required, ten-year update of management plans to the FDEP's Division of State Lands.***

According to Farr and Brock (2006), "In 1963, the Florida Legislature began the first of a series of land acquisition programs for conservation and recreation purposes, all with dedicated funding sources. The Land Acquisition Trust Fund (LATF) was created to fund a newly-created Outdoor Recreation and Conservation Program, designed primarily to purchase land for parks and recreation areas." The purchase of the lands currently known as the Caloosahatchee Regional Park (CRP) began in 1969 with LATF monies. In 1970, TIITF entered into an agreement with the Florida Department of Natural Resources (now known as the FDEP), to establish the Caloosahatchee River State Park "for the use and benefit of the Division of Recreation and Parks" under lease number 2460. This entity had no immediate plans for the development of facilities and programs and consequently lands under lease 2460 were released and ***Lee County obtained a 50-year lease (Lease No. 3698) to the property for the establishment of public, outdoor recreational facilities as a unit of the county's Regional Park System on June 14, 1989 (Appendix A).***

Located in southwest Florida in northeastern Lee County, CRP encompasses approximately seven hundred sixty-eight (768) acres and is located on the north side of the Caloosahatchee River. Seven hundred eighteen acres (718) of the site are leased from the TIITF. Lee County obtained a lease from the South Florida Water Management District (SFWMD; District) for fifty (50) acres on April 20, 2004 (Figure 1) and is currently operating under Amendment 2 (second extension of lease) of this lease effective April 20, 2009 through April 19, 2014 (Appendix B).

The 50-year TIITF lease agreement (Lease No. 3698) with the BoCC directs the BoCC (via LCPR) to "manage the leased premises only for the conservation and protection of natural and historical resources and resource-based, public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 253.023(11), FS". The lease agreement further directs the BoCC (via LCPR) to "implement applicable Best Management Practices for all activities under this lease in compliance with paragraph 18-2.018(2)(h), FAC, which have been selected, developed, or approved by lessor, lessee, or other land managing agencies for the protection and enhancement of the leased premises."

State law requires concurrency with level of service standards set by the county. The required level of service for Regional Parks is six (6) acres per 1,000 total, seasonal population per Lee

Plan Policy 95.1.3 This Regulatory Standard is identified in state law as being essential to support development. The establishment of CRP fulfilled the need for a regional park in northeastern Lee County.

The mission of the LCPR is to (1) provide safe, clean and functional Parks & Recreation facilities, (2) provide programs and services that add to the quality of life for all Lee County residents and visitors, and (3) enhance tourism through special events and attractions. CRP has been developed in a manner to ensure the conservation and protection of natural and historical resources while providing resource-based, public, outdoor recreational opportunities that have been approved for state lands and that are compatible with the conservation and protection of these public lands. The site's diverse vegetation and extensive frontage on the river, coupled with interpretive programs and amenities, provide various opportunities for the public to enjoy and continue to be educated about the importance of the site.

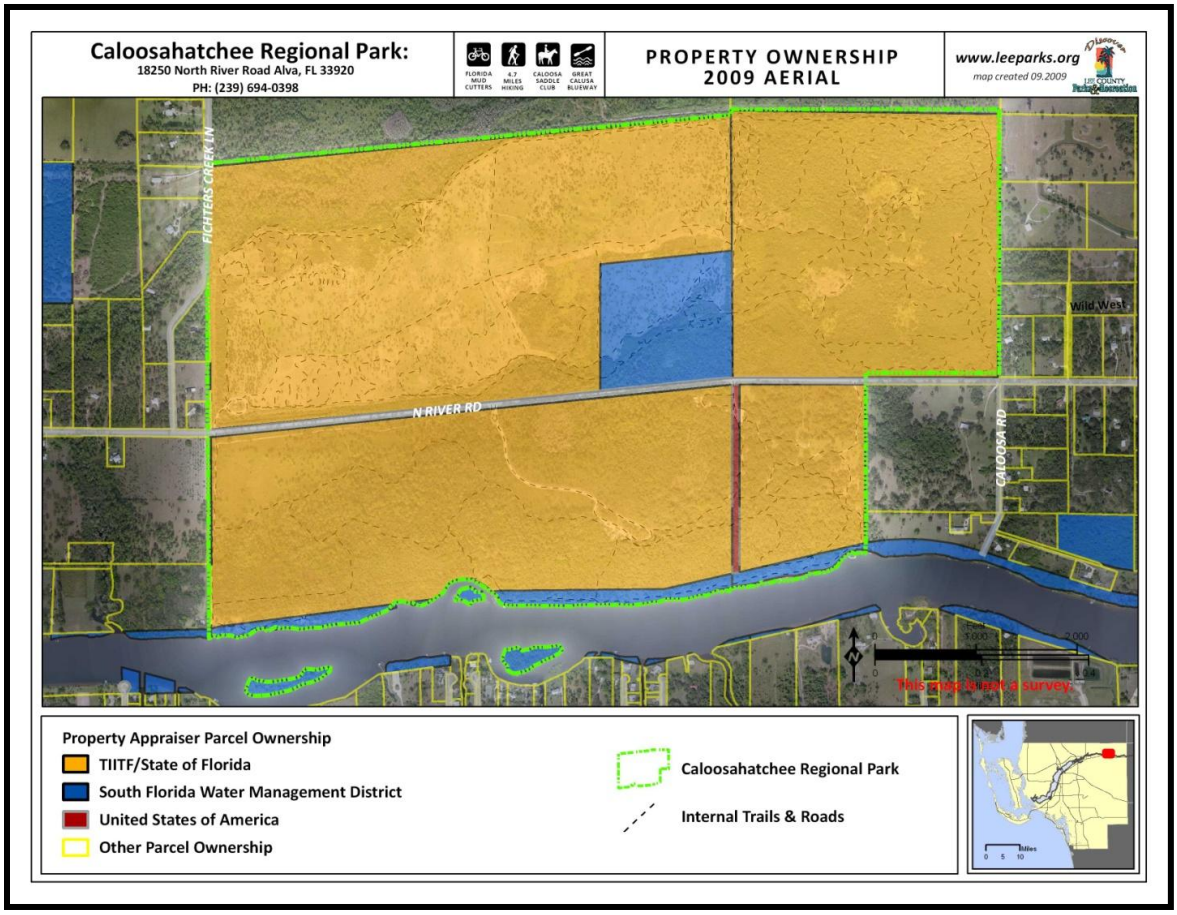


Figure 1: Ownership Map of CRP.

III. LOCATION AND SITE DESCRIPTION

The CRP is located in southwest Florida within Sections 17, 18, 19 and 20 of Township 43 South, Range 27 East and is entirely within the northeastern portion of Lee County. It is divided by County Road 78 (North River Road) and is approximately two miles west of the town of Alva. CRP is bordered by private residences to the east and west, the Bob Janes Preserve (Lee

County portion of the Babcock Ranch Preserve) to the north and Caloosahatchee River to the south (Figure 2).

Providing scenic vistas, the approximately 6,700 linear feet (1.3 miles) of undeveloped frontage on the Caloosahatchee River is a unique feature of the park. Approximately 52% of CRP consists of areas disturbed by deposit of dredge spoil in the 1960s, while 24% is in upland, and 24% is in wetland communities. The diverse plant communities of the site include pine flatwoods, palmetto scrub, cypress, hardwood bottomland, and oak hammock. Wildlife observed include bobcat (*Lynx rufus*), white-tailed deer (*Odocoileus virginianus*), raccoon (*Procyon lotor*), river otter (*Lontra canadensis*), eastern indigo snake (*Drymarchon corais couperi*), eastern diamondback rattlesnake (*Crotalus adamanteus*), gopher tortoise (*Gopherus polyphemus*), red-shouldered hawk (*Buteo lineatus*), barred owl (*Strix varia*), swallow-tailed kite (*Elanoides forficatus*), wild turkey (*Meleagris gallopavo*) and Audubon's crested caracara (*Caracara cheriway*).

CRP was opened to the public in March 1999. The "south side" (portion of CRP south of County Road 78) includes picnic shelters, restrooms, hiking trails totaling 5.25 miles, a campground, a lodge, an overlook, fishing pier, a canoe/ kayak launch, parking and offices. The campground area of the park features 28 primitive tent camping sites. Group and equestrian camping options are available, as well as special use areas for large events. The "north side" (portion of CRP north of County Road 78) has 11.30 miles of mountain bike trails and 6.25 miles of equestrian trails as well as a picnic shelter, parking and restroom facilities (Figure 3).

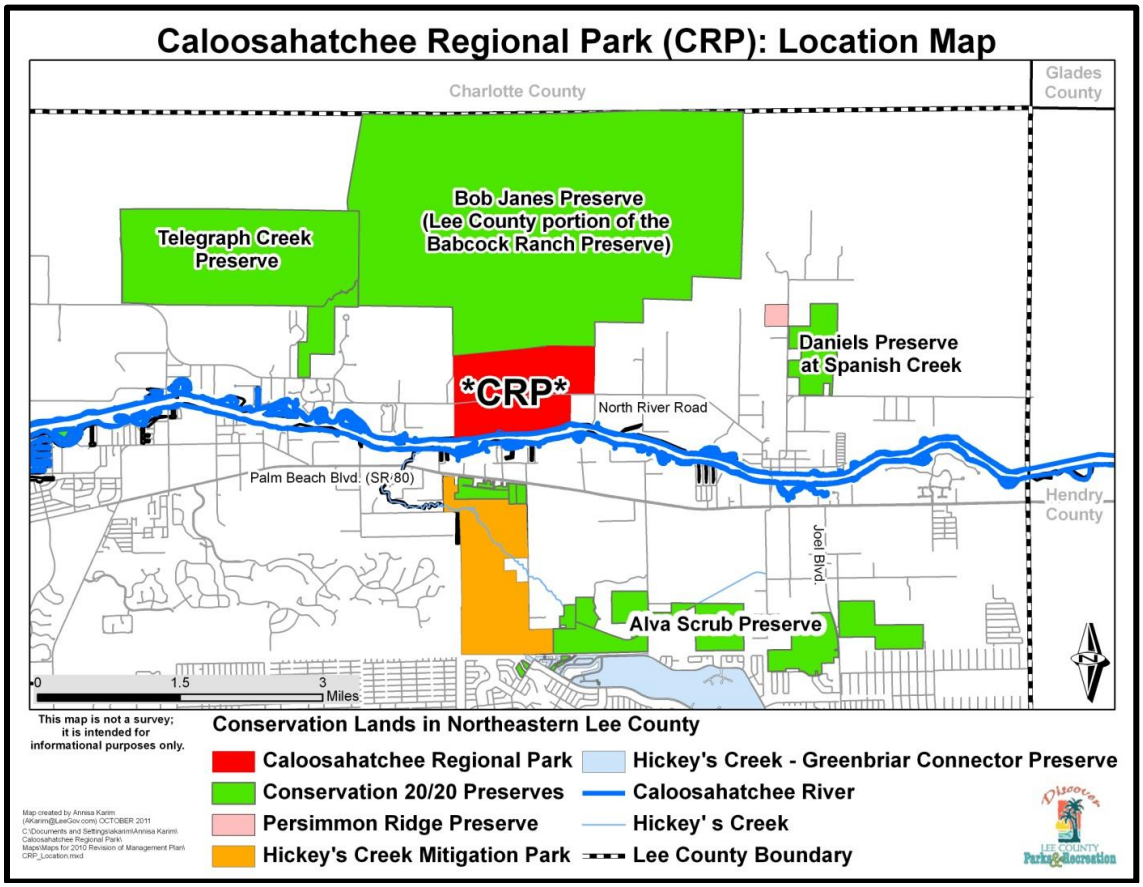


Figure 2: CRP and Other Conservation Lands in Northeastern Lee County, FL.

Figure 3: Map of Trails, Permanent Structures and Improvements.

IV. NATURAL RESOURCES DESCRIPTION

A. Physical Resources

i. Climate

Southwest Florida has a humid, sub-tropical climate due to its maritime influence from the Caribbean Sea and the Gulf of Mexico. The mild temperatures encourage winter residents and tourists to visit the area. Temperate climate influences are exerted as well, with infrequent but significant freezes occurring in December and January (FCC 2005). These freezes prevent some tropical plants from becoming established and occasionally damage the subtropical vegetation. Cold fronts regularly push cool, sometimes moist weather from the southeastern U.S. to southwest Florida during the winter. These cold fronts also encourage migratory birds to utilize CRP either as a stopover point on a longer voyage, or as a winter roosting and feeding area. Table 1 shows the mean high and low temperatures for Fort Myers, Florida compiled by the Southeast Regional Climate Center from 1/ 1/1892 to 7/31/2010.

Table 1: Mean Maximum/ Minimum Temperatures (°F) for Ft. Myers, FL (1892 - 2010).

	Jan.	**Feb.**	**Mar**	**Apr.**	**May**	**Jun.**	**Jul.**	**Aug.**	**Sep.**	**Oct.**	**Nov.**	**Dec.**
Mean Max. Temp.	74.3	75.8	79.7	84.0	88.1	90.0	90.5	90.8	89.2	85.1	79.5	75.4
Mean Min. Temp.	53.8	54.7	58.5	62.3	67.4	72.1	73.8	74.1	73.4	68.2	60.4	55.3

Figure 4 depicts the rainfall data collected by Lee County Division of Natural Resources. Data were collected on a daily basis. Mean rainfall from 1998 – 2010 was 66.41 inches. The Alva rain gauge is located at the Alva Fire Department, approximately 2.2 miles southeast of CRP.

Occasionally, major hurricanes pass through southwest Florida impacting natural ecosystems and man-made infrastructure. Although these effects are believed by many to be short-term, long-term consequences may result in plant canopy restructuring, invasive plant introduction and/or further dispersal, and increased wildfire severity to communities from increased fuel loads (dead vegetation). The effect of hurricanes on natural systems is compounded by the already present anthropogenic impacts. During 2004, tropical systems (Charley, Frances and Jeanne) passed over Lee County. These systems did extensive damage to the campground area of CRP, as well as along some north side trails, requiring removal of large live oak (*Quercus virginiana)* limbs and many trees. In October 2005, Hurricane Wilma also passed through the area with hurricane force winds, and caused more tree damage at the park.

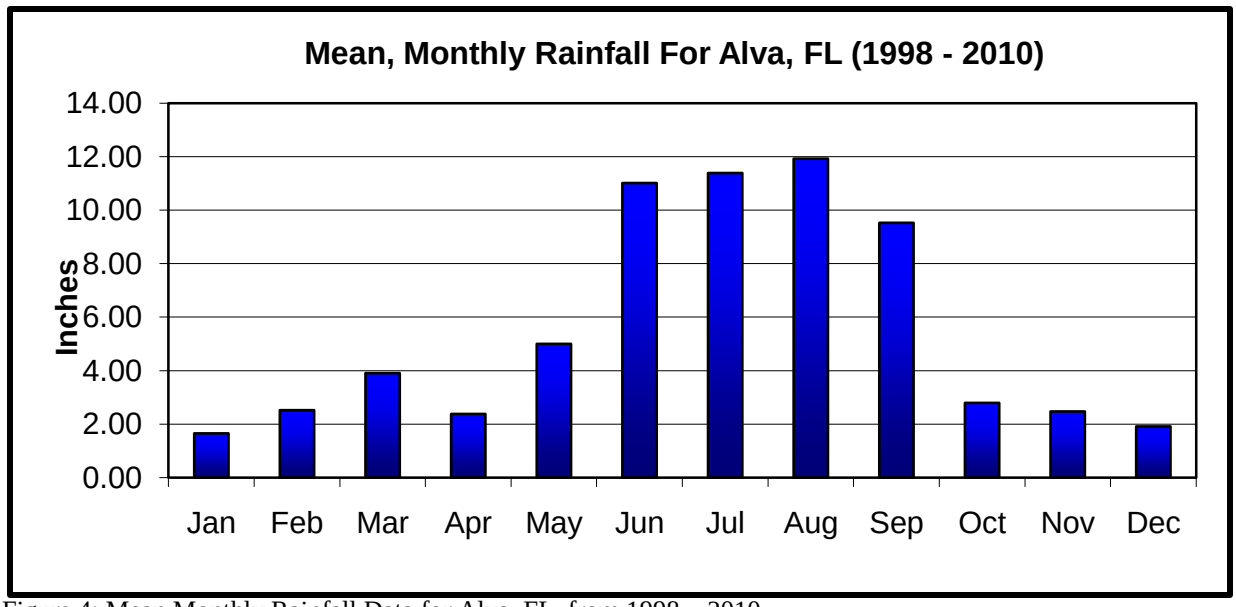


Figure 4: Mean Monthly Rainfall Data for Alva, FL. from 1998 – 2010.

ii. Geology (Mineral Resources)

For millions of years, the Florida Platform was submerged in the ocean. Sediments accumulated upon it and hardened into sedimentary rock. Thirty-five (35) million years ago, portions of Florida rose above the ocean's surface and for the next 12 million years, it alternated between emersion and submergence. From 23 million years ago to the present, at least a small portion of the Florida Platform has always been above the ocean surface.

CRP lies in the Tamiami Formation lithostratigraphic unit. The CRP site rests on a foundation of limestone. The upper layer of the limestone belongs to a Pleistocene series of sedimentary deposits called the Anastasia formation (coquinoid limestone and clay). Soil overlaying the limestone base has an average thickness of 3 feet and tends to be sandy, mixed with marl.

Lithostratigraphic units are differentiated by the conditions under which they were formed and the specific interval of geologic time. The Tamiami Formation was created during the Pliocene Epoch between 5.3 million and 1.8 million years ago. The Tamiami Formation contains a mix of fine to coarse-grained sand, sandy clay, fossiliferous sand and fossiliferous limestone. Phosphate is present throughout as are fossils, particularly barnacles, mollusks, corals, sea urchins and smaller marine life.

Southwest Florida can be divided into 10 major physiographic provinces as described in the Southwest Florida Ecological Characterization Atlas (1984). These are broad-scale subdivisions based on physical geography features such as terrain texture, rock type and geologic structure and history. CRP lies within the Caloosahatchee Valley physiographic region. The Caloosahatchee Valley is an ancient river valley filled with sands and shells from the Plio-Pleistocene age and is comprised of flatwoods and wet prairie with terraced landforms.

"Florida ranks second nationally in production and fourth in consumption of crushed stone (limestone and dolostone). Most of the stone that is mined in Florida is used for road construction. Florida ranks approximately 15th in the country in sand and gravel used or

produced. Sand and gravel is subdivided into construction and industrial sand, the bulk of which is, in Florida, construction grade" (FDEP 2010). Sand and limestone mines are located within Lee County, FL. Mining has not been conducted at CRP nor have any entities expressed an interest in mining the site.

iii. Topography

Lee County is located within the Coastal Lowlands of Florida that extend around the coastal periphery of the state where elevations are generally below 100 feet (Stubbs 1940; Cooke 1945).

The topography at CRP is best described as "low relief", ranging from a low of approximately 2'msl (mean sea level) at the north bank of the Caloosahatchee River to approximately 32'msl on the north side of the park (Figure 5). CRP occurs on the coastal lowlands topographic division and is a part of the DeSoto Plain physiographic zone.

The Caloosahatchee River has been dredged three times; the original dredging was sponsored by the state and funded by Hamilton Disston in the 1880s. The United States Army Corps of Engineers (USACOE) subsequently dredged the Caloosahatchee River from 1930-1937 and from 1960-1964. Spoil from the most recent dredging event was pumped to the north side of CRP and, as a result, the elevation on approximately 392 acres north of County Road 78 was artificially raised within a range of approximately 4 to 20+ feet above natural grade. This spoil area occupies more than half the entire site and constitutes a substantial alteration in topography. Other anthropogenic alterations include ditches and berms related to dredging and past agricultural uses of the land.

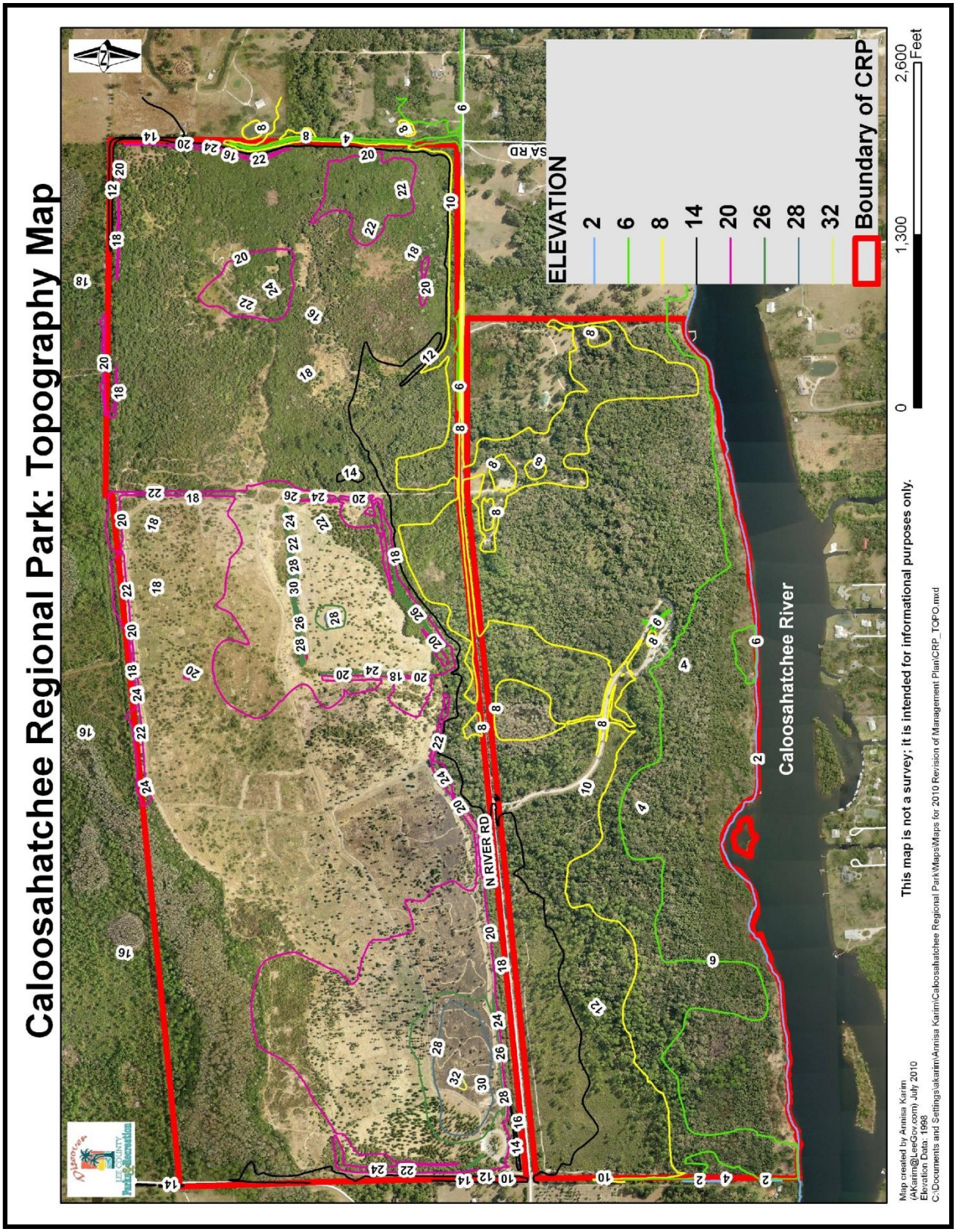


Figure 5: Topography Map for Caloosahatchee Regional Park (Data: 1998).

iv. Soils

The objective of soil mapping is to separate the landscape into landforms or landform segments that have similar use and management requirements (not to delineate pure map unit components). The U. S. Department of Agriculture (via the Natural Resources Conservation Service) and the SFWMD report nine different soil types at CRP (Table 2, Figure 6). In decreasing order of abundance, these soils are: Caloosa Fine Sand (dredge spoil); Bradenton Fine Sand; Copeland Sandy Loam, Depressional; Immokalee Sand; Wabasso Sand; Limestone Substratum; Wabasso Sand; Oldsmar Sand; Pineda Fine Sand, Depressional and Boca Fine Sand. Table 2 provides the approximate acreages and percentages of CRP that each of these soils cover, whether each soil is considered hydric or not and each soil's general drainage class. Because of slight errors associated with the mapping of soils and interpretations within the ArcGIS program, the acreages and percentages provided are close approximations and communicate valuable information for stewardship and operations personnel. Soils data indicate that six of the nine soils found within CRP are non-hydric and make-up approximately 72% of the site. However, five of these non-hydric soils are designated as poorly drained. Caloosa Fine Sand, one of the non-hydric soils, is categorized as moderately well drained. Three of the nine soils found within CRP are categorized as hydric and are either poorly drained or very poorly drained.

In addition to the types of soil found in an area, environmental variables such as climate, topography and hydrology influence the types of plant communities found there. It is not possible to correlate all the soil types on CRP with specific biological communities, but general correlations are given in the Natural Plant Communities section of this document.

Table 2: Coverage, Hydric Designation and Drainage Class of Soils within CRP.

Soil Type	Acres*	% of CRP	Hydric	Drainage Class
Caloosa Fine Sand (dredge spoil)	392	51.92	No	Moderately Well Drained
Bradenton Fine Sand	110	14.57	Yes	Poorly Drained
Copeland Sandy Loam, Depressional	86	11.39	Yes	Very Poorly Drained
Immokalee Sand	44	5.83	No	Poorly Drained
Wabasso Sand, Limestone Substratum	41	5.43	No	Poorly Drained
Wabasso Sand	36	4.77	No	Poorly Drained
Oldsmar Sand	25	3.31	No	Poorly Drained
Pineda Fine Sand, Depressional	17	2.25	Yes	Very Poorly Drained
Boca Fine Sand	4	0.53	No	Poorly Drained

**Due to rounding values, total acreages (and therefore percentages) may not equal the true acreage of CRP. These numbers are approximations.*

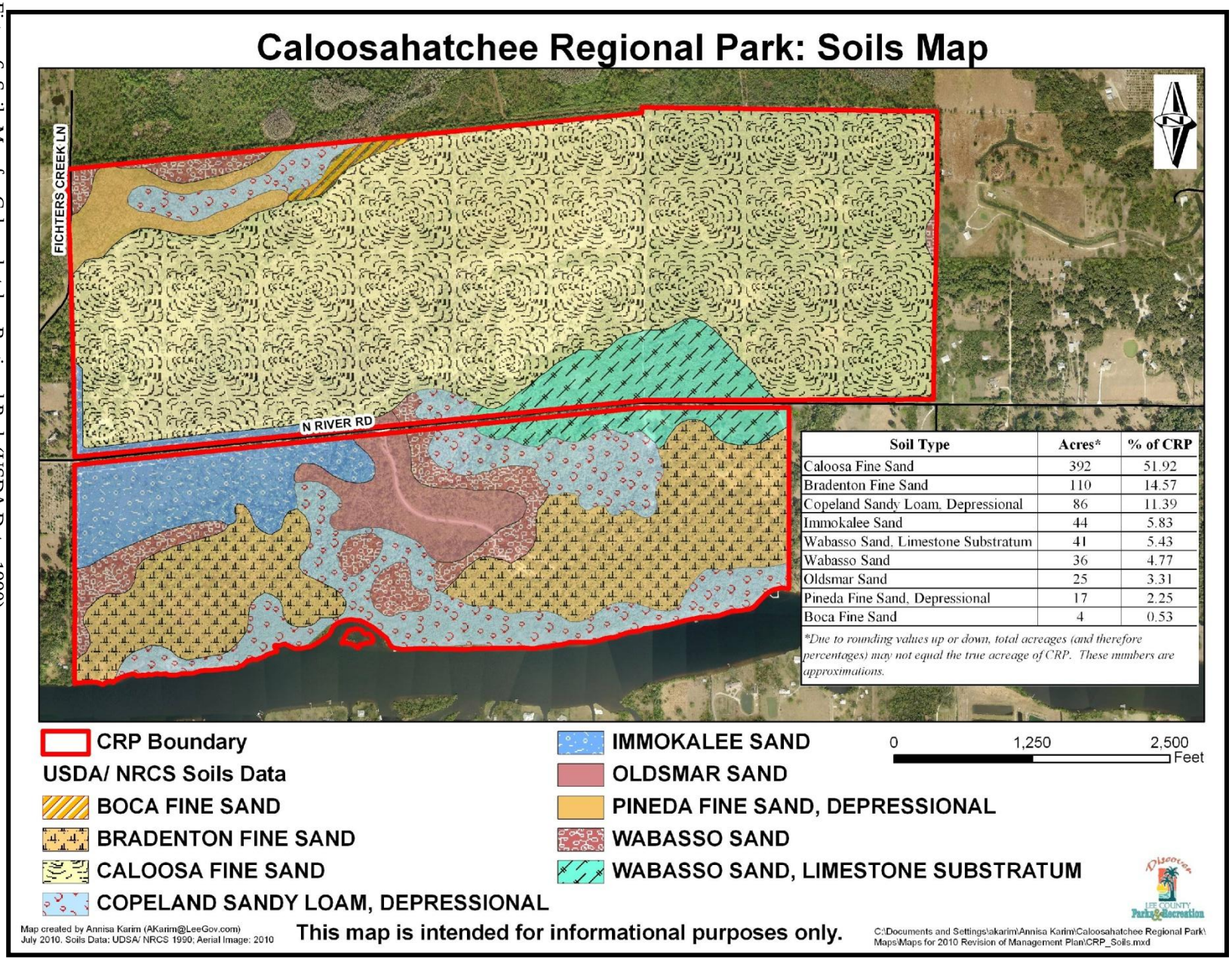


Figure 6: Soils Map for Caloosahatchee Regional Park (USDA Data: 1990).

v. Hydrology and Watershed

A watershed is a region draining into a specific body of water. Topography, geology, soils, biological communities and anthropogenic alterations to a landscape influence the rate and way in which water drains. The SFWMD delineates watersheds within their boundaries. The SFWMD further delineates basins within each of these watersheds. The Caloosahatchee River watershed contains six (6) drainage basins. CRP lies within the West Caloosahatchee Basin of the Caloosahatchee River Watershed.

The Lee County Division of Natural Resources (LCDNR) divides Lee County into 48 different watersheds. These watersheds are based on a more refined scale compared to SFWMD's designations because LCDNR's area of monitoring and restoration is much smaller. According to LCDNR data, CRP lies within the Fichter's Creek Watershed and the Park Branch Watershed (Figure 7). The Fichter's Creek Watershed has a drainage area of 7.3 square miles. Fichter's Creek passes through the northwest corner of CRP and flows southwest into the Caloosahatchee River. The Park Branch Watershed has a drainage area of approximately 1.5 square miles. The drainage of the site has been altered by its use as a spoil deposit site, which resulted in altered topography and in a number of drainage, ditches, some of which flow directly into the river.

A "Total Maximum Daily Load" represents the maximum amount of a given pollutant that a waterbody can assimilate and still meet the waterbody's designated uses. A waterbody that does not meet its designated uses is defined as impaired". The Caloosahatchee River has been designated as an impaired waterbody by the FDEP (FDEP 2005). Hydrological considerations are a significant factor in land stewardship efforts at CRP relative to maintenance of the vegetation communities dependent on a wetland hydroperiod. Drainage of the park is mostly internal except for Fichter's Creek, located in the northwest corner of the park. The most conspicuous drainage feature is the Caloosahatchee River that forms the park's southern boundary. The SFWMD refers to the Caloosahatchee River as C43-Canal 43. The river presently functions and is managed more as a canal than a river. The original purpose of the dredging was to provide drainage and navigation. Since then the river has become an important source for drinking water and irrigation for agriculture. The effects of the Caloosahatchee River channelization have been decreased flooding of the floodplain and increased use by large pleasure boats. Locks occur both upstream and downstream of the park. Located approximately 26 miles upstream of CRP, the Ortona Lock and Spillway (S-78) in Moore Haven, Fl helps to control water levels on adjacent lands upstream and separates the Caloosahatchee River (C-43 canal) into eastern and western basins. Approximately two miles downstream of the park is the Franklin Lock and Dam (S-79) which artificially separates the fresh water of the Caloosahatchee River from the salt water of the estuary and marks the beginning of the 30-mile tidal basin of the Caloosahatchee River. The portion of the river along CRP is primarily freshwater and water levels are influenced by discharges from Lake Okeechobee and the operation of the locks.

In 1974, the United States Fish and Wildlife Service (USFWS) directed its office of Biological Services to conduct an inventory of the nation's wetlands. This National Wetlands Inventory (NWI) became operational in 1977. Wetlands were identified on the photography by vegetation, visible hydrology and geography, and subsequently classified in general accordance with the Classification of Wetlands and Deep Water Habitats of the United States (Cowardin et al. 1979). Federal agencies, state agencies, local agencies, academic institutions and private industry use this information for management, research, policy development, education and planning activities.

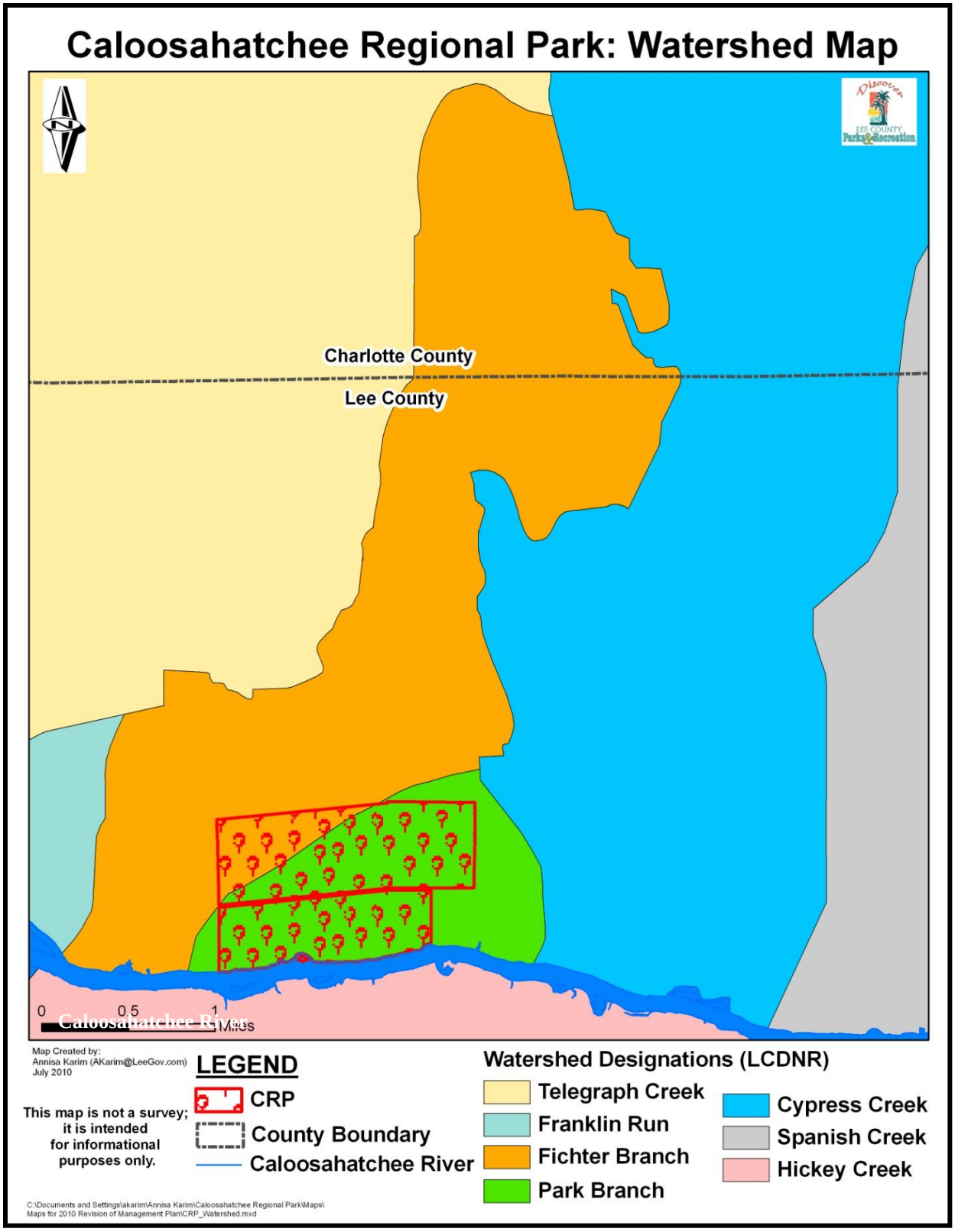


Figure 7: LCDNR Watershed Map.

Figure 8 identifies the variety of palustrine wetlands as identified by NWI in 1999. Palustrine wetlands are often called swamps, marshes, potholes, bogs, or fens. These systems are all non-tidal wetlands dominated by trees, shrubs, persistent emergent aquatic plants, emergent mosses or lichens, and all such wetlands that occur in tidal areas where salinity due to ocean-derived salts is below 0.5%. The majority of palustrine wetlands on CRP are forested. Forested wetlands are characterized by woody vegetation that is 6 meters (19.6 feet) tall or taller. These areas typically have an overstory of trees, an understory of young trees or shrubs and an herbaceous layer.

In addition to the wetlands identified by the NWI data, hydric pine flatwoods are identified in the northwest corner of CRP by the SFWMD land use data from 2004 (Figure 9). This designation and other land use designations made by the SFWMD dataset are discussed in the Natural Plant Communities section of this document.

There are no Florida Special or Outstanding Waters within the boundary of CRP. Additionally, CRP is not included as an Area of Critical State Concern or Aquatic Preserve nor is it under study for such a designation.

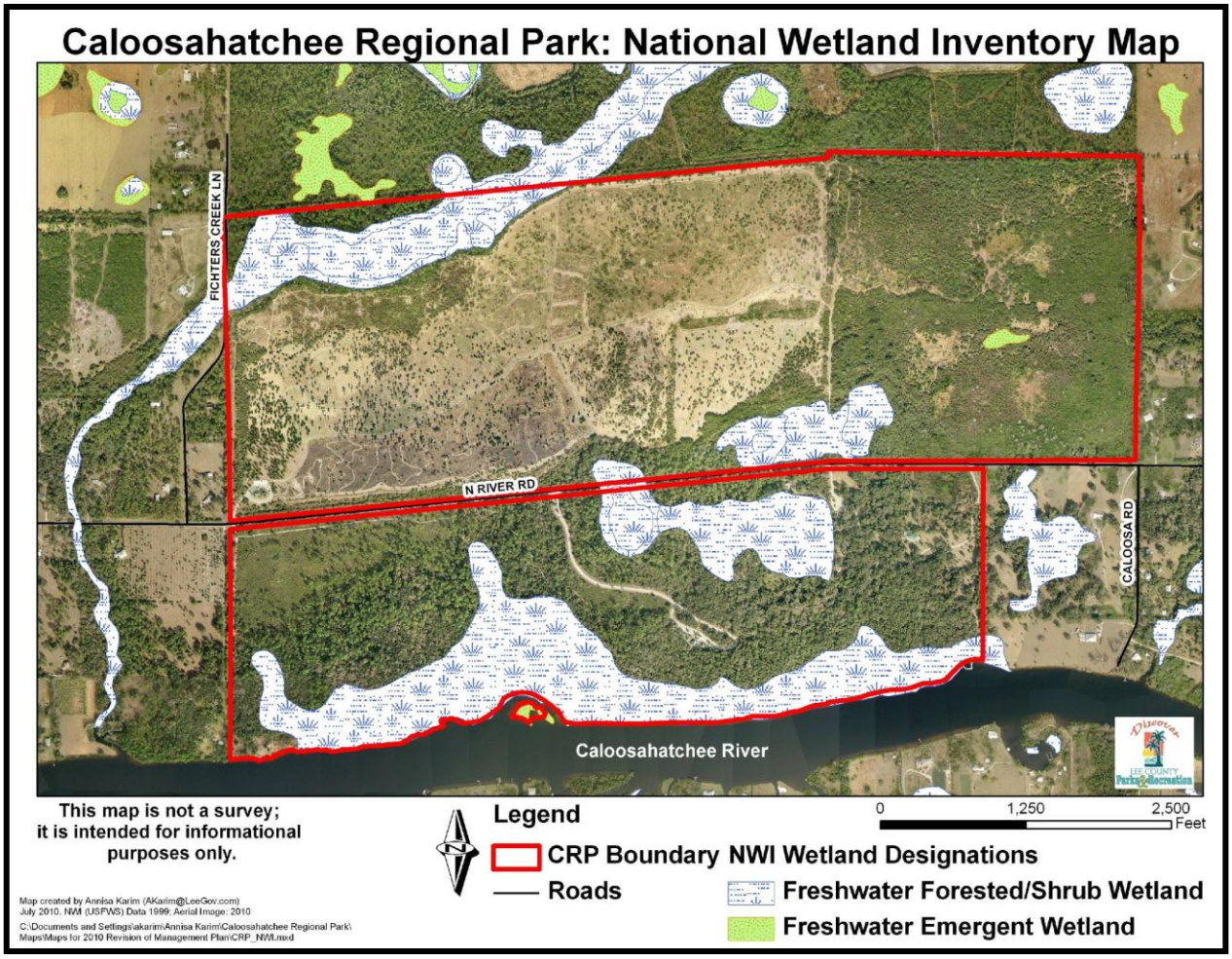


Figure 8: National Wetland Inventory Map of CRP.

B. Biological Resources

i. Ecosystem Function

Ecosystem services such as the protection of water resources, flood control, maintenance of nutrient cycles, preservation of biological diversity, carbon sequestration, and the availability of recreational lands are imperative for the well-being of the citizens of Lee County and may be achieved through the preservation and appropriate stewardship of natural areas.

Lee County's approach to resource management can be described as "natural systems management". This approach is aimed at managing the natural communities of each unit as parts of an interrelated system, rather than managing for the benefit of individual species. The general composition of each community, as it may have appeared at the beginning of Florida's historical period, is determined by considering factors such as climate, geology, soil, hydrology, and fire frequency. Measures are then implemented to recreate, to the extent possible, the natural processes and conditions that prevailed at that time, with the goal of restoring each community to its "original" condition. At CRP, portions of the biological communities within the park were harshly impacted in the recent past. These natural systems will require both time and effort for restoration to succeed. However, burning fire-adapted communities, controlling exotic species, preventing anthropogenic erosion, restoring surface water regimes, and other such measures will assist in their eventual recovery to a level closer to original natural conditions than presently occur. The acquisition and preservation of the 5,620 acre Bob Janes Preserve (Lee County's portion of the Babcock Ranch Preserve) in July 2006 by Lee County at a cost of $41.5 million dollars provides an additional buffer to CRP and greatly increases available habitat for wildlife.

The most significant natural and cultural feature of the park is the Caloosahatchee River. The Caloosahatchee is used heavily for local and intracoastal boat travel as well as by tour boats from Fort Myers.

CRP contains a diversity of plant communities. The "north side" is heavily impacted due to the deposition of dredge spoils onto the land. Because of the increased elevation and the atypical soils (for a terrestrial area), this portion of CRP has proven to be a serious management problem since the park came under the jurisdiction of Lee County Parks and Recreation in May 1989. Exotic vegetation has dominated the site in the past and exotic grasses currently are the most egregious problem creating a consistent monoculture over much of the site. Wildlife documented on the north side include the state listed Audubon's crested caracara, the federally listed eastern indigo snake, white-tailed deer, wild turkey, and bobcats. The "south side" remains a fairly intact system, but continues to be impacted by invasive, exotic vegetation including Brazilian pepper (*Schinus terebinthifolia*), shoebutton ardisia (*Ardisia elliptica*), rosary pea (*Abrus precatorius*), Guineagrass (*Panicum maximum*) and old world climbing fern (*Lygodium microphyllum*). This portion of the park is home to a variety of bird species including barred owls, northern bobwhite quail (*Colinus virginianus*), and red-shouldered hawks.

ii. Natural Plant Communities

The term "plant community" refers to the suite of floristic species that form the natural (i.e., native) vegetation of any place. In addition to anthropogenic influences, the combination of factors such as geology, topography, hydrology, underlying soils and climate determine the types of plants found in an area. These plants, in turn determine the animal species that may be found there.

The Florida Land Use, Cover and Forms Classification System (FLUCCS) dataset published by the SFWMD in 2004 depicts eleven communities on CRP (Table 3, Figure 9).

The park contains of a wide variety of plant communities ranging from cypress to mixed rangelands (Figure 9). While these classifications are based on the SFWMD land use dataset from 2004, the following descriptions are defined using the Guide to the Natural Communities of Florida (2010) prepared by the Florida Natural Areas Inventory (FNAI) and the then Florida Department of Natural Resources (now known as the Florida Department of Environmental Protection). These descriptions list the dominant plants and characteristic animals found within each FNAI community (with exception of Urban and Built-Up lands). Table 3 lists these communities in order of decreasing abundance within CRP. A list of plant species documented to date may be found in Appendix C.

Table 3: FLUCCS Designations Sorted by Decreasing Coverage (SFWMD Data 2004).

FLUCCS Code	Class	Land Cover Classification	Acres*	% of CRP
3200	Rangeland	Shrub and Brushland	225	29.64
3300	Rangeland	Mixed Rangeland	179	23.58
6170	Wetlands	Mixed Wetland Hardwoods	124	16.34
4110	Upland Forests	Pine Flatwoods	93	12.25
1180	Urban and Built-Up	Rural Residential	61	8.04
6300	Wetlands	Wetland Forested Mixed	32	4.22
6210	Wetlands	Cypress	18	2.37
4220	Upland Forests	Brazilian Pepper	14	1.84
6250	Wetlands	Hydric Pine Flatwoods	11	1.45
5110	Water	Natural River, Stream, Waterway	1	0.13
6410	Wetlands	Freshwater Marshes	1	0.13

**Due to rounding values, total acreages (and therefore percentages) may not equal the true acreage of CRP. These numbers are approximations.*

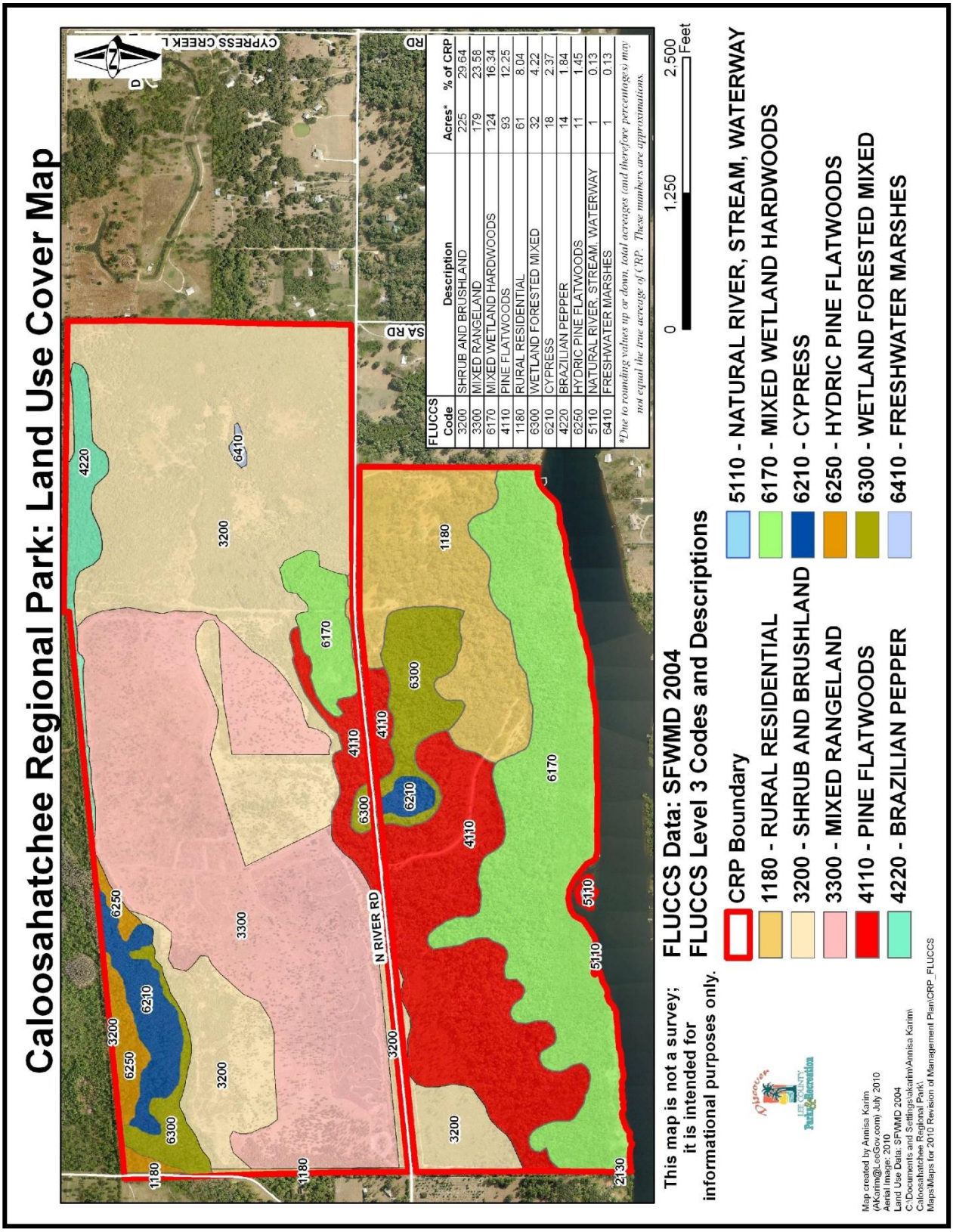
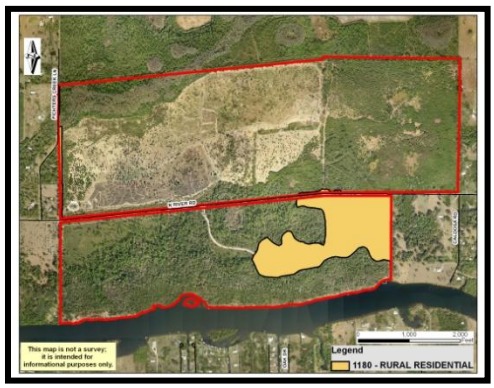


Figure 9: FLUCCS Map for CRP (SFWMD Data 2004).

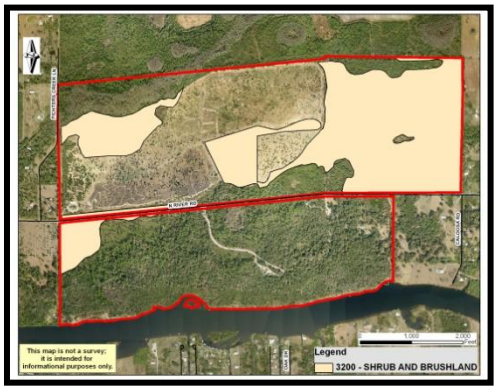
Table 3 lists these plant communities in order of decreasing abundance but the following descriptions are listed in sequential order by class (and FLUCCS). Due to rounding values, total acreages may not equal the true acreage of the communities found on CRP. These numbers are approximations only.

Urban and Built-Up: FLUCCS 1180; 61-acres; 8.04% coverage of CRP



Rural Residential (FLUCCS 1180; No FNAI Classification; 61-acres; 8.04% coverage of CRP): The area classified as Rural Residential is located south of C.R. 78 within the eastern portion of the site (see image to the right). It curves around mixed forested wetlands and meanders west, encompassing the parking area of the main entrance. Bradenton Fine Sand, Wabasso Sand (Limestone Substratum), Copeland Sandy Loam (Depressional), Wabasso Sand and Oldsmar Sand form the substrate of this community. Previously classified as woodland pasture, the community is in various stages of ecological succession with dominant vegetation varying from bahiagrass *(Paspalum notatum*) to live oak. Other species occurring in this community are cabbage palm (*Sabal palmetto*), slash pine (*Pinus elliottii* var. *densa*), saw palmetto (*Serenoa repens*), groundsel (*Baccharis halimifolia*), Brazilian pepper, rosary pea, greenbriar (*Smilax* sp.) wild coffee (*Psychotria nervosa*) and wax myrtle (*Myrica cerifera*). Many of the park's heavily used facilities are located within this community including all of the campsites, the lodge, three of the restrooms, showers, the maintenance compound, both office areas, picnic pavilions and water supply areas. Additionally, some hiking trails are also located on this portion of CRP. Due to the heavy public use of this area, the main stewardship goal is the control of exotic, invasive plants.

Rangeland: FLUCCS 3200 and 3300; 404-acres; 53.23% coverage of CRP



Shrub and Brushland (FLUCCS 3200; FNAI Classification – Dry Prairie; 225-acres; 29.64% coverage of CRP): The image to the right highlights the three areas within CRP designated with FLUCCS code 3200. Also called palmetto prairies, dry prairies are nearly treeless areas characterized by a dense groundcover of saw palmetto, grasses, herbs and low shrubs. Native plants include love grass (*Eragrostis elliottii*), blazing star (*Liatris* spp.), pawpaw (*Asimina reticulata*), tarflower (*Bejaria racemosa*), shiny blueberry (*Vaccinium myrsinites*), American beautyberry (*Callicarpa americana*) gallberry *(Ilex glabra*) and fetterbush (*Lyonia lucida*). The natural fire frequency of dry prairies appears to be every 1-2 years (FNAI 2010) which is the interval recommended for these areas within CRP. However, it will not be

possible to burn areas heavily infested with Brazilian pepper until this invasive species is further controlled.

The shrub and brushland area on the south side of C.R. 78 near the western boundary encompasses 16.5-acres. Saw palmetto is dominant throughout the area with a scattered overstory of slash pine on the eastern portion. Immokalee Sand underlies this portion of CRP. Other plant species associated with this area are consistent with those listed in the previous paragraph. Animals detected in this community within CRP include the Florida box turtle (*Terrapene carolina bauri*), bobcat, loggerhead shrike (*Lanius ludovicianus*) and gopher tortoise. Invasive, exotic flora present in this community include Caesarweed (*Urena lobata*), Brazilian pepper and Guineagrass.

The remaining 205-acres of shrub and brushland (dry prairie) are found on the north side of CRP. Approximately 3.5-acres of this community exists along the southern boundary of the north side just east of the parking lot and west of the mesic flatwood. Approximately 31-acres of dry prairie lies on the western portion of the north side of CRP approximately 0.2 miles north of C. R. 78. Caloosa Fine Sand (dredge spoil) underlies this area and subsequently has altered the expected floral species composition of this area. Saw palmetto is sporadic in this area. Dominant vegetation includes Brazilian pepper, groundsel, wax myrtle, live oak, slash pine and cabbage palm. Trails run throughout the spoil area on the north side of C.R. 78. Guineagrass, cogongrass (*Imperata cylindrica*) and napiergrass (*Pennisetum purpureum*), all invasive exotic species, have invaded some of the area from which Brazilian pepper was removed by heavy equipment in 1995-1996. Crested caracaras have been detected in this portion of CRP. The eastern 160-acres of the north side of the park is heavily infested with Brazilian pepper; it will not be possible to burn this area until the Brazilian pepper is further controlled.

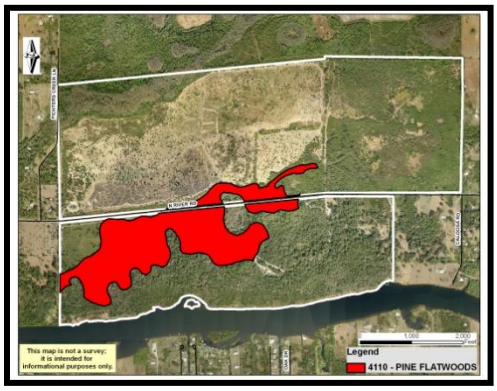
The LCDNR and Community Engineering Services, Inc are undertaking the Fichter's Creek Restoration Project. A goal of this project is to restore the appropriate hydroperiod and water quality within Fichter's Creek to maintain a functioning ecosystem. Additional benefits include alleviating risks of the flooding of neighboring properties in the vicinity of Fichter's Creek. This 31-acre dry prairie is targeted to hold an approximately 3.2-acre lake and three dry detention areas totaling approximately 7.1-acres associated with this project.

Another 174-acres with the FLUCCS designation of 3200 constitutes the majority of the eastern portion of the park (north of C. R. 78). Caloosa Fine Sand (dredge spoil) underlies a majority of this area. Wabasso Sand, Limestone Substrate underlies a small portion in the southwest corner of the 174-acre segment designated as shrub and brushland. Dominant vegetation on the entire 174-acre portion includes Brazilian pepper (heavy infestation), red maple (*Acer rubrum*), hackberry (*Celtis laevigata*) wax myrtle, live oak, slash pine and cabbage palm. Guineagrass, cogongrass and napiergrass, all invasive exotic grasses, also exist here. Brazilian pepper is the most problematic exotic species in this area. The small area that contains Wabasso Sand, Limestone Substrate tends to hold water for longer periods of time and contains wetland plants. In effect, it functions like a wetland. Animal species detected on this portion of CRP include gopher tortoises, Audubon's crested caracaras, white-tailed deer, a variety of warblers and vireos and red-shouldered hawks. All of the intermediate and advanced level mountain bike trails are found in this area as are some of the equestrian trails.

Mixed Rangeland (FLUCCS 3300; FNAI Classification – Dry Prairie; 179-acres; 23.58% coverage of CRP): The image to the right highlights the area within CRP designated with FLUCCS code 3300. Like shrub and brushlands, FNAI classifies mixed rangelands as dry prairie systems. Caloosa Fine Sand (dredge spoil) underlies this portion of CRP and subsequently has altered the expected floral species composition of this area. Dominant vegetation includes wax myrtle, red cedar (*Juniperus virginiana*), live oak, slash pine, cabbage palm and Brazilian pepper. Guineagrass, cogongrass and napiergrass are also problem species in this area. The red cedar was planted on approximately 6-acres of the southwest portion of this community on CRP. As with the community described above, the natural fire frequency of dry prairies appears to be every 1-2 years (FNAI 2010) which is the interval recommended for these areas within CRP. However, it will not be possible to burn areas heavily infested with Brazilian pepper until this invasive species is further controlled. Animal species detected on this portion of CRP include gopher tortoises, Audubon's crested caracaras (foraging and nesting), white-tailed deer, a variety of warblers and vireos and red-shouldered hawks. All of the beginner (easy) level mountain bike trails are found in this area as are some of the equestrian trails. Additionally, the entrance gate and parking area for the north side are located in the southwest portion of this community on CRP.

Upland Forests: FLUCCS 4110 and 4220; 107-acres; 14.10% coverage of CRP

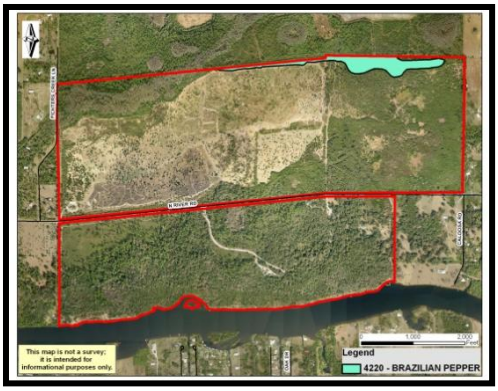
Pine Flatwoods (FLUCCS 4110; FNAI Classification – Mesic Flatwoods; 93-acres; 12.25% coverage of CRP): The mesic flatwood within CRP is divided by C. R. 78; most of this community is located on the south side of the park. Synonyms for this plant community include pine flatwoods and pine savannahs. Mesic flatwoods occur on relatively flat, moderately to poorly drained soils. Standing water is common for brief periods during the rainy season. Mesic flatwoods are characterized by an open canopy of tall pines and a dense, low ground cover of herbs and shrubs (FNAI 2010). Typical plants growing in these communities at CRP include south Florida slash pine, live oak, laurel oak, cabbage palm, saw palmetto, gallberry, wax myrtle, and muhly grass (*Muhlenbergia capillaris*). Exotics present include Brazilian pepper, rosary pea, natalgrass (*Melinis repens*, synonym *Rhynchelytrum repens*) and Guineagrass. Animals that have been documented in the mesic flatwoods at CRP include the gopher tortoise, pileated woodpecker (*Dryocopus pileatus*), eastern cottontail rabbit (*Sylvilagus floridanus*), bobcat, raccoon, Florida black bear (*Ursus americanus floridanus*) and the northern bobwhite quail.



South Florida slash pine provides a unifying character to a number of sub-communities at CRP with varying soils, elevation and understory. Bradenton Fine Sand, Immokalee Sand, Wabasso Sand (Limestone Substratum), Wabasso Sand and Oldsmar Sand underlie the mesic flatwood community within CRP. Caloosa Fine Sand is a minimal component of this community. Mesic flatwoods probably experienced fire every 1-8 years during pre-Columbian times (FNAI 1990). Without frequent fires, mesic flatwoods will succeed into hardwood dominated forests whose closed canopy will gradually eliminate the groundcover of herbs and shrubs. On the other hand, high frequency or intensity fires would eliminate pine recruitment and eventually transform the mesic flatwoods into palmetto prairie. A fire interval of 1-8 years will be the recommended stewardship goal for this community within CRP.

A majority of the Palmetto Path hiking trail and the northern section of the main entrance road at CRP are located within this community. Additionally, this area will likely be the location of the Zip Line canopy tour (refer to the Public Access and Passive Recreation section of this document) proposed for CRP.

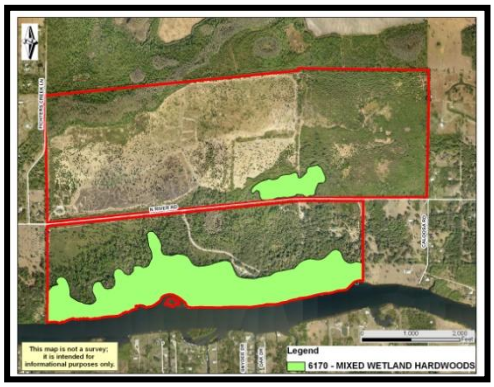
Brazilian Pepper (FLUCCS 4220; FNAI Classification – Upland Hardwood Forest; 14-acres; 1.84% coverage of CRP): The upland hardwood forest is located along the eastern portion of the northern boundary of CRP. Mountain bike and equestrian trails occur on this upland hardwood community within CRP. Caloosa Fine Sand (dredge spoil) underlies this portion of CRP and subsequently has altered the expected floral species composition of this area. Native trees extant on this area include live oak, laurel oak and cabbage palm. Brazilian pepper along with invasive grasses such as Guineagrass and cogongrass present a stewardship challenge on this portion of CRP. This upland hardwood forest is markedly higher in elevation than the areas to its south.



Typically, upland hardwood forests are well-developed, closed-canopy forests dominated by deciduous hardwood trees on mesic soils in areas sheltered from fire. They usually have a diverse assemblage of deciduous and evergreen tree species in the canopy and midstory, shade-tolerant shrubs, and a sparse groundcover. Characteristic canopy trees for southwest Florida include swamp bay (*Persea palustris*), live oak and laurel oak (*Quercus laurifolia*). The midstory layer is composed of younger canopy species as well as small trees, and tall shrubs while the groundcover is composed of shade-tolerant herbs, graminoids and vines (FNAI 2010). Upland hardwood forest occurs on rolling mesic hills, slopes above river floodplains, in smaller areas on the sides of sinkholes, and occasionally on rises within floodplains. Limestone or phosphatic rock may be near the surface. Soils are generally sandy clays or clayey sands with substantial organic and sometimes calcareous components. These soils have higher nutrient levels than the sandy soils prevalent in most of Florida. The moisture retention properties of clays and layers of leaf mulch conserve soil moisture and create decidedly mesic conditions. The dense canopy and multiple layers of midstory

vegetation restrict air movement and light penetration, which maintains high relative humidity within the community (FNAI 2010).

Wetlands: FLUCCS 6170, 6210, 6250, 6300 and 6410; 186-acres; 24.51% coverage of CRP



Mixed Wetland Hardwoods (FLUCCS 6170; FNAI Classification – Hydric Hammock; 124-acres; 16.34% coverage of CRP): Hydric hammock occurs on two areas of CRP. The hydric hammock along the southern boundary of the north side (north of C. R. 78) of CRP is 14-acres in size. Wabasso Sand (Limestone Substratum) underlies this entire northern, hydric hammock. The hammock along the southern border of CRP on the north side of the Caloosahatchee River spans the entire southern boundary of the park and is 110-acres in size. Copeland Sandy Loam (Depressional), Wabasso Sand and Bradenton Fine Sand form the soils of the southern, hydric hammock. Oldsmar Sand also minimally underlies the larger hydric hammock. A service road (pit shell) traverses the northern hammock in a north – south direction. The southern hydric hammock contains portions of the Palmetto Path, River Hammock and the Campground to Kayak Launch hiking trails. The Shoreline, Oxbow and Overlook Trails are entirely within this hammock.

FNAI (2010) categorizes hydric hammocks (modified to describe CRP) as an evergreen hardwood and/or palm forest community with a variable understory typically dominated by palms and ferns occurring on moist soils, often with limestone very near the surface. While species composition varies, the community generally has a closed canopy of oaks and palms, an open understory, and a sparse to a moderate groundcover of grasses and ferns. The canopy is dominated by cabbage palm, live oak and laurel oak. Red maple, water hickory (*Carya aquatica*), American elm (*Ulmus americana*), hackberry and wax myrtle are frequent associates in this diverse community. A small (1.3-acres) tropical hammock is located near the southeast corner of the property near the river. Strangler fig (*Ficus aurea*), cabbage palm, and white stopper (*Eugenia axillaries*) are the dominant species. Animals detected on these communities include gopher tortoises, birds of prey and a variety of warblers and vireos. Exotic species include Brazilian pepper, Guineagrass, cogongrass and rosary pea. These areas are also heavily impacted by feral hog (*Sus scrofa*) activity – especially the southwestern portion of the southern hydric hammock.

Cypress (FLUCCS 6210; FNAI Classification – Strand Swamp; 18-acres; 2.37% coverage of CRP): Strand swamp communities occur on two areas of CRP and are devoid of public access trails. The strand swamp along the northern boundary of the south side of CRP is 3-acres in size. Copeland Sandy Loam, Depressional and Wabasso Sand form the substrate of this southern cypress area. The strand swamp on the northwestern portion of the north side of CRP is 15-acres in size. Pineda Fine Sand (Depressional) and Copeland Sandy Loam (Depressional) form the soils of this northern cypress area. Boca Fine Sand also minimally constitutes the substrate of this community. Fichter's Creek's well-defined flow channels, in the northwest corner of the site, as well as its width of approximately 150-feet, give it characteristics of both a stream and a slough. The stream channels may have become more defined due to the dredging of the Caloosahatchee with a resultant increased capacity to convey run-off from its tributaries, particularly at flood stages. The cypress community occurs within the main slough/stream channel area.

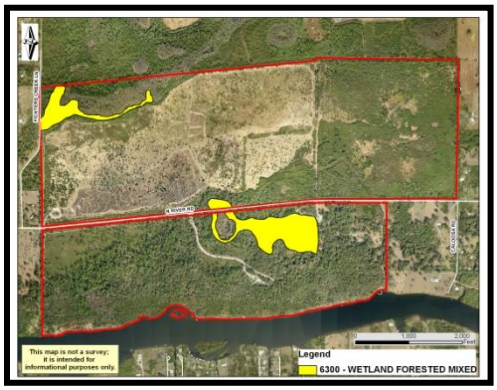
FNAI (2010) characterizes strand swamps as shallow, forested, usually elongated depressions or channels situated in a trough within a flat limestone plain, and dominated primarily by bald cypress (*Taxodium distichum*). Smaller strand swamps and shallow edges may instead contain pond cypress (*T. ascendens*). The variable woody understory contains a mixture of temperate and tropical elements including red maple, pond apple (*Annona glabra*), laurel oak, cabbage palm, strangler fig, swamp bay , coastalplain willow (*Salix caroliniana*), wax myrtle, myrsine (*Rapanea punctata*), and common buttonbush (*Cephalanthus occidentalis*). Other species present on these cypress areas of CRP include popash (*Fraxinus caroliniana*), cabbage palm and swamp tupelo (*Nyssa sylvatica* var. *biflora*). Exotics present in the strand swamps on CRP include Brazilian pepper, shoebutton ardisia and Caesarweed. Guineagrass and cogongrass may also be found on the periphery of these communities. These areas are also heavily impacted by feral hog activity.

FNAI (1990) states that, "Fire occurs in Strand Swamp on a cycle of perhaps 3-200 years, with the largest trees on the deepest peat towards the center of the strand burning least frequently. Fire is essential for maintenance of this natural community; without fire, hardwood invasion and peat accumulation would convert the strand to Bottomland Forest in a few hundred years. Cypress is very tolerant of light surface fires, but muck fires burning into the peat can kill the trees, lower the ground surface, and transform a Strand into a Slough".

Hydric Pine Flatwoods (FLUCCS 6250; FNAI Classification – Wet Flatwoods; 11-acres; 1.45% coverage of CRP): The wet flatwoods community on CRP constitutes approximately 1.45% of the entire site and is located on the northwest corner of the park. The 11-acres of wet flatwoods is divided among two pieces; the western piece totals 9-acres (due to the scale of the image, figure to the right makes it look like three separate pieces) and the eastern portion is 2-acres in size (looks like a check mark). Both portions are devoid of public access trails. The western 9-acres is associated with floodplain swamps (described in the following

section) and strand swamps. Wabasso Sand and Pineda Fine Sand, Depressional constitute the substrate of these 9-acres. The eastern 2-acres are associated with strand swamps and dry prairie to its south. Boca fine sand and Copeland sandy loam, depressional forms the substrate of the eastern 2-acres.

Wet flatwoods are characterized as relatively open canopies of scattered pine or cabbage palms with either thick, shrubby understory with very sparse groundcover, or a sparse understory and a dense groundcover of hydrophytic herbs and shrubs. Plants in this community include slash pine, sedges, dwarf wax myrtle, gallberry, saw palmetto and bluestem (*Andropogon* spp.). Shrubs tend to dominate where fire has been absent for a long period or where cool season fires predominate; herbs are more abundant in locations that are frequently burned (FNAI 2010). Exotics present in these areas of CRP include Brazilian pepper and Caesarweed. At CRP a variety of small and reptiles, amphibians and small mammals use this area.



Wetland Forested Mixed (FLUCCS 6300; FNAI Classification – Floodplain Swamp; 32-acres; 4.22% coverage of CRP): The 32-acres of floodplain swamp within CRP are made up of two areas. The portion in the northwest corner of the property is 10-acres in size and the substrate is composed of Pineda Fine Sand, Depressional, Copeland Sandy Loam, Depressional and minimally by Boca Fine Sand. County Road 78 divides the 22-acres of floodplain swamp east of the main entrance road to CRP. Copeland Sandy Loam, Depressional and Wabasso Sand underlie these 22-acres. These communities typically occur on flooded soils along stream channels and low spots in river floodplains. Dominant trees include bald cypress and pond cypress with sparse understory and ground cover. Other typical plants that occur within these communities include are wax myrtle, dahoon holly (*Ilex cassine*) and greenbriar (FNAI 2010). These sites are typically flooded for most of the year. Exotics in this community include shoebutton ardisia, scattered melaleuca (*Melaleuca quinquenervia*) and Brazilian pepper. These areas are also heavily impacted by feral hogs (especially the southern floodplain swamp). All floodplain swamps within CRP have been compromised due to hydrologic alterations including canal construction and road construction which alters sheet flow and drainage patterns. Oaks and pines have encroached into the cypress system along with cabbage palm.

Freshwater Marshes (FLUCCS 6410; FNAI Classification – Marl Prairie; 1-acre; 0.13% coverage of CRP): The area classified as a marl prairie within CRP occupies 1-acre on the north side of the park. Caloosa Fine Sand (dredge spoil) forms the substrate of this area and subsequently has altered its expected floral species composition. Cabbage palms and south Florida slash pine are the dominant canopy species. Brazilian pepper, Guineagrass and cogongrass have highly degraded this wetland. This area also contains mountain bike trails and an equestrian trail. Due to the dredge spoil that underlies this area and the recreational trails present, it is unlikely that this area will be restored to a marl prairie.

iii. Fauna

The animal species detected within CRP are, in part, a result of the diverse plant communities extant on the park, CRP's location in a rural portion of the county and its continuity and proximity to other natural areas. CRP has a high diversity of fauna including numerous state and federally listed wildlife. Appendix D has the complete list of vertebrates recorded to date within the park (records based on observations by qualified staff and the Lee County Bird Patrol volunteer program).

Recent bird species observed within CRP include Audubon's crested caracara, wood storks (*Mycteria americana*) and a variety of warblers and vireos. Florida scrub-jays (*Aphelocoma coerulescens*) have been recorded historically. Documented reptile species include the gopher tortoise, Florida cottonmouth (*Agkistrodon piscivorus conanti*) and the American alligator (*Alligator mississippiensis*). Mammal species detected include white-tailed deer, bobcats, Florida panthers (*Puma concolor coryi*) and Florida black bears.

Four, exotic vertebrate species have been documented within CRP (Table 4). While all of these animals have some degree of impact on the native plants and animals at the park, the feral hog is of primary concern. Feral hogs are generalists in both their diet (omnivores) and their ability to adapt to a variety of environments. Their rooting behavior "loosens the soil and accelerates erosion, sets back plant succession, reduces earthworm activity, and exacerbates exotic plant invasion" (Mungall, 2001). Lee County currently funds a hog trapper to remove feral hogs from county parks and preserves.

Table 4: Exotic, Vertebrate Species Detected within CRP.

Scientific Name	Common Name
Osteopilus septentrionalis	Cuban tree frog
Anolis sagrei	brown anole
Dasypus novemcinctus	nine-banded armadillo
Sus scrofa	feral hog

Stewardship activities at CRP will focus on providing optimal habitat for native wildlife. Restoration of the disturbed areas, control of invasive exotics and application of prescribed fire (within the appropriate communities at appropriate intervals) will be critical restoration components to provide improved habitat for wildlife.

iv. Designated (Listed) Species

Although all native plant and animal species found within the park have some protection due to the preservation of this property, certain species need additional attention. For stewardship purposes, all plants and animals listed by the USFWS, the Florida Fish and Wildlife Conservation Commission (FWC) and the Florida Department of Agriculture and Consumer Services (FDACS) will be given special consideration.

Typically, designated (i.e., listed) species will benefit from proper stewardship of the biological communities within which they occur. However, some species may require additional measures to ensure their protection. Practices likely to benefit the native flora and fauna within CRP include exotic plant control, feral and exotic animal control, protecting and restoring water resources, prescribed fire applied in appropriate intervals, wildlife monitoring, roller-chopping (where appropriate), pine tree thinning (where appropriate), trash removal and restricting construction of maintenance trails in certain areas. The enforcement of park rules including: no littering, no motorized vehicles and no collection of ANY natural or cultural resources (e.g., plants, animals, shells, artifacts, etc.) will also benefit the native plants and animals.

Listed Plant Species: The Florida State Statute titled "Preservation of native flora of Florida" (Statute 581.185) provides the following definitions:

- Endangered plants means species of plants native to the state that are in imminent danger of extinction within the state, the survival of which is unlikely if the causes of a decline in the number of plants continue, and includes all species determined to be endangered or threatened pursuant to the federal Endangered Species Act of 1973, as amended, Pub. L. No. 93-205 (87 Stat. 884).
- Threatened plants means species native to the state that are in rapid decline in the number of plants within the state, but which have not so decreased in such number as to cause them to be endangered.
- Commercially exploited plants means species native to the state which [sic] are subject to being removed in significant numbers from native habitats in the state and sold or transported for sale.

There are ten (10) plant species at CRP that are listed by the FDACS (2003): four as endangered, five as threatened and one as commercially exploited (Table 5). A list of all plant species documented within CRP may be found in Appendix C.

Table 5: Listed, Plant Species Documented Within CRP (FDACS 2003)

Scientific Name	Common Name(s)	FDACS*
^*Lantana depressa*	rockland shrub verbena, pineland lantana	E
Ophioglossum palmatum	hand fern	E
Tillandsia fasciculata var. *densispica*	stiff-leaved wild-pine, cardinal airplant	E
Tillandsia utriculata	giant wild pine, giant airplant	E
^*Swietenia mahagoni*	West Indian Mahogany	T
Chrysophyllum oliviforme	Satinleaf	T
Myrcianthes fragrans	twinberry, Simpson's stopper	T
Sacoila lanceolata	leafless beaked ladies tresses, leafless beaked orchid	T
Tillandsia balbisiana	northern needleleaf	T
Encyclia tampensis	Florida butterfly orchid	CE

**Florida Dept. of Agriculture and Consumer Services Designations*
E = Endangered; T = Threatened; CE = Commercially Exploited
^ Planted – not indigenous to site prior to planting

USFWS and FWC maintain records of listed species on the federal and state level respectively. The designations of "endangered" (in danger of extinction within the foreseeable future throughout all or a significant portion of its range) and "threatened" (likely to become endangered within the foreseeable future throughout all or a significant portion of its range) are utilized by both agencies. FWC includes a third designation, "species of special concern", to denote a species which has not yet been listed as a threatened species but should be given special attention due to unusually vital or essential ecological niche filled by these species, past population numbers or general vulnerability.

Staff of the FWC are in the process of implementing the new imperiled species rules adopted by the Commission on September 1, 2010. After adoption of the rules, FWC immediately began the biological status review process for some of the species on Florida's threatened, endangered, and species of special concern lists; a number of species that are federally endangered or threatened were not part of the review, including the Florida panther, the American alligator and American crocodile (*Crocodylus acutus*). FWC's draft recommendations propose delisting 16 of the 61 species reviewed. These recommendations are subject to change, and final recommendations are not yet available. Species-specific management plans will need to be approved and adopted before any species are delisted.

The USFWS recognizes five listed vertebrate species at CRP (two endangered and three threatened). FWC (2011) recognizes thirteen listed species at CRP. Of all the listed species at CRP, the Florida black bear and the White ibis (*Eudocimus albus*) have been proposed to be delisted by the process described above. All of the listed species recognized by USFWS are also recognized by FWC (Table 6). A list of all vertebrate species documented within CRP and species profiles for currently listed species may be found in Appendix D.

Table 6: Listed Vertebrate Species Documented Within CRP.

Scientific Name	Common Name	Protection Status (2011)
Mycteria americana	Wood Stork	FE
Puma concolor coryi	Florida panther	FE
Drymarchon corais couperi	Eastern indigo snake	FT
Polyborus plancus audubonii (Caracara cheriway)	Audubon's Crested Caracara	FT
Aphelocoma coerulescens	Florida Scrub-Jay	FT
Alligator mississippiensis	American alligator	FT(S/A)
Gopherus polyphemus	gopher tortoise	ST
Falco sparverius paulus	Southeastern American Kestrel	ST
Sternula antillarum	Least Tern	ST
Ursus americanus floridanus	**Florida black bear	**ST^
Egretta caerulea	Little Blue Heron	SSC
Egretta tricolor	Tricolored Heron	SSC
Eudocimus albus	**White Ibis	**SSC

Protection Status (based on FWC list October 2011): FE = Federally-designated Endangered; FT = Federally-designated Threatened; FT(S/A) = Federally-designated Threatened species due to similarity of appearance; ST = State-designated Threatened; ST^ = State-designated Threatened other than those found in Baker and Columbia Counties or in Apalachicola National Forest; SSC = State Species of Special Concern (those special geographic notations for some species designated as SSC do not appear on this list as they are not applicable to this part of the state). ** = Recommended to be delisted by FWC (see page 27). As recently as the June 2010 FWC list, the Florida black bear was listed as a State-designated Endangered species in June 2010.

v. Biological Diversity

Biological diversity (also called biodiversity) is "the variety of life and all the processes that keep life functioning" (Keystone Center 1991). Biodiversity includes 1] the variety of different species (plants, animals, microbes, etc.), 2] the genes they contain, and 3] the structural diversity in ecosystems. The wealth of biodiversity supports ecological processes that are essential to maintain ecosystems. Healthy and functioning ecosystems provide optimal habitat for the plants and animals that depend on them and provide ecosystem services such as the protection of water resources, appropriate flood control, the proper maintenance of nutrient cycles and carbon sequestration. Quantifying biodiversity is a difficult task, however, the FNAI provides Biodiversity Reports to stewards of the state's managed conservation areas. The report for CRP is provided in Appendix E and includes all species and natural communities tracked by the FNAI, including all federally listed species.

Lee County's approach to resource management can be described as "natural systems management". This approach is aimed at managing the natural communities of each unit as parts of an interrelated system, rather than managing for the benefit of individual species. The general composition of each community as it may have appeared at the beginning of Florida's historical period is determined by considering factors such as climate, geology, soil, hydrology, and fire frequency. Measures are then implemented to recreate, to the extent possible, the natural processes and conditions that prevailed at that time, with the goal of restoring each community to its "original" condition. The plant communities within CRP range from cypress to mixed rangelands (dry prairies). Portions of these biological communities were harshly impacted in the recent past. These natural systems will require both time and effort for restoration to succeed. However, burning fire-adapted communities, controlling exotic species, preventing or mitigating for anthropogenic erosion, restoring surface water regimes, and other such measures will assist in their eventual recovery to a level closer to original natural conditions than presently occur.

The connection of CRP to the Bob Janes Preserve to the north and, to a lesser extent, the agricultural lands surrounding the park, provide greater habitat potential for those animals with home ranges greater than the acreage of the park to survive. Additionally, CRP has been named to the Great Florida Birding Trail (www.floridabirdingtrail.com) as one park within a network of nearly 500 sites (to date) throughout Florida selected for their excellent bird watching or bird education opportunities.

To date, 245 plant species representing 81 families have been documented at CRP (Appendix C). Of these floristic species, 190 (78%) are native and 55 (22%) are classified as exotic. Twenty-seven of the 55 exotic plant species (49%) are on the Florida Exotic Pest Plant Council's 2009 List of Invasive Plant Species (FLEPPC 2009). There are one hundred-eighteen (118) vertebrate species documented within CRP to date (Appendix D). Due, in part, to their high mobility and large numbers, birds are relatively easy to see and therefore comprise the majority of these records. Of the four exotic vertebrates at CRP, the feral hog is responsible for significant damage to natural plant communities.

The integrity and diversity of CRP must be protected when and where possible. Land Stewardship staff and Operations staff will perform the following actions in this regard:

- Maintain boundaries with fencing (where possible) and signs to eliminate illegal access to CRP and protect fragile ecosystems.
- Conduct a prescribed fire program to closely mimic the natural fire regimes for different plant communities.
- Control invasive, exotic vegetation followed by annual maintenance to provide more suitable habitat for native, aquatic and terrestrial species.
- Control invasive, exotic animal populations to reduce their impacts on the herbaceous plants, native animals and soils.
- Conduct on-going species surveys utilizing volunteers and staff to catalog and monitor the diversity extant on CRP.
- Use adaptive management if monitoring of restoration techniques indicates a change may be necessary.

C. Cultural and Historical Resources

i. Archaeological and Historical Sites

Archaeological sites are areas that contain physical evidence of past human occupation or activity. Historical sites are any sites or structures over 50 years in age; the historic period in the United States dates to Ponce de Leon's arrival in 1513. Southarc, Inc., based in Gainesville, Florida, conducted an archaeological study of CRP in 1991 and a cultural resource assessment of the park in 1992. The scope of work given to Southarc, Inc. for the archaeological study specified that their analysis was to focus on the known archaeological site and the known historical site (Dickinson and Wayne 1991). Southarc, Inc. was granted a research permit under Chapter 1A-32 of the Rules of the Department of State to conduct archaeological investigations from March 9, 1992 through June 1, 1992. For the cultural resource assessment, Lee County "requested that undisturbed areas of the park (i.e. not covered with dredge spoil) be surveyed, and that a second effort be made to locate the prehistoric mound. In addition, existing structures on the property were to be plotted on maps and identified in terms of chronological period. It was agreed that the survey would focus on proposed impact areas and/or areas of high or medium site potential" (Dickinson and Wayne 1992). The following paragraphs summarize these reports.

The Fichter Creek Burial Mound (archaeological site 8LL747) is located in the north-central portion of the northern half of the property. This mound site was classified as "aboriginal" by Dickinson and Wayne (1991, 1992) and therefore will not be depicted on the cultural resources map per state request. Dickinson and Wayne (1991, 1992) interviewed two local residents and discovered that the Fichter Creek Burial Mound had been "extensively excavated and looted by neighborhood children prior to the 1960s filling. They [local residents] also stated that there was at least 10 to 15 feet of fill in the area of the mound, pumped in via a pipeline and uniformly spread throughout the northern portion of the park." The ceramics excavated were indicative of a specific time-period or specific culture. No artifacts or bone was recovered. The entire mound was not excavated due to the depth of dredge spoil.

The Kellum Homesite (8LL1614) is located on the south side of CRP just west of the main entrance road (Figure 10) and identified by the presence of a rock chimney. Dickinson and Wayne (1991, 1992) classified the homesite as nonaboriginal containing items of both prehistoric land use and early historic settlement of the area.

The mound site and the Kellum Homesite were found to be of local significance. While Southarc, Inc., identified no additional sites of significance LCPR will consult with the Florida Department of State's Division of Historical Resources (DHR) before taking actions that may adversely affect archaeological or historic resources.

The following are short-term and long-term objectives associated with the protection of the cultural and historical resources at CRP.

Overall Goal: Protect all cultural and historic resources with the park.

Short-term 2011 - 2013

- Cooperate with DHR in designing site plans for development of infrastructure.
- Produce interpretive materials to appropriately educate the public on the Fichter Creek Burial Mound and the Kellum Homesite.

Long-term 2013 - 2021

- Cooperate with DHR in designing site plans for development of infrastructure.
- Cooperate with DHR to manage and maintain known existing cultural resources.

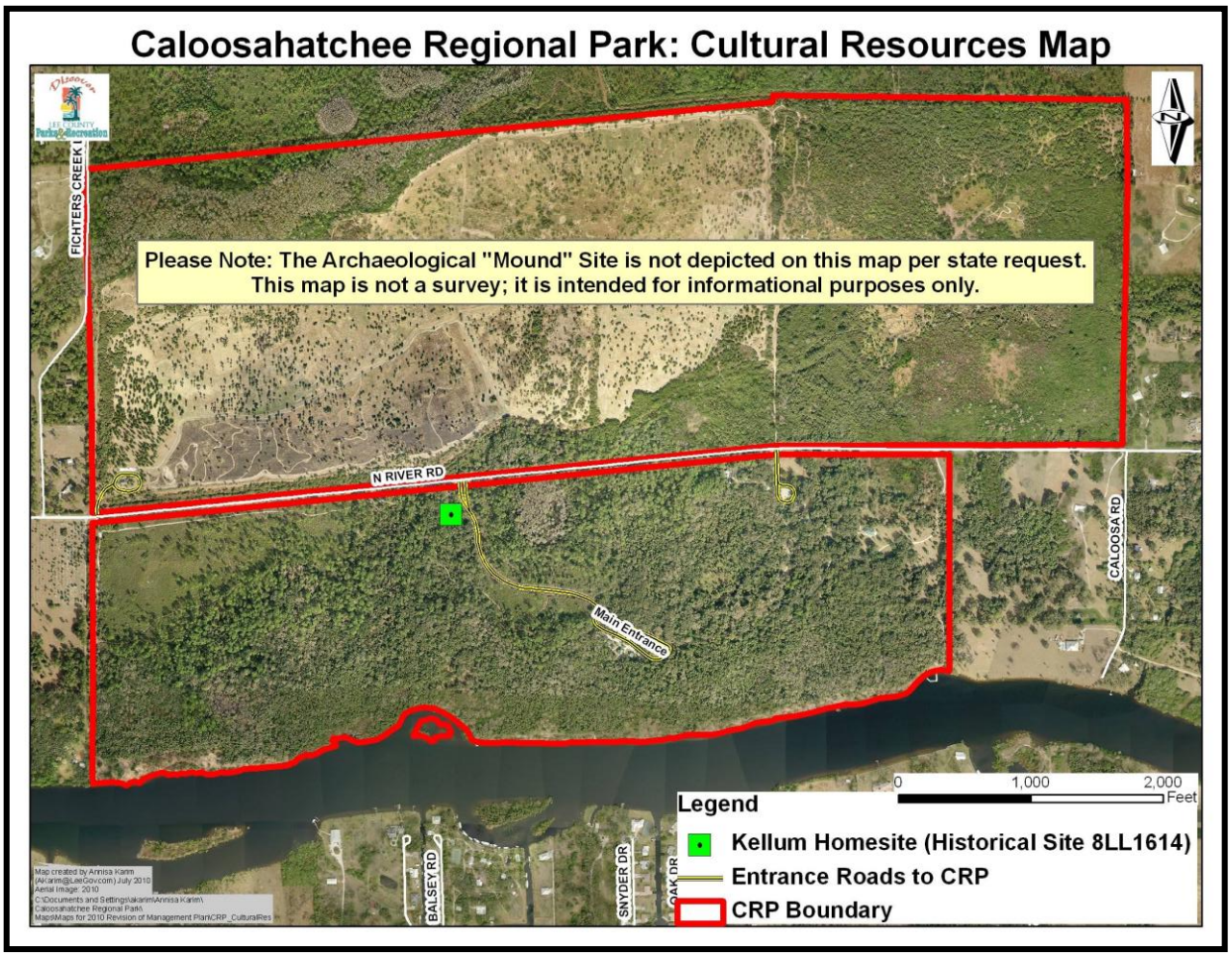


Figure 10: Cultural Resources Map for CRP.

ii. Land Use History

Compared to the east coast of Florida, European settlement in southwest Florida (including Lee County) was relatively abbreviated due to the late settlement of the area. The lack of established trails, heavy vegetative cover and shallow, coastal waters made southwest Florida difficult for settlers to reach.

European settlement of the area in the vicinity of CRP began, primarily, in the mid-19th century. At that time, overland transportation was still very limited. Settlers relied primarily on the Caloosahatchee River as a transportation corridor. However, the river itself posed limitations for transportation due to its shallow, narrow, and tortuous character; and it had a tendency after tropical storms or hurricanes to overflow its banks into its floodplain and adjacent uplands, at times flooding the homes of the settlers.

The Caloosahatchee River has been dredged three times – in the 1880s, from 1930-1937 and 1960-1964. The original dredging was sponsored by the state and funded by Philadelphia millionaire Hamilton Disston. This initial dredging was the main determinate of the river's

present course (including its connection to Lake Okeechobee). The result of the dredging has been the creation of a wide, straight, deep canal that has lost most of its original riverine character, diversity, and habitat. The W.P. Franklin Lock, downstream from the park, was installed during the most recent dredging and channelization period to prevent salt-water intrusion up the river and to manage water levels.

The SFWMD refers to the Caloosahatchee River as C43 – Canal 43. The river presently functions and is managed more as a canal than a river. The original purpose of the dredging was to provide drainage and navigation. Since then the river has become an important source for drinking water and irrigation for farming. All of these uses are not always compatible and frequently present conflicts for management and restoration of the river as a natural system.

The effects of the Caloosahatchee River channelization have been decreased flooding of the floodplain and increased use by large pleasure boats and barges on the Okeechobee Waterway. This waterway provides passage across the state from Fort Myers to Stuart and is a part of the Intracoastal Waterway. In addition, a large number of recreational watercraft users can be seen in the area of the river near the park during the summer.

The park site has had several residents over the years. Dr. Kellum, who settled the site circa 1885, lived in a home located near the middle of the site just south of County Road 78 (Figure 10). Gilmer Heitman, who also had a home near the southeast portion of the site with citrus groves and cattle range being the primary uses, owned the land for years. Others, including the John Douglas family, lived in both of these homes.

An aerial photograph taken in 1944 (Figure 11; note slight alignment problems) shows four groves on the site. The groves were known around the turn of the century as the Windmill Groves because a windmill had been installed near the river in an unsuccessful attempt to harness wind power for irrigation (Charles Foster, personal communication). The Kellum Homesite is not discernible on the aerial. A clearing was located at the southwest corner of the site approximately 100 yards from the river. This may have been an area used during the 1930s dredging. The floodplain area of the river had heavy deciduous tree cover. Pines were scattered south of County Road 78 with large live oaks occurring on the eastern area that was used as pasture. The area north of County Road 78 was largely treeless with the exception of Fichter's Creek. This north area had been logged for pines in the early part of the twentieth century. This aerial shows the Caloosahatchee River before the most recent dredging event (1960 – 1964).

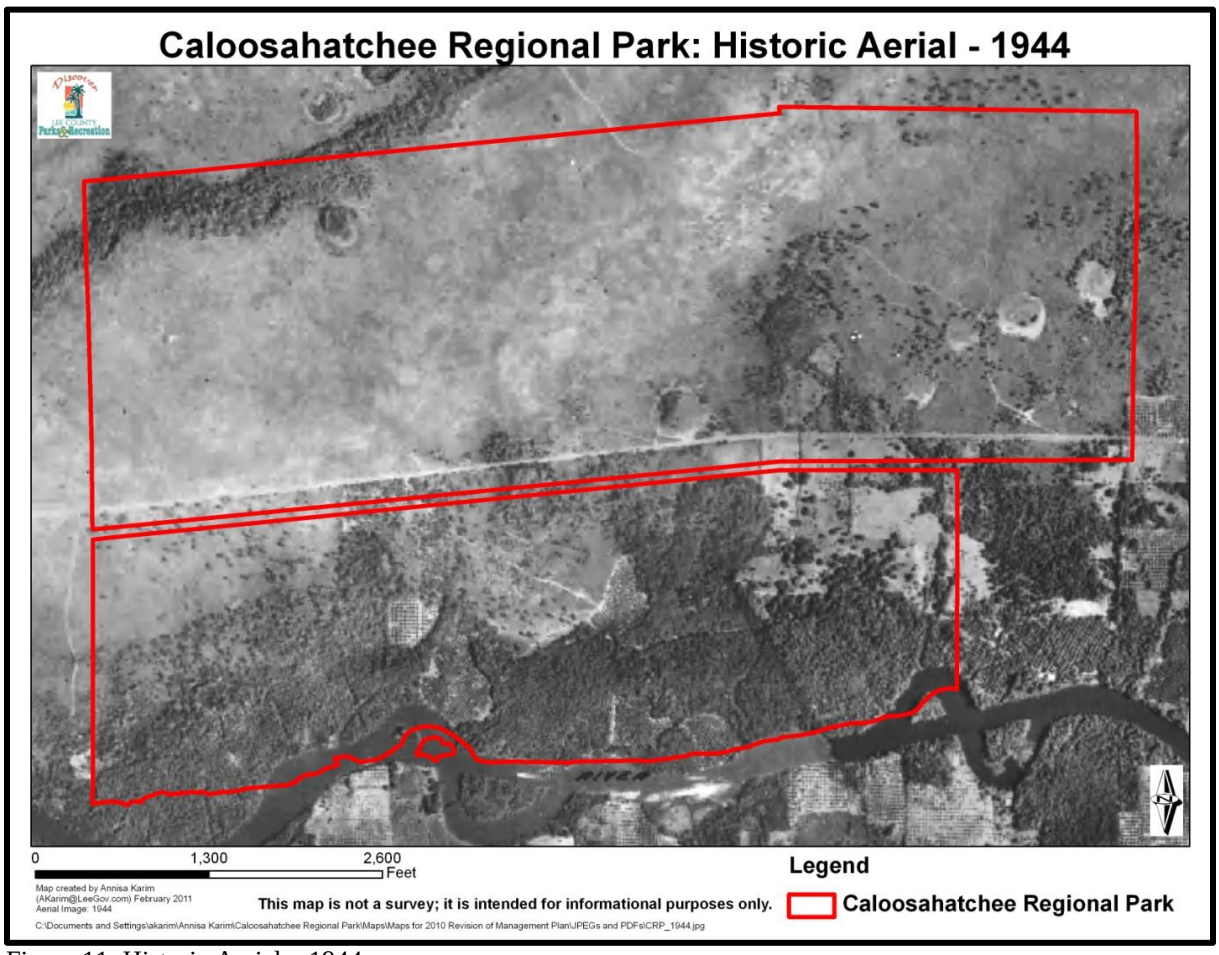
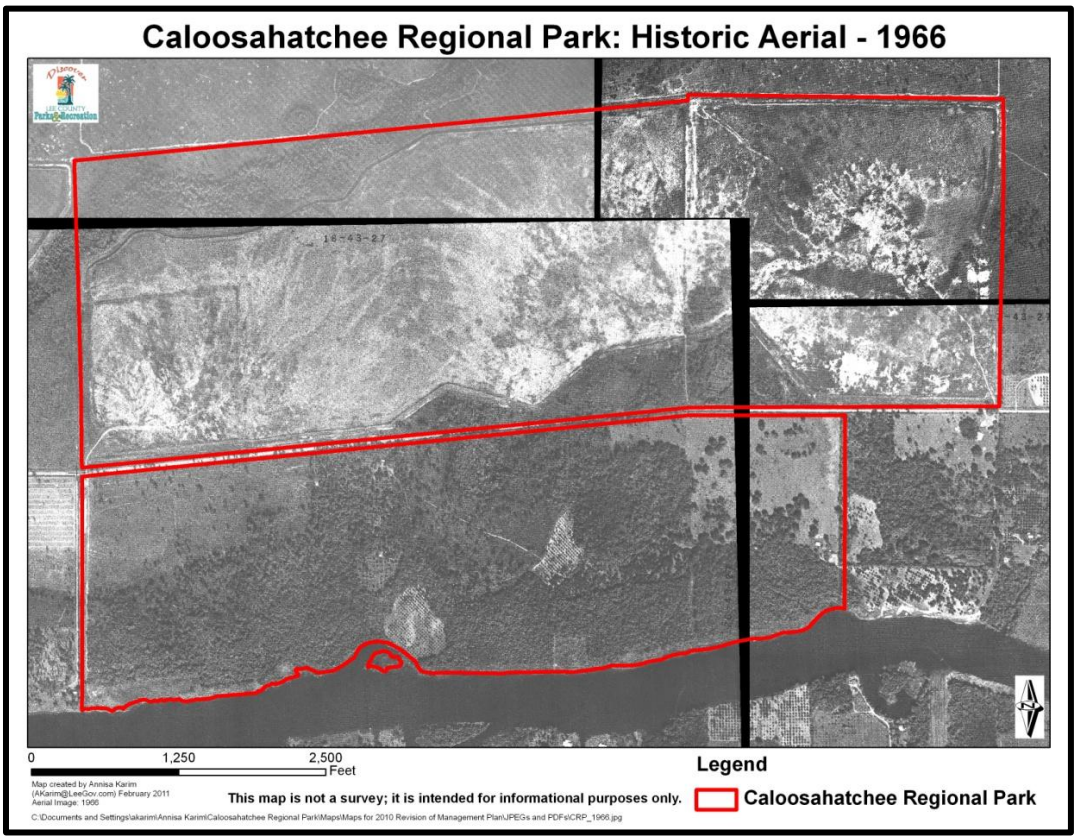
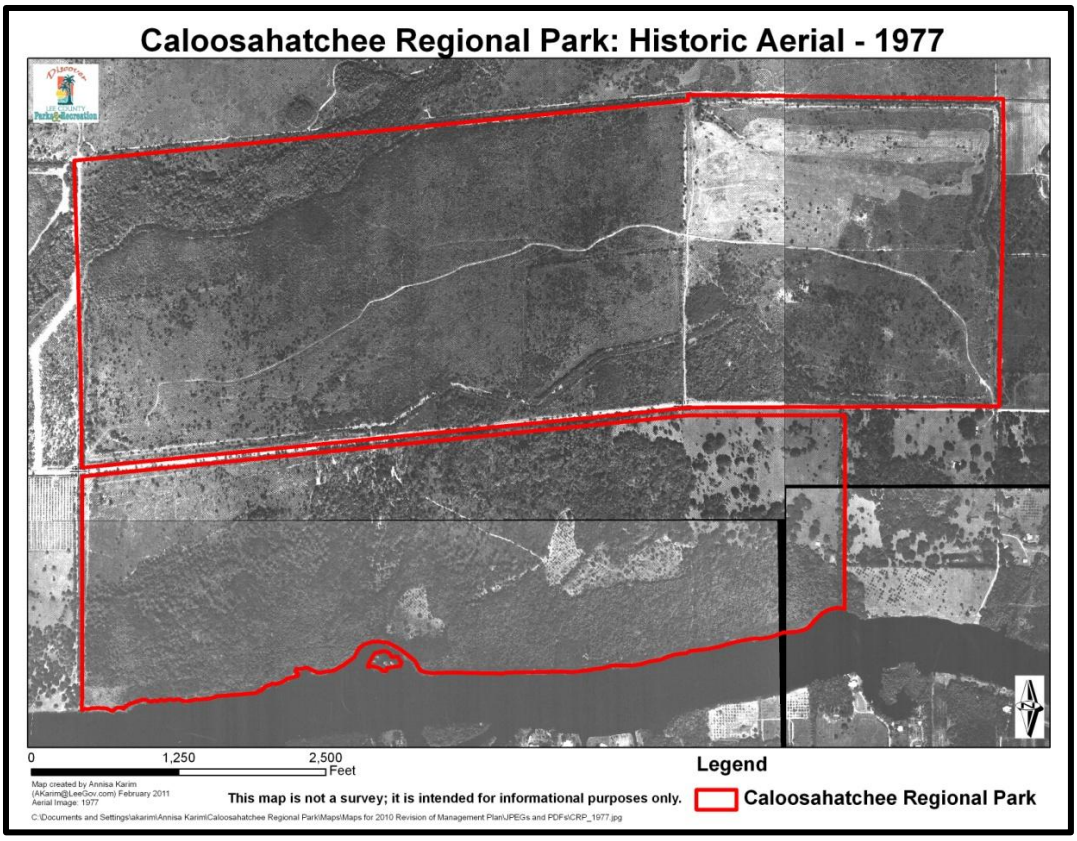


Figure 11: Historic Aerial – 1944

An aerial photograph taken in 1966 (Figure 12 – next page) shows the river after the most recent dredging by the USACOE. The trails and spoil areas on the north side of the park are more defined. These trails are thought to be the ones used by the USACOE to move the spoil materials throughout the site. By 1966, the northeast portion of the south side of the park had been cleared. Vegetation had grown in around the groves and along the shoreline.

The state began the acquisition of these lands in 1969. An aerial photograph taken in 1977 (Figure 13 – next page) shows some newly cleared groves on the south side. The north side seems to be more vegetated and the trail that crosses the north side in an east/ west direction is highly defined.





Figures 12 and 13: Historic Aerials – 1966 and 1977

An aerial photograph taken in 1988 (Figure 14 - below) shows that a large amount of vegetation on the north side was cleared and the current equestrian trails appear at this time. The northeastern section of the south side was becoming heavily vegetated as were the historic groves.

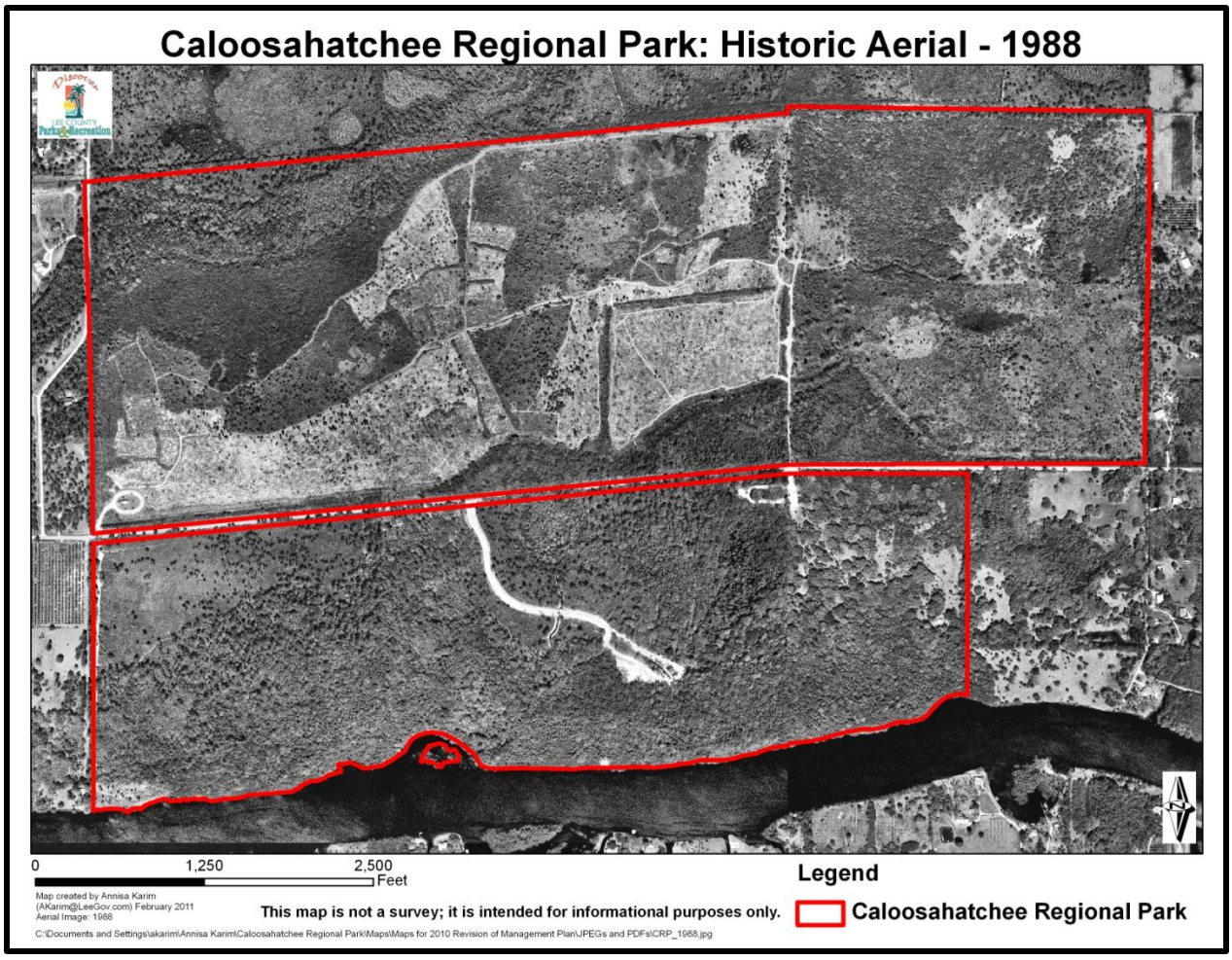


Figure 14: Historic Aerial - 1988

An aerial photograph taken in 2005 (Figure 15 – next page), the first aerial shown in color, shows the degree of cogongrass infestation on the north side (lime green). Additionally, this photograph shows the high degree of infestation of Brazilian pepper on the eastern 160 acres of the north side.

All of the other aerial images appearing in this document to represent the "current" state of the park and were taken in 2010.

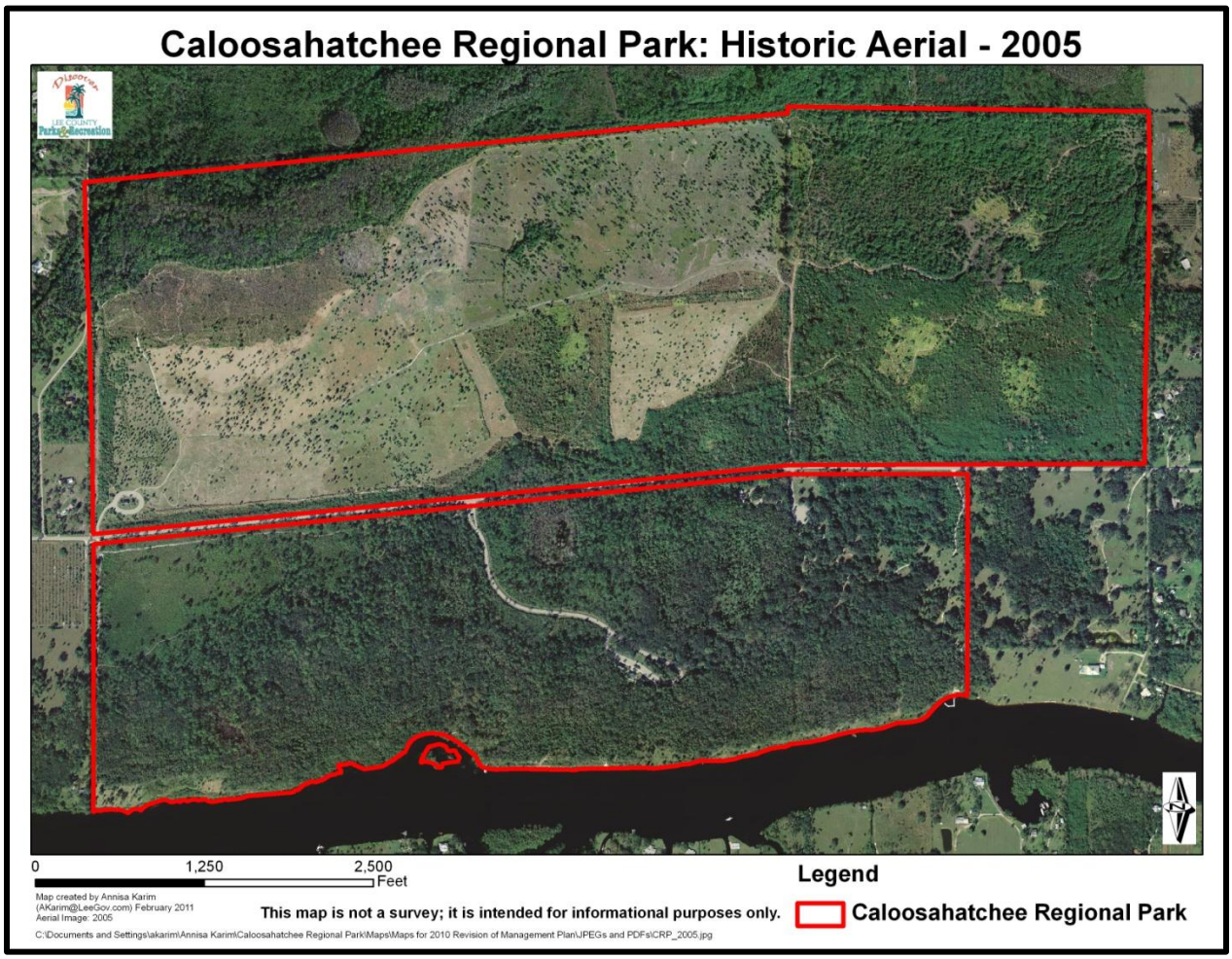


Figure 15: Historic Aerial - 2005

iii. Public Interest

In October 1965, the Lee County Recreational and Development Committee, under the authority of the BoCC, presented a "Proposal to Purchase Land on the Caloosahatchee River in Lee County for Recreational Purposes from the Land Acquisition Trust Fund". This proposal outlined the desire of many residents of Lee County to have access to a public, recreational site in the northeastern portion of the county. Combined with Lee County's rapidly expanding population and resulting recreational demands - escalating land prices, and relatively few sites with recreation potential, led the County to seek the lease of CRP from the State of Florida.

The acquisition of lands currently known as CRP began in 1969. Seven hundred eighteen acres (718) of the site were purchased by TIITF and leased to the Florida Department of Natural Resources (now known as the Florida Department of Environmental Protection), Division of Recreation and Parks. This entity had no immediate plans for the development of facilities and programs and consequently Lee County obtained a 50-year lease to the property for development of public, outdoor recreational facilities as a unit of the County's Regional Park System on June 14, 1989. The lease allows Lee County to manage the leased premises only for the conservation and protection of natural and historical resources and for resource-based public outdoor

recreation that is compatible with the conservation and protection of these public lands. The park opened to the public in March 1999.

Lee County obtained a lease from SFWMD on April 20, 2004 and is currently operating under Amendment 2 (second extension of lease) of this lease effective April 20, 2009 through April 19, 2014. The establishment of CRP fulfilled the need for a regional park in northeastern Lee County.

V. FACTORS INFLUENCING MANAGEMENT

A. Natural Trends and Disturbances

Natural trends and disturbances influencing native communities (and consequently some stewardship activities) at CRP include hurricanes, flooding, wildfires, occasional freezes and the cycling of wet and dry seasons. Implementation of the Management Action Plan will take all of these factors and their influence on projects at CRP into consideration. For example, a tropical storm or hurricane could damage large amounts of vegetation. If the debris increases the chance of negative impacts to wildlife habitat or public safety, it may be necessary to remove or mulch downed vegetation following a hurricane. Wildfires caused by lightning strikes are natural occurrences in Florida. The Florida Forest Service (FFS; formerly the Florida Division of Forestry) Caloosahatchee District and LCPR are developing a wildland firefighting protocol for County preserves. Once completed, this protocol could be adopted for county parks such as CRP. This agreement between FFS and the county will help to minimize impacts to CRP from the utilization of bulldozers, plows and other emergency firefighting equipment creating dozer lines to stop the fires.

Seasonal flooding also influences stewardship activities (invasive exotic plant control, prescribed burning, etc.) at CRP. The Lee County Land Stewardship Operations Manual's exotic plant prescription form will be used to define the conditions for control activities. Care shall be taken to prevent herbicide from running off during a typical summer thunderstorm so as not to affect non-target plants. Only herbicides approved for aquatic application will be used for treatment of vegetation in standing water or where flooding may occur. The use of heavy equipment will be limited to the dry season for CRP's south side. Since the north side of the park is so heavily impacted by invasive, exotic grasses, heavy equipment is required to keep these grasses mowed at all times of the year. The timing of prescribed burns will also be influenced by seasonal rain, weather, wind patterns and the goals of the burn.

B. Internal Influences

Several factors within CRP continue to influence the way in which management activities can be conducted. Many of these influences can be attributed to the historic dredging of the Caloosahatchee River. Caloosa Fine Sand (dredge spoil) underlies approximately 52% of CRP. All of this dredge spoil is contained on the north side (portion of CRP north of C.R. 78) of the park. As a result, the topography of the park has been highly altered (Figure 5) and a burial mound site (see section on Archaeological and Historical Sites) has been covered by the spoil. The deposition of the dredge has also altered the hydrology of the park by changing the way in which water flows southward. These alterations influence water flow on the site by both interrupting sheet flow and holding water for extended periods in some areas while excessively

draining other areas. Finally, Brazilian pepper, cogongrass and Guineagrass have also heavily impacted the north side.

The presence of feral hogs is also compromising some of the natural plant communities within CRP. Their rooting behavior disturbs the soil and provides optimal ground for invasive plant species to take hold. Additionally, feral hogs consume the eggs of ground-nesting birds. Hog trapping via a county-approved contractor has been implemented to address this problem.

C. External Influences

The park is adjacent to the 5620-acre Bob Janes Preserve, which, in turn, is adjacent to the 67,619-acre Babcock Ranch Preserve in Charlotte County. Together with nearby conservation lands, including the Babcock-Webb Wildlife Management Area and Telegraph Creek Preserve, these conservation areas provide habitat for numerous listed species. County Road 78 divides the park into the "north side" and "south side". Privately owned lands along the eastern and western boundaries are designated as rural lands by the Lee County Future Land Use Map and are currently zoned for agricultural uses (AG-2; Lee Plan 1989). Allowed uses for this zoning categorization are itemized in detail in the Lee County Land Development Code Current. Uses of these adjoining properties do not negatively affect the protection of natural resources within CRP, nor do they conflict with planned uses of the park.

Several factors outside of the boundaries of CRP continue to influence the way in which management activities can be conducted. CRP lies within the Alva Planning Community whose mission is to "Preserve and protect its unique historical, rural, agricultural and small town flavor". Alva is the oldest settlement in Lee County and its residents seek to maintain the rural character. This rural character does provide for some habitat value for animals that move large distances, however, these lands also contain additional seed sources for the invasive, exotic plants found within CRP and have the potential to house other invasive plants not yet detected on CRP. LCPR staff will offer these landowners information regarding the Florida Invasive Species Partnership (http://www.floridainvasives.org/). This partnership is an online resource of management assistance programs to help landowners fight against problematic plant species. This resource takes the guesswork out of finding the agencies or organizations offering assistance and will direct landowners to available programs. LCPR staff is involved in the local (southwest Florida) Cooperative Invasive Management Area (CISMA) and may be able to assist in the CISMA's goal "to reduce the impact of or eliminate invasive, non-native plants and non-native animals by combining programs and resources to address invasive species on a landscape level to achieve common goals and objectives."

As discussed in the previous section, the dredging of the Caloosahatchee River has influenced the way in which CRP can be managed. The dredging resulted in high rates of erosion on the banks of the river. Erosion has claimed a significant portion of the bank since the 1960s dredging. The Brazilian pepper that formerly covered the shoreline provided some level of stabilization of the riverbank. Their intertwined root system extended into the river in floating mats, and their floating branches allowed energy from boat wake waves to be partially expended before they broke on the bank. Removal of the pepper was done with relatively minimal soil disturbance. Below-ground portions of the pepper were not removed. The hair root system was probably largely responsible for holding the soil together. These fine roots decay quickly after death of the plant. Cypress has been planted on some portions of the bank but the high-speed boat traffic continues to cause shoreline erosion.

i. Optimal Boundary and Surplus Acreage

While the Lee County Future Land Use Map designates the privately owned lands along the eastern and western boundaries as rural lands and they do not negatively influence the protection of natural resources within CRP and therefore are not are essential to management of the property. However, the protection of the entire length of Fichter's Creek and all the associated wetlands should be considered when discussing the optimal boundary for the park. Approximately 223-acres west of the park buffer the creek and may be considered for acquisition for further protection (Figure 16) if acquisition and management funds are available. If acquired, these lands would be managed according to the stewardship standards set forth by this document. The shape and size of these "optimal" lands are based on current property delineations. The determination of an optimal boundary was made according to resource protection standards only. The 47-acre area on the south side of C.R. 78 and to the east of the existing boundary was pursued for acquisition (owners were contacted) in 1999 and the owners indicated they had no plans to sell the property and intend to keep it in the family. If this situation changes and the property becomes available, this area should be considered for acquisition.

It is the finding of LCPR that no portion of CRP should be considered or declared surplus.

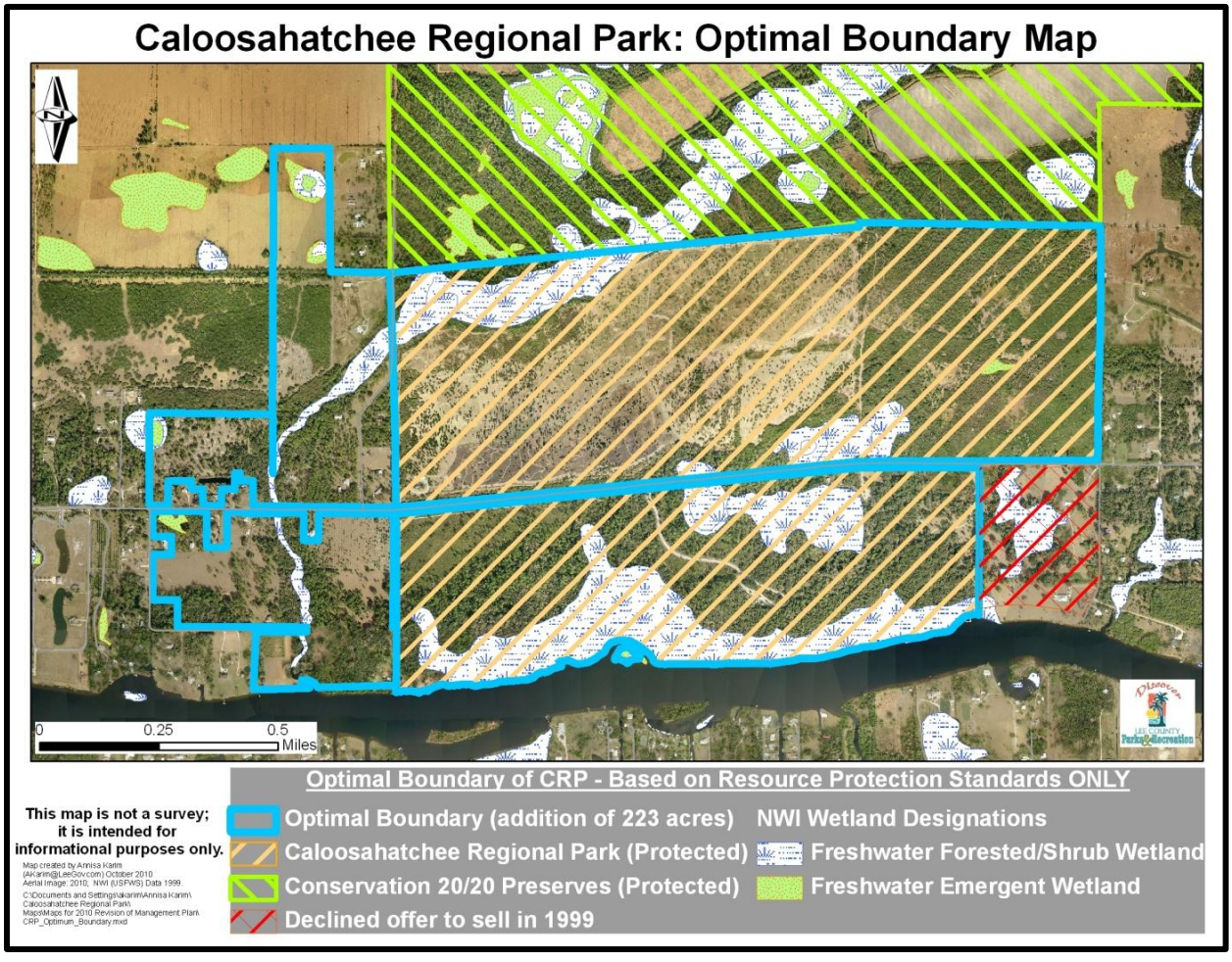


Figure 16: Optimal Boundary Map.

D. Legal Obligations and Constraints

Seven hundred eighteen acres (718) of CRP are owned by the TIITF and leased by the BoCC. This 50-year lease expires on May 10, 2039 (Appendix A). This lease allows Lee County to manage the leased premises only for the conservation and protection of natural and historical resources and for resource-based public outdoor recreation that is compatible with the conservation and protection of these public lands. Lee County obtained a lease from SFWMD (Appendix B) on April 20, 2004 for fifty (50) acres of CRP and is currently operating under Amendment 2 (second extension of lease) of this lease - effective April 20, 2009 through April 19, 2014.

i. Permitting

Land stewardship activities at CRP may involve obtaining permits from regulatory agencies. Any proposed hydrologic improvements to the site may require obtaining permits from the Florida DEP, USACOE and SFWMD. Hydrological and/or habitat restoration projects requiring heavy equipment or tree removal will require notification to the Lee County Department of Community Development (LCDCD). Burn authorization from the FFS is required for all prescribed burns conducted on CRP.

Fichter's Creek Restoration Project: The LCDNR and Community Engineering Services, Inc. are undertaking the Fichter's Creek Restoration Project. A goal of this project is to restore the appropriate hydroperiod and water quality within Fichter's Creek to maintain a functioning ecosystem. Additional benefits include alleviating risks of the flooding of neighboring properties in the vicinity of Fichter's Creek. A 31-acre dry prairie is targeted to hold an approximately 3.2-acre lake and three dry detention areas totaling approximately 7.1-acres associated with this project. Approval of this Management Plan by the Acquisition and Restoration Council will constitute approval of this project.

Shoreline Stabilization Project: A canoe/kayak launch and dock are located along the river shoreline at the southeast corner of the park. Exotic vegetation has predominantly been removed from this portion of shoreline. Although native vegetation is present along the shoreline, wave action from boat wakes has resulted in erosion of the site shoreline. The erosion has resulted in a drop-off from the uplands to the river with underscouring of the bank.

LCPR proposes to stabilize the canoe/kayak launch at CRP with ±46 linear feet of Geoweb. The four-inch thick GW20V perforated Geoweb cellular confinement system was chosen to provide the erosion protection. The Geoweb will stabilize the shoreline at the canoe/kayak launch (immediately west of the existing dock) from further erosion. LCPR also proposes to install ±245 linear feet of riprap to stabilize the shoreline adjacent to the canoe/kayak launch area in the Caloosahatchee River. The riprap will serve to stabilize the remainder of the shoreline, which is currently eroding. The riprap will prevent erosion that contributes to degradation of water quality. It also will protect the existing shoreline by preventing erosion of the shoreline into the Caloosahatchee River. Upon completion of riprap installation, the area will be planted with 3 or 7 gallon trees on 10' centers and 1 gallon ground cover plants on 5' centers. The trees will include (depending upon availability at time of planting) pop ash, pond apple, cypress, red maple, or water hickory. Ground cover plants include leather fern (*Acrostichum danaeifolium*) and sand cordgrass (*Spartina bakeri*) on 5' centers. Plant species chosen are indicative of plants that currently exist along the site shoreline.

An Environmental Resource Permit was submitted to the SFWMD and USACOE for this project. LCPR staff is waiting for approval of this permit. Concurrent with approval of the permit by said agencies, approval of this document by the Acquisition and Restoration Council and will constitute approval of this project.

ii. Other Legal Constraints

Information on easements associated with CRP was gathered from surveys, where available or from various county GIS data layers and verified when possible via official records of the Lee County Clerk of Courts (http://www.leeclerk.org).

Of the fifteen easements related to CRP, one is an access drainage easement held by Lee County, three are electric easements held by Florida Power and Light, three are perpetual spoil easements held by the USACOE, seven are perpetual pipeline easements held by the USACOE and one is a perpetual ingress/ egress easement held by TIITF. Figure 17 shows the location of these easements on CRP and Table 7 provides information on these easements. Code letters A – O were used delineate the easements on the map and within the table.

Currently, BoCC staff is working in coordination with the USACOE to provide a comprehensive list of all park amenities associated with easements held by the USACOE.

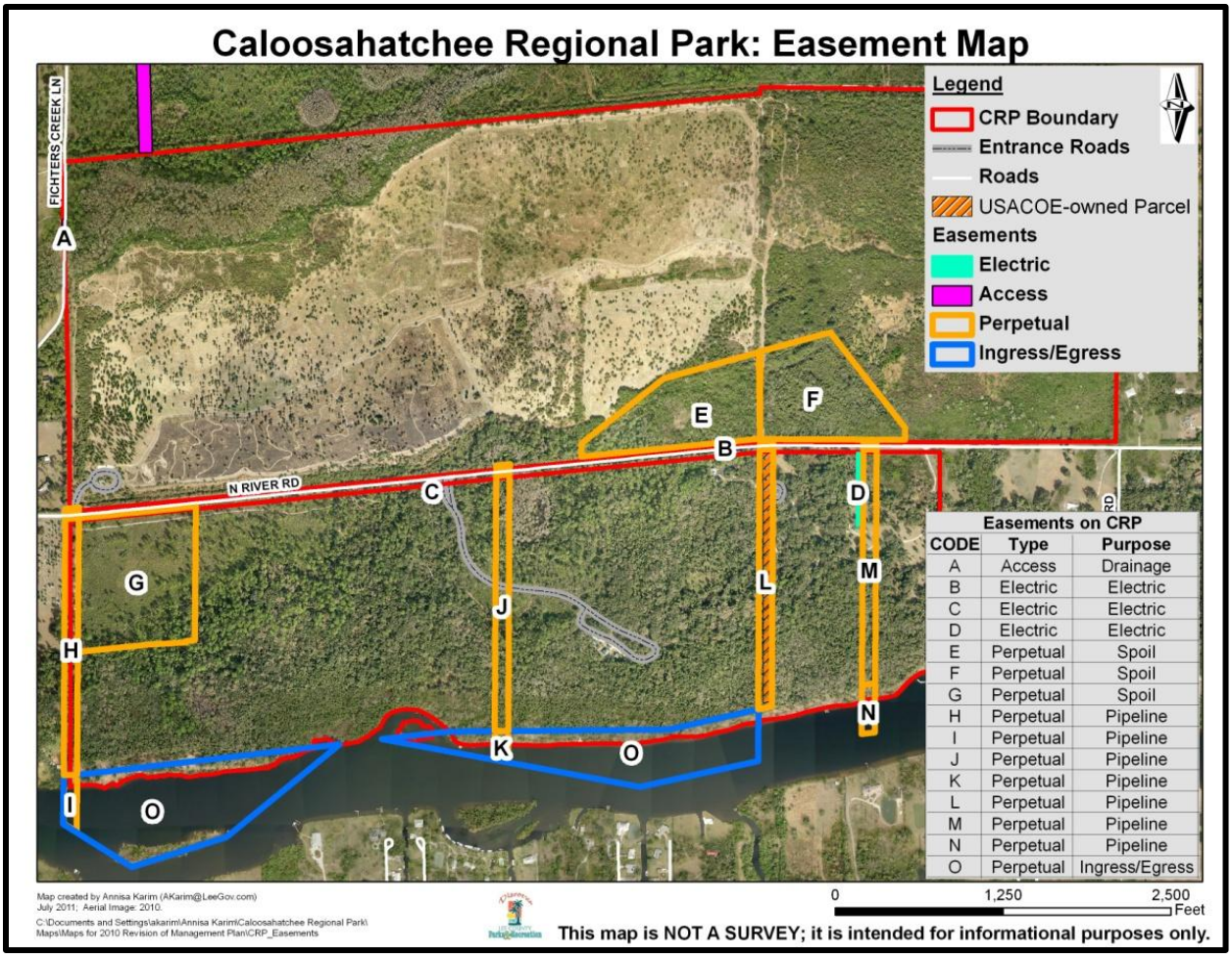


Figure 17: Easements associated with CRP (see Table 7 for complete information).

Table 7: Easements associated with CRP (see Figure 17 for visual representation)

CODE	TYPE	PURPOSE	INSTRUMENT NO.	ORBKPG	GRANTOR[A]	GRANTEE[B]	COMMENTS
A	Access	Drainage	2009000294330		First Community Bank of Southwest Florida	Lee County	
B	Electric	Electric			Lee County (Caloosahatchee Regional Park)	FPL	Blue Sheet 930896 7/28/1993 BoCC meeting date
C	Electric	Electric			Lee County (Caloosahatchee Regional Park)	FPL	Blue Sheet 930896 7/28/1993 BoCC meeting date
D	Electric	Electric	2005000050675		Lee County	FPL	FPL Easement on CRP Specific Purpose
E	Perpetual	Spoil	528365	O BK 569 / PG 281	Central and Southern FL Flood Control District	USA	Perpetual Use easement, granted to USA to deposit spoil and maintain drainage
F	Perpetual	Spoil	338466	O BK 235 / PG 226	Fairway Orange Groves Inc	USA	Remainder of easement released by OR 570/PG 629
G	Perpetual	Spoil	528366	O BK 569 / PG 285	Robert Hughes et al	USA	Right to deposit spoil and maintain drainage
H	Perpetual	Pipeline	338465	O BK 235 / PG 223	Fairway Orange Groves Inc	USA	C - Transmission of dredged materials
I	Perpetual	Pipeline	339314	O BK 236 / PG 393	Central and Southern FL Flood Control District	USA	Parcel 1
J	Perpetual	Pipeline	338465	O BK 235 / PG 223	Fairway Orange Groves Inc	USA	A - Transmission of dredged materials
K	Perpetual	Pipeline	339314	O BK 236 / PG 393	Central and Southern FL Flood Control District	USA	Parcel 2
L[C]	Perpetual	Pipeline	528367	O BK 569 / PG 292	Hughes, Lewis, Clay et al.	USA	Parcel 127-A, Tract No 2502E-6
M	Perpetual	Pipeline	338465	O BK 235 / PG 223	Fairway Orange Groves Inc	USA	B - Transmission of dredged materials
N	Perpetual	Pipeline	339314	O BK 236 / PG 393	Central and Southern FL Flood Control District	USA	Parcel 3
O	Perpetual	Ingress/Egress	529201	O BK 570 / PG 632	Central and Southern FL Flood Control District	TIITF	Also for recreational programs

[A] The Central and Southern FL Flood Control District is the predecessor of the SFWMD; [B] FPL = Florida Power and Light; USA = United States Army Corps of Engineers; [C]Land owned by USA

iii. Relationship to Other Plans: Local, State and National

The LCPR Operations Manual (adopted by the BoCC in March 2002; revised 2008) governs operational functions of CRP. This document provides guidance regarding many subjects affecting the responsibilities of LCPR staff including personnel management, safety issues, facility maintenance, fiscal operations, purchasing and recreation programs. When public facilities are developed on areas managed by LCPR, every effort is made to comply with Public Law 101 - 336, the Americans with Disabilities Act. As new facilities are developed, the universal access requirements of this law are followed in all cases except where the law allows reasonable exceptions (e.g., where accessibility is structurally impractical or where providing such access would change the fundamental character of the facility being provided).

The Land Stewardship chapter within the Operations Manual states that, "Caloosahatchee Regional Park (owned by the State of Florida, but leased to the County) is also included in this total [acres of land under preservation] and will be managed in the same manner as all other preserves". Additionally, LCPR has adopted an internal "Land Stewardship Operations Manual" that "provides guidance for land managers/stewards in managing Lee County's preserves and natural park areas".

This plan is also in conformance with the Local Government Comprehensive Plan for Lee County, Florida, as approved and adopted. State law requires concurrency with level of service standards set by the county. The required level of service for Regional Parks is six (6) acres per 1,000 total, seasonal population per Lee Plan Policy 95.1.3 This Regulatory Standard is identified in state law as being essential to support development. The desired level of service for Regional Parks as stated in the Lee Plan is eight (8) acres per 1,000 total, seasonal population. A letter confirming compliance with the Lee County Comprehensive Plan is presented on page vii of this document.

The Lee Plan, Lee County's comprehensive plan, is designed to depict Lee County as it will appear in the year 2020. Several themes have been identified as having "great importance as Lee County approaches the planning horizon" (Lee County 2004). These themes are:

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

The four chapters that affect the management of CRP are **Chapter II – Future Land Use, Chapter IV – Community Facilities and Services**, **Chapter V – Parks, Recreation and Open Space** and **Chapter VII – Conservation and Coastal Management**.

Chapter II, Policy 1.4.6 states that Conservation Lands include uplands and wetlands that are owned and used for long-range conservation purposes. Upland and wetland conservation lands will be shown as separate categories on the land use map. Upland conservation lands will be subject to the provisions of this policy. Wetland conservation lands will be subject to the provisions of both the Wetlands category described in Objective 1.5 and the Conservation Lands

category described in this policy. The most stringent provisions of either category will apply to wetland conservation lands. Conservation lands will include all public lands required to be used for conservation purposes by some type of legal mechanism such as statutory requirements, funding and/or grant conditions, and mitigation preserve areas required for land development approvals. Conservation Lands may include such uses as wildlife preserves; wetland and upland mitigation areas and banks; natural resource based parks; ancillary uses for environmental research and education, historic and cultural preservation, and natural resource based parks (such as signage, parking facilities, caretaker quarters, interpretive kiosks, research centers, and quarters and other associated support services); and water conservation lands such as aquifer recharge areas, flow ways, flood prone areas, and well fields. 2020 lands designated as conservation are also subject to more stringent use provisions of the 2020 Program or the 2020 ordinances. (Added by Ordinance No. 98-09, Amended by Ordinance No. 02-02)

Chapter IV, Policy 59.1.6 provides that the county will, through appropriate regulations, continue to provide standards for construction of artificial drainage ways compatible with natural flow ways and otherwise provide for the reduction of the risk of flood damage to new development. (Amended by Ordinance No. 94-30, 00-22)

Chapter IV, Policy 60.1.4 provides that the county will examine steps necessary to restore principal flow-way systems, if feasible, to assure the continued environmental function, value, and use of natural surface water flow-ways and associated wetland systems. (Amended by Ordinance No. 00-22)

Chapter V provides that Land Stewardship staff will ensure that any public use facilities and recreational opportunities will comply with **Goal 85: PARK PLANNING AND DESIGN**, which requires that parks and recreation sites are planned, designed, and constructed to comply with the best professional standards of design, landscaping, planning, and environmental concern. Staff will also work to meet **Goal 86: ENVIRONMENTAL AND HISTORICAL PROGRAMS, Objective 86.1** to provide information and education programs regarding its cultural history and its environment at appropriate facilities. (Amended by Ordinance No. 94-30, 00- 22)

Chapter VII, Goal 107: RESOURCE PROTECTION provides to manage the county's wetland and upland ecosystems so as to maintain and enhance native habitats, floral and faunal species diversity, water quality, and natural surface water characteristics. **Objective 107.1: RESOURCE MANAGEMENT PLAN** provides the county will continue to implement a resource management program that ensures the long-term protection and enhancement of the natural upland and wetland habitats through the retention of interconnected, functioning, and maintainable hydro-ecological systems where the remaining wetlands and uplands function as a productive unit resembling the original landscape. (Amended by Ordinance No. 94-30, 00-22) Under **Policy 107.1.1.4e** the county (or other appropriate agency) will prepare a management plan for each acquired site for the long-term maintenance and enhancement of its health and environmental integrity.

Chapter VII, Objective 107.3: WILDLIFE provides the county will maintain and enhance the fish and wildlife diversity and distribution within Lee County for the benefit of a balanced ecological system. (Amended by Ordinance No. 94-30) **Policy 107.3.1:** encourages upland preservation in and around preserved wetlands to provide habitat diversity, enhance edge effect,

and promote wildlife conservation. Initiating a prescribed fire regime and removing invasive exotics will follow this policy.

Chapter VII, Objective 107.4: ENDANGERED AND THREATENED SPECIES IN GENERAL provides Lee County will continue to protect habitats of endangered and threatened species and species of special concern in order to maintain or enhance existing population numbers and distributions of listed species. **Policy 107.4.1** states to identify, inventory, and protect flora and fauna indicated as endangered, threatened, or species of special concern in the "Official Lists of Endangered and Potentially Endangered Fauna and Flora of Florida," Florida Fish and Wildlife Conservation Commission (FWC), as periodically updated. Lee County's Protected Species regulations will be enforced to protect habitat of those listed species found in Lee County that are vulnerable to development.

Chapter VII, Objective 107.8: GOPHER TORTOISES provides that the county will protect gopher tortoises through the enforcement of the protected species regulations and by operating and maintaining, in coordination with the FWC, the Hickey's Creek Mitigation Park. (Amended by Ordinance No. 94-30) **Policy 107.8.1** provides that the county policy is to protect gopher tortoise burrows wherever they are found. However, if unavoidable conflicts make on-site protection infeasible, then off-site relocation may be provided in accordance with FWC requirements (Amended by Ordinance No. 94-30).

Chapter VII, Objective 107.10: WOODSTORK, Policy 107.10.1: provides that Land Stewardship staff will continue to document wood stork utilization of the park and ensure that the CRP stewardship plan follows USFWS "Habitat Management Guidelines for the Wood Stork in the Southeast Region." according to **Policy 107.10.2**.

Chapter VII, Goal 113: COASTAL PLANNING AREAS, Objective 113.1: COASTAL PLANNING AREA IN GENERAL provides that Lee County will manage the coastal planning area to provide a balance among conservation of resources, public safety capabilities, and development. (Amended by Ordinance No. 94-30, 00-22) **Policy 113.1.5** provides that Lee County will protect and conserve the following environmentally sensitive coastal areas: wetlands, estuaries, mangrove stands, undeveloped barrier islands, beach and dune systems, aquatic preserves and wildlife refuges, undeveloped tidal creeks and inlets, critical wildlife habitats, benthic communities, and marine grass beds (Amended by Ordinance No. 00-22)

Chapter VII, Goal 114: WETLANDS provides that the county maintains and enforces a regulatory program for development in wetlands that is cost-effective, complements federal and state permitting processes, and protects the fragile ecological characteristics of wetland systems. (Amended by Ordinance No. 94-30) **Objective 114.1** provides that the natural functions of wetlands and wetland systems will be protected and conserved through the enforcement of the county's wetland protection regulations and the goals, objectives, and policies in this plan. "Wetlands" include all of those lands, whether shown on the Future Land Use Map or not, that are identified as wetlands in accordance with F.S. 373.019(17) through the use of the unified state delineation methodology described in FAC Chapter 17-340, as ratified and amended by F.S. 373.4211. (Amended by Ordinance No. 94-30, 00-22).

Finally, current and planned uses of CRP are (1) in compliance with the Conceptual State Lands Management Plan and its requirement for "balanced public utilization," and, (2) in compliance with Florida's Statewide Comprehensive Outdoor Recreation Plan.

E. Management Constraints

The primary constraints to the stewardship and restoration of CRP are funding and staffing. The north side of the park is heavily impacted by invasive flora (e.g., Brazilian pepper, cogongrass, Guineagrass, rosary pea) due, largely, to the disturbance of the site from the deposition of dredge spoil. LCPR staff continues to seek funding and partnerships to aid in the control of these species. Every year, the FWC's Invasive Plant Management Section asks each of its Regional Upland Working Groups to rank funding requests within their area for the treatment of FLEPPC designated invasive plants. In May 2010, LCPR staff requested funding from the Southwest Florida Invasive Species Working Group for the treatment of approximately 60-acres of cogongrass on the north side of the park. LCPR attained a first place ranking among all projects presented. Additionally, LCPR staff is conducting an experiment on the efficacy of selected herbicides on the control of Guineagrass. Education of the public on (1) the impact if invasive species on natural areas; (2) the needs and realities (e.g., restoration is a long-term endeavor, aesthetics of the park may decline in the short term) of restoration; and (3) their vigilance in halting the spread of exotics is crucial to attaining long-term stewardship goals.

F. Public Access and Passive, Recreational Opportunities

CRP was opened to the public in March 1999. The south side (portion of CRP south of C. R. 78) includes picnic shelters, restrooms, parking, offices, hiking trails totaling 5.25 miles, a campground, a lodge, an overlook, fishing pier and a canoe/ kayak launch. The campground features 28 primitive tent camping sites. Groups and equestrian camping options are available, as well a special use area for large events. The north side (portion of CRP north of County Road 78) currently offers 11.30 miles of mountain bike trails and 6.25 miles of equestrian trails as well as a picnic shelter, parking and restroom facilities (Figure 3).

Section 253.034(1) of Florida State Statutes asserts that, "All lands acquired pursuant to chapter 259 [i.e., CRP] shall be managed to serve the public interest by protecting and conserving land, air, water, and the state's natural resources, which contribute to the public health, welfare, and economy of the state. These lands shall be managed to provide for areas of natural resource based recreation, and to ensure the survival of plant and animal species and the conservation of finite and renewable natural resources. The state's lands and natural resources shall be managed using a stewardship ethic that assures these resources will be available for the benefit and enjoyment of all people of the state, both present and future."

The mission of LCPR is to (1) provide safe, clean and functional Parks & Recreation facilities, (2) provide programs and services that add to the quality of life for all Lee County residents and visitors and, (3) enhance tourism through special events and attractions. Keeping these provisions in mind, CRP has been developed in a manner to ensure the conservation and protection of the natural and historical resources while providing resource-based, public, outdoor recreational opportunities that have been approved for state lands and that are compatible with the conservation and protection of these public lands. The site's diverse vegetation and extensive frontage on the river, coupled with interpretive programs and amenities, provide various opportunities for the public to enjoy and continue to be educated about the importance of the site. From fiscal years (Oct. – Sept) 2005 to 2009, CRP recorded over 347,000 (Table 8) units of service provided to the residents and visitors to Lee County. As the County's population increases, LCPR staff expects to see a continued increase in visitation to CRP.

Table 8: Units of Service Numbers for CRP (FY 2005 – FY 2009).

Fiscal Year	Picnic Shelter	Paths/ Trails	Special Events	Staff Led Programs	Equipment Rental	User Groups (Campground)	Misc.	**Totals**
2005	2,707	8,499	1,087	2,774	280	4,276	1,196	**20,819**
2006	2,923	11,819	150	2,554	181	5,439	1,641	**24,707**
2007	9,751	27,656	3,339	1,933	526	3,790	8,490	**55,485**
2008	16,276	38,041	3,520	1,045	273	3,082	7,975	**70,212**
2009	47,667	113,271	3,864	1,508	413	2,763	6,914	**176,400**
Totals	**79,324**	**199,286**	**11,960**	**9,814**	**1,673**	**19,350**	**25,492**	**347,623**

LCPR offers and promotes appropriate, resource-based recreational activities approved for state lands while maintaining the over-arching goal of natural and cultural resource protection. Safeguarding and enhancing the environmental integrity and biological diversity of CRP is the primary goal and the guiding principle for the operation and management of the site. LCPR staff relies heavily on volunteers to help in the maintenance of public access trails. The number and length of public access trails available at CRP, especially the mountain bike and equestrian trails on the north side of the park, are a direct result of the volunteer hours dedicated to their maintenance and upkeep. If the volunteer hours dedicated to these trails diminish, LCPR staff will determine which trails will remain open and whether proposed trail expansions will take place. LCPR staff will coordinate closely with user groups to ensure that trails meet safety and quality standards while ensuring the environmental integrity of the site is maintained/ improved.

i. Proposed Mountain Bike Trail Alterations

LCPR staff in cooperation with the Florida Mudcutters (the mountain biking group that helps to maintain the trails) manages the mountain bike trails on the north side of CRP. This volunteer-based group donates hundreds of hours each year (Figure 18) in the maintenance and upgrades of existing bike trails and in providing much of the labor for new, approved trails.

The existing mountain bike trails take advantage of the landscape (dredge spoil areas) on the north side of the park making the trails challenging and interesting for riders. The single-track trails are constructed in a stacked loop system, with trail ratings modified from the International Trail Marking System (designates the difficulty of trails used by *skiers* in different parts of the world). Additionally, the bike trails are unidirectional and the allowed direction of travel rotates monthly (clockwise / counterclockwise) to balance out wear and tear to the trail system.

LCPR staff met with representatives from the Florida Mudcutters to gather their input on the current trail system and their requests for the trail system over the next ten years. The Florida Mudcutters expressed a desire that the mountain bike trails at CRP conform, as much as possible, to the standards set forth by the International Mountain Bicycling Association (IMBA). IMBA is a non-profit educational association whose mission it is to create, enhance and preserve great trail experiences for mountain bikers worldwide by encouraging low-impact riding, volunteer trail work participation, cooperation among different trail user groups, grassroots advocacy and innovative trail management solutions. This organization promotes mountain bicycling

opportunities that are environmentally and socially responsible. LCPR staff agreed that the standards set forth by IMBA aligned with the goals of CRP.

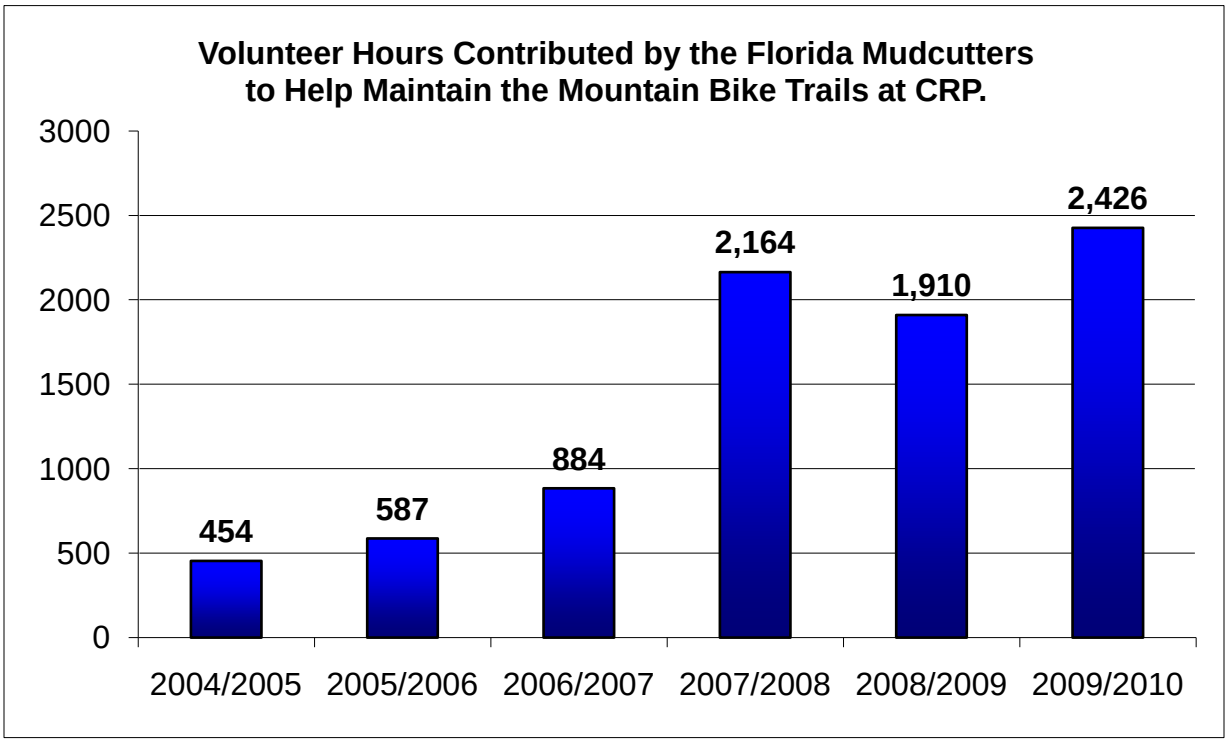


Figure 18: Volunteer Hours Contributed by the Florida Mudcutters (Oct. 2004 - Sept. 2010). Data from http://www.mudcutters.org/maintenance.

Representatives from IMBA evaluated existing mountain bike trails in December 2010. Recommendations made by IMBA that (1) address the safety of the trails; and (2) that align with CRP's goal of and natural and cultural resource protection for the site will be implemented with the help of the Mudcutters.

The IMBA representatives had positive comments focusing specifically on the safety and flow of the bike trails. They were pleased to see that the bike trails are unidirectional and expressed that this is this is a good point of design given that it reduces conflicts among bike riders by potentially reducing collisions. Shorter sight lines and dense canopies add to a feeling of artificially high speeds. The IMBA representatives recommended that intersections between the equestrian and mountain bike trails should be reduced where possible. LCPR staff agreed with this point of safety and used this as part of the decision making process in rerouting and designing future trails.

The bike trails travel through a mixture of vegetation types, many of which require pruning to maintain a safe trail system for users. Proper pruning techniques will be employed by staff and volunteers at all times for the safety of all users. Among other benefits, proper pruning of tree limbs can aide in the tree's health, structural integrity and overall appearance. Trees are most benefited by pruning in winter to early spring, when the wounds are best able to heal over and degradation from insects or disease are less likely to occur. LCPR staff will coordinate closely with the Florida Mudcutters and other volunteers groups to ensure that information on the

identification of flora, proper pruning techniques, etc. is provided. Trail sections rendered dangerous or unusable through improper pruning techniques or the lack of pruning will be closed until the hazards can be corrected. The greenways and trails program under the Tennessee Department of Environment and Conservation recommends that the passageway for single-track trail be 6 foot wide by 8 foot tall. These dimensions may not be feasible in all locations of the bike trail, but should be used where applicable on existing trails and incorporated in all future trail construction. These trail dimensions will provide access for authorized motorized vehicles in emergencies and provide access for stewardship activities.

LCPR staff considered each request made by the Florida Mudcutters and designed a plan (Figure 19) consistent with the land stewardship goals of the park, the requests of the Mudcutters, the requests of other user groups, issues related to operations of the park, the safety of all users of the park and the availability of staff resources. Please note, only the approved areas are viable for completion within this 10-year management plan cycle. No other additions or major route modifications will be considered until the next revision of this plan. The loss of volunteer labor will result in the need to close trail sections or delay the construction of new sections of trail. Requests to improve riding experiences by adding berms, hills, skills areas, etcetera on existing trails will be considered by staff on a case by case basis. LCPR staff charged with the operation and stewardship of CRP must be consulted before any alterations/ improvements are made.

FDEP's Division of Recreation and Parks has created "Visitor Carrying Capacity Guidelines" which, in part, define optimum carrying capacities for outdoor recreational activities. Their recommendation for bicycle trails is a minimum of 25 acres per mile of trail. The only appropriate areas for extensive mountain bike trails within CRP are located on the north side of the park in areas with a substrate of Caloosa Fine Sands. This soil encompasses approximately 392 acres of the site. The total length of bike trails for CRP recommended by FDEP's Division of Recreation and Parks standard is 15.68 miles. This does not take into consideration the needs of other user groups (e.g., horseback riders) primary purpose of the parcel (conservation/ restoration) or plant community and listed species limitations. Keeping in mind the goal of "balanced public utilization" of the park and the need for reserving areas for stewardship activities, 15.68 miles of bike trails is not recommended for the north side. If all proposed mountain bike trails outlined in this document (Figure 19) are constructed, the mountain bike trails at CRP will total approximately 11.72 miles. LCPR staff agreed that a skills area would be appropriate for the north side of the park. This skills area will be situated in Unit 2 to coincide with IMBA's recommendation that skills areas be constructed close to approved parking areas and as close to emergency vehicle access as possible. The construction of this skills area is dependent on the ability of the Mudcutters to maintain the current trail system according to LCPR standards (safety, width, height, proper pruning techniques, protection of native vegetation, etc.). Once the Fichter's Creek Restoration Project is complete, the equestrian trail along the northern boundary of Unit 2 is moved north, and the Mudcutters are able to commit to maintaining the new feature, the skills area will be constructed. This skills area will be designed and maintained at a minimum of 50-feet away from the surrounding equestrian trails.

Overall Goal: Maintain current trails and alter trails as appropriate.

Short-term (2011 – 2013) objectives for the maintenance and expansion of the mountain bike trails include:

- With the help of the Mudcutters, implement recommendations made by IMBA that address the safety of the trails and those that align with CRP's goal of and natural and cultural resource protection.
- With the help of the Mudcutters, create a schedule for trail maintenance by the volunteer group.
- Construct 1400-foot (approximately) extension of Lollipop trail.

Long-term (2013 – 2021) objectives for the maintenance and expansion of the mountain bike trails include:

- Hold meeting with Mudcutters to evaluate the ability of group to maintain current trail system according to LCPR standards (safety, width, height, proper pruning techniques, protection of native vegetation, etc.).
- Review IMBA evaluation from Dec. 2010 and determine if additional work needs to be done.
- Construct skills area (approx. 1.11 miles) per specifications mentioned above.

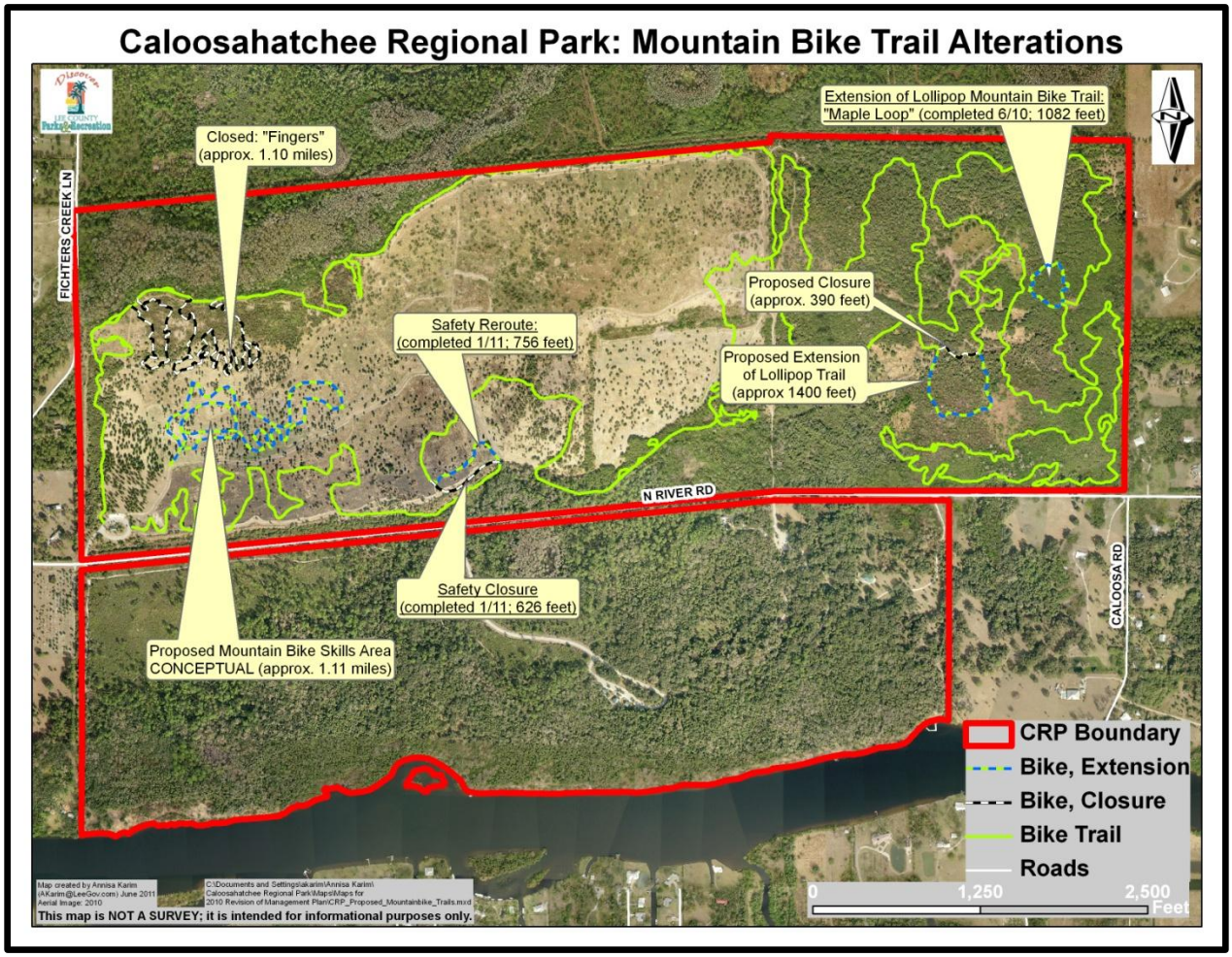


Figure 19: Mountain Bike Trail Alterations

ii. Proposed Equestrian Trail Alterations

LCPR staff in cooperation with the Caloosa Saddle Club (the equestrian group that helps to maintain the trails) manages the equestrian trails on the north side of CRP. The majority of the equestrian trails at CRP take advantage of service roads. Unlike the mountain bike trails, the equestrian trails are not rated for riders with different skill sets. In the past few years, LCPR staff has noted a decline in the use of the equestrian trail due to the availability of newly opened trails in other parts of the county.

LCPR staff met with representatives from the Caloosa Saddle Club to gather their input on the current trail system and their requests for the trail system over the next ten years. LCPR staff considered each request made by the Caloosa Saddle Club and designed a plan (Figure 20) consistent with the land stewardship goals of the park, the requests of the equestrian group, the requests of other user groups, issues related to operations of the park, the safety of all users of the park and the availability of staff resources. Please note, only the approved areas are viable for completion within this 10-year management plan cycle. No other additions or major route modifications will be considered until the next revision of this plan.

Overall Goal: Maintain current trails and alter trails as appropriate.

Short-term (2011 – 2013) objectives for the maintenance and expansion of the equestrian trails include:

- With the help of the Caloosa Saddle Club, create a schedule for trail maintenance by the volunteer group.
- Construct 4,920-foot (approximately) extension of equestrian trails on the north side of the park (note: at the drafting of this document, approximately 3600 feet of this these trails had already been installed due to safety reasons – see Figure 20).

Long-term (2013 – 2021) objectives for the maintenance and expansion of the equestrian trails include:

- Hold meeting with Caloosa Saddle Club and other equestrian enthusiasts to evaluate the ability of group to maintain current trail system according to LCPR standards (safety, width, height, proper pruning techniques, protection of native vegetation, etc.).
- Once the Fichter's Creek Restoration Project is completed, construct approximately 1495-foot trail on the north side of the park and approximately 2200-foot trail on south side of CRP. Please note, at the completion of the Fichter's Creek Project, approximately 2590-feet of the safety reroute completed in 3/11 will be closed. This will effectively separate the equestrian and mountain bike trails; each user group will have a trail on opposite sides of the "lakes".

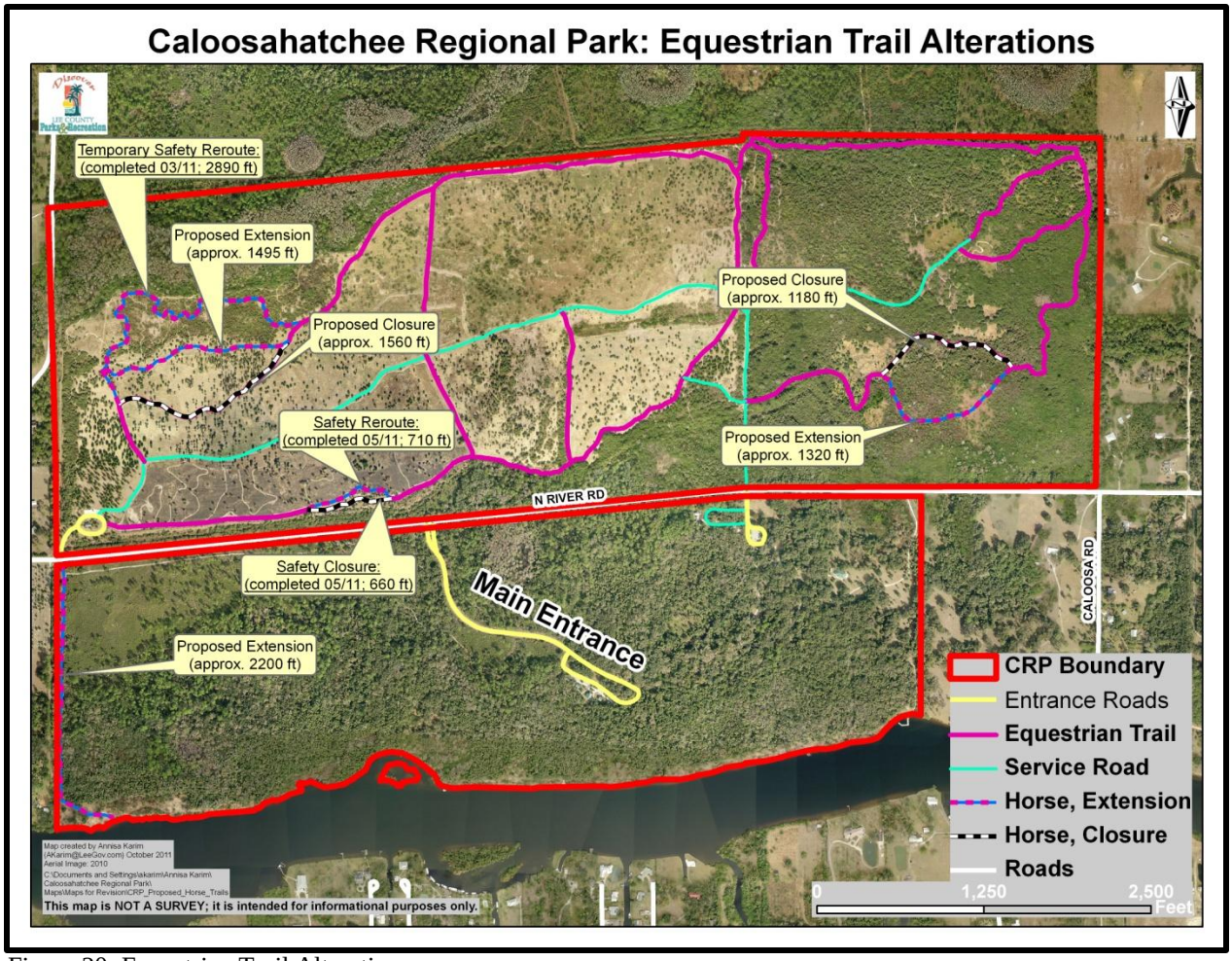


Figure 20: Equestrian Trail Alterations

iii. Proposed Zip Line

All lands managed under Florida Statute s. 253.034 and s. 259.032(9) (b) and shall be "managed for public outdoor recreation which is compatible with the conservation and protection of public lands. Such management may include, but not be limited to, the following public recreational uses: fishing, hunting, camping, bicycling, hiking, nature study, swimming, boating, canoeing, horseback riding, diving, model hobbyist activities, birding, sailing, jogging, *and other related outdoor activities compatible with the purposes for which the lands were acquired*."

A private company approached LCPR with the proposal of constructing and operating a Zip Line. Before this proposal started going through the county's bid process, the concept of the Zip Line had to be deemed as an appropriate use by an advisory group (Appendix F) and approved by the Acquisition and Restoration Council (ARC; s. 259.035, F.S.). In part, the ARC has responsibility for the review of management plans and land uses for all state-owned conservation lands.

LCPR believed that adding a Zip Line to the currently available recreational opportunities at CRP would increase overall park visitation and provide an enhanced experience for park visitors.

LCPR staff considered three options for the approximate location of the Zip Line. In formulating these options, LCPR staff considered: (1) the provisions set forth in s. 253.034(1), F.S. and the corroborating mission of LCPR; (2) the location of various biological communities within the park; (3) the potential impact to vegetation (based on density) within these areas; (4) the existing access point(s) available to the proposer and the public; (5) the layout of existing mountain bike, equestrian and hiking trails and; (6) the potential experience a visitor may have at these different locations.

A public hearing was held on October 20, 2009 at 6:30 PM at the Olga Community Center (2325 South Olga Drive., Fort Myers, FL. 33905) to allow for input by an advisory group and the public pertaining to the proposed changes to the CRP Resource Management Plan [including the Zip Line - as required by Section 259.032(10)(b), F.S.; Appendix F]. LCPR proposed three locations and recommended option "B" (current location seen on Master Site Plan; Figure 21). At the October 2009 meeting, a motion was made that the Zip Line is compatible and is an appropriate use for CRP with the reservation that other users need to be considered if Zip Line is installed. This motion passed 5-2. A second motion was made to recommend option B (currently proposed location) for the proposed Zip Line given that option B is thoroughly vetted with respect to overall biological and ecological impacts as well as impacts to traffic and other users; this motion was passed unanimously 7-0.

The State of Florida (via the ARC meeting in December 2009) unanimously approved the addition of the Zip Line as a resource-based recreational opportunity for CRP (Appendix G). The goals of the park would continue to focus on maintaining a balance between natural and historical resource protection and providing interpretive, convenient and safe recreational use (Figure 21- Master Site Plan).

A Request for Proposal (RFP) was initiated via Lee County's Division of Procurement Management. The Zip Line has been approved for installation within a pyric plant community and as such, the proposer will be responsible for conducting a controlled burn as part of the site preparation for the zip line construction. The prescription must be submitted to LCPR personnel a minimum of three (3) days prior to the burn. The PROPOSER will be responsible for all costs related to this process including, but not limited to, equipment, permits, and personnel. This burn must be coordinated with LCPR personnel and be conducted by Certified Burn Manager as defined in FAC 5-I2.

Public access to the Zip Line would be designated on existing hiking trails and fire lines. Minimal access may be created to provide appropriate public access to the Zip Line in which case, the proposer would incur the cost of trail construction and maintenance.

Siting, Design, Construction and Operation Criteria for the Zip Line will include (at a minimum):

- At no time during construction or operation will the project disturb sensitive lands and work will be done in such a manner as to minimize impacts on native plant communities and will avoid protected species. The proposer will avoid listed species habitat and

impacts on listed species including but not limited to: hand fern (*Ophioglossum palmatum*), eastern indigo snake (*Drymarchon corais couperi*), gopher tortoise (*Gopherus polyphemus*), and Audubon's crested caracara (*Caracara cheriway*).

- The corridor for the Zip Line shall be selected to minimize the need for clearing and avoid impact on native, mature (> 12" diameter at breast height) trees.
- This project shall be designed and constructed so that poles, platforms, sky bridges and/or towers are built to connect all of the Zip Lines. At no time shall any line, guide wire, pole, platform, sky bridge or tower be anchored to a tree.
- Construction techniques shall be used that minimize soil disturbance and collateral clearing damage.
- Zip Line shall be constructed in such a way as to minimize crossings with all public access trails.
- When public access trails must be crossed, the crossing shall be made perpendicular to the trail or as close to perpendicular as possible to afford the public not involved in the Zip Line activities to enjoy the natural beauty of the park.
- It will be the proposer's responsibility to keep the footprint area of the Zip Line free of all Categories I and II exotic, invasive plants as designated by the most current list maintained by FLEPPC.
- The Zip Line will be operated to emphasize developing a "sense of place" for CRP and shall be educational with emphasis on the culture, history and environment of the area.
- The proposer will be required to hire a licensed Lee County Environmental Consultant to conduct a site assessment to determine potential impacts to listed species and take steps to avoid or mitigate impacts to those species.
- The proposer will be responsible for all costs of construction, maintenance & operation of the Zip Line and would assume all liabilities.
- The proposer shall secure all Federal, State and County permits required to build and operate the Zip Line prior to any site work. Copies of these permits must also be provided to LCPR for their records.
- Once site plans are approved by FDEP and Lee County, the PROPOSER will contact professionals from the Florida Department of State, Division of Historical Resources, for assistance prior to any ground-disturbing activity on CRP.
- The proposer shall ensure that the Kellum Homesite (8LL1614) will not be disturbed during any phase of siting, design, construction and operation of the Zip Line.

A public hearing was held on Thursday, March 24, 2011 at 6:00 PM in the Caloosa Lodge (19130 North River Rd., Alva, FL. 33920) to allow for input by an advisory group and the public pertaining to this Land Stewardship Plan [as required by Sections 259.032(10)(b and c), F.S.; Appendix F]. The advisory group made a recommendation (6-0; with one abstention) to remove the proposed Zip Line from the ten-year plan and approve the remainder of the plan. On June 21, 2011, the Lee County BoCC voted (Agenda Item A9A) to approve (3-2) the Land Stewardship Plan as is (with the inclusion of the Zip Line) and forward it to the state for final approval (Appendix F).

Overall Goal: Select appropriate proposer and ensure proposer is maintaining and operating Zip Line as specified by contract.

Short-term (2011 – 2013) objectives for the Zip Line include:

- Select proposer from proposals submitted and meet with proposer to create a timeline for project.
- Hold meeting with the selected proposer, design consultant(s), FDEP and LCPR staff to discuss project design prior to any design work.
- Review development, safety, operation and environmental plans provided by selected proposer.
- Get final approval by FDEP staff on the precise location of all associated structures.
- Proposer will construct and begin operation of the Zip Line.

Long-term (2013 – 2021) objectives for the Zip Line include:

- Evaluate the impact of the Zip Line (from an operations and stewardship perspective) to ensure compliance with this document and the lease held by the BoCC for CRP.

iv. Proposed Ropes Course - CONCEPTUAL

Ropes Courses are challenging, outdoor activities designed to build trust, socialization skills, cooperation, teamwork and camaraderie among participants. Many businesses and social groups are searching for opportunities to participate in activities focused on personal and group enhancement. LCPR believes that considering the addition of a Ropes Course to the currently available recreational opportunities at CRP would increase overall park visitation and provide an enhanced experience for park visitors. This project would only be considered if the proposer awarded the Zip Line Proposal is interested in expanding operations and is financially able to provide the Course within the guidelines of being compatible with the protection of the park's natural and cultural resources.

Overall Goal: Ensure proposer is maintaining and operating Ropes Course as appropriate.

Short-term (2011 – 2013) objectives for the Ropes Course: (No action)

Long-term (2013 – 2021) objectives for the Ropes Course include:

- Evaluate the impact of the Zip Line (from an operational and stewardship perspective) to ensure compliance with this document and the lease held by the BoCC for CRP (if not compliant, a Ropes Course will not be considered).
- Conduct internal review for Ropes Course.
- Meet with Zip Line proposer to access if proposer is willing and able to design, construct and operate a Ropes Course compatible with the protection of the park's natural and cultural resources. If so, LCPR staff will formulate specific guidelines for the proposer.
- Get final approval by FDEP staff on the precise location of all associated structures.
- Proposer will construct and begin operation of the Ropes Course

v. Proposed Playground – CONCEPTUAL

Due to the high rates of visitation by families with children and the anticipated increase in visitation, a playground may be constructed within the campground of CRP. This idea is purely conceptual and must be thoroughly vetted by LCPR staff. Due to current budgetary constraints, a playground will not be considered for at least three years. If the playground is approved by LCPR, its placement will account for the protection of natural and cultural resources and the safety of the public. If constructed, the details of the playground will be presented to the state at the time of the next revision of this plan.

iv. Assessment of the Impact of Planned Uses

LCPR and the FDEP have affirmed that the expansion and addition of public access and uses (Figure 21) described above are consistent with acquisition purposes of CRP and comply with the lease held by the BoCC (Appendix A). The impact of these planned uses provides appropriate, resource-based recreational activities while maintaining the goal of natural and cultural resource protection. The following is a brief summary of the goals for this project:

1. To conserve and protect environmentally unique and irreplaceable lands that contain native, relatively unaltered flora and fauna representing a natural area unique to, or scarce within, a region of Florida or a larger geographic area;
2. To conserve and protect native species habitat or state and federally listed species.
3. To provide areas, including recreational trails, for natural resource-based recreation and other outdoor recreation on any part of any site compatible with conservation purposes.

It is the policy of LCPR to provide a diversity of resource-based recreational activities that do not adversely affect natural plant communities and the animals that utilize them. Public needs and desires, as expressed during Public Meetings (Appendix F), as well as a detailed assessment of the impact of planned activities on natural and cultural resources, are considered in the planning and development of recreational opportunities and represent "balanced public utilization." Additionally, uses planned for CRP comply with the Conceptual State Lands Management Plan.

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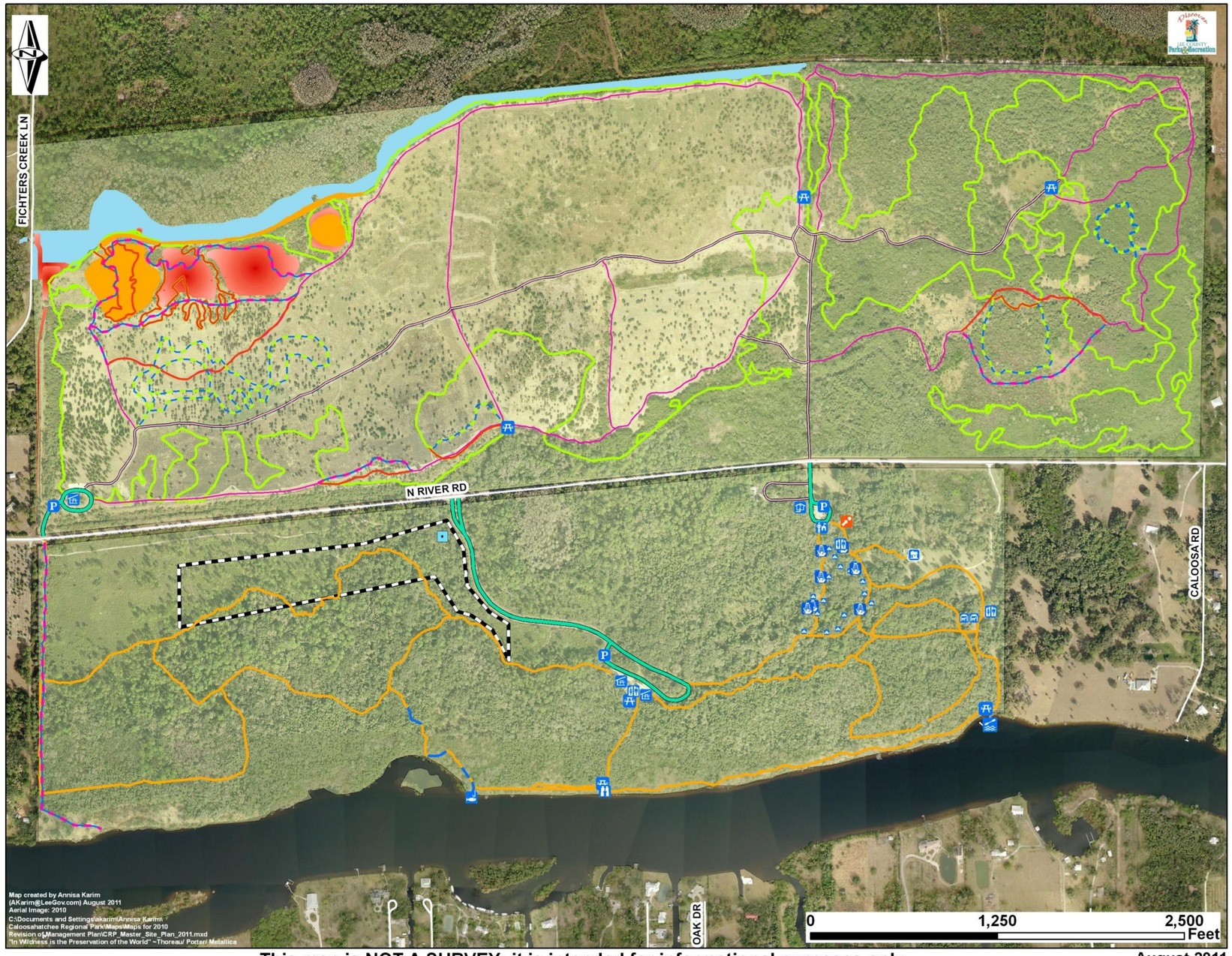
Caloosahatchee Regional Park: Master Site Plan



- Caloosahatchee Regional Park
- Parking w/ Fees
- Campground Office
- Blueway Launch
- Fishing Pier
- Overlook
- Lodge
- Picnic Pavilion
- Picnic Table
- Restroom
- Campsites
- Equestrian Site
- Host Site
- Shower
- Kellum Homesite
- Climbing Rock
- Bike Trail
- Horse Trail
- Hiking Trail
- Boardwalk
- Service Road
- Trail Closures
- Proposed Bike Trail Expansion
- Proposed Horse Trail Expansion
- Entrance Roads
- Area for Proposed Zip Line

Proposed Fichter's Creek Project

- Dry Basins
- Wetland Enhancement
- Upland Enhancement

Figure 21: Master Site Plan (2011 – 2021).

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G. Analysis of Multiple-Use Potential

The following actions and/ or activities have been considered under the multiple-use concept as possible uses to be allowed on CRP. Uses classified as "Approved" are considered to be in accordance with the purposes for acquisition, in compliance with the lease the BoCC holds with TIITF and in compliance with Lee County Ordinance 06-26. Uses designated as "Conditional" indicate those that may be acceptable but will be allowed only as a means to accomplish land stewardship objectives. Uses classified as "Rejected" (i.e., incompatible) are not considered to be in accordance with one or more of the various forms of guidance available for planning and management:

Table 9: Analysis of Multiple-Use Potential within CRP.

Specific Use	Approved	Conditional	Rejected
Bicycling (in sanctioned areas)	x		
Canoeing/ Kayaking	x		
Ecosystem maintenance	x		
Ecotourism	x		
Environmental Education	x		
Fishing	x		
Hiking (in sanctioned areas)	x		
Horseback Riding (in sanctioned areas)	x		
Preservation of Historic and Cultural Sites	x		
Primitive Camping (in sanctioned areas)	x		
Protection of listed species	x		
Ropes Course (in sanctioned areas)	x		
Soil and water conservation	x		
Wildlife Observation/ Nature Study	x		
Zip Line Canopy Tour (in sanctioned area)	x		
Cattle Grazing/ Livestock Grazing		x	
Timber Harvest		x	
Agriculture		x	
Collection of Cultural or Historic Artifacts			x
Collection of Plants or Animals (Dead or Alive)			x
Hunting			x
Motorized Off Road Vehicle Use			x

H. Acquisition

Fee simple title to the property known as the CRP is held by the TIITF, which consists of the Governor and Cabinet, and by the Governing Board of the South Florida Water Management District (Figure 1). Table 10 provides a history of acquisition by the state.

Refer to the "Legal Obligations and Constraints" section of this document for a description of the easements associated with CRP.

Table 10: Acquisition History of CRP.

Acquisition Date (Date Recorded)	Acreage	Cost	Funding Source*
January 8, 1970	167	$225,000	TIITF
February 23, 1970	167	$225,000	TIITF
January 26, 1971	166	$225,000	TIITF
January 7, 1972	218	$240,000	TIITF
TOTAL	**718**	**$915,000**	**TIITF**

* TIITF = Board of Trustees of the Internal Improvement Trust Fund (State of Florida)

VI. MANAGEMENT ACTION PLAN

CRP will continue to be managed under the "single use" concept as provided in Section 253.034 [2(b)] F.S. The BoCC (via LCPR) is the lead managing agency and as such will be responsible for the stewardship and operation of CRP through the life of the lease. LCPR staff consults with DHR staff before taking actions that may adversely affect archaeological or historic resources. Safeguarding and enhancing the environmental integrity and biological diversity of the site will be the guiding principle for its operation and management.

Desired outcomes of the management of CRP include providing resource-based recreational public access, preserving and protecting natural resources, protecting cultural and historical resources, restoring/ reclaiming habitat, protecting threatened and endangered species and controlling the spread of nonnative plants and animals.

A. Land Management Review

To date, the state has not conducted a land management review of CRP nor has one been scheduled (W. Howell, personal communication October 21, 2010).

The following paragraphs constitute a review of goals set for the management of CRP within the previous resource management plan (LCPR 2001) and the degree to which they have been met. The *italicized text* identifies the content from the previous plan (LCPR 2001). Refer to the "Goals and Strategies (Short-term/ Long-term)" section for planned stewardship goals for the upcoming ten-year period.

Hydroperiod

Goal: Restore and maintain the site hydrology as much as possible given the major topographic changes that have occurred.

Objective (restoration): Install weirs, ditch blocks or other structures to counteract drainage impacts that have occurred on the site.

Objective (monitoring): Establish a monitoring program for wetlands to determine their hydroperiod before and after restoration activities. Monitoring of aquatic indicator animal species is also recommended.

Performance Standard: The hydrology of on-site wetlands supports vegetation and wildlife similar to that of similar areas that have had minimal disturbance.

Monitoring will be conducted to determine the hydroperiod of the wetland communities. The hydroperiods for both the isolated and connected wetlands will be compared to known optimum hydroperiods for similar ecosystem to determine their health. Restoration efforts (control structures and filling ditches) will be pursued to restore the hydroperiods if necessary. Fill was placed in the internal ditches that drained the area south of C.R. 78 in late 1999. Hopefully, this action will help increase the hydroperiod of the wetlands near the river.

The installation of a weir on the north side of CRP is still in the planning process. A monitoring program for wetlands to determine their hydroperiod on the south side of CRP will be established. Qualitatively, the wetlands on the south side of the park appear to be holding water for longer periods and the species composition within the Mixed Wetland Hardwoods appears consistent with those on other sites.

Prescribed Burning

Goal: Reestablish a fire regime conducive to maintenance of pyric plant communities.

Objective: Partition the site into management units and prepare a burn plan for each unit. Schedule burns at intervals appropriate for the particular plant community.

Performance Standard: Pyric communities experience fire at intervals recognized by Florida Natural Areas Inventory or other organizations as appropriate.

CRP has been divided into eighteen stewardship units to better organize and achieve management goals. These stewardship units are described in detail in the" Stewardship Unit Description" section of this document. The "Projected Timetable for Implementation" section outlines which units are scheduled to be burned within the next ten-year cycle. In general, a fire regime will be reestablished for ~374 acres of the site.

Exotic Species Control

Goal: Control all invasive plants and animals to at least a maintenance level.

Objective (plants): Prepare a treatment methodology and schedule by management unit that includes control measures for exotic plants.

Performance Standard (exotic plants): Bring all populations of exotic plants to at least a control level in each management unit.

Objective (wild hogs): Establish a control program for wild hogs that is safe, humane and complies with all regulations regarding disease concerns.

Performance Standards (wild hogs): Wild hogs are brought to a population level that limits their impact from rooting on groundcover vegetation and trails.

The control of all invasive plants to a maintenance level (< 5%) has not yet been established. Exotic control has been conducted throughout the last ten-year period but the extent of the invasives present on the site, especially the north side, is vast. The treatment of exotic plants is on-going. A grant was obtained from the Natural Resources Conservation Service's Wildlife Habitat Incentive Program (WHIP) to address issues on the north side of the park. These funds were used to mechanically remove Brazilian pepper and to treat exotic grasses such as

Guineagrass and cogongrass. Additionally, monies were used to plant a variety of native species such as live oak, dahoon holly wax myrtle, gallberry and a variety of grasses.

Lee County currently funds a hog trapper to remove feral hogs from county parks and preserves including CRP. Currently, this is the only method of control for this invasive, exotic vertebrates. LCPR staff will consult with experts within the FWC in the development of specific methodologies to target and eradicate invasive, non-native species while ensuring the protection of native wildlife. The Lee County Mosquito Control District performs the task of arthropod control within CRP. They target nuisance and disease vectoring mosquitoes. The Arthropod Control Plan for CRP is presented in Appendix H.

B. Stewardship Unit Descriptions

CRP has been divided into eighteen units to better organize and achieve stewardship goals (Table 11). Acreages were calculated within ArcMap 9.2. Due to rounding values up or down, these numbers are close approximations. Parking lots and entrance roads are not included within any stewardship unit. Figure 22 delineates the stewardship units that were created based on existing trails, roads, ditches, berms, stewardship needs and plant communities. Figure 23 shows these units superimposed on the eleven plant communities found within CRP (refer to "Natural Plant Community" section for descriptions of these land cover types). Many of the easements associated with CRP (discussed in the "Legal Obligations and Constraints" section of this document) cross the boundary lines of the delineated stewardship units. A map showing the spatial relationship of the stewardship units and easements is provided in Appendix I.

Prescribed burns may not exactly match the stewardship units shown. Burns will be conducted within pyric communities based on abiotic and biotic conditions present in addition to the availability of the appropriate equipment, staffing level and funding.

Table 11: Stewardship Unit Names and Associated Acreages.

North Side Unit Name	Acres*	South Side Unit Name	Acres*
Fichter's Creek Unit	41.86	Unit A	45.27
Unit 1	28.63	Unit B	25.56
Unit 2	39.01	Unit C	51.11
Unit 3	14.59	Unit D	29.79
Unit 4	57.68	Unit E	2.90
Unit 5	63.15	Unit F	29.62
Unit 6	63.39	Unit G	57.00
Unit 7	102.25	Unit H	32.07
Unit 8	58.47	Unit I	12.76

** Due to rounding values up or down, these numbers are close approximations. Entrance roads and parking lots are not included in these units.*

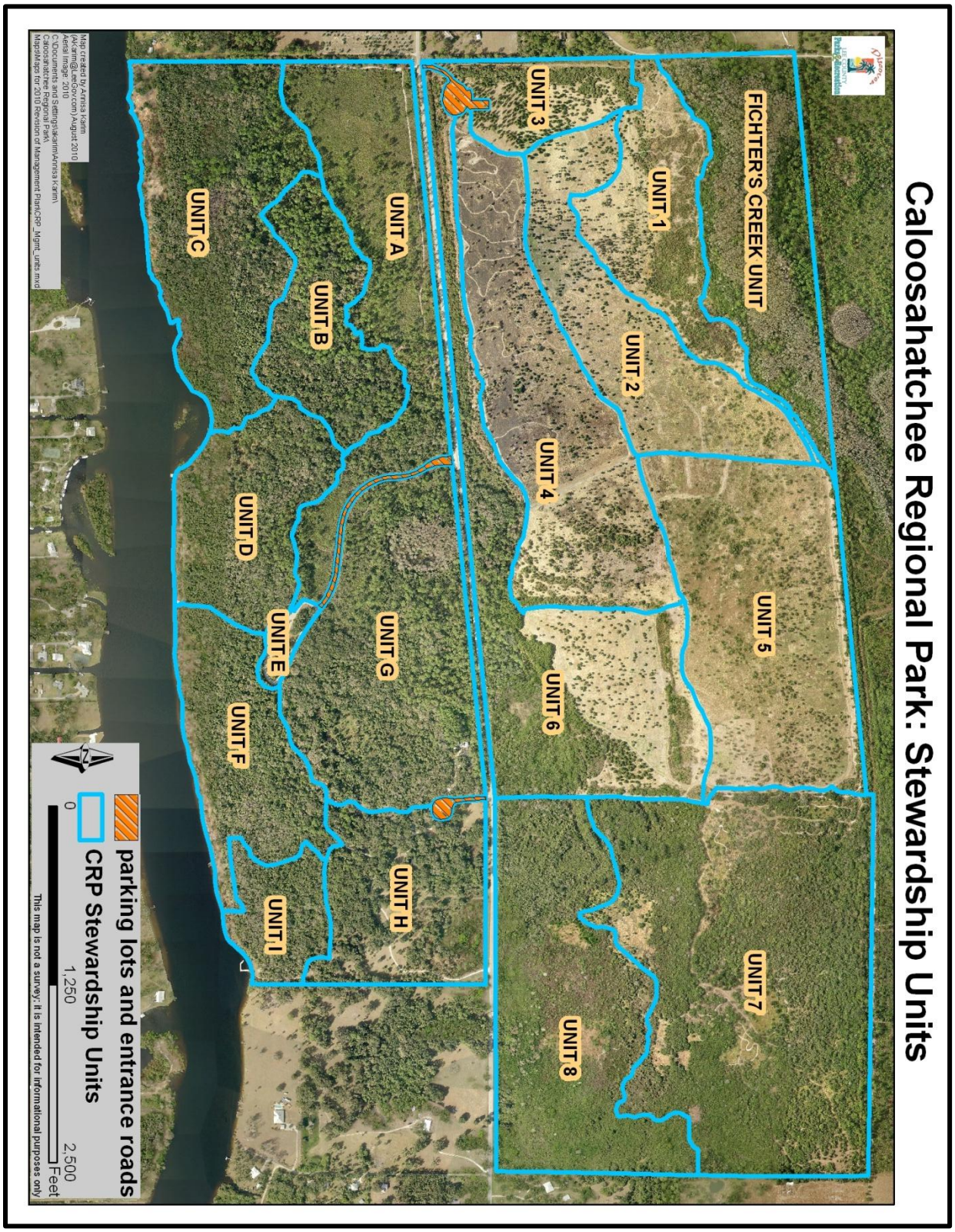

Figure 22: Stewardship Units within CRP.

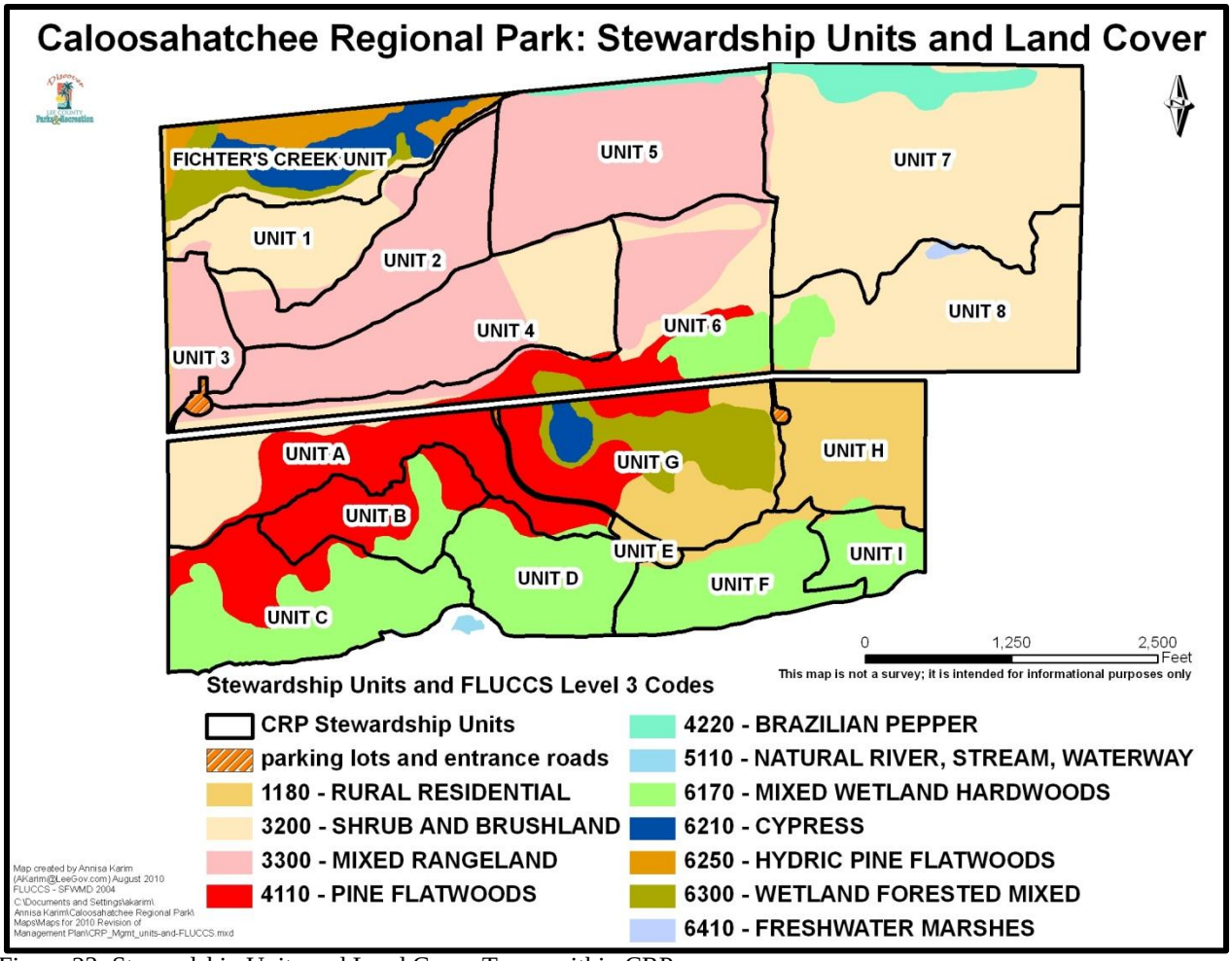

Figure 23: Stewardship Units and Land Cover Types within CRP.

Stewardship activities on all of these units will focus on the control of invasive, exotic plants and animals, prescribed fires where appropriate and restoration (planting of native flora) when needed. The protection of listed plants and animals and the habitats in which they live will be the guiding principle of these activities. The following paragraphs describe each stewardship unit at CRP.

- Fichter's Creek Unit (approximately 41.86 acres): The Fichter's Creek stewardship unit is located on the extreme northwest corner of the site and bounded on the west and north by the park's boundary lines. Portions of the mountain bike and equestrian trails constitute the southern/ eastern boundary of the unit; otherwise, this unit contains no public access trails. As the name suggests, Fichter's Creek and the associated wetlands are located within this unit. The creek runs from a northeast to southwest direction through the unit. The Fichter's Creek stewardship unit is comprised of primarily of wetlands (FLUCCS 6210, 6250 and 6300). A small area of uplands (FLUCCS 3200) exists on the southern portion of this unit. Wabasso Sand, Pineda Fine Sand (depressional), Copeland Sandy Loam (depressional) and Boca Fine Sands underlie this portion of the site.

As a requirement of LCDNR obtaining the required permits from the SFWMD (Application Number 090504-3; Permit Number: 36-03165-P) to go forward with the Fichter's Creek Restoration Project, the following conditions will be placed on the Fichter's Creek Stewardship Unit for the remainder of the lease period (Appendix A; Lease No. 3698) between TIITF and Lee County.

Lee County agrees not to undertake or authorize any activity on or use of the Fichter's Creek stewardship unit that is inconsistent with the following language. Without limiting the generality of the foregoing, the following activities and uses are expressly prohibited within this unit:

(a) Constructing or placing buildings, roads, signs, billboards or other advertising, utilities or other structures on or above the ground.

(b) Dumping or placing soil or other substance or material as landfill or dumping or placing of trash, waste or unsightly or offensive materials.

(c) Removing, trimming, or destroying native trees, shrubs or other vegetation within the stewardship unit. All nonnative species, including those identified by FLEPPC, are exempt from this requirement.

(d) Excavating, dredging or removing loam, peat, gravel, soil, rock or other material substances in such a manner as to affect the surface.

(e) Surface use, except for purposes that permit the land or water area to remain predominantly in its natural condition.

(f) Activities detrimental to drainage, flood control, water conservation, erosion control, soil conservation or fish and wildlife habitat preservation.

(g) Acts or uses detrimental to such retention of land or water areas.

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

The portions of the mountain bike and equestrian trails that constitute the southern/ eastern boundary of the Fichter's Creek stewardship unit will be maintained for the protection natural resources and the safety of the public. Nonnative trees, shrubs and other vegetation will be treated and/ or removed dependent on funding and staffing availability. Native trees will be pruned to the standards of the American National Standards Institute (ANSI) and as specified within the LCPR Operations Manual. While trail maintenance may be necessary from time to time, these activities and the trail itself will not impact the wetlands (FLUCCS 6210, 6250 and 6300) within the unit.

- Unit 1 (approximately 28.63 acres): The Unit 1 stewardship unit is located on the northwest corner of CRP and is bounded on the north by the Fichter's Creek stewardship unit. A majority of the southern/ eastern boundary of Unit 1 is an equestrian trail; the remainder of the southern boundary is a mowed line. The western boundary of Unit 1 is the western boundary of CRP. This stewardship unit is comprised of rangelands (FLUCCS 3200 and 3300) and Caloosa Fine Sand (dredge spoil) underlies this portion of

CRP. In addition to the equestrian trails that form the boundaries of this stewardship unit, a portion of the site's mountain bike trails are within this unit.

The dry prairie (FLUCCS 3200) portion of this stewardship unit will be impacted by the Fichter's Creek Restoration Project. A goal of this project is to restore the appropriate hydroperiod and water quality within Fichter's Creek to maintain a functioning ecosystem. Additional benefits include alleviating risks of the flooding of neighboring properties in the vicinity of Fichter's Creek. An approximately 3.2-acre lake and three dry detention areas totaling approximately 7.1 acres associated with this endeavor are projected to be created within the Unit 1 stewardship unit. To aid in the establishment of the native flora that may be planted during the Fichter's Creek Restoration Project, this unit will not be burned until FY 2015/2016. Figure 24 shows the approximate locations of the components of the Fichter's Creek Project and Appendix J provides greater detail about the project.

As of the drafting of this Land Stewardship Plan, LCDNR was in the process of acquiring all required permits and coordinating with adjacent landowners to gain necessary authorization to move forward with this project.

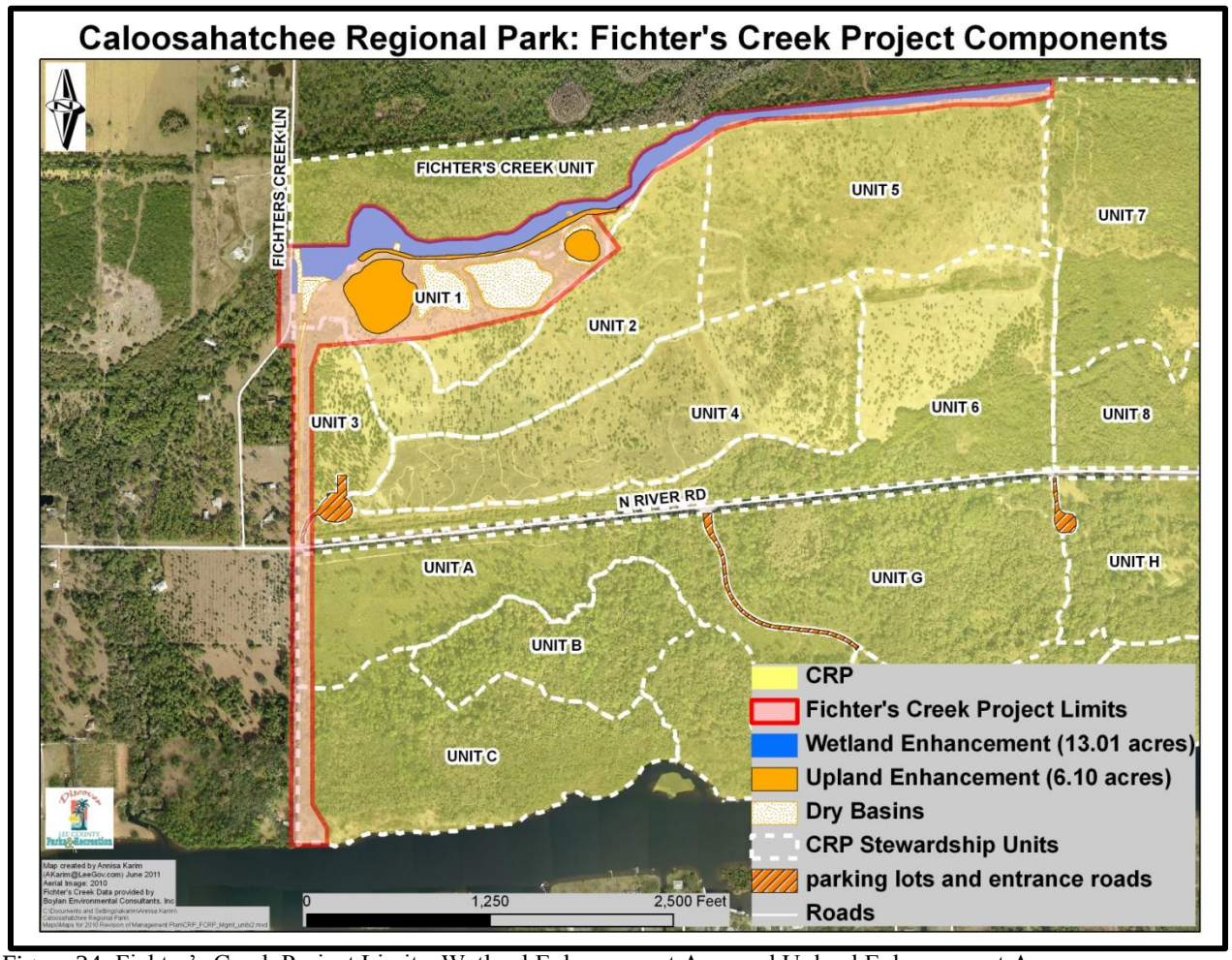

Figure 24: Fichter's Creek Project Limits, Wetland Enhancement Area and Upland Enhancement Area.

- Unit 2 (approximately 39.01 acres): Unit 2 is located on the western portion of the north side of CRP. It is bounded on the north by Unit 1; the bulk of this boundary line is comprised of equestrian trails. A small portion of the northern boundary is a mowed line. The Unit 2 stewardship unit is bounded on the east by Unit 5 and on the south by Unit 4; both of these boundary lines are equestrian trails. Unit 3 is located to the west of Unit 2 and a majority of this boundary line is also an equestrian trail. This stewardship unit is comprised of rangelands (FLUCCS 3200 and 3300) and Caloosa Fine Sand (dredge spoil) underlies this portion of the site. In addition to the equestrian trails that form the boundaries of this stewardship unit, a portion of the site's equestrian trails are also within this unit.
- Unit 3 (approximately 14.59 acres): Unit 3 is located along the western boundary of the north side of CRP. Unit 3 is bounded on the north by Unit 1. This boundary line is comprised of a mowed line and mountain bike trails. Unit 3 is bounded on the east by Units 1, 2 and 4. This boundary line consists of equestrian trails and mowed lines. The southern boundary for the Unit 3 stewardship unit is the north side parking lot and approximately 27 feet of the southern boundary of the portion of CRP north of C. R. 78. Red cedar was planted on approximately 6 acres of this unit. This stewardship unit is comprised of rangelands (FLUCCS 3300) and Caloosa Fine Sand (dredge spoil) underlies this portion of the site. In addition to the equestrian trails that form portions of the boundaries of this stewardship unit, a mountain bike trail runs through the unit in a north/ south direction.
- Unit 4 (approximately 57.68 acres): Unit 4 occupies the central and western portion of the north side of CRP. Except for approximately 107 feet of its western boundary (parking lot), equestrian trails make up the entirety of Unit 4's boundary lines. This unit is bounded on the north by Units 2 and 5, on the east and south by Unit 6 and on the west by the parking lot and Unit 3. This stewardship unit is comprised of rangelands (FLUCCS 3200 and 3300) and Caloosa Fine Sand (dredge spoil) underlies this portion of the site. In addition to the equestrian trails that form the majority of the border of this unit, a majority of the Sunburn Meadow and Light Bulb mountain bike trails are found within this unit. An equestrian trail runs through the Unit 4 stewardship unit in a northwest to southeast direction roughly at the boundary between FLUCCS 3200 and FLUCCS 3300. On January 15, 2010, FFS conducted a prescribed fire on the western 34.5 acres of this unit.
- Unit 5 (approximately 63.15 acres): The Unit 5 stewardship unit is located along the northern boundary of the north side of CRP. Equestrian trails from the boundaries on the western, southern and eastern sides of this unit. Unit 5 is bounded to the west by the Fichter's Creek Unit and Units 1 and 2. Units 4 and 6 are directly south of the Unit 5 stewardship unit. This unit is bounded on the east by Unit 7. This stewardship unit is comprised of rangelands (FLUCCS 3300) and Caloosa Fine Sand (dredge spoil) underlies this portion of CRP. Mountain bike trails and equestrian trails are found on the periphery of this unit. A wildfire in March 2001 burned through much of this unit; on December 21, 2010, FFS conducted a prescribed fire on this unit.
- Unit 6 (approximately 63.39 acres): Unit 6 is located along the southern boundary of the north side of CRP. While oddly shaped, this unit takes advantage of public access trails (equestrian) as logical boundaries. In addition to the equestrian trails that form the

boundaries or a majority of this unit, mountain bike trails exist within this area. Unit 6 is bounded from west to east by the parking lot and Units 4, 5, 7 and 8. The Unit 6 stewardship unit is comprised of rangelands, upland forests and wetlands (FLUCCS 3200, 3300, 4100, 6170 and 6300). Six, mapped soils form the substrate of this stewardship unit: Caloosa Fine Sand (dredge spoil), Copeland Sandy Loam (Depressional), Immokalee Sand, Wabasso Sand (Limestone Substratum), Wabasso Sand and Oldsmar Sand.

- Unit 7 (approximately 102.25 acres): Unit 7 is the largest stewardship unit within CRP. Its northern and eastern boundaries correlate to the northern and eastern boundaries of the north side of the park. The western boundary line of this unit is made up of equestrian trails and service roads. The majority of the southern line is comprised of equestrian trails. The Unit 7 land stewardship unit contains both equestrian and a large portion of mountain bike trails. A majority of this unit is classified as rangeland (FLUCCS 3200); the SFWMD 2004 land use data also classifies a small portion of this unit as upland forest (FLUCCS 4220) and wetlands (FLUCCS 6410). Caloosa Fine Sand (dredge spoil) forms the substrate of a majority of this unit while Wabasso Sand is mapped in the extreme southeast corner of the unit.
- Unit 8 (approximately 58.47 acres): The Unit 8 stewardship unit is located along the southern boundary of the north side of CRP. Its southern and eastern boundaries coincide with the southern and eastern boundaries of the north side of the park. The western boundary of this unit is a service road and the northern boundary is an equestrian trail. The Unit 8 stewardship unit is bounded on the west by Unit 6 and on the north by Unit 7. Other than the equestrian trail that forms its northern boundary, there are no other equestrian trails within this unit. Mountain bike trails do exist within this unit. A majority of this unit is classified as rangeland (FLUCCS 3200); the SFWMD 2004 land use data also classifies a small portion of this unit as wetlands (FLUCCS 6170 and 6410). Caloosa Fine Sand (dredge spoil) forms the substrate of a majority of this unit while Wabasso Sand is mapped in the extreme northeast corner of the unit and Wabasso Sand, Limestone Substratum is mapped for the southwestern portion of the unit.
- Unit A (approximately 45.27 acres): Unit A is located on northwest corner of the south side (area of the park south of C. R. 78) of CRP. Its northern and western boundaries correlate to the northern and western boundaries of the south side of the park. The eastern boundary is the main entrance road to CRP and the southern boundary is a portion of the Palmetto Path hiking trail. In addition to the hiking trail that forms the southern boundary of this unit, a hiking trail runs in a north-south direction along the western boundary line. The Kellum Homesite is also located within this unit. A majority of the proposed zip line will likely be installed within this unit (excluding areas encumbered by an easement). The SFWMD 2004 land use data maps two upland communities within this unit: shrub and brushland (FLUCCS 3200) and pine flatwoods (FLUCCS 4110). Immokalee Sand and Oldsmar Sand form the majority of the substrate of this unit while Wabasso Sand and Copeland Sandy Loam (Depressional) soils underlie a small part of this unit. Prescribed fires were conducted on this unit on February 9, 2006 and in December 2007.
- Unit B (approximately 25.56 acres): Unit B is located on the south side of CRP. The Palmetto Path forms the entire boundary of this unit. Other than this hiking trail, no other

public access trails exist within this unit. The proposed zip line may cross the northern portion of this unit. The Unit B stewardship section is bounded on the north by Unit A and to the south by Units C and D. The perpetual spoil easement described in the paragraph above exists in the extreme western part of Unit B. Pine flatwoods (FLUCCS 4110) and mixed wetland hardwoods (FLUCCS 6170 are the mapped natural plant communities within this unit. Bradenton Fine Sand, Copeland Sandy Loam (Depressional), Wabasso Sand, Immokalee Sand and Oldsmar Sand form the substrate of this stewardship unit. A prescribed fire was conducted on this unit on February 9, 2006.

- Unit C (approximately 51.11 acres): Unit C is located on southwest corner of the south side (area of the park south of C. R. 78) of CRP. Its southern and western boundaries correlate to the southern and western boundaries of the south side of the park. The eastern boundary line of this unit is the Oxbow hiking trail and the northern boundary line is a portion of the Palmetto Path hiking trail. In addition to these hiking trails, a hiking trail runs through this unit. Three communities are mapped within this unit. Shrub and brushland (FLUCCS 3200) is mapped for in the extreme northwest corner of this area. Pine flatwoods (FLUCCS 4110) and mixed wetland hardwoods (FLUCCS 6170) are mapped in a majority of this unit. Immokalee Sand and Oldsmar Sand form the majority of the substrate of this unit while Wabasso Sand and Copeland Sandy Loam (Depressional) soils underlie a small part of this unit. Bradenton Fine Sand, Copeland Sandy Loam (Depressional) and Wabasso Sand underlie the Unit C stewardship area. A prescribed fire was conducted on this unit on November 22, 2005.
- Unit D (approximately 29.79 acres): Unit D is located along the southern boundary (shoreline) of CRP. Hiking trails form the western, northern and eastern boundaries of this unit. The Fishing Pier, Shoreline hiking trail and portions of the Oxbow trail are located within this area. The Overlook is located at the southern terminus of the Overlook Trail. This trail serves as the eastern boundary of this unit. Unit D is bounded on the west by Unit C, on the north by Units A and B, on the east by Units E and F and on the south by the Caloosahatchee River. A majority of this unit is mapped as mixed wetland hardwoods (FLUCCS 6170). The rest of the unit is mapped as pine flatwoods (FLUCCS 4110) and rural residential (FLUCCS 4200). Copeland Sandy Loam (Depressional) and Wabasso Sand form the substrate of this stewardship area. A prescribed fire was conducted on this unit on November 22, 2005.
- Unit E (approximately 2.90 acres): Unit E is the smallest stewardship unit delineated for CRP. This unit is bounded by the main entrance road and the associated parking area. Two picnic pavilions, the main entrance offices and restroom facilities are located within this unit. This area is the point at which day users may access the park's hiking trails. The periphery of this unit is maintained as mowed turf. Approximately 1.35 acres of the unit consists of shade trees and mowed turf. Other than the control of exotic, invasive plants and animals, no stewardship activities will take place within this unit. This unit is bounded on the west by Unit A on the north by Unit G, on the southeast by Unit F and on the southwest by Unit D.
- Unit F (approximately 29.62 acres): Like Unit D, Unit F is located along the shoreline of CRP. It is bounded from west to east by Units D, E, G, H and I. Hiking trails form the boundaries if Unit F. Additionally, portions of the River Hammock and Shoreline trails are located within this unit. The Overlook is located at the southern terminus of the

Overlook Trail. This trail serves as the western boundary of this unit. A majority of this unit is mapped as mixed wetland hardwoods (FLUCCS 6170). The northern portion of the unit is mapped as rural residential (FLUCCS 4200). Copeland Sandy Loam (Depressional) and Bradenton Fine Sand are the mapped soils for this unit.

- Unit G (approximately 57.00 acres): Unit G is the largest stewardship unit on the south side (portion of CRP south of C. R. 78) of the park. Its northern boundary line coincides to the northern boundary line of the south side of the park. It is bounded on the west by the main entrance road, to the south by Units E and F, and to the east by the campground entrance road and Unit H. Except for the hiking trails that from portions of the southern and eastern boundary lines of this unit, no other public access trails are currently located within the unit. A service road, the camp host site and the maintenance area are situated in the northeast corner of this unit. Four shower facilities and three campsites are located along the eastern boundary of Unit G. The SFWMD 2004 land use dataset designates four land cover types for this unit: rural residential (FLUCCS 1180), pine flatwoods (FLUCCS 4110), cypress (FLUCCS 6210) and wetland forest mixed (FLUCCS 6300). Bradenton Fine Sand, Wabasso Sand (Limestone Substratum), Wabasso Sand, Copeland Sandy Loam (Depressional) and Oldsmar Sand comprise the substrate of Unit G.
- Unit H (approximately 32.07 acres): Unit H is located in the northeast corner of the south side of CRP. Its northern and eastern boundary lines correlate with the northern and eastern boundary lines of the south side of the park. This unit is bounded on the west by Unit G and on the south by Unit I. Numerous trails are located within this area. Additionally, two equestrian campsites, sixteen campsites, two restroom facilities, four shower facilities, the lodge and the campground offices are located within this unit. Unit H is mapped entirely as rural residential (FLUCCS 4200). Bradenton Fine Sand is mapped for a majority of this unit. Copeland Sandy Loam (Depressional) and Wabasso Sand are also mapped for this unit.
- Unit I (approximately 12.76 acres): Unit I is located on the southeast corner of the south side of CRP. Like Units C, D and F, this unit's southern boundary is the northern bank of the Caloosahatchee River. This stewardship unit's eastern boundary coincides with the eastern boundary of the south side of CRP. Campground trails serve as the northern boundary line for this unit while the River Hammock trail and the Shoreline trail form the western boundary of this unit. Unit I is bounded on the west by Unit F and to the north by Unit H. Public hiking trails and the Kayak (Blueway) Launch are located within this unit. The SFWMD 2004 land use dataset designates two land cover types for this unit: rural residential (FLUCCS 1180) and mixed wetland hardwoods (FLUCCS 6170). Bradenton Fine Sand and Copeland Sandy Loam (Depressional) are the mapped soil types for Unit I. The Shoreline Stabilization Project is proposed for the southeastern 291 linear feet of this unit. Refer to the Legal Obligations and Constraints section of this document for a description of the Shoreline Stabilization Project.

C. Goals and Strategies (Short-term/ Long-term)

Safeguarding and enhancing the environmental integrity and biological diversity of CRP is the primary goal and the guiding principle for the operation and management of the park. The primary stewardship objectives for CRP are appropriate habitat improvements for listed species,

continued prescribed burning within the appropriate communities at appropriate intervals and the continued control of invasive, exotic plants and animals.

The following goals and objectives have been developed specifically for CRP. They represent ideas of LCPR personnel in charge of managing and protecting the area. Target dates for completion of objectives are classified as short-term (first two years) or long-term (up to ten years).

The following is a description of how each of these goals will be carried out. A projected timetable outlining when each activity will take place may be found in the "Projected Timetable for Implementation" section.

i. Prescribed Burning/ Fire Management

Historically arising from lightning strikes, fire renews and sustains fire-dependent ecosystems and the associated flora and fauna. Prescribed burning, as a surrogate for natural fire, is essential for the perpetuation, restoration, and stewardship of many natural plant communities. Specifically, prescribed fire may be used to reduce fuel loads, improve wildlife habitat, enhance recreational resources, decrease the rate of invasion by certain exotic species, reduce pest insect populations and aid in the restoration the native, fire-dependent ecosystems (Monroe et al. 2006, Stevens and Beckage 2010). Periodic fires enable pyric communities to remain within the seral or intermediate stage of community succession (e.g., allows a pine flatwood to remain a pine flatwood system instead of transitioning to an oak dominated system). Periodic fires subsequently facilitate the long-term survival of the plants and animals that have adapted to this transitional stage. Alternatively, the exclusion of fires allows these transitional stages to mature until a climax hardwood community exists. Additionally, the lack of fire in pyric communities results in heavy fuel accumulation (e.g., leaf litter on the ground, dense vegetation) which, in turn, results in increased wildfire hazards. Florida Statutes in Chapter 590 and FAC Chapter 5I-2 govern the use of prescribed fire in Florida.

Conducting prescribed fires within pyric plant communities and at appropriate intervals is crucial to achieving some of the desired outcomes at CRP. These outcomes include restoring habitat, protecting threatened and endangered species and controlling the spread of some species of nonnative plants. These outcomes are in accord with Section 253.034 of the Florida State Statutes and with the goals of LCPR.

A majority of the north side of CRP is mapped as containing pyric communities. However, the heavy infestation of Brazilian pepper of the approximately 160 eastern acres (Units 7 & 8) of the north side currently precludes the use of prescribed fire as a management tool (see "Exotic and Invasive Species: Maintenance and Control" section below). Units 1, 2, 4, 5 and 6 will be burned in intervals depending on appropriate weather conditions and the availability of staff and funding. The Shrub and Brushland (FLUCCS 3200; FNAI Classification – Dry Prairie) and Pine Flatwoods (FLUCCS 4110; FNAI Classification – Mesic Flatwoods) areas of the south side of the park are classified as pyric communities. These plant communities are located within stewardship units A, B and C. These will be burned at appropriate intervals contingent on suitable weather conditions and the availability of staff and funding. These plant communities are described in detail in the "Natural Plant Communities" section of this document. Please note, to aid in the establishment of the native flora that will be planted during the Fichter's Creek

Restoration Project, Unit 1 will not be burned until FY 2015/2016 (Figure 25). The "Projected Timetable for Implementation" provides the projected sequence of prescribed burns by unit.

Overall Goal: Reestablish a fire regime conducive to maintenance of pyric plant communities (Figure 25).

Short-term objectives - 2011 - 2013

- Develop a prescribed burn plan.
- Reintroduce prescribed fire to pyric communities (Units 2, 4, 5 and 6; Units A, B and C: ~ 345.17 acres)

Long-term objectives - 2013 - 2021

- Reintroduce prescribed fire to Unit 1 (FY 2015/2016)
- Continue to use prescribed fire on a two to six year fire return interval on fire-adapted communities (based on site specific conditions). This will include Units 7 and 8 when feasible.

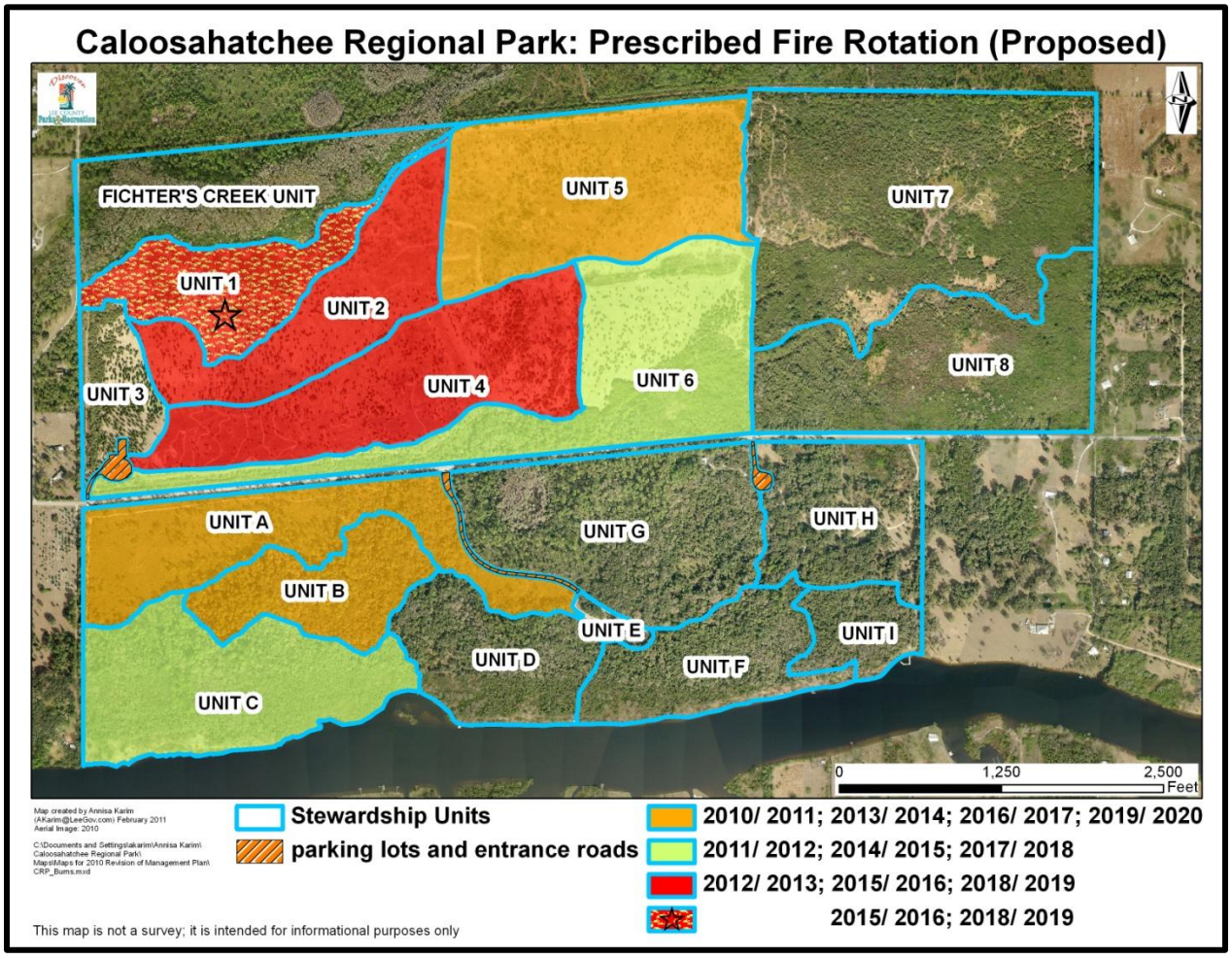

Figure 25: Proposed Prescribed Burn Rotation (Units 7 and 8 will be incorporated when feasible).

ii. Habitat Restoration and Improvement

The primary stewardship challenge at CRP is the restoration of the approximately 392 (~51.92% of the park) acres of Caloosa Fine Sand on the north side of the park. This "soil" is the dredge spoil area that resulted from the dredging of the Caloosahatchee River. Because of the increased elevation, exotic vegetation has dominated the site in the past and exotic grasses currently are the most problematic group creating a consistent monoculture over much of the site. It must be noted that the "restoration" of this site is not feasible because of the difficulty and cost of returning the site to natural grade. "Reclamation" with native plant species may better describe the strategy proposed in this plan. LCPR staff is systematically addressing this issue. Returning the system to a natural fire regime, controlling exotic species and planting native species (when feasible) will aid in the reclamation and improvement of the site.

The south side of CRP (portion of the park south of C. R. 78) contains healthy communities with native vegetation. Controlling the exotic species on the south side is the primary stewardship objective.

Overall Goal: Restore/ Reclaim plant communities as appropriate.

Short-term objectives - 2011 - 2013

- Develop a prescribed burn plan.
- Survey and map exotic, invasive plants by stewardship unit.
- Reintroduce prescribed fire to pyric communities (Units 2, 4, 5 and 6; Units A, B and C: ~ 345.17 acres)
- Continue treatment of exotic, invasive plants (~350 acres)

Long-term objectives - 2013 - 2021

- Develop comprehensive restoration plan for dredge spoil areas on the north side of the park.
- Plant test plots on north side to mimic natural plant communities found in south Florida
- Monitor test plots for success (based on overall survival of plants without the aid of human intervention once established).
- Reintroduce prescribed fire to Unit 1 (FY 2015/2016)
- Continue to use prescribed fire on a two to six year fire return interval on fire-adapted communities based on site specific conditions. This will include Units 7 and 8 when feasible.
- Continue treatment of exotic species as needed.

iii. Hydrological Preservation and Restoration

Hydrological considerations are a significant factor in land stewardship efforts at CRP relative to maintenance of the plant communities dependent on a wetland hydroperiod. The channelization of the Caloosahatchee River by the USACOE has resulted the continued erosion of the almost vertical bank caused by the frequency and speed of the boats traveling the river, especially in the winter months. This underscouring and erosion of the shoreline southern boundary of the park is the most significant stewardship challenge on the south side of the park.

Drainage within the park is mostly internal except for Fichter's Creek, located in the northwest corner of the park. The following (in blue text) is a narrative provided by LCDNR to LCPR in regards to the Fichter's Creek Restoration Project:

Fichter's Creek Restoration is an Improvement Project which increases water quality treatment and enhances flood protection within the Fichter's Creek Watershed. Fichter's Creek is a natural system flowing from shared headwaters within the Babcock Property in Charlotte County. Historically, water has proceeded from the headwaters known as Saddler's Hammock, through Fichter's Creek, Cypress Creek and Hall Creek to the Caloosahatchee River. During a dredging project for the Caloosahatchee River, fill was placed on what is now the Caloosahatchee Regional Park and a ditch was constructed that directed runoff from the fill areas to the river. This ditch was connected to the creek on the north end and allows runoff to be diverted from the creek. Farming within the Babcock property also diverts and channels the overland flow from the headwaters. The purpose of this project is to improve the water quality within the creek system and to relieve some of the flooding that occurs within developed portions of the watershed. The project analysis included consideration of flows downstream of proposed improvements so that the developed areas were not adversely impacted.

Proposed changes to the Creek system include regrading the existing manmade ditch to create a filter marsh north of CR 78, replacing the existing 36" culvert in the manmade ditch at North River Road with a water control structure and double 36" culvert pipes under CR 78; regrading the berm between the proposed filter marsh and Fichter's Creek Lane to the west and filling existing breaches; improving the cross-section in the manmade ditch south of CR78 to keep the flow within the ditch reducing flooding to the west of the park property; creating a meandering swale connection to divert part of the flow from the existing manmade ditch where it ties into the Caloosahatchee River; replacing the existing Fichter's Creek Lane Bridge crossing the Creek with a 6'x10' box culvert and concrete spillway; construction of a wet detention pond and dry detention ponds, including control structures, within the Caloosahatchee Regional Park and reconstruction of existing berms to block breaches between the park, the creek and the filter marsh.

Since this is a restoration project, the project is expected to have a net positive environmental impact. Wetland impacts within the Creek are limited to three areas. The greatest impact will be at the Fichter's Creek Lane bridge site as the existing structure must be removed and replaced. The other two locations involve removal and replacement of existing damaged and outdated outfall pipes from the park. An existing ditch will be regraded to create a filter marsh along the west side of the Caloosahatchee Regional Park north of CR78 (North River Road). Exotic removal is proposed on the berm along the Creek within the Park boundaries. Coordination with FWC will occur concurrently with the ERP regarding protected species management on the site.

The improvements impact the stages and flow within the creek system. Highlights of the changes are as follows:

Interface with the Cypress Creek Watershed: The peak stages at the interface with the Cypress Creek watershed remain the same for the 5 year, 25 year and 100 year storm events. There is a decrease in the flow volume between the watersheds of 8 acft at 100 hours and 17 acft 360 hours during a 25 year storm event.

Inflow into the Hall Creek Watershed: The peak stages at the inflow to the Hall Creek Watershed stay essentially the same for the 5 year, 25 year and 100 year storm events. There is a

decrease in the flow volume between the watersheds of 26 acft at 100 hours and 98 acft at 360 hours during a 25 year storm event.

Inflow into the Main Channel of Fichter's Creek Upstream of the Regional Park: The hydroperiod within the main channel is increased with the improvements. The peak stages increase 0.16 feet during the 25-year storm event. The 5 year and 100 year storm events have peak stages within 0.1 feet of the existing stages. The volume of runoff directed to the channel is increased by156 acft at 100 hours and 206 acft at 360 hours during a 25 year 3 day storm event. A goal for the project is met by increasing the volume of water within the main creek section.

Outflow Downstream from the Fichter's Creek Lane Bridge: The proposed improvements include replacement of the existing bridge for Fichter's Creek Lane. The surrounding areas adjacent to the current bridge have flooded during significant storm events in the past. The proposed peak stages downstream of the bridge have been reduced. The peak stage for the 5 year storm event is lowered by 0.24 feet. The 25 year storm event has a peak stage that is reduced 1.4 feet. The 100 year storm event peak stage is decreased by 1.74 feet. The volume discharged downstream is decreased by 35.8 acft at 100 hours and 167.4 acft at 360 hours during a 25 year 3 day storm event. A goal for the project is met by reducing the flooding to existing developed areas along the creek.

Upstream Side of the CR78 Bridge over Fichter's Creek: Improvements reducing overland flow in addition to reduce flow within the main channel are reflected in the proposed flow volumes at the CR78 Bridge over the creek. The peak stages for the 5 year, 25 year and 100 year storm event remain the same or reduced. The volume discharged downstream is decreased by 687.2 acft at 100 hours and 815.9 acft at 360 hours during the 25 year 3 day storm event. The creek stages remain relatively unchanged with a reduction of flooding in the areas adjacent to the creek.

Manmade Ditch discharges under CR 78: Additional treatment is provided in the filter marsh with water then being discharged south under CR 78 through a proposed control structure with two 36" outfall pipes. The peak stages immediately south of the crossing remain essentially unchanged with the enlarged outfall. The volume discharge increases significantly with an additional 65 acft at 100 hours and 280 acft feet at 360 hours during the 25 year 3 day storm event. Improvements to the ditch are proposed to address the additional flow volume.

Manmade Ditch between CR78 and the Caloosahatchee River

Improvements to the existing ditch are proposed to assure that flooding does not occur on the property west of the Caloosahatchee Regional Park. The peak stages for the 5 year, 25 year and 100 year storm events are designed to be less than or equalivalent to the existing stages within the ditch with all flow being channeled within the banks of the ditch.

Outfall to the Caloosahatchee River: A bypass outfall is proposed in addition to the existing manmade ditch outfall to the Caloosahatchee River. The creek will then discharge into the river in three locations. Flow from the main channel will be reduced 691 acft at 100 hours and 820 acft at 360 hours during a 25 year 3 day storm event. The manmade ditch outfall will reduced 61.9 acft at 100 hours and increase 6.9 acft at 360 hours during the 25 year 3 day storm event. The new flow from the bypass will discharge 145.3 acft at 100 hours and 290.6 acft at 360 hours during the 25 year 3 day storm event. The net outfall to the river is a reduction of 608 acft at 100 hours and 523.4 acft at 360 hours.

Conclusion: The improvements to the system increase stormwater retained in the creek north of the Caloosahatchee Regional Park while providing increased water quality treatment on the park property and reducing flooding of developed areas. The project also addresses the need to have base flow to the Cypress Creek Watershed and Hall Creek Watershed.

Overall Goal: Restore and maintain the site hydrology as much as possible given the major topographic changes that have occurred.

Short-term objectives - 2011 - 2013

- LCDNR will complete and implement the Fichter's Creek Restoration Plan.
- Complete pilot Shoreline Stabilization Project.
- Continue to control exotic vegetation in wetland areas.

Long-term objectives - 2013 - 2021

- If feasible, develop a stabilization plan for the shoreline areas experiencing high levels of erosion.

iv. Sustainable Forest Management

The Society of American Foresters uses the following definitions for Sustainable Forest Management: "(sustainable forestry management) (SFM) this evolving concept has several definitions (1) the practice of meeting the forest resource needs and values of the present without compromising the similar capability of future generations —note sustainable forest management involves practicing a land stewardship ethic that integrates the reforestation, managing, growing, nurturing, and harvesting of trees for useful products with the conservation of soil, air and water quality, wildlife and fish habitat, and aesthetics (UN Conference on Environment and Development, Rio De Janeiro, 1992) (2) the stewardship and use of forests and forest lands in a way, and at a rate, that maintains their biodiversity, productivity, regeneration capacity, vitality, and potential to fulfill, now and in the future, relevant ecological, economic, and social functions at local, national, and global levels, and that does not cause damage to other ecosystems (the Ministerial Conference on the Protection of Forests in Europe, Helsinki, 1993) —note criteria for sustainable forestry include (a) conservation of biological diversity, (b) maintenance of productive capacity of forest ecosystems, (c) maintenance of forest ecosystem health and vitality, (d) conservation and maintenance of soil and water resources, (e) maintenance of forest contributions to global carbon cycles, (f) maintenance and enhancement of long-term multiple socioeconomic benefits to meet the needs of societies, and (g) a legal, institutional, and economic framework for forest conservation and sustainable management (Montréal Process, 1993)"

The FFS works to protect and manage Florida's forest resources through a stewardship ethic to assure these resources will be available for future generations. As stated in the "Analysis of Multiple-Use Potential section of this document, LCPR staff will consider the use of timber harvesting programs as a means to accomplish land stewardship objectives. Furthermore, if this stewardship activity is employed, it will be in accordance with the goals of sustainable forest management.

Overall Goal: Conduct Sustainable Forest Management practices if and when appropriate.

Short-term objectives - 2011 - 2013

- If appropriate, consult with the Division of Forestry to complete a Timber Assessment.

Long-term objectives - 2013 - 2021

- Continue to consult with the Division of Forestry regarding sustainable forest management activities as appropriate.

v. Exotic and Invasive Species: Maintenance and Control

The three species of invasive, exotic flora that constitute the largest biomass and coverage at CRP are Guineagrass, Brazilian pepper and cogongrass. Land stewardship endeavors at CRP have resulted in minimal control of Guineagrass. In an effort maximize the efficiency of chemicals, time and monies used to control Guineagrass, LCPR staff, in partnership with the University of Florida's Institute of Food and Agricultural Sciences (UF/ IFAS), have devised an experiment to test the efficacy of selected herbicides. Seven groups (6 on the north side and 1 on the south side) of eight plots each (56 total plots) have been delineated within CRP. One plot from each of the seven groups will be labeled as a control plot and will not receive any treatments throughout the experiment. The remaining seven plots in each group will receive different mixtures of herbicides to control the Guineagrass. Staff will measure and record the number of live stems in an equal portion of each of the 56 plots (including control plots). A two-way repeated measures, analysis of variance test will be performed on the data to find out if there is a significant difference in the effectiveness of the herbicides used in the experiment. Ideally, this experiment will last for two years (four seasons) and results disseminated via presentations and published reports.

Small infestations of exotic species will be controlled on an on-going basis throughout the park. The heavy infestation of Brazilian pepper on the approximately 160 eastern acres (Units 7 & 8) of the north side currently precludes the use of prescribed fire as a management tool. Funding for the removal of this Brazilian pepper is not available. However, LCPR staff will systematically treat the gynoecious (female) individuals of this dioecious plant to (1) reduce the overall extent of Brazilian pepper on these units and (2) reduce the on-site seed source. Ewel et al. (1982) estimated the ratio of female individuals in successional ecosystems of Everglades National Park at 50%. Stevens and Beckage (2010) confirmed this ratio (51%) in Florida Pine Savannas. While the north side of CRP may not conform to the plant communities studied by these authors, a 50% ratio (or thereabouts) of female Brazilian pepper trees on the north side of CRP is likely. Once the occurrence of live Brazilian pepper is cut to approximately 50%, prescribed fire may be used to control this invasive, exotic shrub. Stevens and Beckage (2010) discovered that even though the individuals that survived fire exhibited rapid growth rates (by resprouting) they also exhibited lower fecundity rates.

Currently, cogongrass covers approximately 60 acres of the north side of CRP. These areas were initially treated with funds from a grant received from the WHIP. The WHIP treatment was initiated on April 29, 2009 and the area was retreated approximately eight weeks after the conclusion of the first treatment. The FWC Invasive Upland Plant Control Management Group has approved funding for the re-treatment of these areas. Re-treatment of cogongrass occurred in June, 2011.

While all FLEPPC Category I and Category II plants will be targeted for control, of major concern are rosary pea and old-world climbing fern. A marked increase in rosary pea has been detected in the last 18-24 months. The campground area and the Far East mountain bike trail on the north side of the park are the major areas of increased coverage. Continued control of rosary pea will be a priority. LCPR staff has detected Old-world climbing fern occurring sporadically on the north side and impacted areas have been treated as discovered. In addition to surveys by park staff, volunteers will be recruited to record areas of this invasive, exotic plants detected specifically on public access trails.

Four, exotic vertebrate species have been documented within CRP (Table 4). While all of these animals have some degree of impact on the native plants and animals at the park, the feral hog is of primary concern. Lee County currently funds a hog trapper to remove feral hogs from county parks and preserves including CRP. Currently, this is the only method of control for this invasive, exotic species. LCPR staff will consult with experts within the FWC in the development of specific methodologies to target and eradicate invasive, non-native species while ensuring the protection of native wildlife.

Overall Goal: Control all invasive plants and animals to at least a maintenance level.

Short-term objectives - 2011 - 2013

- Complete the Guineagrass experiment as described above.
- Develop a work plan with volunteer base focused on exotic control.
- Provide "Basic Herbicide Short Courses" for volunteers as needed.
- Survey and map exotic, invasive plants by stewardship unit.
- Continue treatment of exotic, invasive plants (~350 acres)

Long-term objectives - 2013 - 2021

- Continue to use prescribed fire on a two to six year fire return interval on fire-adapted communities. This will include Units 7 and 8 when feasible.
- Continue treatment of exotic species as needed.
- Develop comprehensive restoration plan for dredge spoil areas on the north side of the park.

vi. Capital Facilities and Infrastructure

The design, planning and construction of capital infrastructure projects at CRP have already been completed. The on-going infrastructure projects deal with public access trail systems. Short-term and long-term goals for the maintenance and alteration public access trails is described in the Public Access and Passive, Recreational Opportunities section of this document.

vii. Imperiled Species Habitat Maintenance, Enhancement, Restoration, or Population Restoration

Lee County's approach to resource management may be described as "natural systems management". This approach aims at managing the natural communities of each unit as parts of an interrelated system, rather than managing for the benefit of individual species. The general composition of each community, as it may have appeared at the beginning of Florida's historical

period, is determined by considering factors such as climate, geology, soil, hydrology, and fire frequency. Measures are then implemented to recreate, to the extent possible, the natural processes and conditions that prevailed at that time, with the goal of restoring each community to its "original" condition. Portions of the biological communities within the park were harshly impacted in the recent past. These natural systems will require both time and effort for restoration to succeed. However, burning fire-adapted communities, controlling exotic species, preventing erosion due to human activities, restoring surface water regimes, and other such measures will assist in their eventual recovery to a level closer to original natural conditions than presently occur.

To date, 10 listed plant species (Table 5) and 13 listed wildlife species (Table 6; species profiles provided in Appendix D) occur within the boundaries of CRP. As stewardship activities progress within CRP, the habitats of these imperiled species will continue to become more suitable to supporting their populations and therefore will help to ensure their long-term survival. As funds to conduct stewardship activities are limited, LCPR staff will apply for grants and encourage professionals and students alike to helping staff maintain comprehensive lists of the flora and fauna of the park.

Overall Goal: Conduct stewardship activities conducive to the long-term survival of imperiled species within CRP.

Short-term objectives - 2011 - 2013

- Maintain comprehensive lists of the flora and fauna of the park.

Long-term objectives - 2013 - 2021

- In cooperation with FWC, develop a Wildlife Management Strategy that addresses all appropriate fish and wildlife species, including appropriate imperiled species, their habitats, and their sustainability based on site-specific population data. In conjunction with this strategy, develop and institute a monitoring program as funding and staffing allows.
- Continue to use prescribed fire on a two to six year fire return interval on fire-adapted communities. This will include Units 7 and 8 when feasible.
- Continue treatment of exotic species as needed.
- Develop comprehensive restoration plan for dredge spoil areas on the north side of the park.

VII. PROJECTED TIMETABLE FOR IMPLEMENTATION

Table 12 depicts the planning and progression of stewardship activities for the next ten years. The primary constraints to the stewardship and restoration of CRP are funding and staffing as discussed in the next section of this document.

Table 12: Projected Timetable for Implementation

Fiscal Year (Oct. – Sept)/ Stewardship Activity*	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020
(Re)treat invasive, exotic plants within CRP to prevent reinfestation.	x	x	x	x	x	x	x	x	x	x
Prescribed Fire^ (Figure 25)	Unit 5; Units A, B	Unit 6; Unit C	Units 2, 4	Unit 5; Units A, B	Unit 6; Unit C	Units 1, 2, 4	Unit 5; Units A, B	Unit 6; Unit C	Units 1, 2, 4	Unit 5; Units A, B
Feral and exotic animal control	x	x	x	x	x	x	x	x	x	x
Fichter's Creek Restoration Project	x	x								
Shoreline Stabilization Project	x	x								
Plant test plots on north side to mimic natural communities			x	x	x					
Monitor test plots on north side				x	x	x	x	x	x	x

* All activities will be based on the amount of staff and funding available; ^ Fires will be conducted according to appropriate staff, funding, site and weather conditions. Additional units will be burned if appropriate and feasible. To aid in the establishment of the native flora that will be planted during the Fichter's Creek Restoration Project, Unit 1 will not be burned until FY 2015/2016. Stewardship units are shown in Figures 22 and 23.

VIII. FINANCIAL CONSIDERATIONS

Table 13 breaks down the costs of stewardship and operations functions at CRP as outlined by 239.037 (3)(a) F. S.

A. Funding

The county's General Fund is subsidized by ad valorem property taxes in Lee County, Florida. This fund is utilized throughout the County and LCPR receives a portion of these monies. Stewardship and operation activities at CRP are funded primarily through this General Fund. Historically, monies budgeted for the stewardship and operation of CRP have accounted for approximately 3% of funds budgeted to LCPR as a whole. As property taxes decline, the dollar amount received by CRP is expected to decline as well. Staff anticipates that CRP will continue to receive approximately 3% of the General Fund monies appropriated to LCPR (subject to

BoCC approval). Grant funding will be sought to accomplish stewardship and operation goals and objectives for CRP as institutional funding declines.

B. Staffing

The stewardship staffing for the park is included in the position description for the Land Stewardship Coordinator for Hickey's Creek Mitigation Park. This position serves as an advisor to park operations staff on resource-based management questions related to land stewardship, permitting, public access trail improvement, exotic plants, etc. It is recommended that *at least* one member of the CRP staff attend basic fire training courses (S-130, S-190, L-180) offered through the FFS to enable them to serve on the burn crew. If funds are available, this person should then successfully complete FFS's Interagency Prescribed Fire Basic Training course so that this member of the staff can eventually become a Certified Burn Manager as defined in FAC 5-I2.

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Table 13: Annual and Ten-Year Cost Estimates for CRP (Oct. 2010 - Sept. 2020).
Assumptions for cost estimates presented on next page.

Activity/ Fiscal Year	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	Ten-Year Totals
Resource Management											
Exotic Plant Control	$3,890	$3,948	$5,054	$4,019	$4,079	$4,141	$4,203	$4,266	$4,330	$4,395	$42,324
Exotic Animal Control (Feral Hogs)	$9,300	$9,440	$9,581	$9,725	$9,871	$10,019	$10,169	$10,322	$10,476	$10,634	$99,535
Prescribed Burning	$463	$309	$309	$463	$309	$463	$463	$309	$463	$309	$3,862
Cultural Resource Management	$100	$36	$36	$36	$36	$100	$36	$36	$36	$36	$488
Mowing Units on North Side	$17,937	$18,206	$18,479	$18,757	$19,038	$19,323	$19,613	$19,907	$20,206	$20,509	$191,977
Fichter's Creek Restoration	$0	$2,400,000	$0	$0	$0	$0	$0	$0	$0	$0	$2,400,000
Shoreline Stabilization	$48,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$48,000
Annual Subtotals	***$79,691***	***$2,431,939***	***$33,460***	***$33,000***	***$33,333***	***$34,046***	***$34,484***	***$34,840***	***$35,512***	***$35,882***	***$2,786,186***
Administration											
General Administration	$11,191	$11,003	$10,813	$10,620	$10,424	$10,225	$10,023	$9,818	$9,610	$9,399	$103,128
Personnel Costs	$218,000	$218,000	$221,270	$224,589	$227,958	$231,377	$234,848	$238,371	$241,946	$245,575	$2,301,934
Annual Subtotals	***$229,191***	***$229,003***	***$232,083***	***$235,209***	***$238,382***	***$241,602***	***$244,871***	***$248,189***	***$251,557***	***$254,975***	***$2,405,063***
Support											
Land Management Planning	$2,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,000	$1,500	$8,600	$19,100
Land Management Reviews	$476	$200	$0	$0	$0	$0	$0	$0	$0	$476	$1,152
Training/ Staff Development/ Travel	$722	$173	$393	$273	$373	$273	$493	$273	$373	$273	$3,622
Vehicle Purchase	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
Vehicle Operation and Maintenance	$50,553	$51,311	$52,081	$52,862	$53,655	$54,460	$55,277	$56,106	$56,947	$57,802	$541,054
Bulk Fuel	$1,932	$1,971	$2,010	$2,050	$2,091	$2,133	$2,176	$2,219	$2,264	$2,309	$21,155
Annual Subtotals	***$55,683***	***$54,655***	***$55,484***	***$56,186***	***$57,120***	***$57,866***	***$58,946***	***$59,598***	***$61,084***	***$69,460***	***$586,083***
Capital Improvements											
New Facility Construction	0	0	0	0	$50,000	0	0	0	0	0	$50,000
Facility Maintenance	$15,874	$16,112	$16,354	$16,599	$16,848	$17,101	$17,358	$17,618	$17,882	$18,151	$169,898
Annual Subtotals	***$15,874***	***$16,112***	***$16,354***	***$16,599***	***$66,848***	***$17,101***	***$17,358***	***$17,618***	***$17,882***	***$18,151***	***$219,898***
Visitor Services/Recreation											
Information/ Operations	$2,860	$2,903	$2,947	$2,991	$3,036	$3,082	$3,128	$3,175	$3,222	$3,271	$30,615
Staff Led Programs	$1,194	$1,212	$1,231	$1,249	$1,268	$1,287	$1,306	$1,326	$1,346	$1,366	$12,784
Campground Maintenance	$7,634	$7,749	$7,865	$7,983	$8,103	$8,224	$8,347	$8,473	$8,600	$8,729	$81,706
Annual Subtotals	***$11,689***	***$11,864***	***$12,042***	***$12,223***	***$12,406***	***$12,592***	***$12,781***	***$12,973***	***$13,168***	***$13,365***	***$125,104***

(Table continued on next page)

Table 13 (continued): Annual and Ten-Year Cost Estimates for CRP (Oct. 2010 - Sept. 2020).

Activity/ Fiscal Year	2010/ 2011	2011/ 2012	2012/ 2013	2013/ 2014	2014/ 2015	2015/ 2016	2016/ 2017	2017/ 2018	2018/ 2019	2019/ 2020	Ten-Year Totals
Law Enforcement											
Resource protection	$6,159	$6,159	$6,251	$6,345	$6,440	$6,536	$6,634	$6,734	$6,835	$6,938	$65,030
Visitor Services	$2,639	$2,639	$2,679	$2,719	$2,760	$2,801	$2,843	$2,886	$2,929	$2,973	$27,870
Annual Subtotals	***$8,798***	***$8,798***	***$8,930***	***$9,064***	***$9,200***	***$9,338***	***$9,478***	***$9,620***	***$9,764***	***$9,911***	***$92,900***
ANNUAL TOTALS	**2010/ 2011**	**2011/ 2012**	**2012/ 2013**	**2013/ 2014**	**2014/ 2015**	**2015/ 2016**	**2016/ 2017**	**2017/ 2018**	**2018/ 2019**	**2019/ 2020**	
	$400,926	$2,752,372	$358,353	$362,281	$417,289	$372,546	$377,918	$382,838	$388,967	$401,743	
PROJECTED TEN-YEAR COST ESTIMATE (Oct. 2010 - Sept. 2020):											**$6,215,23**

Activity	Cost Estimates Based on the Following Assumptions
Resource Management	
Exotic Plant Control	includes costs of herbicides and anticipated costs for contracted services
Exotic Animal Control (Feral Hogs)	price based on contracted services - increased by 1.5% per year
Prescribed Burning	based on equipment needed for site preparation, conducting fire and post-burn monitoring for each unit. Costs may be lower if more than one unit is burned at a time.
Cultural Resource Management	personnel costs
Mowing Units on North Side	price based on contracted services - increased by 1.5% per year
Fichter's Creek Restoration	cost estimate supplied by LCDNR, includes design and permitting
Shoreline Stabilization	Geoweb has been purchased. Cost based on the rest of materials and labor. Does not include design and permitting costs incurred in 2009.
Administration	
General Administration	cost of fire gear included in 2010/2011 but removed from subsequent years
Personnel Costs	includes all taxes and benefits - stagnant for 2011/ 2012 - increased by 1.5% each subsequent year
Support	
Land Management Planning	based on personnel costs
Land Management Reviews	based on advertising costs of publishing press release for public meetings and visit by Land Management Review Team (anticipated in 2012)
Training/ Staff Development/ Travel	based on costs of license renewal, memberships, travel, etc.
Vehicle Purchase	included in annual costs of "vehicle operation and maintenance"; County's fleet department includes a recurring cost for vehicle maintenance monthly (per vehicle) to include in fund specifically for vehicle purchase
Vehicle Operation and Maintenance	based on costs incurred in 2009/ 2010 - increased by 1.5% per year
Bulk Fuel	based on costs incurred in 2009/ 2010 - increased by 2% per year
Capital Improvements	
New Facility Construction	estimate for proposed campground playground – conceptual – no detailed site plans are available
Facility Maintenance	based on costs incurred in 2009/ 2010 - increased by 1.5% per year
Visitor Services/Recreation	
Information/ Operations	based on costs incurred in 2009/ 2010 - increased by 1.5% per year
Staff Led Programs	based on costs incurred in 2009/ 2010 - increased by 1.5% per year
Campground Maintenance	based on costs incurred in 2009/ 2010 - increased by 1.5% per year
Law Enforcement	
Resource protection	based on personnel costs for law enforcement - dependent on need of services - stagnant for 2011/ 2012 - increased by 1.5% each subsequent year
Visitor Services	based on personnel costs for law enforcement - dependent on need of services - stagnant for 2011/ 2012 - increased by 1.5% each subsequent year

IX. ANALYSIS OF POTENTIAL FOR CONTRACTING PRIVATE VENDORS FOR RESTORATION AND MANAGEMENT ACTIVITIES

Per 253.034(5) and 259.032(10), F.S. and TIITF/ Acquisition and Restoration Council rule requirements, Table 14 delineates management and restoration activities have been considered for outsourcing to private vendors. It has been determined that items selected as "Approved" below are those that Lee County either does not have in-house expertise to accomplish or which can be done at a lesser cost by an outside provider of services. "Conditional" items are those that could be done either by an outside provider or by Lee County at virtually the same cost and with the same level of competence. Those items selected as "Rejected" represent those for which Lee County has in-house expertise and/or which the agency has found it can accomplish at lesser expense than through contracting with outside sources.

Table 14: Analysis for Contracting Private Vendors for Restoration & Management Activities

Stewardship Activity	Approved	Conditional	Rejected
(Re)treat invasive, exotic plants within CRP to prevent reinfestation.		x	
Prescribed Fire		x	
Feral and exotic animal control	x		
Fichter's Creek Restoration Project	x		
Shoreline Stabilization Project	x		
Plant test plots on north side to mimic natural communities			x
Monitor test plots on north side			x

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XI. APPENDICES

APPENDIX A: Lease agreement between the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida and Lee County.

LEE CO. CONTRACT NO. C890102

OAL8102

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND
OF THE STATE OF FLORIDA

(1) 3698

LEASE AGREEMENT

Lease No. 3698

THIS LEASE AGREEMENT, made and entered into this 14th day of June 1989, by and between the BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA hereinafter referred to as "LESSOR," and LEE COUNTY, hereinafter referred to as "LESSEE."

LESSOR, for and in consideration of mutual covenants and agreements hereinafter contained, does hereby lease to said LESSEE, the lands described in Paragraph 2 below, together with the improvements thereon, and subject to the following terms and conditions:

1. DELEGATIONS OF AUTHORITY: LESSOR'S responsibilities and obligations herein shall be exercised by the Division of State Lands, Department of Natural Resources.

2. DESCRIPTION OF PREMISES: The property subject to this lease, is situated in the County of Lee, State of Florida and is more particularly described in Exhibit A attached hereto and hereinafter called the "leased premises".

3. TERM: The term of this lease shall be for a period of 50 years commencing on May 11, 1989 and ending on May 10, 2039, unless sooner terminated pursuant to the provisions of this lease.

4. PURPOSE: LESSEE shall only manage the leased premises for the conservation and protection of natural and historical resources and for resource based public outdoor recreation which is compatible with the conservation and protection of these public lands, as set forth in subsection 253.023(11), Florida Statutes, along with other related uses necessary for the accomplishment of this purpose as designated in the Management Plan required by paragraph (8) of this lease.

Page 1 of 13
Lease No. 3698

5. QUIET ENJOYMENT AND RIGHT OF USE: LESSEE shall have the right of ingress and egress to, from and upon the leased premises for all purposes necessary to the full quiet enjoyment by said LESSEE of the rights conveyed herein.

6. UNAUTHORIZED USE: LESSEE shall, through its agents and employees prevent the unauthorized use of the leased premises or any use thereof not in conformity with this lease.

7. ASSIGNMENT: This lease shall not be assigned in whole or in part, without the prior written consent of LESSOR. Any assignment made either in whole or in part without the prior written consent of LESSOR shall be void and without legal effect.

8. MANAGEMENT PLAN: LESSEE shall prepare and submit a Management Plan for the leased premises in accordance with Chapters 18-2 and 18-4, Florida Administrative Code, within 12 months of the effective date of this lease. The Management Plan shall be submitted to LESSOR for approval through the Division of State Lands. The leased premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the leased premises until the Management Plan is approved, without the prior written approval of LESSOR. LESSEE shall provide LESSOR with an opportunity to participate in all phases of preparing and developing the Management Plan for the leased premises. The Management Plan shall be submitted to LESSOR in draft form for review and comments within ten months of the effective date of this lease. LESSEE shall give LESSOR reasonable notice of the application for and receipt of any state, federal or local permits as well as any public hearings or meetings relating to the development or use of the leased premises. LESSEE shall not proceed with development of said leased premises including, but not limited to, funding, permit applications, design or building contracts until the Management Plan required herein has been submitted and approved. Any financial commitments made by LESSEE which are not in compliance with the terms of this lease shall be done at LESSEE'S own risk. The Management Plan shall emphasize the original

management concept as approved by LESSOR at the time of acquisition which established the primary public purpose for which the leased premises were acquired. The approved Management Plan shall provide the basic guidance for all management activities and shall be reviewed jointly by LESSEE and LESSOR at least every five (5) years. LESSEE shall not use or alter the leased premises except as provided for in the approved Management Plan without the prior written approval of LESSOR. The Management Plan prepared under this lease shall identify management strategies for exotic species, if present. The introduction of exotic species is prohibited, except when specifically authorized by the approved Management Plan.

9. EASEMENTS: All easements including, but not limited to, utility easements are expressly prohibited without the prior written approval of LESSOR. Any easement not approved in writing by LESSOR shall be void and without legal effect.

10. SUBLEASES: This lease is for the purposes specified herein and subleases of any nature are prohibited, without the prior written approval of LESSOR. Any sublease not approved in writing by LESSOR shall be void and without legal effect.

11. RIGHT OF INSPECTION: LESSOR or its duly authorized agents, representatives or employees shall have the right at any and all times to inspect the leased premises and the works and operations of LESSEE in any matter pertaining to this lease.

12. PLACEMENT AND REMOVAL OF IMPROVEMENTS: All buildings, structures, improvements, and signs shall be constructed at the expense of LESSEE in accordance with plans prepared by professional designers and shall require the prior written approval of LESSOR as to purpose, location and design. Further, no trees, other than non-native species shall be removed or major land alterations done without the prior written approval of LESSOR. Removable equipment and removable improvements placed on the leased premises by LESSEE which do not become a permanent part of the realty will remain the property of LESSEE and may be removed by LESSEE upon termination of this lease.

13. INSURANCE REQUIREMENTS: During the term of this lease LESSEE shall procure and maintain policies of fire, extended risk, and liability insurance coverage. The extended risk and fire insurance coverage shall be in an amount equal to the full insurable replacement value of any improvements or fixtures located on the leased premises. The liability insurance coverage shall be in amounts not less than $100,000.00 per occurrence and $200,000.00 per accident for personal injury, death, and property damage on the leased premises. Such policies of insurance shall name LESSOR, the State of Florida and LESSEE as co-insureds. LESSEE shall submit written evidence of having procured all insurance policies required herein prior to the effective date of this lease and shall submit annually thereafter, written evidence of maintaining such insurance to the Bureau of Uplands Management, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399. LESSEE shall purchase all policies of insurance from a financially-responsible insurer duly authorized to do business in the State of Florida. Any certificate of self-insurance shall be issued or approved by the Insurance Commissioner, State of Florida. The certificate of self-insurance shall provide for casualty and liability coverage. LESSEE shall immediately notify LESSOR and the insurance agent of any erection or removal of any building or other improvement on the leased premises and any changes affecting the value of any improvements and shall request the insurance agent to make adequate changes in the coverage to reflect the changes in value. LESSEE shall be financially responsible for any loss due to failure to obtain adequate insurance coverage, and failure to maintain such policies or certificate in the amounts set forth shall constitute a breach of this lease.

14. INDEMNITY: LESSEE hereby covenants and agrees to investigate all claims of every nature at its own expense, and to indemnify, protect, defend, hold and save harmless the State of Florida and LESSOR from any and all claims, actions, lawsuits and demands of any kind or nature arising out of this lease to the

extent provided by law.

15. PAYMENT OF TAXES AND ASSESSMENTS: LESSEE shall assume full responsibility for and shall pay all liabilities that accrue to the leased premises or to the improvements thereon, including any and all ad valorem taxes and drainage and special assessments or taxes of every kind and all mechanic's or materialman's liens which may be hereafter lawfully assessed and levied against the leased premises.

16. NO WAIVER OF BREACH: The failure of LESSOR to insist in any one or more instances upon strict performance of any one or more of the covenants, terms and conditions of this lease shall not be construed as a waiver of such covenants, terms or conditions, but the same shall continue in full force and effect, and no waiver of LESSOR of any of the provisions hereof shall in any event be deemed to have been made unless the waiver is set forth in writing, signed by LESSOR.

17. TIME: Time is expressly declared to be of the essence of this lease.

18. NON DISCRIMINATION: LESSEE shall not discriminate against any individual because of that individual's race, color, religion, sex, national origin, age, handicap, or marital status with respect to any activity occurring within the leased premises or upon lands adjacent to and used as an adjunct of the leased premises.

19. UTILITY FEES: LESSEE shall be responsible for the payment of all charges for the furnishing of gas, electricity, water and other public utilities to the leased premises and for having the utilities turned off when the leased premises are surrendered.

20. MINERAL RIGHTS: This lease does not cover petroleum or petroleum products or minerals and does not give the right to LESSEE to drill for or develop the same.

21. RIGHT OF AUDIT: LESSEE shall make available to LESSOR all financial and other records relating to this lease, and LESSOR shall have the right to audit such records at any

reasonable time during the term of this lease. This right shall be continuous until this lease expires or is terminated. This lease may be terminated by LESSOR should LESSEE fail to allow public access to all documents, papers, letters or other materials made or received in conjunction with this lease, pursuant to the provisions of Chapter 119, Florida Statutes.

22. CONDITION OF PREMISES: LESSOR assumes no liability or obligation to LESSEE with reference to the conditions of the leased premises. The leased premises herein are leased by LESSOR to LESSEE in an "as is" condition, with LESSOR assuming no responsibility for the care, repair, maintenance or improvement of the leased premises for the benefit of LESSEE.

23. COMPLIANCE WITH LAWS: LESSEE agrees that this lease is contingent upon and subject to LESSEE obtaining all applicable permits and complying with all applicable permits, regulations, ordinances, rules, and laws of the State of Florida or the United States or of any political subdivision or agency of either.

24. NOTICE: All notices given under this lease shall be in writing and shall be served by certified mail including, but not limited to, notice of any violation served pursuant to 253.04, Florida Statutes, to the last address of the party to whom notice is to be given, as designated by such party in writing. LESSOR and LESSEE hereby designate their address as follows:

LESSOR: Department of Natural Resources
Division of State Lands
Bureau of Uplands Management
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

LESSEE: Board of County Commissioners of Lee County
Post Office Box 398
Fort Myers, Florida 33902-0398

25. BREACH OF COVENANTS, TERMS, OR CONDITIONS: Should LESSEE breach any of the covenants, terms, or conditions of this lease, LESSOR shall give written notice to LESSEE to remedy such breach within sixty (60) days of such notice. In the event LESSEE fails to remedy the breach to the satisfaction of LESSOR within sixty (60) days of receipt of written notice, LESSOR may either terminate this lease and recover from LESSEE all damages

LESSOR may incur by reason of the breach including, but not limited to, the cost of recovering the leased premises and attorneys' fees or maintain this lease in full force and effect and exercise all rights and remedies herein conferred upon LESSOR.

26. DAMAGE: LESSEE agrees that it will not do, or suffer to be done, in, on or upon the leased premises or as affecting said leased premises, any act which may result in damage or depreciation of value to the leased premises, or any part thereof.

27. SURRENDER OF PREMISES: Upon termination or expiration of this lease, LESSEE shall surrender the leased premises to LESSOR. In the event no further use of the leased premises or any part thereof is needed, LESSEE shall give written notification to the Bureau of Uplands Management, Division of State Lands, Department of Natural Resources, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399 at least six (6) months prior to the release of any or all of the leased premises. Notification shall include a legal description, this lease number, and an explanation of the release. The release shall only be valid if approved by LESSOR through the execution of a release of lease instrument with the same formality as this lease. Upon release of all or any part of the leased premises or upon termination or expiration of this lease, all improvements, including both physical structures and modifications to the leased premises, shall become the property of LESSOR, unless LESSOR gives written notice to LESSEE to remove any or all such improvements at the expense of LESSEE. The decision to retain any improvements upon termination of this lease shall be at LESSOR'S sole discretion. Prior to surrender of all or any part of the leased premises a representative of the Division of State Lands shall perform an on-site inspection and the keys to any building on the leased premises shall be turned over to the Division. If the improvements do not meet all conditions as set forth in paragraphs 19 and 35 herein, LESSEE shall, at its expense, pay

all costs necessary to meet the prescribed conditions.

28. BEST MANAGEMENT PRACTICES: LESSEE shall implement applicable Best Management Practices for all activities conducted under this lease in compliance with paragraph 18-2.004(1)(d), Florida Administrative Code, which have been selected, developed, or approved by LESSOR or other land managing agencies for the protection and enhancement of the leased premises.

29. PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: Fee title to the leased premises is held by LESSOR. LESSEE shall not do or permit anything to be done which purports to create a lien or encumbrance of any nature against the real property contained in the leased premises including, but not limited to, mortgages or construction liens against the leased premises or against any interest of LESSOR therein.

30. PARTIAL INVALIDITY: If any term, covenant, condition or provision of this lease shall be ruled by a court of competent jurisdiction, to be invalid, void, or unenforceable, the remainder of the provisions shall remain in full force and effect and shall in no way be affected, impaired or invalidated.

31. ARCHAEOLOGICAL AND HISTORIC SITES: Execution of this lease in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state-owned lands is prohibited unless prior authorization has been obtained from the Department of State, Division of Historical Resources. The Management Plan prepared pursuant to Chapters 18-2 and 18-4, Florida Administrative Code, shall be reviewed by the Division of Historical Resources to insure that adequate measures have been planned to locate, identify, protect and preserve the archaeological and historic sites and properties on the leased premises.

32. SOVEREIGNTY SUBMERGED LANDS: This lease does not authorize the use of any lands located waterward of the mean or ordinary high water line of any lake, river, stream, creek, bay, estuary, or other water body or the waters or the air space

thereabove.

33. DUPLICATE ORIGINALS: This lease is executed in duplicate originals each of which shall be considered an original for all purposes.

34. ENTIRE UNDERSTANDING: This lease sets forth the entire understanding between the parties and shall only be amended with the prior written approval of LESSOR.

35. MAINTENANCE OF IMPROVEMENTS: LESSEE shall maintain the real property contained within the leased premises and the improvements located thereon, in a state of good condition, working order and repair including, but not limited to, keeping the leased premises free of trash or litter, meeting all building and safety codes in the location situated, maintaining the planned improvements as set forth in the approved Management Plan and maintaining any and all existing roads, canals, ditches, culverts, risers and the like in as good conditions as the same may be at the date of this lease; provided, however, that any removal, closure, etc, of the above improvements shall be acceptable when the proposed activity is consistent with the goals of conservation, protection and enhancement of the natural and historical resources within the leased premises and with the approved Management Plan.

36. ASSENT TO LEASE AGREEMENT TERMS AND CONDITIONS: LESSEE joins in this lease for the purpose of indicating its assent to all terms and conditions hereof and agrees to be bound hereby.

37. GOVERNING LAW: This lease shall be governed by and interpreted according to the laws of the State of Florida.

38. SIGNS: LESSEE shall ensure that the area is identified as being publicly owned and operated as a public outdoor recreational facility in all signs, literature and advertising and shall erect signs identifying the leased premises as being open to the public. If federal grants or funds are used by LESSEE for any project on the leased premises LESSEE shall erect signs identifying the leased premises as a federally assisted project.

39. SECTION CAPTIONS: Articles, subsections and other captions contained in this lease are for reference purposes only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this lease or any provisions thereof.

IN WITNESS WHEREOF, the parties have caused this lease to be executed on the day and year first above written.

BOARD OF TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND OF THE STATE OF FLORIDA

Virginia A. Curry
Witness

Bonnie Poter
Witness

By: _____ (SEAL)
DIRECTOR, DIVISION OF STATE LANDS, DEPARTMENT OF NATURAL RESOURCES

"LESSOR"

STATE OF FLORIDA
COUNTY OF LEON

The foregoing instrument was acknowledged before me this 28th day of June, 1989, by Percy W. Mallison, Jr., as Director, Division of State Lands, Department of Natural Resources.

Teresa P. Cook (SEAL)
NOTARY PUBLIC

Notary Public, State of Florida
My Commission Expires July 14, 1992
Bonded Thru Troy Fain - Insurance Inc.

My Commission Expires:

Approved as to Form and Legality

By: Patricia E. Davenport
DNR Attorney

APPROVED AS TO FORM

James R. Adams
OFFICE OF COUNTY ATTORNEY

BOARD OF COUNTY COMMISSIONERS OF LEE COUNTY, FLORIDA

Janet S. Foster
Witness

Mary Armentrout
Witness

By: _____ (SEAL)
Its: CHAIRMAN

"LESSEE"

STATE OF FLORIDA
COUNTY OF

The foregoing instrument was acknowledged before me this 16 day of June, 1989, by Charles L. Bigelow, Jr., as Chairman, Lee County Board of County Commissioners

Adrienne Elliott (SEAL)
NOTARY PUBLIC

Notary Public, State of Florida
My Commission Expires May 26, 1990
Bonded Thru Troy Fain - Insurance Inc.

My Commission Expires:

The following described land, situate, lying and being in the County of Lee, State of Florida, to-wit:

IN SECTIONS 18 AND 19, TOWNSHIP 43 SOUTH, RANGE 27 EAST:

The westerly 1595.00 feet (as measured on a perpendicular with the westerly line thereof), of the S 1/2 of said Section 18; ALSO: the westerly 1595.00 feet (as measured on a perpendicular with the westerly line thereof), of said Section 19, lying North of the northwesterly right-of-way of the Central and Southern Florida Flood Control District right-of-way for the Caloosahatchee River Canal.

EXCEPTING THEREFROM: The existing right-of-way of State Road No. 78 lying over and across the line between said Sections 18 and 19.

SUBJECT TO: A dredging pipeline easement lying over and across the westerly 100 feet of said Section 19 and other existing rights-of-way and easements of record.

CONTAINING 167 acres, more or less.

A parcel of land lying in Sections 18 and 19, Township 43 South, Range 27 East, Lee County, Florida, which parcel is more particularly described as follows:

The Easterly 1595.00 feet of the westerly 3190 feet, (as measured on a perpendicular with the westerly line thereof), of the s 1/2 of said Section 18: ALSO: The Easterly 1595.00 feet of the westerly 3190 feet (as measured on a perpendicular with the westerly line thereof), of said Section 19 lying North of the northerly right-of-way of the Central and Southern Florida Flood Control District right-of-way for the Caloosahatchee River Canal.

EXCEPTING THEREFROM: The existing right-of-way of State Road No. 78 lying over and across the line between said Sections 18 and 19.

SUBJECT TO: A 40 feet wide dredging pipeline easement, running in a generally North - South direction, lying near the easterly line of the hereinabove described fractional portion of the aforesaid Section 19, and other existing rights-of-way and easements of record.

CONTAINING 167 Acres, more or less.

EXHIBIT "A"
PAGE 11 OF 13
LEASE NO. 3698

The following described land, situate, lying and being in the County of Lee, State of Florida, to-wit:

A parcel of land lying in the South Half (S 1/2) of Section 17, Township 43 South, Range 27 East, and being more particularly described as follows:

Beginning at the Southwest corner of said Section 17 and a point on the centerline of State Road No. 78, run North 00 degrees 12 minutes 47 seconds East along the West Line of said Section 17 for 2660.40 feet to the West Quarter (W 1/4) corner of said Section 17; thence run South 89 degrees 45 minutes 00 seconds East along the North line of the Southwest Quarter (SW 1/4) of said Section 17 for 2673 feet more or less to the center of said Section 17; thence run South 00 degrees 12 minutes 47 seconds West parallel with the West line of said Section 17 for 2670 feet more or less to an intersection with the South line of said Section 17 and a point on said centerline of State Road No. 78; thence run North 89 degrees 32 minutes 53 seconds West along the South line of said Section 17 and the centerline of said State Road No. 78 for 2673.37 feet to the point of beginning.

EXCEPTING THEREFROM: The existing right of way of State Road No. 78 lying over and across the southerly portion of the hereinabove described parcel and other existing rights of way and easements of record.

Containing 163 acres, more or less.

TOGETHER WITH

A parcel of land lying in the Northwest Quarter (NW 1/4) of Section 20, Township 43 South, Range 27 East, and being more particularly described as follows:

Beginning at the Northwest corner of said Section 20 and a point on the centerline at State Road No. 78, run South 89 degrees 32 minutes 53 seconds East along the North line of said Section 20 and said centerline of State Road No. 78 for 1336.34 feet to the Northeast corner of the West Half (W 1/2) of the Northwest Quarter (NW 1/4) of said Section 20; thence run South 00 degrees 06 minutes 13 seconds West along the East line of the West Half (w 1/2) of the Northwest Quarter (NW 1/4) of said Section 20 for 1640.36 feet to a point on the Northerly right of way line of the Caloosahatchee River; thence run South 77 degrees 16 minutes 46 seconds West along said Northerly right of way line for 1338.01 feet to a point on the West line of said Section 20; thence run North 00 degrees 19 minutes 18 seconds East along the West line of said Section 20 for 1963.62 feet to the point of beginning.

EXCEPTING THEREFROM: The existing right of way of State Road No. 78 lying over and across the Northerly portion of the hereinabove described parcel and other existing rights of way and easements or record.

Containing 55 acres, more or less.

The following described land, situate, lying and being in the County of Lee, State of Florida, to-wit:

A parcel of land lying in Sections 18 and 19, Township 43 South, Range 27 East, Lee County, Florida, which parcel is more particularly described as follows:

All that portion of the South 1/2 of said Section 18 lying East of the Westerly 3190 feet (as measured on a perpendicular with the Westerly line thereof), and all that portion of said Section 19 lying, East of the Westerly 3190 feet (as measured on a perpendicular with the Westerly line thereof) and lying North of the northerly right of way line of the Central and Southern Florida Flood Control District right of way for the Caloosahatchee River Canal.

EXCEPTING THEREFROM: The existing right of way of State Road No. 78 lying over and across the line between the said Sections 18 and 19.

ALSO EXCEPTING THEREFROM: The Southeast quarter of the Southeast quarter of Section 18, Township 43 South, Range 27 East.

SUBJECT TO: A 40 foot wide dredging pipeline easement, running in a generally North-South direction, lying near the westerly line of the hereinabove described fractional portion of the aforesaid Section 19, and other existing rights of way and easements of record.

Containing 166 acres, more or less.

EXHIBIT "A"
PAGE 13 OF 13
LEASE NO. 3698

APPENDIX B: Lease agreement between the SFWMD and Lee County

LS040648

AGREEMENT

BETWEEN

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

AND

LEE COUNTY, FLORIDA

(Lands Near the Caloosahatchee Regional Park)

This LEASE AGREEMENT ("LEASE") is entered into on 20th April, 2004, between the "the Parties", the **South Florida Water Management District**, a public corporation of the State of Florida (the "DISTRICT"), and the **Lee County Board of County Commissioners**, a political subdivision and charter county of the State of Florida (the "COUNTY"), for the use and benefit of the Lee County Parks and Recreation Department.

WITNESSETH

WHEREAS, the DISTRICT is a public corporation of the State of Florida, created by the Florida Legislature and given those powers and responsibilities enumerated in Chapter 373, Florida Statues to include entering into contracts with public agencies, private corporations or other persons; and

WHEREAS, the DISTRICT holds title to those certain lands and property legally described in Exhibit "A" attached hereto and incorporated herein by reference (the "Leased Premises"); and

WHEREAS, the Leased Premises are utilized by the State of Florida for water resource management purposes; and

WHEREAS, the COUNTY, pursuant to that certain Lease Agreement, dated June, 1989, with the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida, leases the land known as the Caloosahatchee Regional Park for the purpose of protecting the natural, aesthetic, cultural and educational attributes of the land; and

WHEREAS, the DISTRICT desires that certain public lands within the areas to be leased for use and possession by the COUNTY; and

WHEREAS, the COUNTY's rapidly expanding population, resulting recreation demands, escalating land prices and relatively few sites with recreation potential, led the County to lease the Caloosahatchee Regional Park. In furtherance of its desire to preserve representative examples of Florida's natural and cultural heritage, and to provide outdoor recreational opportunities for Lee County's

citizens and visitors, the COUNTY seeks to lease the Leased Premises since such lands are adjacent to Caloosahatchee Regional Park property; and

WHEREAS, the Governing Board of the DISTRICT, at its March 11, 2004 meeting, has authorized the leasing of these lands to the COUNTY;

WHEREAS, the COUNTY approved this LEASE at its April 20, 2004 meeting.

NOW THEREFORE, for and in consideration of the foregoing and the respective mutual covenants and agreements hereinafter contained, the DISTRICT leases the below described premises to the COUNTY subject to the following terms and conditions:

ARTICLE 1-PREMISES TO BE LEASED

1.1 DESCRIPTION OF PREMISES: The Leased Premises consists of five DISTRICT owned parcels that total approximately 188.40 acres, identified by the DISTRICT as Tract Numbers 34-100-044, 34-100-045, 34-100-046, 34-100-047 and 34-100-048. The Leased Premises is situated in the County of Lee, State of Florida.

1.2 PURPOSE: The COUNTY shall manage the Leased Premises as part of the Lee County Park System for the purpose of preserving the natural and cultural heritage of the Caloosahatchee Regional Park site. Such management shall be consistent with the Resource Management Plan, as approved by the Department of Environmental protection on January 25, 2001, and subsequently approved by the Lee County Board of County Commissioners on May 15, 2001 (the "Resource Management Plan"), which plan includes the following activities: control of exotic grasses and plants, hog control, hydrologic restoration, prescribed burning, wildlife (Sherman's fox squirrel, wood stork, gopher tortoise, etc.), monitoring and shoreline stabilization. A copy of the Resource Management Plan is attached hereto as Exhibit "B".

1.3 QUIET ENJOYMENT AND RIGHT OF USE: The COUNTY shall have the right of ingress and egress to, from, and upon the Leased Premises for all purposes necessary to the full quiet enjoyment by said COUNTY of the rights conveyed herein. The parties hereto acknowledge and agree that the DISTRICT has previously used the Leased Premises as spoil deposit sites. Pursuant to the terms of this LEASE, the DISTRICT agrees not to enter the Leased Premises during the term of the LEASE for the purpose of depositing, storing or removing excess spoil material thereon. In consideration for the DISTRICT's willingness to not use the Leased Premises for such purposes during the term of the LEASE, in the event the DISTRICT notifies the COUNTY that it needs spoil deposit sites, the COUNTY shall use its best efforts to provide alternative spoil deposit sites for use by the DISTRICT, within ninety (90) days of the DISTRICT's notice to the COUNTY concerning the DISTRICT's need for alternative spoil deposit sites.

The COUNTY has had the opportunity to inspect the Leased Premises, is familiar and satisfied with its present condition and accepts it in its "AS IS" condition. The DISTRICT makes no warranty or representation as to the condition of the Leased Premises or its suitability for the COUNTY's intended use thereof. DISTRICT is not liable for any interruption or failure in use or occupancy or quiet or peaceful enjoyment of the Leased Premises due to the physical condition of the Leased Premises.

1.4 AUTHORIZED USES: Authorized uses for the purposes of the LEASE shall be defined as those management activities that the COUNTY is authorized to perform under the terms and conditions of this LEASE and the Resource Management Plan, as that term is defined in subparagraph 1.2 hereinabove. The authorized uses shall be consistent with statutory requirements that require the Leased Premises to be managed, and maintained in an environmentally acceptable manner, including permitting of compatible recreational use. The authorized uses shall at a minimum always include essential site management measures including, but not limited to security, resource protection, public access, recreational use, habitat management and enhancement of land use control. The COUNTY shall, through its agents and employees, use its best efforts to prevent the unauthorized use of the Leased Premises or any use thereof not in conformance with this LEASE.

1.5 MANAGEMENT PLAN:The County shall manage the Leased Premises in accordance with the purposes identified in the Resource Management Plan. The Leased Premises shall not be developed or physically altered in any way other than what is necessary for security and maintenance of the Leased Premises without the prior written approval of the DISTRICT.

The Resource Management Plan shall provide the basic guidance for all management activities on the Leased Premises and shall be reviewed jointly by the DISTRICT and the COUNTY every five (5) years. The Resource Management Plan provides for the control of exotic plants (South side) and exotic grasses (North side). Unless specifically authorized by the Resource Management Plan, the introduction of additional exotic plants onto the Leased Premises is prohibited.

The DISTRICT's area of responsibility will be to review, monitor and approve activities affecting water management, water conservation and protection of water resources.

1.6 RIGHT OF INSPECTION: The DISTRICT and the U.S. Corps of Army Engineers, or their duly authorized agents and contractors, upon reasonable notice, shall have the right at any and all times to inspect the leased premises and the works and operations thereon of the COUNTY.

1.7 ARCHAEOLOGICAL AND HISTORIC SITES: Execution of this LEASE in no way affects any of the parties' obligations pursuant to Chapter 267, Florida Statutes. The collection of artifacts or the disturbance of archaeological and historic sites on state owned lands is prohibited unless prior authorization has been obtained from the Division of Historical Resources of the Florida Department of State. If any archaeological or historic sites are found on the Leased Premises, the COUNTY agrees to take adequate measures to protect and preserve the sites and to comply with any and all Florida laws regarding the collection and/or disturbance of any artifacts.

1.8 EASEMENTS: COUNTY is expressly prohibited from granting any easements including, but not limited to, utility easements without the prior written approval of the DISTRICT. Any easements or other conveyances not approved in writing by the DISTRICT shall be void and without legal effect.

1.9 SUBLEASES: Subleases of any nature are prohibited without the prior written approval of DISTRICT. Any sublease not approved in writing by DISTRICT shall be void and without legal effect. However, COUNTY may utilize its own contractors to perform work consistent with the Management Plan approved by the DISTRICT.

1.10 MINERAL RIGHTS: The DISTRICT agrees not to exercise or permit the exercise of a right of entry over, upon, or across the leased premises or use or permit the use of the surface estate or interest in the Leased Premises for testing, exploration or development of any natural resources including oil, gas, or minerals, during the term of this LEASE.

1.11 UTILITY FEES: The COUNTY shall be responsible for the payment of all charges for the furnishing of gas, electricity, water, and other public utilities in connection with the COUNTY'S use of the Leased Premises and for having all utilities turned off when the Leased Premises are surrendered.

1.12 PLACEMENT AND REMOVAL OF IMPROVEMENTS: All buildings, structures improvements, and signs erected in connection with the COUNTY'S use of the Leased Premises, shall be constructed at the expense of the COUNTY in accordance with plans of prepared by professional designers and shall require the prior written approval of the DISTRICT as to purpose, location, and design. Further, with the exception of those activities identified in the Management Plan, no trees, other than non-native species, shall be removed or major land alterations done without the prior written approval of the DISTRICT. All buildings, structures, improvements, and signs placed on the Leased Premises by the COUNTY will remain the property of the COUNTY and shall be removed by the COUNTY within thirty (30) days of the expiration or earlier termination of this LEASE, subject to Paragraph 6.2 below. Any buildings, structures, improvements or signs placed on the Premises by the COUNTY during the term of this LEASE that are not removed by the COUNTY pursuant to this subparagraph 1.12 shall automatically become the property of the DISTRICT, whereupon the COUNTY shall have no further rights or interest therein.

1.13 MAINTENANCE OF IMPROVEMENTS: The COUNTY shall maintain the real property contained within the Leased Premises and any improvements located thereon, in a state of good condition, working order and repair including, but not limited to, maintaining the planned improvements as set forth in the approved Management Plan, meeting applicable, building and safety codes in the location situated, keeping the Leased Premises free of trash or litter and maintaining any and all existing roads, canals, ditches, culverts, risers and the like in as good condition as the same may be on the effective date of this LEASE.

1.14 PROHIBITIONS AGAINST LIENS OR OTHER ENCUMBRANCES: The COUNTY shall not do or permit anything to be done which purports to create a lien or encumbrance of any nature against the real property contained in the Leased Premises including, but not limited to, mortgages or construction liens against the Leased Premises or against any interest of the DISTRICT therein.

1.15 DAMAGE TO THE PREMISES: The COUNTY shall not do, or suffer to be done, in, on or upon the Leased Premises or as affecting said Leased Premises or adjacent properties, any act which may result in damage or depreciation of value to the Leased Premises or adjacent properties, or any part thereof. The COUNTY shall not generate, store, produce, place, treat, release or discharge any contaminants, pollutants or pollution, including, but not limited to, hazardous or toxic substances, chemicals or other agents on, into, or from the Leased Premises or any adjacent lands or waters in any manner not permitted by law. For the purposes of this LEASE, "hazardous substances" shall mean and include those elements or compounds defined in 42 USC Section 9601 or which are contained in the list of hazardous substances adopted by the United States Environmental Protection Agency (EPA) and the list of toxic pollutants designated by the United

States Congress or the EPA or defined by any other federal, state, or local statute, law, ordinance, code, rule, regulation, order or decree regulating, relating to, or imposing liability or standards of conduct concerning any hazardous, toxic or dangerous waste, substance, material, pollutant or contaminant. "Pollutants" and "pollution" shall mean those products or substances defined in Chapters 376 and 403, Florida Statutes, and the rules promulgated thereunder, all as amended or updated from time to time. In the event of the COUNTY'S failure to comply with this paragraph, the COUNTY shall, at its sole cost and expense, promptly commence and diligently pursue any legally required closure, investigation, assessment, cleanup, decontamination, remediation, restoration and monitoring of (1) the leased premises, and (2) all off-site ground and surface waters and lands affected by the COUNTY'S failure to comply, as may be necessary to bring the Leased Premises and affected off-site waters and lands into full compliance with all applicable federal, state or local statutes, laws, ordinances, codes, rules, regulations, orders and decrees, and to restore the damaged property to the condition existing immediately prior to the occurrence which caused the damage. The COUNTY'S obligations set forth in this paragraph shall survive the termination or expiration of this LEASE. Nothing herein shall relieve the COUNTY of any responsibility or liability prescribed by law for fines, penalties and damages levied by governmental agencies, and the cost of cleaning up any contamination caused directly or indirectly by the COUNTY'S activities or facilities. Upon discovery of a release of a hazardous substance or pollutant, or any other violation of local, state or federal law, ordinance, code, rule, regulation, order or decree relating to the generation, storage, production, placement, treatment, release or discharge of any contaminant, the COUNTY shall report such violation to all applicable governmental agencies having jurisdiction, and to the DISTRICT, all within the applicable reporting periods of the applicable agencies which COUNTY is legally permitted to pay.

Notwithstanding anything contained herein to the contrary, the COUNTY, its employees, agents and contractors shall be permitted to control exotics through the application of herbicides, provided such application shall comply strictly with the Resource Management Plan and shall be limited to those chemicals specified on Schedule "1" attached hereto and made a part hereof. Any on-site chemical or pesticide use by the COUNTY, its employees, agents and/or contractors shall not create contamination above regulatory limits

1.17 PAYMENT OF TAXES AND ASSESSMENTS: The COUNTY shall assume full responsibility for and shall pay all liabilities that accrue to the Leased Premises or to the improvements thereon as a result of COUNTY'S use of the Leased Premises pursuant to this lease, including any and all drainage assessments and special assessments or taxes of every kind and all mechanic's or materialman's liens which may be hereafter lawfully assessed and levied against the Leased Premises.

ARTICLE 2 - TERM

2.1 The term of this LEASE shall commence upon execution by both parties and shall continue for a period of five (5) years unless terminated pursuant to Article 6 of this LEASE.

2.2 The parties agree that time is of the essence in the performance of each and every obligation under this LEASE.

ARTICLE 3 - CONSIDERATION

3.1 The parties agree that, for and in consideration of the foregoing and the respective mutual covenants and agreements hereinafter contained, their respective obligations will be carried out at no cost to the other party.

3.2 Nothing contained in this LEASE shall be construed as obligating the COUNTY to either expend funds or involving any party in a contract or other obligation for the future payment of money in excess of the authorized funding. The COUNTY shall use its best efforts to obtain adequate funding in subsequent fiscal years to fund the COUNTY's performance of its duties and obligations under this LEASE.

ARTICLE 4 - PROJECT MANANAGEMENT/NOTICE

4.1 The Project Manager for the DISTRICT is Jacque Rippe, at Lower West Coast Service Center,2301 McGregor Boulevard, Fort Myers, Florida 33901; telephone (239) 338-2929.

The Project Manager for the COUNTY is:

Director of Lee County Parks & Recreation
3410 Palm Beach Boulevard
Fort Myers, FL 33916
Telephone: 239-461-7400

The parties shall direct all matters arising in connection with the performance of this LEASE, other than notices, to the attention of the Project Managers for attempted resolution or action. The Project Managers shall be responsible for overall coordination and oversight relating to the performance of this LEASE.

4.2 All notices, demands, or other communications to the COUNTY under this LEASE shall be in writing and shall be deemed received if sent by certified mail, return receipt requested, to:

Director of Lee County Parks & Recreation
3410 Palm Beach Boulevard
Fort Myers, FL 33916

All notices to the DISTRICT under this LEASE shall be in writing and sent by certified mail, return receipt requested, to:

South Florida Water Management District
Attn: Procurement Department
3301 Gun Club Road
P.O. Box 24680
West Palm Beach, Florida 33416-4680

All notices required by this LEASE shall be considered delivered upon receipt. Should either party change its address, written notice of such new address shall promptly be sent to the other party.

All correspondence to the DISTRICT under this LEASE shall reference the DISTRICT'S Contract Number LS040648.

ARTICLE 5 - LIABILITY & INSURANCE

5.1 The COUNTY shall be liable for damages in tort for any injuries to or losses of property, personal injury or death caused by the negligent or wrongful act(s) or omission(s) of any official or employee of the COUNTY while acting within the scope of the official's or employee's office or employment under circumstances in which a private person would be held liable in accordance with the general laws of the State of Florida, subject to the limitations as set out in section 768.28, Florida Statutes, as it may be revised or amended from time to time. The DISTRICT acknowledges its liability for torts to the extent provided in Section 768.28, Florida Statutes. Nothing in this LEASE is intended or is to be construed as a waiver of sovereign immunity or expansion of the limits of liabilities as provided to the parties signatory hereto under Section 768.28, Florida Statutes, or provided by law.

5.2 In the event the COUNTY contracts with any third party to conduct any work on the Leased Premises, the COUNTY shall require each and every such contractor, or subcontractor, to identify the DISTRICT as an additional insured on all insurance policies required by the COUNTY in conjunction with such work. Any contract awarded by the COUNTY to perform work on the Leased Premises shall also include a provision whereby the COUNTY's contractor and any subcontractors agree to defend, indemnify, and pay on behalf, save and hold the DISTRICT harmless from all damages arising in connection with the performance of the COUNTY's contract.

5.3 The COUNTY, as a political subdivision of the State of Florida, represents that it is self-funded for liability insurance, or has liability insurance, both public and property, with such protection being applicable to the COUNTY officers, employees, servants and agents while acting within the scope of their employment with the COUNTY. The COUNTY and the DISTRICT further agree that nothing contained herein shall be construed or interpreted as (1) denying to either party any, remedy or defense available to such party under the laws of the State of Florida; (2) the consent of the State of Florida or its agents and agencies to be sued; (3) a waiver of sovereign immunity of the State of Florida beyond the waiver provided in Section 768.28, Florida Statutes, or (4) a waiver of limitation of liability protection as provided in Section 373.1395, Florida Statutes.

5.4 a. Throughout the term of this LEASE, COUNTY shall provide, maintain, and keep in force a program and insurance covering its liabilities, as prescribed by Section 768.28, Florida Statutes. COUNTY shall maintain insurance coverage as shown in Exhibit "B" attached hereto and made a part hereof. In addition, nothing contained herein shall be construed as a waiver of limitations of liability which may be enjoyed by DISTRICT as a landowner, or any other law providing limitations on claims against the landowner.

b. Proof of Insurance: The COUNTY shall provide the DISTRICT with insurance certificates for all insurance required pursuant to this LEASE as proof of insurance prior to the Commencement Date. The COUNTY shall, upon request by the DISTRICT, have its insurance agent provide certified copies of all insurance coverage required by this LEASE. Such copies shall be provided within ten (10) days of request. All insurance required under this LEASE shall be written on a financially sound company acceptable to DISTRICT and shall name the DISTRICT as additional insured, as required.

c. Notice of Insurance Cancellation: The COUNTY shall notify DISTRICT at least thirty (30) days prior to cancellation or modification of any insurance required by this LEASE. Insurance required under paragraph 5.3(a) above of this LEASE shall contain a provision that it may not be cancelled or modified until thirty (30) days after written notice to DISTRICT. In the event COUNTY fails to obtain and keep any insurance required hereunder in full force and effect, DISTRICT may at its option obtain such policies and COUNTY shall pay to DISTRICT the premiums therefore, together with interest at the maximum rate allowed by law, upon demand.

d. Contractor Insurance: It shall be the responsibility of the COUNTY to ensure that all contractors and subcontractors performing work on the Leased Premises on behalf of the COUNTY are adequately insured or covered under its policies, with limits and conditions of coverage that at a minimum duplicate that which is required under paragraph 5.4(a) of this LEASE.

ARTICLE 6 - TERMINATION/SURRENDER OF PREMISES/REMEDIES

6.1 If either party fails to fulfill its obligations under this LEASE in a timely and proper manner, the other party may give written notice to the other party in default specifying the nature of the deficiency. The party in default shall then have sixty (60) calendar days from receipt of notice to correct the deficiency. If the defaulting party fails to correct this deficiency within this time, the party defaulted upon may have the option to terminate this LEASE at the expiration of the sixty (60) day time period. The DISTRICT may terminate this LEASE for good cause upon ninety (90) calendar days prior written notice to the other party. Provided however, that should this agreement be terminated for reasons other than default by the COUNTY and public funds have been expended by the COUNTY for capital improvements, the DISTRICT shall reimburse the COUNTY ratably for the remaining useful life of the capital as determined by appraisal conducted by state certified general appraiser.

6.2 Upon expiration or termination of this LEASE, all improvements, including both physical structures and modifications to the Leased Premises shall become the property of the DISTRICT, except those improvements which the COUNTY removes at the COUNTY'S expense upon termination of this LEASE. Prior to surrender of all or any part of the Leased Premises, a representative of the DISTRICT shall perform an on-site inspection and keys to any buildings on the Leased Premises shall be turned over to the DISTRICT. If the Leased Premises do not meet all conditions as set forth in Article 1 of this LEASE, the COUNTY shall, at its expense, pay all cost(s) necessary to meet the prescribed conditions.

6.3 In the event a dispute arises which the project managers cannot resolve between themselves, the Parties shall have the option to submit to non-binding mediation. The mediator or mediators shall be impartial, shall be selected by the Parties, and the cost of the mediation shall be borne equally by the Parties. The mediation process shall be confidential to the extent permitted by law.

6.4 Notwithstanding anything contained herein to the contrary, the parties hereto acknowledge and agree that, in the event the COUNTY ever ceases to use the Leased Premises as a public park during the term of this Lease, as provided in subparagraph 1.2 of this LEASE, the LEASE shall terminate immediately.

ARTICLE 7 - STANDARDS OF COMPLIANCE

7.1 The laws of the State of Florida shall govern all aspects of this LEASE. In the event it is necessary for either party to initiate legal action regarding this LEASE, venue shall-be in the Twentieth Judicial Circuit for claims under state law and in the Southern District of Florida for any claims which are justiciable in federal court.

7.2 The COUNTY shall maintain records and the DISTRICT shall have inspection and audit rights as follows:

A. Maintenance of Records: The COUNTY shall maintain all financial and non financial records and reports directly or indirectly related to the negotiation or performance of this LEASE including supporting documentation for any service rates, expenses, research or reports. Such records shall be maintained and made available for inspection for a period of five years from completing performance under this LEASE.

B. Examination of Records: The DISTRICT or its designated agent shall have the right to examine in accordance with generally accepted governmental auditing standards all records directly or indirectly related to this LEASE. Such examination may be made only within five years from the date of completing performance under this LEASE and upon reasonable notice, time and place.

C. Extended Availability of Records for Legal Disputes: In the event that the DISTRICT should become involved in a legal dispute with a third party arising from performance under this LEASE, the COUNTY shall extend the period of maintenance for all records relating to the LEASE until the final disposition of the legal dispute, and all such records shall be made readily available to the DISTRICT.

7.3 The COUNTY hereby assures that no person shall be discriminated against on the grounds of race, color, creed, national origin, handicap, age, or sex in any activity under this LEASE. The COUNTY shall take all measures necessary to effectuate these assurances.

7.4 The COUNTY shall obtain, at its sole expense, all necessary licenses, authorizations and permits from the appropriate private party or federal, state, municipal or local agency, and other governmental approvals, prior to commencing performance of this LEASE.

7.5 The COUNTY shall allow public access to all project documents and materials in accordance with the provisions of Chapter 119, Florida Statutes. Should the COUNTY assert any exemptions to the requirements of Chapter 119 and related Statutes, the burden of establishing such exemption, by way of injunctive or other relief as provided by law, shall be upon the COUNTY.

ARTICLE 8 - RELATIONSHIP BETWEEN THE PARTIES

8.1 The COUNTY is an independent contractor and is not an employee or agent of the DISTRICT. Nothing in this LEASE shall be interpreted to establish any relationship other than that of an independent contractor, between the DISTRICT and the COUNTY, its employees, agents, subcontractors, or assigns, during or after the performance of this LEASE.

8.2 The COUNTY shall not assign, delegate, or otherwise transfer its rights and obligations as set forth in this LEASE without the prior written consent of the DISTRICT. Any attempted assignment in violation of this provision shall be void.

8.3 The COUNTY shall not pledge the DISTRICT's credit or make the DISTRICT a guarantor of payment or surety for any contract, debt, obligation, judgment, lien, or any form of, indebtedness.

ARTICLE 9 - GENERAL PROVISIONS

9.1 Notwithstanding any provisions of this LEASE to the contrary, the parties shall not be held liable for any failure or delay in the performance of this LEASE that arises from fires, floods, strikes, embargoes, acts of the public enemy, unusually severe weather, outbreak of war, restraint of Government, riots, civil commotion, force majeure, act of God, or for any other cause of the same character which is unavoidable through the exercise or due care and beyond the control of the parties. Failure to perform shall be excused during the continuance of such circumstances, but this LEASE shall otherwise remain in effect. This provision shall not apply if this LEASE specifies that performance by COUNTY is specifically required during the occurrence of any of the events herein mentioned.

9.2 In the event any provisions of this LEASE shall conflict, or appear to conflict, the LEASE, including all exhibits, attachments and all documents specifically incorporated by reference, shall be interpreted as a whole to resolve any inconsistency.

9.3 Failures or waivers to insist on strict performance of any covenant, condition, or provision of this LEASE by the parties, their successors and assigns shall not be deemed a waiver of any of its rights or remedies, nor shall it relieve the other party from performing any subsequent obligations strictly in accordance with the terms of this LEASE. No waiver shall be effective unless in writing and signed by the party against whom enforcement is sought. Such waiver shall be limited to provisions of this LEASE specifically referred to therein and shall not be deemed a waiver of any other provision. No waiver shall constitute a continuing waiver unless the writing states otherwise.

9.4 Should any term or provision of this LEASE be held, to any extent, invalid or unenforceable, as against any person, entity or circumstance during the term hereof, by force of any statute, law, or ruling of any forum of competent jurisdiction, such invalidity shall not affect any other term or provision of this LEASE, to the extent that the LEASE shall remain operable, enforceable and in full force and effect to the extent permitted by law.

9.5 Articles, subsections and other captions contained in this LEASE are for reference purposes only and are in no way intended to describe, interpret, define or limit the scope, extent or intent of this LEASE or any provisions thereof.

9.6 This LEASE is executed in duplicate originals, each of which shall be considered an original for all purposes.

9.7 All of the provisions of this LEASE shall be deemed covenants running with the land included in the Leased Premises, and construed to be "conditions" as well as "covenants" as though the words specifically expressing or imparting covenants and conditions were used in each separate provision.

9.8 This LEASE states the entire understanding and agreement between the parties and supersedes any and all written or oral representations, statements, negotiations, or agreements previously existing between the parties with respect to the subject matter of this LEASE. The COUNTY recognizes that any representations, statements or negotiations made by DISTRICT staff do not suffice to legally bind the DISTRICT in a contractual relationship unless they have been reduced to writing and signed by an authorized DISTRICT representative. This LEASE shall inure to the benefit of and shall be binding upon the parties, their respective assigns, and successors in interest.

(Seal)

DISTRICT:
SOUTH FLORIDA WATER MANAGEMENT DISTRICT, BY ITS GOVERNING BOARD

By: _____
Nicolas J. Gutierrez, Jr., Esq.,
Chair

ATTEST:

By: _____
~~Garrett Wallace~~, Secretary
Lori Ojala

STATE OF FLORIDA
COUNTY OF PALM BEACH

The foregoing, instrument was acknowledged before me this 12th day of July, 2004 by Nicolas J. Gutierrez, Jr. and ~~Garrett Wallace~~, Chair and Secretary, respectively, of the Governing Board of the South Florida Water Management District, a public corporation of the State of Florida, on behalf of the corporation and who are personally known to me.

Paula Moree
MY COMMISSION # DD145258 EXPIRES
August 26, 2006
BONDED THRU TROY FAIN INSURANCE, INC.

Notary Public
Print PAULA MOREE.
My Commission Expires: 8/26/06

Approved as to Form and Legality
By: Heb Walter
SFWMD Office of Counsel
Date: 8-5-04

(Seal)

By: Marilyn Irons
SFWMD Procurement Approved
Date: March 10, 2004

COUNTY:
LEE COUNTY BOARD OF COUNTY COMMISSIONERS

By: _____ Vice-Chairman, for
Print: John E. Albion, Chairman

ATTEST:

By: _____

Print: _____

STATE OF FLORIDA
COUNTY OF LEE

The foregoing, instrument was acknowledged before me this 12th day of April, 04 by Doug St. Cerny and _____, Chairman and Vice-Chairman of the Lee County Board of County Commissioners, a political subdivision of the State of Florida, on behalf of thereof and who are personally known to me.

(SEAL)

Georgia Sekulski
Notary Public
Print GEORGIA SEKULSKI

My Commission Expires:

GEORGIA SEKULSKI
MY COMMISSION # DD 055585
EXPIRES: September 9, 2005
Bonded Thru Notary Public Underwriters

Approved as to Form and Legality
By: _____
Lee County Attorney
Date: 4/21/04

Exhibit "A"
Tract No. 34-100-044

A parcel of land in Government Lot 1, Section 28, Township 43 South, Range 27 East, Lee County, Florida, being specifically described as follows:

From the Southeast corner of the Northeast quarter of said Section 28, the coordinates of which are X=625,560.53 and Y=963,306.13, bear North 1°50'20" West; along the East line of the Northeast quarter of said Section 28, a distance of 1318.61 feet to the Southeast corner of said Government Lot 1; thence, South 89°16'22" West, along the South line of said Government Lot 1; a distance of 730.00 feet to the POINT OF BEGINNING; thence, continue South 89°16'22" West, along said South line, a distance of 188.65 feet; thence, North 10°00'00" East, a distance of 272.44 feet; thence, North 27°00'00" East, a distance of 100.00 feet; thence, North 62°00'00" East, a distance of 250.00 feet; thence, North 44°00'00" East, a distance of 150.00 feet; thence, North 28°00'00" East, a distance of 110.00 feet to the intersection thereof with the Southerly Right-of-Way line of Canal 43 as recorded in Official Records Book 114, page 430, Lee County Florida, public records; thence South 62°36'33" East, along said Southerly Right-of-Way line, a distance of 95.74 feet; thence, South 30°00'00" West, a distance of 731.33 feet to the POINT OF BEGINNING.

The bearings and coordinates in the above description refer to the standard plane rectangular coordinate system for the West Zone of Florida.

TOGETHER WITH:

The East half of the Northwest quarter of the Southeast quarter of the Northeast quarter of Section 28, Township 43 South, Range 27 East, Lee County, Florida.

TOGETHER WITH:

The West half of the Northeast quarter of the Southeast quarter of the Northeast quarter of Section 28, Township 43 South, Range 27 East, Lee County, Florida.

LESS, the South 207 feet, thereof.

Containing a total of 11.61 acres, more or less, per Lee County Tax Rolls.

C43\SFWMD
Folio: 4327280000008004
Folio: 4327280000009000
Folio: 4327280000011002

R:\Legals\c43\100-044.lgl
September 13, 2000

LEGAL DESCRIPTION
14-Sep-00
Date
PSM

Exhibit "A"
Tract No. 34-100-045

The Northeast quarter of the Southwest quarter and all that part of the North three-quarters of the West half of the Southeast quarter of Section 13, Township 43 South, Range 26 East, lying Northerly of the South line of the North 1600 feet of the South half of said Section 13.

LESS:

The South 277.90 feet of the North 1600 feet of the West half of the Southeast quarter of Section 13, Township 43 South, Range 26 East, Lee County, Florida.

TOGETHER WITH:

The East 100 feet of the East half of the Southeast quarter of the Southwest quarter of Section 13, Township 43 South, Range 26 East, Lee County, Florida, being more particularly described as follows:

From the Southeast corner of Section 13, bear North 89°38'50" West, along the South line of said Section 13, a distance of 2680.29 feet to the South quarter corner and the POINT OF BEGINNING; thence, North 0°30'48" East, along the East line of the Southwest quarter a distance of 1334.78 feet to the intersection thereof with the North line of the East half of the Southeast quarter of the Southwest quarter; thence, North 89°45'40" West, along said North line, a distance of 100 feet; thence, South 0°03'48" West, parallel to the East line of the Southwest quarter a distance of 1334.58 feet to the intersection thereof with the South line of said Section 13; thence, South 89°38'50" East, along said South line, a distance of 100 feet to the POINT OF BEGINNING.

LESS, the Right-of-Way for State Road No. 78.

The bearings in the above description refer to the standard plane rectangular coordinate system for the West Zone of Florida.

Containing a total of 85.69 acres, more or less, per Lee County Tax Rolls.

C-43\SFWMD
Folio: 4326130000003005
Folio: 4326130000002010

R:\Legals\c43-100-045.lgl
September 13, 2000

LEGAL DESCRIPTION
14-Sep-00
Date
Dennis J. Hearn PSM

Exhibit "A"
Tract No. 34-100-046

All that part of the fractional North half of Section 19, Township 43 South, Range 27 East, Lee County, Florida, lying Southerly of the following specifically described line:

From the Northwest corner of said Section 19, bear South 0°22'31" West, along the West line of said Section 19, a distance of 1932.51 feet to the POINT OF BEGINNING; Thence, North 88°26'23" East, a distance of 116.43 feet; thence, North 83°19'00" East, a distance of 2760.80 feet; Thence, North 89°25'37" East, a distance of 1647.10 feet; Thence, North 77°16'46" East, a distance of 681.90 feet, more or less, to the intersection thereof with the East line of said Section 19, and the end of the specifically described line.

LESS The Right-of-Way for Caloosahatchee River Canal, as shown on the map or plat recorded in Plat Book 8, Page 51, Lee County, Florida, Public Records.

ALSO LESS All that part of fractional Section 19 lying Southerly of the Caloosahatchee River.

The bearing in the above description refer to the Standard Plane Rectangular Coordinate System for the West Zone of Florida.

Containing 40.00 acres, more or less, per Lee County Tax Rolls.

C-43\SFWMD
Folio: 43271900000001001

R:\Legals\c43\100-046.lgl
September 13, 2000

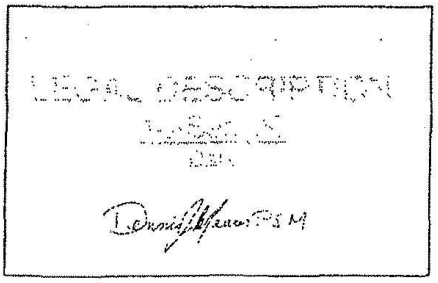


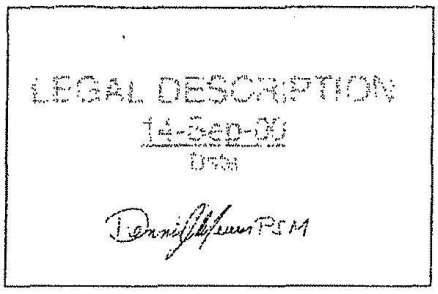
Exhibit "A"
Tract No. 34-100-047

The Southeast quarter of the Southeast quarter of Section 18, Township 43 South, Range 27 East, Lee County, Florida.

Containing 40.00 acres, more or less, per Lee County Tax Rolls.

C-43\SFWMD
Folio: 43271800000003000

R:\Legals\c43\100-047.lgl
September 13, 2000



Page from Res to p 13 as duplicate of first 7 p.

Exhibit "A"
Tract No. 34-100-044

A parcel of land in Government Lot 1, Section 28, Township 43 South, Range 27 East, Lee County, Florida, being specifically described as follows:

From the Southeast corner of the Northeast quarter of said Section 28, the coordinates of which are X=625,560.53 and Y=963,306.13, bear North 1°50'20" West; along the East line of the Northeast quarter of said Section 28, a distance of 1318.61 feet to the Southeast corner of said Government Lot 1; thence, South 89°16'22" West, along the South line of said Government Lot 1; a distance of 730.00 feet to the POINT OF BEGINNING; thence, continue South 89°16'22" West, along said South line, a distance of 188.65 feet; thence, North 10°00'00" East, a distance of 272.44 feet; thence, North 27°00'00" East, a distance of 100.00 feet; thence, North 62°00'00" East, a distance of 250.00 feet; thence, North 44°00'00" East, a distance of 150.00 feet; thence, North 28°00'00" East, a distance of 110.00 feet to the intersection thereof with the Southerly Right-of-Way line of Canal 43 as recorded in Official Records Book 114, page 430, Lee County Florida, public records; thence South 62°36'33" East, along said Southerly Right-of-Way line, a distance of 95.74 feet; thence, South 30°00'00" West, a distance of 731.33 feet to the POINT OF BEGINNING.

The bearings and coordinates in the above description refer to the standard plane rectangular coordinate system for the West Zone of Florida.

TOGETHER WITH:

The East half of the Northwest quarter of the Southeast quarter of the Northeast quarter of Section 28, Township 43 South, Range 27 East, Lee County, Florida.

TOGETHER WITH:

The West half of the Northeast quarter of the Southeast quarter of the Northeast quarter of Section 28, Township 43 South, Range 27 East, Lee County, Florida.

LESS, the South 207 feet, thereof.

Containing a total of 11.61 acres, more or less, per Lee County Tax Rolls.

Exhibit "A"
Tract No. 34-100-044

Page from Rec to p 13 as duplicate of first 7 p.

A parcel of land in Government Lot 1, Section 28, Township 43 South, Range 27 East, Lee County, Florida, being specifically described as follows:

From the Southeast corner of the Northeast quarter of said Section 28, the coordinates of which are X=625,560.53 and Y=963,306.13, bear North 1°50'20" West; along the East line of the Northeast quarter of said Section 28, a distance of 1318.61 feet to the Southeast corner of said Government Lot 1; thence, South 89°16'22" West, along the South line of said Government Lot 1; a distance of 730.00 feet to the POINT OF BEGINNING; thence, continue South 89°16'22" West, along said South line, a distance of 188.65 feet; thence, North 10°00'00" East, a distance of 272.44 feet; thence, North 27°00'00" East, a distance of 100.00 feet; thence, North 62°00'00" East, a distance of 250.00 feet; thence, North 44°00'00" East, a distance of 150.00 feet; thence, North 28°00'00" East, a distance of 110.00 feet to the intersection thereof with the Southerly Right-of-Way line of Canal 43 as recorded in Official Records Book 114, page 430, Lee County Florida, public records; thence South 62°36'33" East, along said Southerly Right-of-Way line, a distance of 95.74 feet; thence, South 30°00'00" West, a distance of 731.33 feet to the POINT OF BEGINNING.

The bearings and coordinates in the above description refer to the standard plane rectangular coordinate system for the West Zone of Florida.

TOGETHER WITH:

The East half of the Northwest quarter of the Southeast quarter of the Northeast quarter of Section 28, Township 43 South, Range 27 East, Lee County, Florida.

TOGETHER WITH:

The West half of the Northeast quarter of the Southeast quarter of the Northeast quarter of Section 28, Township 43 South, Range 27 East, Lee County, Florida.

LESS, the South 207 feet, thereof.

Containing a total of 11.61 acres, more or less, per Lee County Tax Rolls.

C43\SFWMD
Folio: 43272800000008004
Folio: 43272800000009000
Folio: 43272800001 1002

R:\Legals\c43\100-044.lgl
September 13, 2000

LEGAL DESCRIPTION
14-Sep-00
Date

Dennis Jefferson, PSM

Exhibit "A"
Tract No. 34-100-045

The Northeast quarter of the Southwest quarter and all that part of the North three-quarters of the West half of the Southeast quarter of Section 13, Township 43 South, Range 26 East, lying Northerly of the South line of the North 1600 feet of the South half of said Section 13.

LESS:

The South 277.90 feet of the North 1600 feet of the West half of the Southeast quarter of Section 13, Township 43 South, Range 26 East, Lee County, Florida.

TOGETHER WITH:

The East 100 feet of the East half of the Southeast quarter of the Southwest quarter of Section 13, Township 43 South, Range 26 East, Lee County, Florida, being more particularly described as follows:

From the Southeast corner of Section 13, bear North 89°38'50" West, along the South line of said Section 13, a distance of 2680.29 feet to the South quarter corner and the POINT OF BEGINNING; thence, North 0°30'48" East, along the East line of the Southwest quarter a distance of 1334.78 feet to the intersection thereof with the North line of the East half of the Southeast quarter of the Southwest quarter; thence, North 89°45'40" West, along said North line, a distance of 100 feet; thence, South 0°03'48" West, parallel to the East line of the Southwest quarter a distance of 1334.58 feet to the intersection thereof with the South line of said Section 13; thence, South 89°38'50" East, along said South line, a distance of 100 feet to the POINT OF BEGINNING.

LESS, the Right-of-Way for State Road No. 78.

The bearings in the above description refer to the standard plane rectangular coordinate system for the West Zone of Florida.

Containing a total of 85.69 acres, more or less, per Lee County Tax Rolls.

C-43\SFWMD
Folio: 4326130000003005
Folio: 4326130000002010

R:\Legals\c43-100-045.lgl
September 13, 2000

LEGAL DESCRIPTION
14-Sec-00
Date

Exhibit "A"
Tract No. 34-100-046

All that part of the fractional North half of Section 19, Township 43 South, Range 27 East, Lee County, Florida, lying Southerly of the following specifically described line:

From the Northwest corner of said Section 19, bear South 0°22'31" West, along the West line of said Section 19, a distance of 1932.51 feet to the POINT OF BEGINNING; Thence, North 88°26'23" East, a distance of 116.43 feet; thence, North 83°19'00" East, a distance of 2760.80 feet; Thence, North 89°25'37" East, a distance of 1647.10 feet; Thence, North 77°16'46" East, a distance of 681.90 feet, more or less, to the intersection thereof with the East line of said Section 19, and the end of the specifically described line.

LESS The Right-of-Way for Caloosahatchee River Canal, as shown on the map or plat recorded in Plat Book 8, Page 51, Lee County, Florida, Public Records.

ALSO LESS All that part of fractional Section 19 lying Southerly of the Caloosahatchee River.

The bearing in the above description refer to the Standard Plane Rectangular Coordinate System for the West Zone of Florida.

Containing 40.00 acres, more or less, per Lee County Tax Rolls.

C-43\SFWMD
Folio: 4327190000001001

R:\Legals\c43\100-046.lgl
September 13, 2000

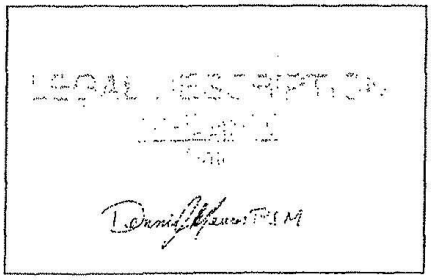


Exhibit "A"
Tract No. 34-100-047

The Southeast quarter of the Southeast quarter of Section 18, Township 43 South, Range 27 East, Lee County, Florida.

Containing 40.00 acres, more or less, per Lee County Tax Rolls.

C-43\SFWMD
Folio: 4327180000003000

R:\Legals\c43\100-047.lgl
September 13, 2000

LEGAL DESCRIPTION
14-Sep-00
Date
Dennis [signature] PSM

Exhibit "A"
Tract No. 34-100-048

All that part of Government Lot 5, Section 24, Township 43 South, Range 26 East, Lee County, Florida, lying Northerly of the Right-of-Way for State Road No. 80, Southerly of the Right-of-Way for Canal 43, as recorded in Official Records Book 161, Page 415, and Westerly of the following specifically described line:

From a three-quarter inch iron pipe marking the Southeast corner of Said Government Lot 5, bear South 88° 40'55" West, along the South line of said Government Lot 5, a distance of 713.41 feet; thence, north 1°24'25" East, a distance of 38.65 feet to the intersection thereof with the Northerly Right-of-Way line of State Road No. 80 and the POINT OF BEGINNING: thence, continue North 1°24'25" East, a distance of 743.24 feet to the intersection thereof with the Southerly Right-of-Way line of said Canal 43 and the end of the specifically described line.

Containing 11.10 acres, more or less, per Lee County Tax Rolls.

C-43\SFWMD
Folio: 4326240000007001

R:\Legals\c43\100-048.lgl
September 13, 2000

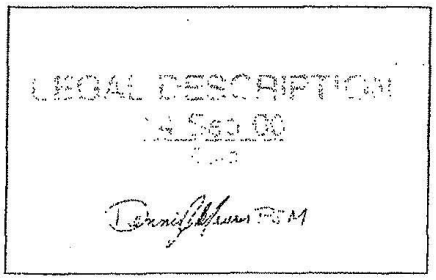
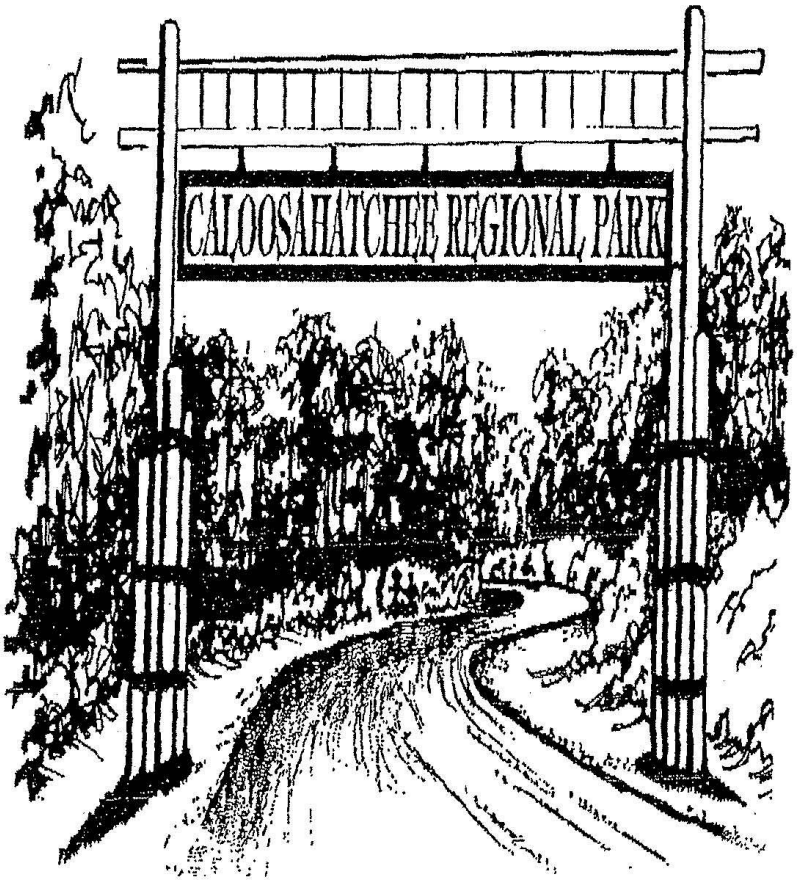


EXHIBIT B



Caloosahatchee Regional Park
Resource Management Plan
County of Lee
Department of Parks and Recreation

ORIGINAL

SOUTH FLORIDA WATER MANAGEMENT DISTRICT AMENDMENT

LS040648-A01

AMENDMENT NO. 01

TO LEASE NO. LS040648

BETWEEN THE

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

AND

LEE COUNTY, FLORIDA

This **AMENDMENT NO. 01**, entered into on SEP 20 2007, to that **LEASE**, dated April 20, 2004, between "the Parties," the South Florida Water Management District (**DISTRICT**) and Lee County Board of County Commissioners (**COUNTY**).

WITNESSETH THAT:

WHEREAS, the **LEASE** may be amended with the prior written approval of the Parties; and

WHEREAS, **COUNTY** and **DISTRICT** entered into that certain Lease, dated April 20, 2004 (the "**LEASE**"), whereby **DISTRICT** leased to **COUNTY** that certain real property consisting of 188.40 acres, more or less, located in Lee County, Florida (the "Leased Premises"); and

WHEREAS, the Parties wish to amend the terms and conditions of the **LEASE** in order to add ~~2.87~~ 2.14 acres, more or less, as depicted on Exhibit "A-1" attached hereto and incorporated herein by reference (the "Additional Property") to the Leased Premises, subject to certain terms and conditions set forth hereinbelow.

NOW THEREFORE, the **DISTRICT** and the **COUNTY**, in consideration of the mutual benefits flowing from each to the other, do hereby agree as follows:

This **AMENDMENT NO. 01** shall be effective upon execution by the parties.

1. **Recitals:** The foregoing recitals are true and correct and are hereby incorporated herein by reference.

2. Effective as of the date hereof, Paragraph 1.1 shall be revised to add the Additional Property to the Leased Premises, identified by the **DISTRICT** as Parcel Numbers 1998, 2246 and 2200 (Westerly portion of Parcel 2200). Hereinafter, Parcels 1998, 2200 and 2246 shall be referred to as the "Right of Way Parcels".

C10a
8-28-07

SOUTH FLORIDA WATER MANAGEMENT DISTRICT AMENDMENT

DISTRICT:

(Corporate Seal)

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

ATTEST: Jacki McGorty

Print Name: JACKI McGORTY
As its: DISTRICT CLERK

By: Frank Hayden

Frank Hayden, Procurement Director
SEP 20 2007

Witnesses:

Print Name: Alejandro Quintero

Print Name: Jennifer S. Kilian

SFWMD PROCUREMENT APPROVED
By: Pamela K Stallwell

Date: 4/20/07

SFWMD OFFICE OF COUNSEL, APPROVED
By: Holly Walton

Dat 6.22.07

STATE OF FL
COUNTY OF Palm Beach

The foregoing instrument was acknowledged before me this 20th day of September 2007, by Frank Hayden, the Procurement Director of the South Florida Water Management District, a public corporation of the State of Florida and who is personally known to me.

Marianne Caminiti
Commission #DD281574
Expires: Feb 29, 2008
Bonded Thru
Atlantic Bonding Co., Inc.

Notary Public
Marianne Caminiti
Print
My Commission Expires: 2/29/08

Exhibit "A"
Tract No. 34100-072

A parcel of land lying in Section 22, Township 43 South, Range 26 East, Lee County, Florida. Said parcel being more particularly described as follows:

All that part of lots 1, 2, 3, 4, 5, 6, 7 and 8 and the Lagoon, in Block C, IDALIA, a subdivision in Section 22, Township 43 South, Range 26 East, according to the plat thereof, as recorded in Plat Book 3, page 30, Lee County, Florida, public records, lying Northerly of the following specifically described line:

From the Southeast corner of Section 22, Township 43, Range 26, bear North 00°21'38" West, along the East line of said Section 22, a distance of 2561.69 feet; Thence, South 89°56'17" West, to the intersection thereof with the East bank of the Lagoon as shown on said Plat of Idalia and the point of beginning; Thence, continue South 89°56'17" West, to the intersection thereof with the West line of said Lot 1, Block C, and the end of the specifically described line.

The bearings in the above description refer to the standard plane rectangular coordinate system for the West Zone of Florida.

Containing 2.39 acres, more or less.

LEGAL DESCRIPTION
Apr. 5, 2007
Jin Ma

C-43\SFWMD
WMD: 1998
R:\Legals\c43\100-072.lgl.doc
April 5, 2007

Exhibit "A"
Tract No. 34100-074

Parcel A

All that part of Government Lot 2, Section 20, Township 43 South, Range 27 East, lying Southerly of the following specifically described line:

From the Northwest corner of said Section 20, bear South 00°19'18" West along the West line of said Section 20, a distance of 1963.74 feet to the point of beginning; Thence, North 77°16'46" East, a distance of 1338.02 feet to the point of curvature of a curve to the right, having a central angle of 30°12'19" and a radius of 2182.74 feet; Thence, Easterly along the arc of said curve, a distance of 1150.70 feet to the point of tangency; Thence, South 72°30'55" East, a distance of 1212.36 feet to the point of curvature of a curve to the left, having a central angle of 18°26'54" and a radius of 2133.09 feet; Thence, Easterly along the arc of said curve, a distance of 686.82 feet to the point of tangency; Thence, North 89°02'11" East, a distance of 561.79 feet; Thence, South 75°29'38" East, a distance of 514.1 feet, more or less, to the intersection thereof with the East line of Government Lot 1 of said Section 20 and the end of the specifically described line.

And Westerly of the West line of the following described parcel of land:

Begin at the Southeast corner of the Northeast quarter of the Northwest quarter of Section 20, Township 43 South, Range 27 East; Thence, run West 15 feet; thence, South 25.5° west, 33.5 rods to the Caloosahatchee River; thence, up the river bank 5 rods; thence, North 25.5° East, 4.5 rods; thence, North 64.5° west, 36 feet; thence, North 25.5° East, 28 rods; thence, West 15 feet to the point of beginning. Also, Less the right of way for Caloosahatchee river Canal, as shown on the map or plat, recorded in Plat Book 8, page 51, Lee County, Florida, Public records.

The bearings in the above description refer to the standard plane rectangular coordinate system for the West Zone of Florida.

LEGAL DESCRIPTION
Apr. 5 2007
Jin Ma

Containing 17.50 acres, more or less.

C-43\SFWMD
WMD: 2200
R:\Legals\C43\100-074.lgl.doc
April 5, 2007

ORIGINAL

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
AMENDMENT

LS040648-A02
(SAP #3600000701)

AMENDMENT NO. 2

TO AGREEMENT NO. LS040648

BETWEEN THE

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

AND

LEE COUNTY, FLORIDA

This **AMENDMENT NO. 2** entered into on the 2nd Day of June, 2009, to that **LEASE** dated April 20, 2004, and as amended on September 20, 2007 (A01), between "the Parties," the South Florida Water Management District (**DISTRICT**), and Lee County Board of County Commissioners (**COUNTY**).

WITNESSETH THAT:

WHEREAS, the **LEASE** may be amended with the prior written approval of the Parties; and

WHEREAS, the Parties wish to amend the **LEASE** in order to extend the period of performance and revise the Legal Description of the **LEASE**;

NOW THEREFORE, the **DISTRICT** and the **COUNTY**, in consideration of the mutual benefits flowing from each to the other, do hereby agree as follows:

1. The expiration date of the **LEASE** is hereby extended by five (5) years and the expiration date, as amended, is April 19, 2014. Regardless of the actual date of execution, this **AMENDMENT NO. 2** shall be effective as of April 20, 2009.

2. This **AMENDMENT NO.** 2 shall be at no additional cost to the **DISTRICT.**

C10a
6-2-09

SOUTH FLORIDA WATER MANAGEMENT DISTRICT
AMENDMENT

3. The Legal Description, attached as Exhibit "A" to the **LEASE** is hereby revised in accordance with Exhibit "A2", attached hereto and made a part of this **AMENDMENT NO. 2.**

4. All other terms and conditions of the **LEASE**, remain unchanged.

IN WITNESS WHEREOF, the Parties or their duly authorized representatives hereby execute this **AMENDMENT NO. 2** on the date first written above.

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

By: Dorothy Bradshaw, Deputy Procurement Director
for **Frank Hayden, Procurement Director**

SFWMD PROCUREMENT APPROVED
BY: Pamela K Bellwood
DATE: 3/26/09

LEE COUNTY, FLORIDA
BOARD OF COUNTY COMMISSIONERS

By: J Judah

Title: Chair

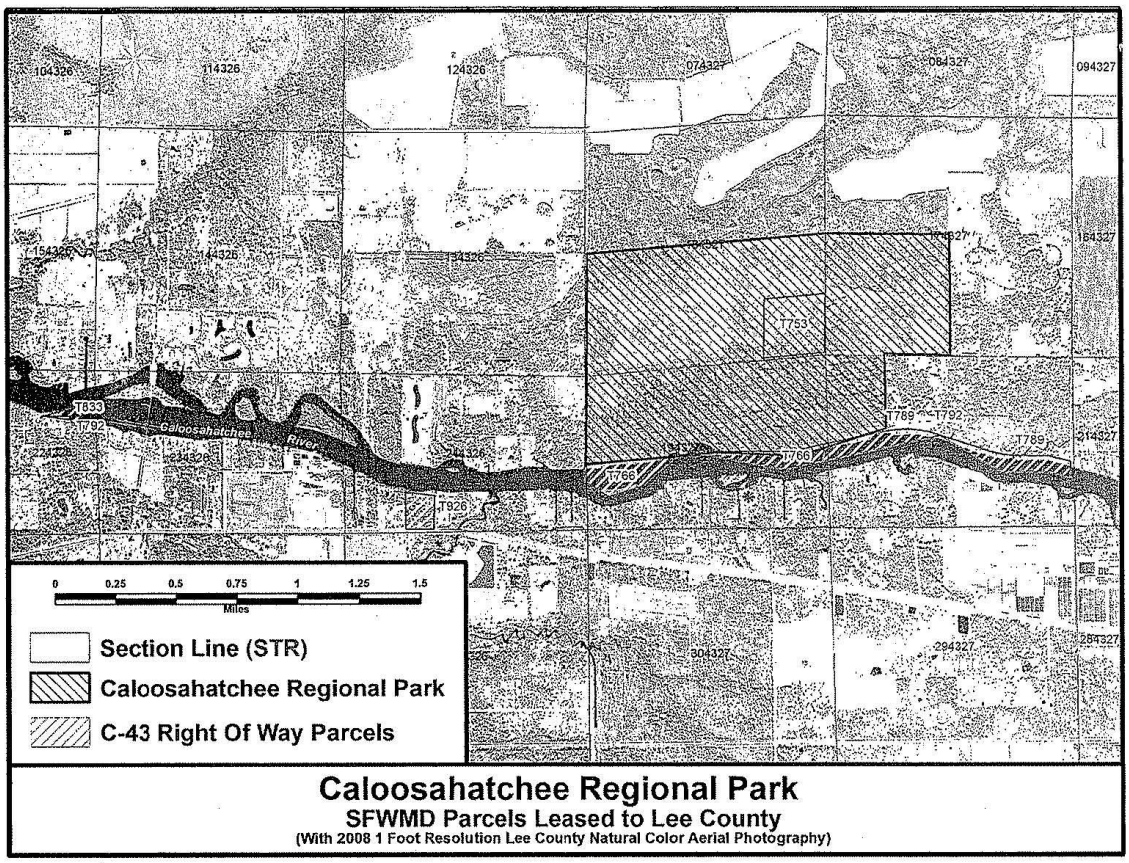
ATTEST:
CLERK OF CIRCUIT COURT
Charlie Green, Clerk

By: Marcia Wilson
Deputy Clerk

BOARD OF COUNTY COMMISSIONERS SEAL LEE COUNTY, FLORIDA

APPROVED AS TO FORM

By: Michael A-Baker
County Attorney's Office



Lee County Leased Parcels – Caloosahatchee Regional Park

- Tract No 34-100-046- WMD T766
- Tract No 34-100-047- WMD T753
- Tract No 34-100-048- WMD T926
- Tract No 34-100-072,-Tract No 34-100-073,-Tract No 34-100-074, (WMD T833, T789, T792)
- * Parcel As described in Warranty Deed (Official Records Book 114, page 415)

FCD Deed Form No. 1
(Corporation)

Form No. 74

283836

114/415

WARRANTY DEED

THIS INDENTURE, Made this the 30 day of January A.D., 1962 between FAIRWAY ORANGE GROVES, INC., a Florida corporation a corporation existing under the Laws of the State of Florida having its principal place of business in the County of Lee ✓ State of Florida party of the first part, and CENTRAL AND SOUTHERN FLORIDA FLOOD CONTROL DISTRICT, a body corporate, created by the Acts of the Florida Legislature of 1949, with its principal office in West Palm Beach, and whose Post Office Box is 1671, West Palm Beach, of the County of Palm Beach, in the State of Florida, party of the second part;

WITNESSETH: That the said party of the first part, for and in consideration of the sum of TEN DOLLARS ($10.00), and other good and valuable considerations to it in hand paid by the said party of the second part, the receipt whereof is hereby acknowledged, has granted, bargained and sold to the said party of the second part, its successors and assigns forever, the following described land, situate, lying and being in the County of Lee State of Florida, to wit:

All that part of the fractional North one-half (N½) of Section 19, Township 43 South, Range 27 East, lying Southerly of the following specifically described line:

From the Northwest (NW) corner of said Section 19, bear South 0° 22' 31" West, along the West line of said Section 19, a distance of 1932.51 feet to the point of beginning; Thence, North 88° 26' 23" East, a distance of 116.43 feet; Thence, North 83° 19' 00" East, a distance of 2760.80 feet; Thence, North 89° 25' 37" East, a distance of 1647.40 feet; Thence, North 77° 16' 46" East, a distance of 681.9 feet, more or less, to the intersection thereof with the East line of said Section 19, and the end of the specifically described line.

LESS, However, the right of way for Caloosahatchee River Canal, as shown on the map or plat recorded in Plat Book 8, page 51, Lee County, Florida, public records.

The bearings in the above description refer to the standard plane rectangular coordinate system for the West Zone of Florida.

ALSO LESS, all that part of Fractional Section 19 lying Southerly of the Caloosahatchee River.

SUBJECT to that certain Perpetual Spoil Easement granted to the United States of America, dated August 19, 1935, recorded in Miscellaneous Book 17, page 324.

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

2199

APPENDIX C: Floristic Species Documented Within CRP.

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Acanthaceae							
	Ruellia blechum (syn. = *Blechum pyramidatum*)	Browne's blechum	exotic	II			
	Ruellia tweediana	Britton's wild petunia, Mexican bluebell	exotic	I			
	Thunbergia fragrans	whitelady	exotic				
Family: Altingiaceae							
	Liquidambar styraciflua	sweetgum	native			PE	
Family: Amaranthaceae							
	Alternanthera philoxeroides	alligatorweed	exotic	II			
Family: Amaryllidaceae							
	Crinum americanum	seven-sisters, string-lily	native			S	
Family: Anacardiaceae							
	Rhus copallinum	winged sumac	native			S	
	Schinus terebinthifolius	Brazilian pepper	exotic	I			
	Toxicodendron radicans	eastern poison ivy	native			S	
Family: Annonaceae							
	Annona glabra	pond apple	native			S	
	Asimina reticulata	netted pawpaw	native			S	
Family: Apiaceae							
	Centella asiatica	spadeleaf	native			S	
	Cicuta maculata	spotted water hemlock	native			I	
	Hydrocotyle umbellata	manyflower marshpennywort	native			R	
Family: Aquifoliaceae							
	^Ilex cassine	dahoon holly	native			S	
	Ilex glabra	gallberry, inkberry	native			S	
Family: Araceae							
	Colocasia esculenta	wild taro, dasheen, coco yam	exotic	I			
	Pistia stratiotes	water-lettuce	exotic	I			
Family: Arecaceae							
	Sabal palmetto	cabbage palm	native			S	
	Serenoa repens	saw palmetto	native			S	
	Syagrus romanzoffiana	queen palm	exotic	II			
Family: Apocynaceae							
	Asclepias curassavica	scarlet milkweed	exotic				
	Cynanchum scoparium	leafless swallowwort	native			R	
	Sarcostemma clausum	white twinevine	native			S	

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Asteraceae							
	Ambrosia artemisiifolia	common ragweed	native			S	
	Baccharis glomeruliflora	silverling	native			S	
	Baccharis halimifolia	groundsel tree, sea myrtle	native			S	
	Bidens alba	Beggarticks	native			S	
	Carphephorus corymbosus	Florida paintbrush, Coastalplain chaffhead	native			R	
	Cirsium horridulum	purple thistle	native			S	
	Conoclinium coelestinum	blue mistflower	native			S	
	Elephantopus elatus	tall elephant's-foot	native			R	
	Emilia fosbergii	Florida tasselflower	exotic				
	Eupatorium capillifolium	dogfennel	native			S	
	Eupatorium rotundifolium	roundleaf thoroughwort, false horehound	native			I	
	Eupatorium serotinum	lateflowering thoroughwort	native			R	
	Euthamia caroliniana	slender flattop goldenrod	native			S	
	Hieracium megacephalon	Coastal plainhawkweed	native			S	
	Laitris spp.	blazing star, gayfeather	native				
	Lygodesmia aphylla	rose-rush	native			R	
	Mikania cordifolia	Florida Keys hempvine	native			R	
	Mikania scandens	climbing hempvine	native			S	
	Pityopsis graminifolia	narrowleaf silkgrass	native			S	
	Pluchea odorata	sweetscent	native			S	
	Pterocaulon pycnostachyum	blackroot	native			S	
	Rudbeckia hirta	blackeyed susan	native			R	
	Solidago fistulosa	pinebarren goldenrod	native			R	
	Solidago odora var. *chapmanii*	Chapman's goldenrod	native			S	
	Sonchus asper	Spiny sowthistle	exotic				
	Sphagneticola trilobata	creeping oxeye	exotic	II			
	Symphyotrichum carolinianum	climbing aster	native			R	
	Symphyotrichum dumosum	rice button aster	native			S	
	Youngia japonica	Oriental false hawksbeard	exotic				
Family: Bignoniaceae							
	Campsis radicans	trumpet creeper	native			CI	
Family: Blechnaceae							
	Blechnum serrulatum	swamp fern, toothed midsorus fern	native			S	
	Woodwardia virginica	Virginia chain fern	native			S	

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Bromeliaceae							
	Tillandsia balbisiana	northern needleleaf	native		T	S	
	Tillandsia fasciculata var. *densispica*	stiff-leaved wild-pine, cardinal airplant	native		E	S	
	Tillandsia recurvata	ballmoss	native			S	
	Tillandsia setacea	southern needleleaf	native			S	
	Tillandsia usneoides	Spanish moss	native			S	
	Tillandsia utriculata	giant wild pine, giant airplant	native		E	S	
Family: Caprifoliaceae							
	^Lonicera sempervirens	coral honeysuckle	native				
	Viburnum obovatum	small-leaf viburnum, Walter's viburnum	native			I	
Family: Cistaceae							
	Helianthemum corymbosum	pinebarren frostweed	native			R	
Family: Clusiaceae							
	Hypericum hypericoides	St. Andrew's-cross	native			S	
	Hypericum tetrapetalum	fourpetal St. John's-wort	native			S	
Family: Commelinaceae							
	Callisia ornata	Florida scrub roseling	native			I	
	Commelina diffusa	common dayflower	exotic				
Family: Convolvulaceae							
	Dichondra carolinensis	Carolina ponysfoot	native			S	
	Ipomoea alba	moonflowers, tropical white morning-glory	native			S	
	Ipomoea indica	oceanblue morning-glory	native			S	
	Ipomoea quamoclit	cypressvine	exotic				
	Ipomoea sagittata	saltmarsh morning-glory	native			AS	
Family: Cornaceae							
	Cornus foemina	swamp dogwood, stiff dogwood	native			R	
Family: Cucurbitaceae							
	Melothria pendula	creeping cucumber	native			S	
	Momordica charantia	Balsampear	exotic				
Family: Cupressaceae							
	Juniperus virginiana	red cedar	native				
	Taxodium ascendens	Pond cypress	native			S	

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Cyperaceae							
	Cladium jamaicense	Jamaica swamp sawgrass	native			S	
	Cyperus involucratus	umbrella plant	exotic	II			
	Cyperus ligularis	swamp flatsedge	native			S	
	Cyperus odoratus	fragrant flatsedge	native			S	
	Cyperus croceus	Baldwin's flatsedge	native			R	
	Rhynchospora colorata	starrush whitetop	native			R	
Family: Dennstaedtiaceae							
	Pteridium aquilinum var. *pseudocaudatum*	tailed bracken fern	native			R	
Family: Ebenaceae							
	Diospyros virginiana	common persimmon	native			R	
Family: Ericaceae							
	Bejaria racemosa	tarflower	native			R	
	Lyonia ferruginea	rusty staggerbush	native			PE	
	Lyonia fruticosa	Coastalplain staggerbush	native			S	
	Lyonia lucida	fetterbush	native			S	
	Vaccinium corymbosum	highbush blueberry	native			CI	
	Vaccinium myrsinites	shiny blueberry	native			S	
Family: Euphorbiaceae							
	Chamaesyce hirta	pillpod sandmat	native			S	
Family: Fabaceae							
	Abrus precatorius	rosary pea, blackeyed susan	exotic	I			
	Aeschynomene americana	shyleaf	native			R	
	Albizia lebbeck	woman's tongue	exotic	I			
	Apios americana	groundnut	native			R	
	Centrosema virginianum	spurred butterfly pea	native			S	
	Chamaecrista fasciculata	partridge pea	native			S	
	Chamaecrista nictitans var. *aspera*	sensitive pea	native			S	
	Crotalaria pallida var. *obovata*	smooth rattlebox	exotic				
	Crotalaria spectabilis	showy rattlebox	exotic				
	Dalbergia sissoo	Indian rosewood	exotic	II			
	Desmodium incanum	zarzabacoa comun	exotic				
	^Erythrina herbacea	coralbean, Cherokee bean	native			S	
	Galactia elliottii	Elliott's milkpea	native			R	
	Indigofera hirsuta	hairy indigo	exotic				

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Fabaceae (continued)							
	Leucaena leucocephala	white leadtree	exotic	II			
	Senna pendula var. *glabrata*	valamuerto, Christmas cassia, climbing cassia	exotic	I			
	Vigna luteola	hairypod cowpea	native	I		S	
Family: Fagaceae							
	Quercus chapmanii	Chapman's oak	native			S	
	Quercus laurifolia	laurel oak	native			S	
	Quercus minima	dwarf live oak	native			R	
	Quercus myrtifolia	myrtle oak	native			S	
	Quercus pumila	running oak	native			R	
	Quercus virginiana	live oak	native			S	
Family: Iridaceae							
	Iris hexagona	dixie iris, prairie iris	native			I	
	Sisyrinchium angustifolium	narrowleaf blue-eyed grass	native			R	
Family: Juglandaceae							
	Carya aquatica	water hickory	native			I	
Family: Juncaceae							
	Juncus marginatus	shore rush, grassleaf rush	native			R	
Family: Lamiaceae							
	Callicarpa americana	American beautyberry	native			S	
	Clerodendrum indicum	Turk's turban, skyrocket	exotic				
	Piloblephis rigida	wild pennyroyal	native			R	
Family: Lauraceae							
	Persea borbonia	red bay	native			R	
	Persea palustris	swamp bay	native			S	
Family: Malvaceae							
	Kosteletzkya pentacarpos	Virgina saltmarsh mallow	native			S	
	Malvastrum corchorifolium	false mallow	native			S	
	Sida cordifolia	llima	exotic				
	Urena lobata	Caesarweed	exotic	II			
	Waltheria indica	sleepymorning	native			S	
Family: Meliaceae							
	Melia azedarach	Chinaberrytree	exotic	II			
	^Swietenia mahagoni	West Indian Mahogany	native		T		G3 G4 S3

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Moraceae							
	Ficus aurea	strangler fig, golden fig	native			S	
	Morus rubra	red mulberry	native			R	
Family: Myricaceae							
	Myrica cerifera	wax myrtle, southern bayberry	native			S	
Family: Myrsinaceae							
	Ardisia elliptica	shoebutton	exotic	I			
	Ardisia escallonioides	marlberry	native			S	
	Rapanea punctata	myrsine, colicwood	native			S	
Family: Myrtaceae							
	Eugenia axillaris	white stopper	native			S	
	Eugenia uniflora	Surinam cherry	exotic	I			
	Melaleuca quinquenervia	Melaleuca, punktree	exotic	I			
	Myrcianthes fragrans	twinberry, Simpson's stopper	native		T	T	
	Psidium guajava	guava	exotic	I			
Family: Nephrolepidaceae							
	Nephrolepis exaltata	sword fern, wild Boston fern	native			S	
Family: Nyssaceae							
	Nyssa sylvatica var. biflora	swamp tupelo	native			CI	
Family: Oleaceae							
	Fraxinus caroliniana	water ash, Carolina ash, pop ash	native			R	
	Forestiera segregata	Florida swampprivet	native			S	
Family: Ophioglossaceae							
	Ophioglossum palmatum	hand fern	native		E	I	G4 S2
Family: Orchidaceae							
	Encyclia tampensis	Florida butterfly orchid	native		CE	S	
	Habenaria quinqueseta	longhorn false reinorchid, Michaux's orchid	native			R	
	Habenaria repens	waterspider false reinorchid	native			I	
	Sacoila lanceolata	leafless beaked ladiestresses, leafless beaked orchid	native		T	I	
	Zeuxine strateumatica	soldier's orchid, lawn orchid	exotic				
Family: Orobanchaceae							
	Buchnera americana	American bluehearts	native			S	
Family: Passifloraceae							
	Passiflora suberosa	corkystem passionflower	native			S	

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Phyllanthaceae							
	Bischofia javanica	Javanese bishopwood	exotic	I			
Family: Phytolaccaceae							
	Phytolacca americana	American pokeweed	native			S	
	Rivina humilis	rouge plant	native			S	
Family: Pinaceae							
	Pinus elliottii var. *densa*	south Florida slash pine	native			S	
	^Pinus palustris	longleaf pine	native			I	
Family: Platanaceae							
	^Platanus occidentalis	American sycamore, American Planetree	native				
Family: Poaceae							
	Amphicarpum muhlenbergianum	blue maidencane	native			R	
	Andropogon glomeratus var. *glaucopsis*	purple bluestem	native			R	
	Andropogon glomeratus var. *pumilus*	bushy bluestem	native			S	
	Andropogon virginicus var. *glaucus*	chalky bluestem	native			R	
	Arundo donax	giant reed	exotic				
	Cenchrus sp.	sandbur	native				
	Cynodon dactylon	Bermuda grass	exotic				
	Dichanthelium aciculare	needleleaf witchgrass	native			S	
	Dichanthelium commutatum	variable witchgrass	native			R	
	Dichanthelium portoricense	hemlock witchgrass	native			S	
	Dichanthelium strigosum var. glabrescens	roughhair witchgrass	native			S	
	Eragrostis elliottii	Elliott's lovegrass	native			S	
	Imperata brasiliensis	Brazilian satintail	native			R	
	Imperata cylindrica	cogongrass	exotic				
	Melinis repens	rose natalgrass	exotic	I			
	Oplismenus hirtellus	woodsgrass, basketgrass	native			AS	
	Panicum maximum	Guineagrass	exotic	II			
	Panicum rigidulum	redtop panicum	native			S	
	Panicum virgatum	switchgrass	native			S	
	Paspalum conjugatum	sour paspalum, hilograss	native			S	
	Paspalum notatum	bahiagrass	exotic				
	Paspalum urvillei	vaseygrass	exotic				
	Pennisetum purpureum	napiergrass, elephantgrass	exotic	I			
	Rottboellia cochinchinensis	itchgrass	exotic				

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Poaceae (continued)							
	^*Spartina bakeri*	sand cordgrass	native			S	
	Sporobolus indicus var. *pyramidalis*	West Indian dropseed	exotic				
	Stenotaphrum secundatum	St. Augustinegrass	native				
	^*Tripsacum dactyloides*	eastern gamagrass, Fakahatcheegrass	native			R	
Family: Polygalaceae							
	Polygala nana	candyroot	native			R	
	Polygala rugelii	yellow milkwort	native			I	
	Polygala violacea	showy milkwort	native				
Family: Polygonaceae							
	Polygonum punctatum	dotted smartweed	native			AS	
Family: Polypodiaceae							
	Phlebodium aureum	golden polypody	native			S	
	Pleopeltis polypodioides var. *michauxiana*	resurrection fern	native			S	
Family: Primulaceae							
	Samolus valerandi subsp. *parviflorus*	pineland pimpernel, seaside brookweed	native			R	
Family: Psilotaceae							
	Psilotum nudum	whisk-fern	native			S	
Family: Pteridaceae							
	Acrostichum danaeifolium	giant leather fern	native			S	
Family: Rosaceae							
	Rubus cuneifolius	sand blackberry	native			I	
	Rubus trivialis	southern dewberry	native			R	
Family: Rubiaceae							
	Diodia teres	poor joe, rough buttonweed	native			R	
	Psychotria nervosa	wild coffee	native			S	
	Psychotria sulzneri	shortleaf wild coffee	native			S	
	Randia aculeata	white indigoberry	native			S	
	Spermacoce remota	woodland false buttonweed	native			S	
Family: Rutaceae							
	Citrus reticulata	tangerine	exotic				
	^^*Citrus xparadisi*	Grapefruit	exotic				
	Zanthoxylum fagara	wild lime, lime pricklyash	native			S	
Family: Salicaceae							
	Salix caroliniana	Coastalplain willow	native			S	

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Sapotaceae							
	Chrysophyllum oliviforme	satinleaf	native		T	R	
	Sideroxylon celastrinum	saffron plum	native			S	
Family: Sapindaceae							
	Acer rubrum	red maple	native			S	
	Cardiospermum halicacabum	love-in-a-puff, ballon vine	exotic				
	Cupaniopsis anacardioides	carrotwood	exotic	I			
Family: Schizaeaceae							
	Lygodium microphyllum	small-leaf climbing fern, Old-world climbing fern	exotic	I			
Family: Schoepfiaceae							
	Schoepfia chrysophylloides	graytwig	native			R	
Family: Scrophulariaceae							
	Bacopa monnieri	herb-of-grace	native			S	
Family: Smilacaceae							
	Smilax auriculata	earleaf greenbrier	native			S	
	Smilax bona-nox	saw greenbrier	native			R	
	Smilax tamnoides	bristly greenbrier, hogbrier	native			I	
Family: Solanaceae							
	Solanum americanum	American black nightshade	native			S	
Family: Sterculiaceae							
	Melochia corchorifolia	chocolateweed	exotic				
Family: Tetrachondraceae							
	Polypremum procumbens	rustweed, juniperleaf	native			S	
Family: Thelypteridaceae							
	Thelypteris dentata	downy maiden fern	exotic				
	Thelypteris kunthii	southern shield fern	native			S	
Family: Tiliaceae							
	Triumfetta semitriloba	Sacramento burrbark	exotic				
Family: Ulmaceae							
	Celtis laevigata	sugarberry, hackberry	native			AS	
	Ulmus americana	American elm	native			CI	
	^Ulmus alata	winged elm	native				
Family: Urticaceae							
	Boehmeria cylindrica	false nettle, bog hemp	native			S	
	Parietaria floridana	Florida pellitory	native			S	

APPENDIX C: Floristic Species Documented Within CRP (continued).

Scientific names in accord with Wunderlin and Hansen 2008 (see key at end of list).

	Scientific Name	Common Name(s)	Status	FLEEPC	FDACS	IRC	FNAI
Family: Verbenaceae							
	^Lantana depressa	rockland shrub verbena, pineland lantana	native		E	S	
	Lantana montevidensis	trailing shrubverbena	exotic				
	Phyla nodiflora	frogfruit, turkey tangle fogfruit, capeweed	native			S	
Family: Vitaceae							
	Ampelopsis arborea	peppervine	native			S	
	Cissus verticillata	possum grape, seasonvine	native			S	
	Parthenocissus quinquefolia	Virginia creeper, woodbine	native			S	
	Vitis aestivalis	summer grape	native			I	
	Vitis cinerea var. *floridana*	Florida grape	native			S	
	Vitis shuttleworthii	caloose grape	native			S	
	Vitis rotundifolia	muscadine	native			S	
Family: Vittariaceae							
	Vittaria lineata	shoestring fern	native			S	
Family: Ximeniaceae							
	Ximenia americana	tallow wood, hog plum	native				
Family: Zamiaceae							
	^Zamia pumila	Florida arrowroot, coontie	native				

Key

Florida EPPC Status (2009)
I = species that are invading and disrupting native plant communities
II = species that have shown a potential to disrupt native plant communities

FDACS (2003) Designations
E = Endangered
T = Threatened
CE = Commercially Exploited

IRC (Institute for Regional Conservation) Designations
CI = Critically Imperiled
I = Imperiled
R = Rare
S = Secure
PE = Possibly Extirpated
AS = Apparently Secure

FNAI (Florida Natural Areas Inventory) Designations
G= Global Status
T= Threatened
CE= Commercially Exploited
or because of extreme vulnerability to extinction due to some natural or man-made factor.
2= Imperiled because of rarity (6 to 20 occurrences or less than 3000 individuals)
or because of vulnerability to extinction due to some natural or man-made factor.
3= Either very rare and local throughout its range (21-200 occurrences or less than 10,000 individuals)
or found locally in a restricted range or vulnerable to extinction from other factors.
4= Apparently secure

^ Planted – not indigenous to site prior to planting
^^ Not recognized by Wunderlin and Hansen 2008

APPENDIX D: Vertebrate Species Documented Within CRP.

see key at end of list

Amphibians					
Order	**Family**	**SubFamily**	**Scientific Name**	**Common Name**	**Protection Status**
Anura	Hylidae	Hylinae	*Osteopilus septentrionalis**	Cuban treefrog*	
			Acris crepitans	cricket frog	
			Hyla cinerea	green treefrog	
	Ranidae		*Lithobates grylio*	pig frog	
			Lithobates sphenocephalus	southern leopard frog	
	Bufonidae		*Anaxyrus quercicus*	oak toad	
	Microhylidae	Microhylinae	*Gastrophryne carolinensis*	Eastern narrowmouth toad	
Reptiles					
Order	**Family**	**SubFamily**	**Scientific Name**	**Common Name**	**Protection Status**
Testudines	Testudinidae		*Gopherus polyphemus*	gopher tortoise	ST
	Emydidae		*Terrapene carolina bauri*	Florida box turtle	
	Kinosternidae		*Kinosternon baurii*	striped mud turtle	
Squamata	Polychrotidae		*Anolis carolinensis*	green anole	
			*Anolis sagrei**	brown anole*	
	Teiidae		*Cnemidophorus sexlineatus*	six-lined race runner	
	Scincidae		*Eumeces inexpectatus*	southeastern five-lined skink	
	Elapidae		*Micrurus fulvius*	coral snake	
	Viperidae	Crotalinae	*Agkistrodon piscivorus conanti*	Florida cottonmouth	
			Crotalus adamanteus	Eastern diamondback rattlesnake	

APPENDIX D: Vertebrate Species Documented Within CRP (continued).

see key at end of list

Reptiles (continued)					
Order	**Family**	**SubFamily**	**Scientific Name**	**Common Name**	**Protection Status**
Squamata (continued)	Colubridae	Colubrinae	*Drymarchon corais couperi*	Eastern indigo snake	FT
			Coluber constrictor priapus	southern black racer	
			Diadophis punctatus	ring-necked snake	
			Elaphe guttata guttata	red rat snake	
			Elaphe obsoleta quadrivittata	yellow rat snake	
Crocodilia	Alligatoridae		*Alligator mississippiensis*	American alligator	FT (S/A)
Birds					
Order	**Family**	**SubFamily**	**Scientific Name**	**Common Name**	**Protection Status**
Galliformes	Odontophoridae		*Colinus virginianus*	Northern Bobwhite	
	Phasianidae	Meleagridinae	*Meleagris gallopavo*	Wild Turkey	
Ciconiiformes	Ciconiidae		*Mycteria americana*	Wood Stork	FE
Suliformes	Anhingidae		*Anhinga anhinga*	Anhinga	
Pelecaniformes	Ardeidae		*Egretta caerulea*	Little Blue Heron	SSC
			Egretta tricolor	Tricolored Heron	SSC
			Bubulcus ibis	Cattle Egret	
			Butorides virescens	Green Heron	
	Threskiornithidae	Threskiornithinae	*Eudocimus albus*	**White Ibis	SSC**
Accipitriformes	Cathartidae		*Coragyps atratus*	Black Vulture	
			Cathartes aura	Turkey Vulture	
	Pandionidae		*Pandion haliaetus*	Osprey	
	Accipitridae		*Elanoides forficatus*	Swallow-tailed Kite	

APPENDIX D: Vertebrate Species Documented Within CRP (continued).

see key at end of list

Birds (continued)

Order	Family	SubFamily	Scientific Name	Common Name	Protection Status
Accipitriformes	Accipitridae		*Haliaeetus leucocephalus*	Bald Eagle	
Accipitridae	Accipitridae		*Accipiter cooperii*	Cooper's Hawk	
			Buteo lineatus	Red-shouldered Hawk	
			Buteo jamaicensis	Red-tailed Hawk	
Falconiformes	Falconidae	Caracarinae	*Polyborus plancus audubonii (Caracara cheriway)*	Audubon's Crested Caracara	FT
		Falconinae	*Falco sparverius paulus*	Southeastern American Kestrel	ST
			Falco peregrinus	Peregrine Falcon	
Gruiformes	Aramidae		*Aramus guarauna*	Limpkin	
Charadriiformes	Charadriidae	Charadriinae	*Charadrius vociferus*	Killdeer	
	Laridae	Larinae	*Leucophaeus atricilla*	Laughing Gull	
		Sterninae	*Sternula antillarum*	Least Tern	ST
Columbiformes	Columbidae		*Zenaida macroura*	Mourning Dove	
			Columbina passerina	Common Ground-Dove	
Cuculiformes	Cuculidae	Cuculinae	*Coccyzus americanus*	Yellow-billed Cuckoo	
Strigiformes	Tytonidae		*Tyto alba*	Barn Owl	
	Strigidae		*Megascops asio*	Eastern Screech-Owl	
			Strix varia	Barred Owl	
Caprimulgiformes	Caprimulgidae	Caprimulginae	*Caprimulgus vociferus*	Eastern Whip-poor-will	
Apodiformes	Trochilidae	Trochilinae	*Archilochus colubris*	Ruby-throated Hummingbird	
Piciformes	Picidae	Picinae	*Melanerpes erythrocephalus*	Red-headed Woodpecker	
			Melanerpes carolinus	Red-bellied Woodpecker	
			Sphyrapicus varius	Yellow-bellied sapsucker	
			Picoides pubescens	Downy Woodpecker	

APPENDIX D: Vertebrate Species Documented Within CRP (continued).

see key at end of list

Birds (continued)					
Order	**Family**	**SubFamily**	**Scientific Name**	**Common Name**	**Protection Status**
Piciformes (continued)	Picidae (continued)	Picinae (continued)	*Picoides villosus*	Hairy Woodpecker	
			Colaptes auratus	Northern Flicker	
			Dryocopus pileatus	Pileated Woodpecker	
Passeriformes	Tyrannidae	Fluvicolinae	*Sayornis phoebe*	Eastern Phoebe	
		Tyranninae	*Myiarchus crinitus*	Great Crested Flycatcher	
	Laniidae		*Lanius ludovicianus*	Loggerhead Shrike	
	Vireonidae		*Vireo griseus*	White-eyed Vireo	
			Vireo solitarius	Blue-headed Vireo	
	Corvidae		*Cyanocitta cristata*	Blue Jay	
			Aphelocoma coerulescens	Florida Scrub-Jay	FT
			Corvus brachyrhynchos	American Crow	
			Corvus ossifragus	Fish Crow	
	Hirundinidae	Hirundininae	*Progne subis*	Purple Martin	
			Tachycineta bicolor	Tree Swallow	
			Hirundo rustica	Barn Swallow	
	Paridae		*Poecile carolinensis*	Carolina Chickadee	
			Baeolophus bicolor	Tufted Titmouse	
	Troglodytidae		*Thryothorus ludovicianus*	Carolina Wren	
			Troglodytes aedon	House Wren	
	Polioptilidae		*Polioptila caerulea*	Blue-gray Gnatcatcher	
	Regulidae		*Regulus calendula*	Ruby-crowned Kinglet	
	Turdidae		*Catharus guttatus*	Hermit Thrush	
			Turdus migratorius	American Robin	
	Mimidae		*Dumetella carolinensis*	Gray Catbird	
			Mimus polyglottos	Northern Mockingbird	
			Toxostoma rufum	Brown Thrasher	

APPENDIX D: Vertebrate Species Documented Within CRP (continued).

see key at end of list

Birds (continued)

Order	Family	SubFamily	Scientific Name	Common Name	Protection Status
Passeriformes (continued)	Bombycillidae		*Bombycilla cedrorum*	Cedar Waxwing	
	Parulidae		*Oreothlypis peregrina*	Tennessee Warbler	
			Parula americana	Northern Parula	
			Dendroica coronata	Yellow-rumped Warbler	
			Dendroica virens	Black-throated Green Warbler	
			Dendroica dominica	Yellow-throated Warbler	
			Dendroica pinus	Pine Warbler	
			Dendroica discolor	Prairie Warbler	
			Dendroica palmarum	Palm Warbler	
			Mniotilta varia	Black-and-white Warbler	
			Setophaga ruticilla	American Redstart	
			Seiurus aurocapilla	Ovenbird	
			Geothlypis trichas	Common Yellowthroat	
	Emberizidae		*Pipilo erythrophthalmus*	Eastern Towhee	
	Cardinalidae		*Cardinalis cardinalis*	Northern Cardinal	
			Passerina ciris	Painted Bunting	
	Icteridae		*Agelaius phoeniceus*	Red-winged Blackbird	
			Sturnella magna	Eastern Meadowlark	
			Quiscalus quiscula	Common Grackle	

Mammals

Order	Family	SubFamily	Scientific Name	Common Name	Protection Status
Marsupialia	Didelphidae		*Didelphis virginiana*	Virginia opossum	
Xenarthra	Dasypodidae		*Dasypus novemcinctus**	Nine-banded armadillo*	
Insectivora	Talpidae		*Scalopus aquaticus*	Eastern mole	

APPENDIX D: Vertebrate Species Documented Within CRP (continued).

see key at end of list

Mammals (continued)					
Order	**Family**	**SubFamily**	**Scientific Name**	**Common Name**	**Protection Status**
Lagomorpha	Leporidae		*Sylvilagus floridanus*	Eastern cottontail rabbit	
			Sylvilagus palustris	marsh rabbit	
Rodentia	Sciuridae		*Sciurus carolinensis*	Eastern gray squirrel	
			Sciurus niger shermani	Sherman's fox squirrel	-
	Cricetidae		*Sigmodon hispidus*	hispid cotton rat	
Artiodactyla	Suidae		*Sus scrofa**	feral hog, wild boar*	
Carnivora	Canidae		*Vulpes vulpes*	Red fox	
	Felidae		*Puma concolor coryi*	Florida panther	FE
			Lynx rufus	bobcat	
	Mustelidae		*Lutra canadensis*	river otter	
	Procyonidae		*Procyon lotor*	raccoon	
	Ursidae		*Ursus americanus floridanus*	**Florida black bear	ST**

Key (Please see page 27 for potential delisting information)

Florida Fish and Wildlife Conservation Commission (FWC; 2011)

* = Exotic Species; FE = Federally-designated Endangered; FT = Federally-designated Threatened; FT(S/A) = Federally-designated Threatened species due to similarity of appearance; ST = State-designated Threatened; ST^ = State-designated Threatened other than those found in Baker and Columbia Counties or in Apalachicola National Forest; SSC = State Species of Special Concern (those special geographic notations for some species designated as SSC do not appear on this list as they are not applicable to this part of the state). ** = Recommended to be delisted by FWC. The Florida black bear was listed as a State-designated Endangered species as recently as the June 2010 by FWC.

Please see species profiles on the following pages.

Species Profiles:

Following are abbreviated descriptions for the listed, vertebrate species documented (to date) at CRP. These species profiles are provided in the order that they appear in this appendix. More detailed descriptions and management prescriptions are available on the FWC website: http://www.myfwc.com/wildlifehabitats/profiles and the USFWS website: http://www.fws.gov/species/.

Typically, designated species will benefit from the proper stewardship of the biological communities in which they occur. Practices likely to benefit wildlife and plants at CRP include exotic plant control, protecting and restoring water resources, prescribed fire, trash removal, wildlife monitoring, feral and exotic animal control, restricting construction of maintenance trails in certain areas and the enforcement of "no littering" and "no motorized vehicles" regulations.

Additionally, the appropriate design and planning of passive, recreational opportunities for the public enable the patrons of the park to benefit from and learn about natural areas while protecting native species.

Reptiles:

Gopher Tortoise (*Gopherus polyphemus*)

The gopher tortoise is currently listed as a ***State-designated Threatened*** species. The primary threats to gopher tortoises in Florida are habitat destruction, fragmentation, and degradation, particularly from urbanization and development, agriculture, and phosphate/heavy metals mining. Habitat fragmentation of rural areas by roads and increased vehicular traffic due to development result in increased road mortality of gopher tortoises, which are often drawn to roadsides because of available forage.

These reptiles live in well-drained sandy areas with sparse tree canopy and abundant low growing vegetation. They are commonly found in habitats such as sandhill, pine flatwoods, scrub, scrubby flatwoods, dry prairies, xeric hammock, pine-mixed hardwoods, and coastal dunes that have historically been maintained by periodic wildfires. When fire is suppressed in gopher tortoise habitat, small trees, shrubs, and brambles begin to grow making it difficult for the gopher tortoise to move around and eventually shade out the low growing plants that gopher tortoises eat. Consequently, the implementation of a prescribed fire program conducted at community appropriate intervals can be useful in maintaining a diverse grass and legume dominated groundcover at a height where it is suitable for tortoise foraging. This management regime also benefits a large suite of species including several species of special concern.

Gopher tortoises dig burrows that offer refuge from cold, heat, drought, forest fires and predators. The burrows maintain a fairly constant temperature and humidity throughout the year and protect the gopher tortoise and other species from temperature extremes, drying out, and predators. Burrows also act as a refuge from the periodic, regenerative fires that are required to maintain the quality of their habitat. More than 350 species, including burrowing owls, Florida mice, indigo snakes opossums, rabbits, gopher frogs, Florida mice, eastern diamondback rattlesnakes and gopher crickets use these burrows. Since many of these commensal species depend on the burrows for survival and decreases in gopher tortoise populations result in a decline of other species, the tortoise is considered a keystone species.

Eastern indigo snake (*Drymarchon corais couperi*)

Specific information about the population size of this species is unknown, although it was originally listed in the 1970s due to population decline during the 1960s-70s. The presumed population trend for this species is declining. Currently, this reptile is listed as a ***Federally-designated Threatened*** species. The most significant threat to this snake is habitat loss, degradation and fragmentation. Conversion of suitable habitat to residential development, commercial development, and incompatible silviculture negatively impact this species. Its large home range compounds these problems. Predation by domestic pets and highway mortality contribute to population reductions. Other factors, though probably less important than habitat loss, may still threaten indigo snake populations. Since becoming a federally threatened species, collecting indigo snakes for pets is less common, but still may be a factor. Pesticides, particularly rondenticides applied in silvicultural and agricultural settings may affect indigo snakes through bioaccumulation in their prey. Disease has been investigated as a factor in declines.

Eastern indigo snakes utilize a mosaic of natural communities throughout the year. They are most commonly associated with scrub, sandhill, and scrubby flatwoods where they occur in or near gopher tortoise burrows. Pine flatwoods, dry prairie, hardwood hammocks, marsh edges, agricultural fields, and even human-dominated areas are also used by these snakes. In warm months, indigo snakes use a variety of natural areas and have large home ranges. Because it is such a wide-ranging species, the eastern indigo snake is especially vulnerable to habitat fragmentation that makes travel between suitable habitats difficult.

A habitat requirement of indigo snakes is sufficient refuge. They use this refuge to escape cold and desiccation. Within the range of the gopher tortoise, tortoise burrows are a favorite refuge for indigo snakes. They are known to use burrows made by cotton rats, land crabs, hollows at bases of trees and stumps, ground litter, trash piles and rock piles lining banks of canals. Indigo snakes appear to be tied closely to sandhill and tortoise burrows in northern Florida. In central and south Florida, thermal stress is reduced and they can use other terrestrial habitats, if not heavily impacted by urban development. Indigo snakes commonly use hydric hammocks in central/south Florida, and pine flatwoods, pine rock lands and tropical hardwood hammocks as important habitat in south Florida. Burrows and other below ground refuge will still be used by indigo snakes in central/south Florida.

American alligator (*Alligator mississippiensis*)

Related to the American crocodile (*Crocodylus acutus*), the American alligator is designated as a ***Federally-designated Threatened species due to similarity of appearance***. This classification reflects a complete recovery of the alligator (from endangered in 1967 – then threatened in 1977), but is intended to facilitate necessary protections for the American crocodile in the United States and foreign countries, and other endangered crocodilians in foreign countries, whose products are difficult to distinguish from those of the American alligator. Alligators prefer fresh water lakes and slow-moving rivers and their associated wetlands, but they also can be found in brackish water habitats. This large reptile has been documented in the Caloosahatchee River and is very likely found in Fichter's Creek. Hydrological improvements to Fichter's Creek will help to maintain appropriate habitat for this species.

Birds:

Wood Stork (*Mycteria americana*)

The Wood Stork is currently listed as a ***Federally-designated Endangered*** species. It is believed that the populations of these colonial wading birds declined from an estimated 20,000 pairs in the 1930s to about 10,000 pairs by 1960, and to a low of approximately 5,000 pairs in the late 1970s because of the reduction in food base (primarily small fish) necessary to support breeding colonies. This reduction is attributed to loss of wetland habitat as well as to changes in water hydroperiods from draining wetlands and changing water regimes by constructing levees, canals, and floodgates to alter water flow in south Florida.

At a minimum, for continued survival of the United States breeding population of wood storks, currently occupied nesting, roosting, and foraging habitat must be protected from further loss or degradation. Restoration of hydroperiods that favor flooding, during which prey (fish) populations increase, alternating with dryer periods, during which receding water levels concentrate fish at higher densities coinciding with the stork's nesting season is a key component in the potential increase in this stork's population numbers. Hydrological improvements to Fichter's Creek may help to maintain appropriate foraging areas for this species.

Herons: Little Blue Heron (*Egretta caerulea*) and Tricolored Heron (*E. tricolor*)

Both the Little Blue Heron and the Tricolored Heron are currently listed as ***State Species of Special Concern***. Both species suffered tremendous losses from egg and plume hunting prior to regulations enacted in the early 1900s. Current threats to these species are not well understood, but coastal development, disturbance at foraging and breeding sites, environmental degradation of foraging habitat and reduced prey availability, and impacts of predators are concerns. Like other wading birds that depend on fragile estuaries and wetlands for foraging and breeding, both threats to these species include exposure to pesticides, heavy metals and other contaminants at the local level, adverse weather events at nesting colony locations, parasitic infection, and alteration to the hydrology of wetland habitats.

White Ibis (*Eudocimus albus*)

The White Ibis is currently listed as a ***State Species of Special Concern***. The range of the White Ibis extends from the mid-Atlantic coast and southern Pacific coast of North America, south into northern South America. The species can be found year round in Florida and throughout the Caribbean. White ibises prefer coastal marshes and wetlands, feeding in fresh, brackish and saltwater environments. They are generally nomadic, and flocks are often observed outside typical breeding areas in search of new sources of prey. Population and colony sizes are dependent on movement in response to water levels and prey abundance. Loss of coastal marsh and wetlands habitats are a primary threat to the white ibis population. This species is often observed foraging among the grasses on the north side of the park. Hydrological improvements to Fichter's Creek may help to maintain appropriate foraging areas for this species.

Staff of the FWC are in the process of implementing the new imperiled species rules adopted by the Commission on September 1, 2010. After adoption of the rules, FWC immediately began the biological status review process for some of the species on Florida's threatened, endangered, and

species of special concern lists; a number of species that are federally endangered or threatened were not part of the review, including the Florida panther, the American alligator and American crocodile (*Crocodylus acutus*). FWC's draft recommendations propose delisting 16 of the 61 species reviewed including the white ibis. These recommendations are subject to change, and final recommendations are not yet available. Species-specific management plans will need to be approved and adopted before any species are delisted.

Audubon's Crested Caracara [*Polyborus plancus audubonii* (*Caracara cheriway*)]

Audubon's Crested Caracara is listed as a ***Federally-designated Threatened*** species. John James Audubon (1834) found the Crested Caracara *(Polyborus plancus audubonii)* in Florida near St. Augustine (where it no longer occurs) on November 21, 1831, and published a full account of it as *Polyborus vulgaris.* In 1865 John Cassin named the bird *Polybonss audubonji* after Audubon. It is known variously as *Polybonis plancus cheriway, Polyborus cheriway audubon*ii, and *Caracara cheriway audubonii.* The U.S. Fish and Wildlife Service follows the American Ornithologist's Union (1983) for usage of the generic and specific names *Polyborus plancus,* and likewise the American Ornithologist's Union (1957) for usage of the subspeciflc name *audubonii* for the Florida population.

At one time, Caracaras were common in the prairies of central Florida, but their numbers declined as favored habitat was converted to housing developments, citrus groves and improved pastures. This species is most abundant in a six-county area north and west of Lake Okeechobee (DeSoto, Glades, Hendry, Highlands, Okeechobee and Osceola counties). Their stronghold is privately held ranch land, and biologists are working with landowners to better understand the needs of caracaras and the many wild animals dependent on these upland prairies. This bird is often seen along roadsides foraging with vultures and on the north side of CRP. A nesting pair of Caracaras has been documented sporadically on the north side of the park. The most recent nesting event occurred in 2009.

Southeastern American Kestrel (*Falco sparverius paulus*)

The Southeastern American Kestrel is currently listed as a ***State-designated Threatened*** species. This is the smallest and most common of the falcons. Two subspecies of American Kestrel (*Falco sparverius*) occur in Florida: a northern subspecies (*Falco sparverius sparverius*) that winters here between September and April, and a resident, non-migratory subspecies, the Southeastern American Kestrel (*Falco sparverius paulus*). Kestrels seen in Florida during May-June are resident Southeastern American Kestrels.

American Kestrels nest in cavities that they do not excavate. Instead, they must depend on woodpeckers and natural processes to create holes in trees. Kestrels nest predominantly in dead but standing longleaf pine trees, called snags, usually in the abandoned cavities of Pileated woodpeckers (*Dryocopus pileatus*). Loss of nesting snags, especially longleaf pine, appears to be the main reason for the decline. In addition, since Kestrels avoid pine plantations and hardwood stands, the loss of open foraging habitat has been a contributing factor. While there are no naturally occurring longleaf pine trees within the park, many large snags left by dead slash pines exist and will be maintained if they do not pose a safety hazard to the patrons of the park.

Least Tern (*Sternula antillarum*)

The Least Tern is currently listed as a ***State-designated Threatened*** species. Beach development resulting in loss of extensive beach habitat, increased human activity on beaches and nest disturbance have been identified as threats to this North American tern. An entire colony can be easily destroyed by predation by red foxes, raccoons, dogs and house cats, by human trampling, or by catastrophic storms. Due to habitat loss, least terns have taken to nesting on flat roofs, especially those covered in gravel. CRP does not provide appropriate nesting habitat but terns have been seen foraging on the south side of the park.

Florida Scrub-Jay (*Aphelocoma coerulescens*)

The Florida Scrub-Jay is listed as a ***Federally-designated Threatened*** species. Scrub-jays range over much of the western United States and Mexico, but the physically and behaviorally unique Florida Scrub-jay is restricted to scattered, often small and isolated patches of sand pine scrub, xeric oak scrub, and scrubby flatwoods in peninsular Florida. They have very specific habitat requirements. Florida Scrub-jays prefer these various forms of scrub habitat that burn frequently enough to maintain a tree height of 3-10 feet tall. They actively avoid other forest types, wetlands, and large, open areas such as agricultural lands. While these Corvids may be found in areas where scrub has been recently converted to other uses such as residential developments or farmland, their survival and reproductive success are generally very poor in these areas. This species has not been recently documented at the park; it occurs only in historical records. The scrub plant community does not occur on CRP and therefore it is accepted that those birds documented at the park were likely accidental visitors.

Mammals:

Florida Panther (*Puma concolor coryi*)

The Florida panther is currently listed as a ***Federally-designated Endangered*** species. The Florida panther is a sub-species of puma. In some areas of the country, pumas are called cougars, or mountain lions. At one time, these large predators had the largest distribution of any mammal in the western hemisphere, ranging from Patagonia in South America, through Central America, across North America from the Pacific to the Atlantic and Gulf of Mexico, and north almost to Alaska. These cats are able to survive in many types of ecosystems including jungles, swamps, deserts, mountains, deciduous forest, and coniferous forests. Centuries of efforts to exterminate these cats and with significant habitat loss, the range of the panther was restricted to extreme south Florida by the 1970s. This long term decline of panther numbers and the virtual extirpation of panthers from the vast majority of its native, historical range lead to its designation as a Federally listed endangered species by the USFWS in 1967 and inclusion in the Endangered Species Act when it was passed in 1973. The panther was first protected by Florida in 1958 and was designated as the official state animal in 1982. While males sometimes range into central and north Florida , and even as far as Georgia, in the last 30 years there has been no documented cases of females (or breeding) north of Lake Okeechobee and the Caloosahatchee River. Today, the USFWS and FWC estimate that there are between 100-160 adult panthers in south Florida; this does not include numbers for sub adults and kittens in the population. Practices likely to

benefit the Florida panther at CRP include exotic plant control, protecting and restoring water resources, prescribed fire and wildlife monitoring.

Florida Black Bear (*Ursus americanus floridanus*)

The Florida black bear is currently listed as a ***State-designated Threatened*** species. The Florida black bear was formerly listed as a State-designated Endangered species as late as the June 2010 list by FWC.

This large omnivore is a subspecies of the American black bear. The Florida Black Bear is 1 of 3 subspecies of bears recognized in the southeastern United States. The Florida black bear can be distinguished from other subspecies by genetic and skeletal differences. Black bears originated in North America, and have been here at least 1.5 million years. A bear's diet consists of 80% plant and 20% animal matter. Black bears eat mainly acorns, nuts, berries, and other vegetation as well as insects. A small percentage of their diet is meat that is mostly obtained from scavenging. The black bear diet varies seasonally and yearly depending on fluctuations in plant productivity but it is also based on geographic variation from one region of Florida to the next. For example, saw palmetto berries are a high portion of bear diets in the Osceola population, but insignificant in the Apalachicola population. This ability to find and eat a wide variety of food types can bring bears into contact with humans. For example, bears can be attracted to garbage, honey, barbeque grills, wildlife feeders, etc. Bears are solitary by nature, except when in family groups or pairings during the mating season. Bears will congregate in areas of high food density, such as oak stands or berry patches. These groupings happen more because one bear cannot defend such a rich food source from competitors than because they enjoy the company. While bears may defend a food resource, in general, bears are not territorial in that they do not defend a "specific area" from intrusion by other bears.

The long-term future of black bears in Florida is uncertain because of their large spatial requirements, the fragmented nature of the remaining population and increasing human development and activity that lead to conflicts. In order to maintain a sustainable population of bears throughout Florida, we must provide adequate habitats, promote viable populations, manage human impacts, and influence human behavior. If a population drops below a certain level, it becomes increasingly susceptible to negative effects like inbreeding and stochastic variability.

Staff of the FWC are in the process of implementing the new imperiled species rules adopted by the Commission on September 1, 2010. After adoption of the rules, FWC immediately began the biological status review process for some of the species on Florida's threatened, endangered, and species of special concern lists; a number of species that are federally endangered or threatened were not part of the review, including the Florida panther, the American alligator and American crocodile (*Crocodylus acutus*). FWC's draft recommendations propose delisting 16 of the 61 species reviewed including the Florida Black bear. These recommendations are subject to change, and final recommendations are not yet available. Species-specific management plans will need to be approved and adopted before any species are delisted.

APPENDIX E: Florida Natural Areas Inventory Biodiversity Report for CRP.

FLORIDA Natural Areas INVENTORY

1018 Thomasville Road
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Tallahassee, FL 32303
850-224-8207
fax 850-681-9364
www.fnai.org

November 13, 2009

Annisa Karim
Lee County
2115 Second Street
Fort Myers, FL 33901

Dear Ms. Karim,

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

Project:	Caloosahatchee Regional Park
Date Received:	November 10, 2009
Location:	Lee County

Element Occurrences

A search of our maps and database indicates that currently we have five Element Occurrences mapped within the study area (see managed area summary report) and several Occurrences mapped in the vicinity (see enclosed map and element occurrence report). There is a potential that the Occurrences mapped in the vicinity are on the study area, if suitable habitat exists. Please be advised that a lack of element occurrences in the FNAI database is not a sufficient indication of the absence of rare or endangered species on a site.

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

Likely and Potential Rare Species

In addition to documented occurrences, other rare species and natural communities may be identified on or near the site based on habitat models and species range models (see enclosed Biodiversity Matrix Report). These species should be taken into consideration in field surveys, land management, and impact avoidance and mitigation.

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

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

Florida Resources and Environmental Analysis Center

Institute of Science and Public Affairs

The Florida State University

Tracking Florida's Biodiversity

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

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

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

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

Managed Areas
As you are aware, the site appears to be located within the Caloosahatchee Regional Park, managed by Lee County.

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

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

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

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

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

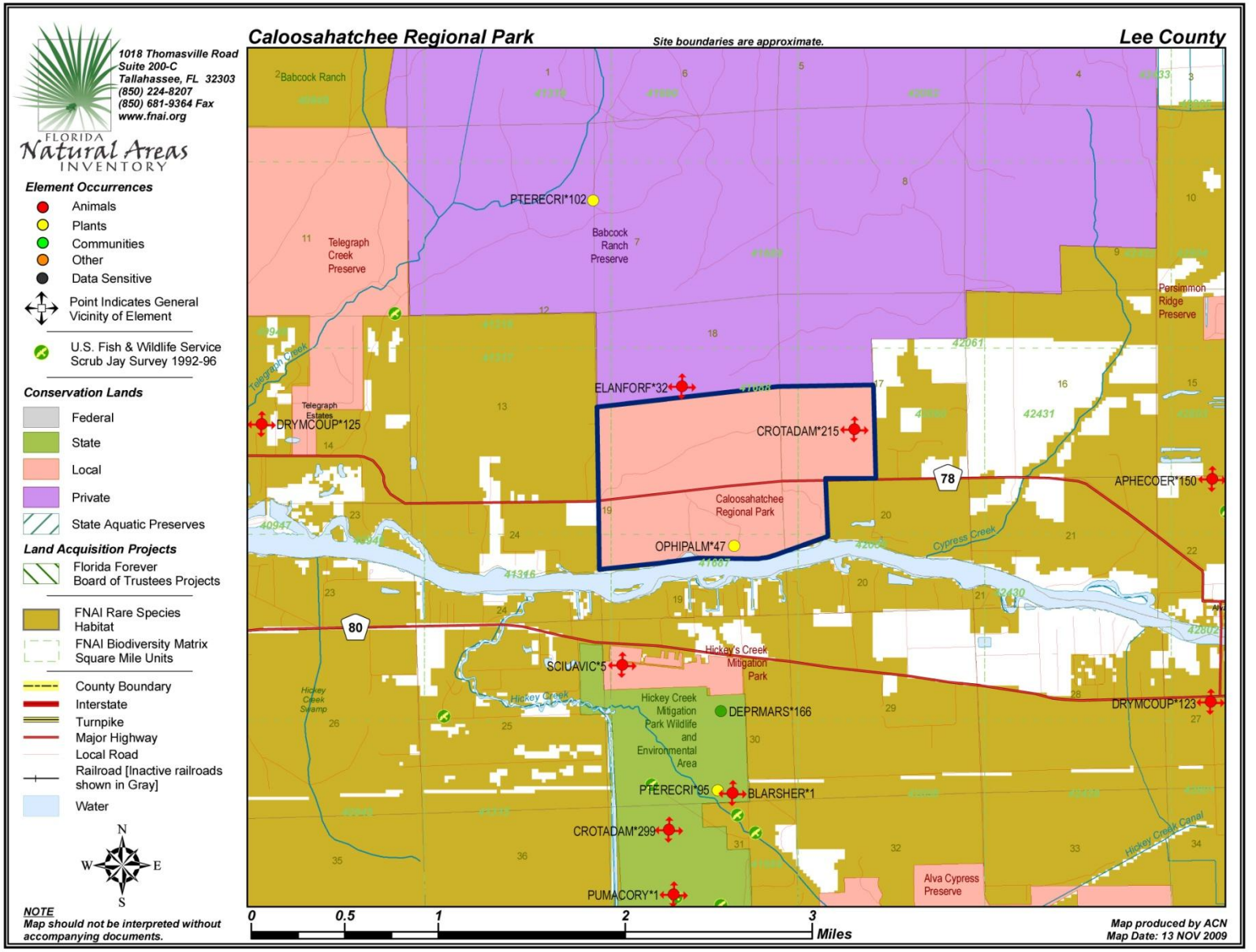
This report is made available at no charge due to funding from the Florida Department of Environmental Protection, Division of State Lands.

Thank you for your use of FNAI services. If I can be of further assistance, please give me a call at (850) 224-8207.

Sincerely,
Alicia C. Newberry

Alicia C. Newberry
Data Services Coordinator

Encl


Caloosahatchee Regional Park
Site boundaries are approximate.
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FLORIDA Natural Areas INVENTORY
Element Occurrences
Animals
Plants
Communities
Other
Data Sensitive
Point Indicates General Vicinity of Element
U.S. Fish & Wildlife Service Scrub Jay Survey 1992-96
Conservation Lands
Federal
State
Local
Private
State Aquatic Preserves
Land Acquisition Projects
Florida Forever Board of Trustees Projects
FNAI Rare Species Habitat
FNAI Biodiversity Matrix Square Mile Units
County Boundary
Interstate
Turnpike
Major Highway
Local Road
Railroad [Inactive railroads shown in Gray]
Water
N
W
E
S
NOTE
Map should not be interpreted without accompanying documents.
Babcock Ranch
Telegraph Creek Preserve
Babcock Ranch Preserve
Persimmon Ridge Preserve
Telegraph Estates
Caloosahatchee Regional Park
Hickey's Creek Mitigation Park
Hickey Creek Mitigation Park Wildlife and Environmental Area
Alva Cypress Preserve
Telegraph Creek
Cypress Creek
Hickey Creek
Hickey Creek Swamp
Hickey Creek Canal
PTERECRI*102
ELANFORF*32
DRYMCOUP*125
CROTADAM*215
APHECOER*150
OPHIPALM*47
SCIUAVIC*5
DEPRMARS*166
DRYMCOUP*123
PTERECRI*95
BLARSHER*1
CROTADAM*299
PUMACORY*1
78
80
0
0.5
1
2
3
Miles
Map produced by ACN
Map Date: 13 NOV 2009

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR
Caloosahatchee Regional Park

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
DRYMCOUP*123	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1970->	2005-09-21: no healthy xeric habitat found; habitat highly converted to pasture and small residential areas; highway 80 a very busy road (PNDJEN04FLUS).	2005-09-21: M. Jenkins (PNDJEN04FLUS) visited area, observed no indigos but made habitat notes (see General Description). POST-1970: T. CRUTCHFIELD OBSERVED INDIGO SNAKE (P. MOLER INTERVIEW OF 3 NOV 1981) (U82MOL01FLUS).
DRYMCOUP*125	Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT	1980-Pre	2005-09-21: Xeric habitats mostly converted to agricultural lands (pasture) and residential development; lower lands though, such as wet flatwoods, remain large and abundant (PNDJEN04FLUS).	2005-09-21: M. Jenkins (PNDJEN04FLUS) visited site, observed no snakes but made habitat notes (see General Description). POST-1970: T. CRUTCHFIELD OBSERVED INDIGO SNAKE (P. MOLER INTERVIEW OF 3 NOV 1981: U82MOL01FLUS).
APHECOER*150	Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT	1980-03-22	2005-09-21: Area converted to residential/agricultural areas, though some xeric habitat remains (PNDJEN04FLUS). 1981:RESIDENTIAL AREA, SOME MYRTLE OAKS (U81COX01FLUS).	2005-09-21: No scrub jays found on informal survey using audio tapes. Small scrub remnants extremely fire suppressed w/ closed canopy of Quercus geminata. Most scrubs have been converted to orange groves, residential areas, and pasture (PNDJEN04FLUS). 19
BLARSHER*1	Blarina shermani	Sherman's Short-tailed Shrew	G1	S1	N	LS	1955	No general description given	museum specimen
CROTADAM*215	Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N	1995-Pre	No general description given	No date given: snake observed by Jim Beever (M95MAR01FLUS).
ELANFORF*32	Elanoides forficatus	Swallow-tailed Kite	G5	S2	N	N	1991-05-02	Strand swamp	1991-05-02: M.S. Robson, GFC - Adult on nest with 2 eggs.
SCIUAVIC*5	Sciurus niger avicennia	Mangrove Fox Squirrel	G5T2	S2	N	LT	2005	2005: Pine forest adjacent to clearing (U05GRE01FLUS and 2004 aerial photograph).	2005: L. Greeno (PNDGRE03FLUS) reported observation of individual moving across the pasture(U05GRE01FLUS).
DEPRMARS*166	Depression marsh		G4	S4	N	N	2004	2003: high quality marsh subject to seasonal filling and drying; surrounding pinelands managed with prescribed fire (PNDJAC01FLUS).	2004: extant from aerial photography. 2003: D. Jackson observed marsh and set traps for gopher frogs (none caught) in surrounding pineland (PNDJAC01FLUS).

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Florida Natural Areas Inventory

ELEMENT OCCURRENCES DOCUMENTED ON OR NEAR
Caloosahatchee Regional Park

Map Label	Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing	Observation Date	Description	EO Comments
PUMACORY*1	Puma concolor coryi	Florida Panther	G5T1	S1	LE	LE	1990	1990: part of Big Cypress Swamp, includes several water courses, numerous ponds and low "uplands". Diverse habitats include wet and dry prairie, cypress forest (logged), mixed pines, mixed hardwoods; seasonally flooded (PNDMAE01FLUS).	Probably the largest remaining EO, despite frequent roadkills on SR-29 and SR-84 (Alligator Alley); known animals (1987) include 3 adult males, 3 adult females, 1 juvenile female. Animals tend to be malnourished, though some are healthy; 1 of 3 "populat
OPHIPALM*47	Ophioglossum palmatum	Hand Fern	G4	S2	N	LE	2005-09-20	2005-09-20: On cabbage palm in oak hammock (U05GRE02FLUS).	2005-09-20: 3 individuals in leaf observed on cabbage palm (U05GRE02FLUS).
CROTADAM*299	Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N	2003	2003: moasic of pinelands and variety of wetlands (PNDJAC01FLUS).	2003, probably March: L. Greeno (PNDGRE01FLUS) observed adult along trail or park road within management area. Species probably not common within county-managed portion of parks, as this was the first observation known to the park manager in the 4.5 yea
PTERECRI*95	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2008-12-03	2008-12-03: Mesic flatwoods adjacent to utility corridor (U08IAC01FLUS).	2008-12-03: Two fruiting stalks with withered leaves in mesic flatwoods (U08IAC01FLUS).
PTERECRI*102	Pteroglossaspis ecristata	Giant Orchid	G2G3	S2	N	LT	2007-10-22	2007-10-22: Mesic flatwoods lightly disturbed by forestry operations and cattle (F08FNA04FLUS).	2007-10-22: 1-10 plants in fruit within 10-100 square meters (F08FNA04FLUS).

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

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

PE Proposed for listing as Endangered.

PT Proposed for listing as Threatened.

PS Proposed for listing as a Species of Special Concern.

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

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

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

PE Proposed by the FDACS for listing as Endangered Plants.

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

PT Proposed by the FDACS for listing as Threatened Plants.

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

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FLORIDA Natural Areas INVENTORY

Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Matrix Unit ID: 41316					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Caracara cheriway	Crested Caracara	G5	S2	LT	LT
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Puma concolor coryi	Florida Panther	G5T1	S1	LE	LE
Sciurus niger avicennia	Mangrove Fox Squirrel	G5T2	S2	N	LT
Potential					
Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2	S2	LT	LS
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Blarina carolinensis shermani	Sherman's Short-tailed Shrew	G5T1	S1	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Deeringothamnus pulchellus	Beautiful Pawpaw	G1	S1	LE	LE
Dendroica discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Eumops floridanus	Florida bonneted bat	G1	S1	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	LE
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Schizachyrium niveum	Scrub Bluestem	G1	S1	N	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Trichechus manatus	Manatee	G2	S2	LE	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 41317					
Likely					
Aphelocoma coerulescens	Florida Scrub-jay	G2	S2	LT	LT
Caracara cheriway	Crested Caracara	G5	S2	LT	LT
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Elanoides forficatus	Swallow-tailed Kite	G5	S2	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS

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FLORIDA Natural Areas INVENTORY

Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Blarina carolinensis shermani	Sherman's Short-tailed Shrew	G5T1	S1	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Deeringothamnus pulchellus	Beautiful Pawpaw	G1	S1	LE	LE
Dendroica discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Eumops floridanus	Florida bonneted bat	G1	S1	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	LE
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Puma concolor coryi	Florida Panther	G5T1	S1	LE	LE
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Schizachyrium niveum	Scrub Bluestem	G1	S1	N	LE
Sciurus niger avicennia	Mangrove Fox Squirrel	G5T2	S2	N	LT
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*
Matrix Unit ID: 41687					
Documented					
Depression marsh		G4	S4	N	N
Ophioglossum palmatum	Hand Fern	G4	S2	N	LE
Likely					
Caracara cheriway	Crested Caracara	G5	S2	LT	LT
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Puma concolor coryi	Florida Panther	G5T1	S1	LE	LE
Sciurus niger avicennia	Mangrove Fox Squirrel	G5T2	S2	N	LT
Scrub		G2	S2	N	N
Potential					
Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2	S2	LT	LS
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Blarina carolinensis shermani	Sherman's Short-tailed Shrew	G5T1	S1	N	LS

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FLORIDA Natural Areas INVENTORY

Florida Natural Areas Inventory

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Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Deeringothamnus pulchellus	Beautiful Pawpaw	G1	S1	LE	LE
Dendroica discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Eumops floridanus	Florida bonneted bat	G1	S1	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	LE
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Trichechus manatus	Manatee	G2	S2	LE	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 41688

Likely

Caracara cheriway	Crested Caracara	G5	S2	LT	LT
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Elanoides forficatus	Swallow-tailed Kite	G5	S2	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS

Potential

Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Blarina carolinensis shermani	Sherman's Short-tailed Shrew	G5T1	S1	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Deeringothamnus pulchellus	Beautiful Pawpaw	G1	S1	LE	LE
Dendroica discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Eumops floridanus	Florida bonneted bat	G1	S1	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	LE
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE

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Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Puma concolor coryi	Florida Panther	G5T1	S1	LE	LE
Rana capito	Gopher Frog	G3	S3	N	LS
Sciurus niger avicennia	Mangrove Fox Squirrel	G5T2	S2	N	LT
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 42059

Likely

Caracara cheriway	Crested Caracara	G5	S2	LT	LT
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Puma concolor coryi	Florida Panther	G5T1	S1	LE	LE

Potential

Acipenser oxyrinchus desotoi	Gulf Sturgeon	G3T2	S2	LT	LS
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Blarina carolinensis shermani	Sherman's Short-tailed Shrew	G5T1	S1	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Deeringothamnus pulchellus	Beautiful Pawpaw	G1	S1	LE	LE
Dendroica discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Elytraria caroliniensis var. angustifolia	Narrow-leaved Carolina Scalystem	G4T2	S2	N	N
Eumops floridanus	Florida bonneted bat	G1	S1	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	LE
Litsea aestivalis	Pondspice	G3	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Rana capito	Gopher Frog	G3	S3	N	LS
Rostrhamus sociabilis plumbeus	Snail Kite	G4G5T3Q	S2	LE	LE
Sciurus niger avicennia	Mangrove Fox Squirrel	G5T2	S2	N	LT
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Trichechus manatus	Manatee	G2	S2	LE	LE
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

Matrix Unit ID: 42060

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FLORIDA Natural Areas INVENTORY

Florida Natural Areas Inventory

Biodiversity Matrix Report

Scientific Name	Common Name	Global Rank	State Rank	Federal Status	State Listing
Likely					
Caracara cheriway	Crested Caracara	G5	S2	LT	LT
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N
Drymarchon couperi	Eastern Indigo Snake	G3	S3	LT	LT
Elanoides forficatus	Swallow-tailed Kite	G5	S2	N	N
Mesic flatwoods		G4	S4	N	N
Mycteria americana	Wood Stork	G4	S2	LE	LE
Picoides borealis	Red-cockaded Woodpecker	G3	S2	LE	LS
Potential					
Aimophila aestivalis	Bachman's Sparrow	G3	S3	N	N
Athene cunicularia floridana	Florida Burrowing Owl	G4T3	S3	N	LS
Blarina carolinensis shermani	Sherman's Short-tailed Shrew	G5T1	S1	N	LS
Calopogon multiflorus	Many-flowered Grass-pink	G2G3	S2S3	N	LE
Centrosema arenicola	Sand Butterfly Pea	G2Q	S2	N	LE
Deeringothamnus pulchellus	Beautiful Pawpaw	G1	S1	LE	LE
Dendroica discolor paludicola	Florida Prairie Warbler	G5T3	S3	N	N
Elytraria caroliniensis var. angustifolia	Narrow-leaved Carolina Scalystem	G4T2	S2	N	N
Eumops floridanus	Florida bonneted bat	G1	S1	N	LE
Gopherus polyphemus	Gopher Tortoise	G3	S3	N	LT
Grus canadensis pratensis	Florida Sandhill Crane	G5T2T3	S2S3	N	LT
Lechea cernua	Nodding Pinweed	G3	S3	N	LT
Linum carteri var. smallii	Small's Flax	G2T2	S2	N	LE
Matelea floridana	Florida Spiny-pod	G2	S2	N	LE
Mustela frenata peninsulae	Florida Long-tailed Weasel	G5T3	S3	N	N
Nemastylis floridana	Celestial Lily	G2	S2	N	LE
Neofiber alleni	Round-tailed Muskrat	G3	S3	N	N
Nolina atopocarpa	Florida Beargrass	G3	S3	N	LT
Panicum abscissum	Cutthroat Grass	G3	S3	N	LE
Puma concolor coryi	Florida Panther	G5T1	S1	LE	LE
Rana capito	Gopher Frog	G3	S3	N	LS
Salix floridana	Florida Willow	G2	S2	N	LE
Sciurus niger avicennia	Mangrove Fox Squirrel	G5T2	S2	N	LT
Sciurus niger shermani	Sherman's Fox Squirrel	G5T3	S3	N	LS
Ursus americanus floridanus	Florida Black Bear	G5T2	S2	N	LT*

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FLORIDA Natural Areas INVENTORY

Florida Natural Areas Inventory

Managed Area Summary
Caloosahatchee Regional Park

SCIENTIFIC NAME	COMMON NAME	Global Rank	State Rank	Federal Status	State Listing
REPTILES					
Crotalus adamanteus	Eastern Diamondback Rattlesnake	G4	S3	N	N
BIRDS					
Elanoides forficatus	Swallow-tailed Kite	G5	S2	N	N
MAMMALS					
Blarina shermani	Sherman's Short-tailed Shrew	G1	S1	N	LS
Trichechus manatus	Manatee	G2	S2	LE	LE
PLANTS					
Ophioglossum palmatum	Hand Fern	G4	S2	N	LE

Note: *Summary includes all occurrence records currently in the FNAI database.*

GLOBAL AND STATE RANKS

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

GLOBAL RANK DEFINITIONS

G1	Critically imperiled globally because of extreme rarity (5 or fewer occurrences or less than 1000 individuals) or because of extreme vulnerability to extinction due to some natural or man-made factor.
G2	Imperiled globally because of rarity (6 to 20 occurrences or less than 3000 individuals) or because of vulnerability to extinction due to some natural or man-made factor.
G3	Either very rare and local throughout its range (21-100 occurrences or less than 10,0000 individuals) or found locally in a restricted range or vulnerable to extinction from other factors.
G4	Apparently secure globally (may be rare in parts of range).
G5	Demonstrably secure globally.
G#?	Tentative rank (e.g., G2?)
G#G#	Range of rank; insufficient data to assign specific global rank (e.g., G2G3)
G#T#	Rank of a taxonomic subgroup such as a subspecies or variety; the G portion of the rank refers to the entire species and the T portion refers to the specific subgroup; numbers have same definition as above (e.g., G3T1)
G#Q	Rank of questionable species - ranked as species but questionable whether it is species or subspecies; numbers have same definition as above (e.g., G2Q)
G#T#Q	Same as above, but validity as subspecies or variety is questioned.
GH	Of historical occurrence throughout its range, may be rediscovered (e.g., ivory-billed woodpecker)
GNA	Ranking is not applicable because element is not a suitable target for conservation (e.g. as for hybrid species)
GNR	Not yet ranked (temporary)
GNRTNR	Neither the full species nor the taxonomic subgroup has yet been ranked (temporary)
GX	Believed to be extinct throughout range
GXC	Extirpated from the wild but still known from captivity/cultivation
GU	Unrankable. Due to lack of information, no rank or range can be assigned (e.g., GUT2).

STATE RANK DEFINITIONS

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

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

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

FEDERAL LEGAL STATUS

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

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

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

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

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

APPENDIX F: Documents Relating to Public Hearings/ Meetings

This management plan was presented to the BoCC during a Regular Board Meeting on Tuesday, June 21, 2011 (Administrative Agenda Item 9A) and approved by a 3-2 vote (Minutes from that meeting may be accessed via the Lee County Clerk of Courts: BOOK - 2011R - B.O.C.C. pages 311 – 312). The following County Commissioners were present for and voted on this item: Frank B. Mann, Chairman; John E. Manning, Vice Chairman; A. Brian Bigelow; Ray Judah and Tammy Hall (Commissioners Mann and Bigelow voted against the approval of this document). Alva resident, Keith Dean, spoke in favor of the Zip Line at the park during the allotted public comment period.

The following documents and emails satisfy the requirements set forth in the Management Plan Compliance Checklist and in state statutes regarding the Public Hearing process. The FDEP, Division of State Lands was informed of the public hearing scheduled for March 24, 2011 in the following emails (at that time, William Howell served as the DSL contact).

From: Loomis, Kathleen
Sent: Sunday, February 20, 2011 4:48 PM
To: Clark, Roger; llayman@sfwmd.gov; Steve Eldlin (Edln8223@aol.com); Sgt. Dan Scowden (dscowden@sheriffleefl.org); Mann, Frank; kimhawkleeco@aol.com; jfhawkins@live.com
Cc: **William.Howell@dep.state.fl.us**; Karim, Annisa; Ball, Kathryn; Derums, Deborah; Carr, Laura; Harner, David; Manzo, Barbara
Subject: CRP Land Stewardship Plan
CRP Land Stewardship Advisory Board Members,
On behalf of Lee County Parks and Recreation, I'd like to thank you all for agreeing to serve on the Caloosahatchee Regional Park Land Stewardship Management Plan Advisory Board. This is a one evening commitment to be at the Public Meeting on Thursday, March 24, 2011 at 6:00 p.m. at Caloosa Lodge within the campground of Caloosahatchee Regional Park (19130 North River Rd., Alva, Fl. 33920). Your role will be to give input and make recommendations at the meeting. Your comments and recommendations will then be included in the completed plan that goes to the Acquisition and Restoration Council (Florida Statute 259.032(10)(b).
Annisa Karim has spent countless hours researching and writing this Land Stewardship Plan and has done an incredible job. She will give a slide show presentation which will highlight the plan. We ask that you review the Land Stewardship Plan prior to the meeting on March 24th. This plan can be accessed through our website at [website provided]. If you would like a hard copy please contact me either by e-mail or call 707-7033.
Once again we appreciate your willingness to serve on this board. If you have any questions, please call me at 707-7033 or Annisa Karim at 229-7247.
Thank You,
Kathy Loomis, CPRP
Parks & Recreation Senior Supervisor
East District

From: Karim, Annisa
Sent: Monday, February 21, 2011 2:16 PM
To: PARKS - ALL; EXTSRV - ALL
Cc: William Howell [William.Howell@dep.state.fl.us]
Subject: Notice of Public Meeting - Please post if possible
Dear Colleagues,
Please find attached [NEXT PAGE] a notice for an upcoming meeting to discuss the Caloosahatchee Regional Park Land Stewardship Plan on March 24, 2011. If you have a Community Bulletin Board at your facility, I ask that you post this.
Many thanks,
Annisa Karim: Land Stewardship Coordinator

[This "Notice of Public Meeting" was posted at all three public entrances to CRP]

Notice of Public Meeting

The 768-acre Caloosahatchee Regional Park (CRP) is located on the north side of the Caloosahatchee River. CRP is owned by the state, leased by the Lee County Board of County Commissioners and managed by the Lee County Department of Parks and Recreation.

CRP has been developed in a manner to ensure the conservation and protection of the natural and historical resources while providing resource-based, public, outdoor recreational opportunities that have been approved for state lands and that are compatible with the conservation and protection of these public lands. The site's diverse vegetation and extensive frontage on the river, coupled with interpretive programs and amenities, provide various opportunities for the public to enjoy and continue to be educated about the importance of the site.

The Lee County Dept. of Parks and Recreation Staff invites the public to review the Land Stewardship Plan for the park and attend this public meeting:

Thursday, March 24, 2011; 6:00 PM
at the Caloosa Lodge in the campground of the Caloosahatchee Regional Park
19130 North River Rd., Alva, FL. 33920

The Land Stewardship Plan will be available for review from February 22, 2011 - March 24, 2011 at the Riverdale Branch Library (2421 Buckingham Rd., Fort Myers, FL. 33905), the campground office of CRP and online at the CRP webpage [http://www.leeparks.org/pdf/CRP-Land-Stewardship-Plan-Copy-for-Public-Hearing.pdf].

Written comments will be accepted prior to the commencement of and during the course of the scheduled meeting. Comments may also be sent to: Annisa Karim (AKarim@LeeGov.com; Hickey's Creek Mitigation Park, 17980 State Road 80, Alva, FL. 33920) before March 24, 2011.

For more information, contact Kathy Loomis at 239-707-7033.

"Lee County Parks & Recreation...The Natural Place To Play"
WWW.LEEPARKS.ORG

DO NOT REPLY: Event Submission at The News-Press Approved

mhudson@news-press.com [mhudson@news-press.com]

Sent: Thursday, March 10, 2011 1:55 PM

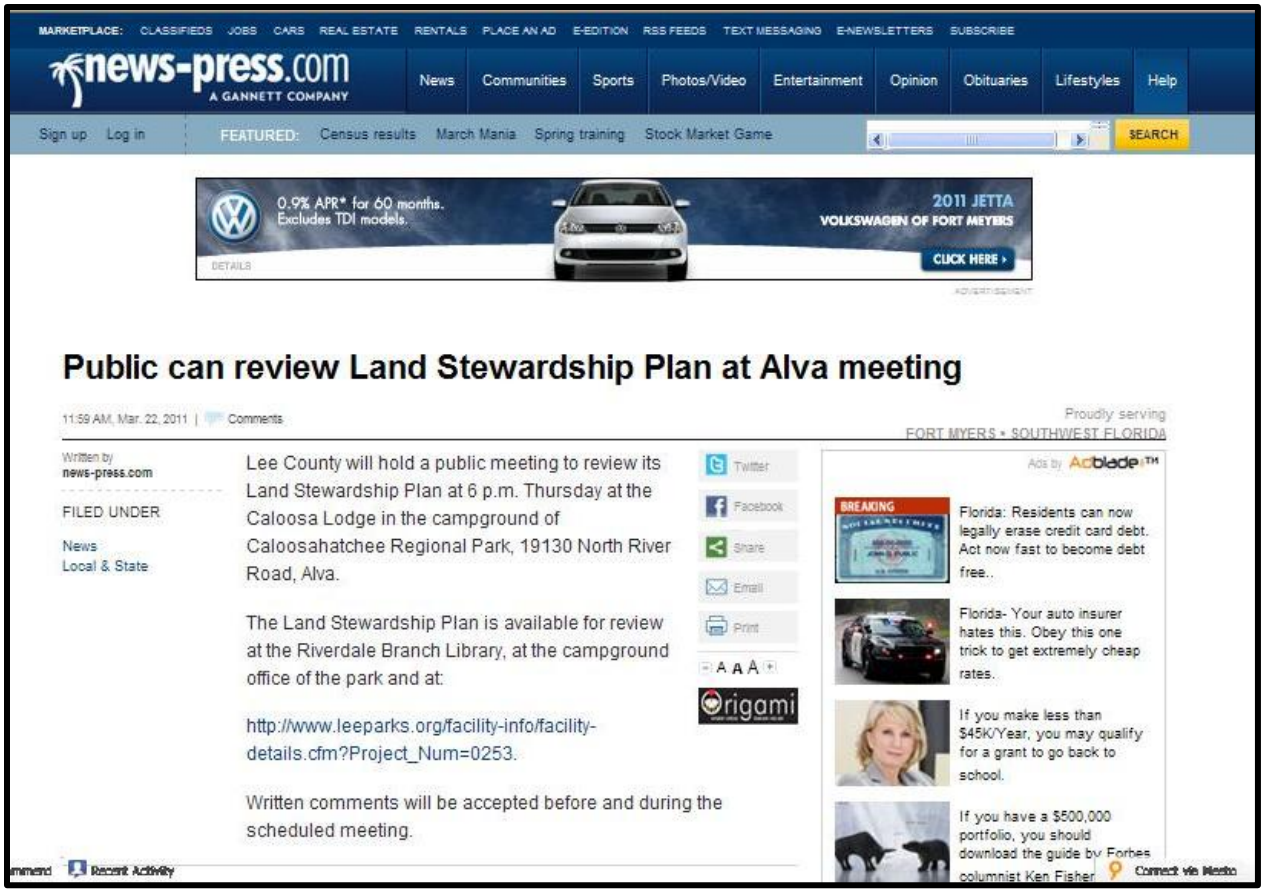
To: Karim, Annisa

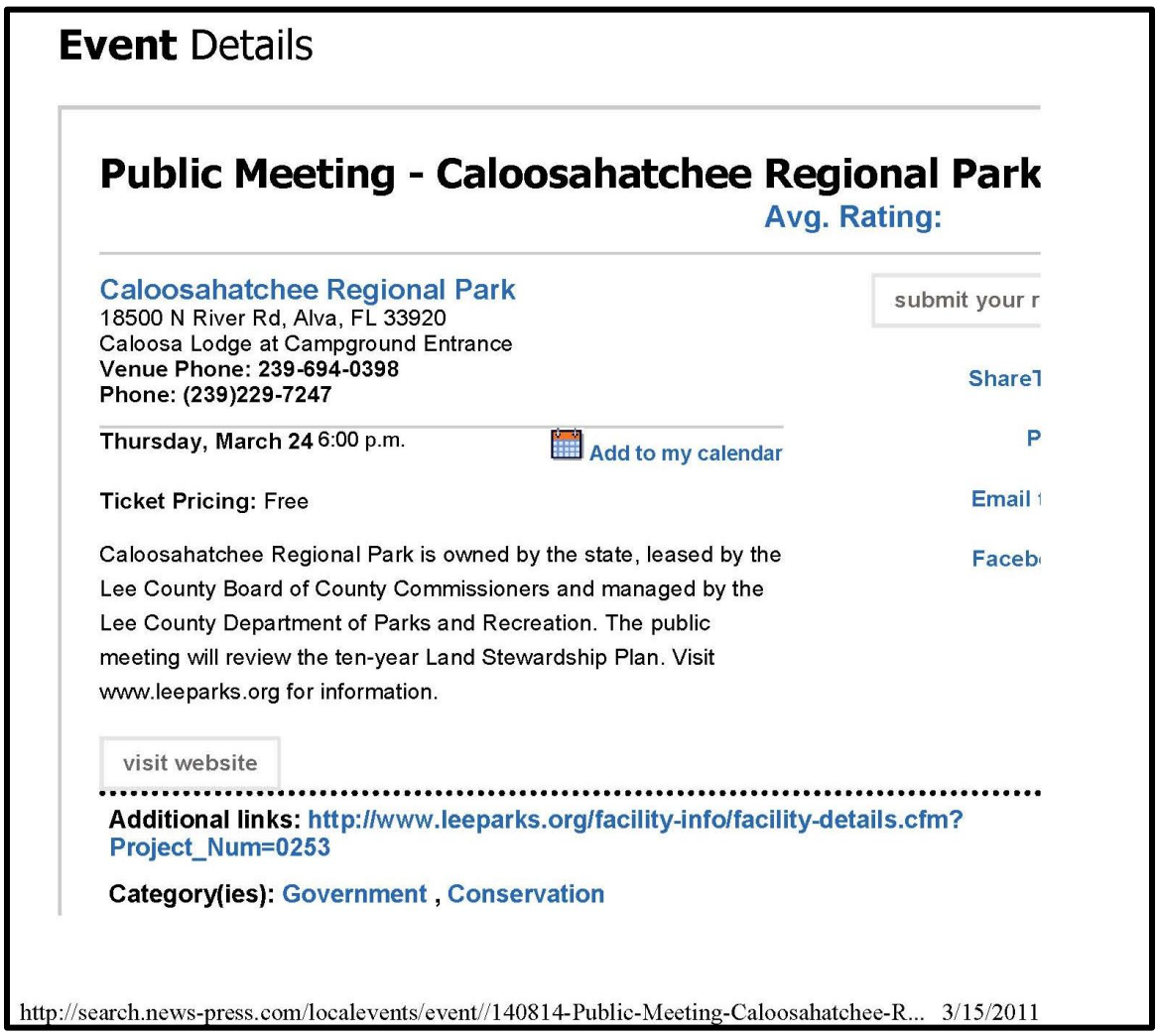
Greetings,

This is an automatically generated email to let you know that your event submission for Public Meeting - Caloosahatchee Regional Park has been approved and will appear on our site shortly. PLEASE DO NOT REPLY TO THIS MESSAGE. If you have any questions related to your event submission, please send an email to jmoore@news-press.com.

We appreciate your submission and wish you the best of luck with your upcoming event!

Thank you,
The News-Press
http://www.news-press.com
jmoore@news-press.com





Event Details

Public Meeting - Caloosahatchee Regional Park

Avg. Rating:

Caloosahatchee Regional Park
18500 N River Rd, Alva, FL 33920
Caloosa Lodge at Campground Entrance
Venue Phone: 239-694-0398
Phone: (239)229-7247

submit your r

Share1

Thursday, March 24 6:00 p.m. Add to my calendar

P

Ticket Pricing: Free

Email

Caloosahatchee Regional Park is owned by the state, leased by the Lee County Board of County Commissioners and managed by the Lee County Department of Parks and Recreation. The public meeting will review the ten-year Land Stewardship Plan. Visit www.leeparks.org for information.

Faceb

visit website

Additional links: http://www.leeparks.org/facility-info/facility-details.cfm?Project_Num=0253

Category(ies): Government , Conservation

http://search.news-press.com/localevents/event//140814-Public-Meeting-Caloosahatchee-R... 3/15/2011

The following announcement was made at a "scheduled meeting of the local governing body" (i.e., a Regular Meeting of the Lee County Board of County Commissioners) on Tuesday, March 1, 2011 by Chairman Frank Mann - the representative for the district in which CRP is located.

"Public Hearing Announcement for the Caloosahatchee Regional Park: A public hearing will take place on Thursday, March 24, 2011 at 6:00 PM in the Lodge of the Caloosahatchee Regional Park. Pursuant to Florida State Statute 259.032(10)(b), a public hearing will be held to receive input from the public and an advisory group on the ten-year revision of the Caloosahatchee Regional Park Land Stewardship Plan. This plan will be available for review until March 24th at the Campground office of the Caloosahatchee Regional Park, the Riverdale Branch Library and on the Caloosahatchee Regional Park webpage on www.LeeParks.org.

The Lee County Dept. of Parks and Recreation invites the public to review the Land Stewardship Plan for the park and attend this public meeting on Thursday, March 24, 2011 at 6:00 PM. The meeting will take place in the Caloosa Lodge in the campground of the Caloosahatchee Regional Park".

Summary of Public Hearing: March 24, 2011

A public hearing was held on Thursday, March 24, 2011 at 6:00 PM in the Caloosa Lodge (19130 North River Rd., Alva, FL. 33920) to allow for input by an advisory group and the public pertaining to the ten-year update of the CRP Land Stewardship Plan 2011 – 2021 [as required by Sections 259.032(10)(b and c), F.S.]. Approximately forty-three people attended this meeting (including at least three that did not sign-in).

To satisfy criteria under Section 259.032 (10)(b), F.S., the following individuals were invited to serve as members of the advisory group:

Name	**Affiliation**	**Criteria satisfied under Section 259.032 (10)(b), F.S.**
Roger Clark	Land Stewardship and District 1 Manager - LCPR	representative of the lead land managing agency
*Laura Layman	* Science Supervisor; Environmental Analyst - SFWMD	*representative of the comanaging entity
Dan Scowden	neighboring property owner	local private property owner
Steve Edlin	neighboring property owner	local private property owner
Kim Hawk	Supervisor Seat 5: Lee Soil and Water Conservation District	representative of local soil and water conservation district
**John Hawkins	**Board Member - Alva, Inc.	**representative of local conservation organization
Frank Mann	Chair, Lee County BoCC; representative District 5	local elected official

*SFWMD is not a comanaging entity; LCPR has a lease with them for approximately 50 acres of CRP but they do not help to manage the property with LCPR on a daily basis. They were invited to provide their expertise.
** Alva, Inc is not exclusively a conservation organization. Their aim is to preserve the rural character of the town of Alva. Many issues that are discussed at the Alva, Inc. meetings are related to the protection of natural resources within Alva. The current President of the Caloosahatchee River Citizens Association was invited to participate as a member of the Advisory Group but did not respond to the invitation.

The public hearing consisted of an introduction, overview of the updated ten-year Land Stewardship Plan and a question/ answer session for public input. The advisory group discussed the comments made by the public, the content of the plan, asked questions of county staff and provided their input. Finally, the advisory group made a recommendation (6-0; with one abstention) to remove the proposed Zip Line from the ten-year plan and approve the remainder of the plan. ***The summary of the public hearing held in October 2009, where the Zip Line was presented in full detail, is also included here to provide a comprehensive record of all public comments received on this matter.***

Input from members of the public

Comments and questions posed by the public and the responses *provided by county staff (in italics)* are summarized here:

- A few members of the public were concerned that the concept of a Zip Line is not a natural-resource based activity and that its installation would deter or harm wildlife. *Staff visited Forever Florida, a private organization that installed a Zip Line in a natural area, twice to explore and investigate the appropriateness of the Zip Line for CRP and the location of their Zip Line. The Forever Florida structure was placed in similar habitat types to the ones proposed here. From staff's discussions with the general manager of this private organization, staff determined that if done properly and with sufficient guidelines and stipulations in place, a Zip Line would be suitable within the park. Environmental education would be a key component in the operation of the Zip Line per the RFP.*

- Some public comments focused on the logistics of operating the Zip Line at CRP. Staff informed the public that the selected vendor would not be permitted to set up a concession stand for all visitors to the park but would be allowed to sell limited goods (soda, water, light snacks) to participants of the Zip Line. The selected vendor would be required to obtain all state and county required permits. The RFP has been initiated and is at 90% completion. The RFP requires that the vendor pay a flat fee to the county on a monthly basis regardless of the revenue generated by the vendor. The county will also generate funds by parking fees paid by participants of the Zip Line. Staff's research into the Forever Florida Zip Line (built similarly to that envisioned for CRP) revealed that Forever Florida's programs were bolstered by the presence of the Zip Line.

- Some public comments focused on the location of the Zip Line and its proximity to equestrian trails. The public expressed concern that the noise generated from the participants of the Zip Line would frighten some horses and pose a risk to horseback riders and the horses themselves. *Staff explained that when the Zip Line was proposed for CRP, they evaluated three potential locations for its placement. During the public meeting held on October 20, 2009, three options for the placement of the Zip Line were presented to the advisory board. All three options were evaluated on the bases of compliance with state statutes, potential conflicts with other public access trails within the park and ultimately, natural and cultural resource conservation concerns. Additionally, the Forever Florida Zip Line also had equestrian use in close proximity to their Zip Line and this was considered when recommendations were made. Communications between LCPR staff and the SFWMD in 2009 revealed that the proposed Zip Line would not be permitted on any SFWMD's land (i.e., shoreline of CRP) because the vendor would need to charge a fee to provide this activity. The Water Management Districts have liability immunity protection provided recreational opportunities on District lands are without charge. Staff's recommendation to the advisory group in 2009, the advisory group's recommendation to the state and the state's approval all focused on what was then deemed "option B" (northwest portion of the south side of CRP). Option "B" was approved by the advisory group in October 200 and by the state in December 2009.*

- A few members of the public inquired how the park facilities would be able to handle increased use in visitation due to the Zip Line and/ or increase in public access trails. While the *Zip Line is expected to increase visitation to the park, the visitation would be dispersed evenly; that is, the Zip Line could only accommodate 8 – 12 people at a time but could run throughout the day. If the Zip Line is installed, staff does expect an increase in the utilization of other park facilities. The campground is already limited by the number of campsites and number of tents allowed per site. The trail system is currently underutilized and staff believes that an increase in visitation can be sustained. The parking area on the north side can sustain current usage. If usage increases dramatically due to the increase in public access trails, staff will consider adding parking. An amendment to the management plan would have to be prepared to get approval for additional parking.*
- One member of the public expressed approval of the Zip Line. He acknowledged that if managed properly, this could be a great addition to the park. Typically, the Zip Lines that create lots of noise are the ones that have large elevation changes – unlike that proposed for CRP.
- Discussion ensued on the "restoration/ reclamation" of the north side. Will there ever be a native canopy? A*pproximately 392 acres of Caloosa Fine Sand were deposited on the north side of the park. This "soil" is the dredge spoil area that resulted from the dredging of the Caloosahatchee River. Because of the increased elevation, exotic vegetation has dominated the site in the past and exotic grasses currently are the most problematic group creating a consistent monoculture over much of the site. "Restoration" of this site is not feasible because of the difficulty and cost of returning the site to natural grade. "Reclamation" with native plant species may better describe the strategy proposed in this plan. LCPR staff is systematically addressing this issue. Returning the system to a natural fire regime, controlling exotic species and planting native species (when feasible) will aid in the reclamation and improvement of the site. As funding allows, test plots will be planted to determine the most suitable species for these soils. Some exotic grasses (e.g., cogongrass) increase fire risk and in the past, canopy trees have been burned during wildfires. Staff is trying to balance exotic control with successful rearing of native species.*
- The public had questions on the number and location of the horse and bike trails on the north side of the park. Is this plan set in stone? *When looking at the current trail system and propositions for the next ten years, staff sat down with the Saddle Club and the Mudcutters to obtain their "wish lists". Additionally, staff reviewed safety concerns, funding limitations, staffing constraints and land stewardship goals for the park. The first priority was to address all safety concerns dealing with user conflict on the north side of the park. Most actions will focus on removing bike/ horse intersections where feasible. The county has proposed trail alterations that would (1) reduce trail intersections and (2) increase the distance of trails offered. Additionally, the county will be investing some time and money into creating a better-marked trail system with better maps for the kiosks. It would be cost prohibitive to constantly change these maps and trail markers.*

- What is a "Dry Basin" (Re: Fichter's Creek Project)? *A Dry Basin is one that holds water for 72 hours or less (intended to drain dry between storm events).*
- A few members of the public asked if the public access trails at CRP could be connected to Bob Janes Preserve (to the north) and eventually to Telegraph Creek Preserve. *At this time, the connection of trails is not feasible. If any connection were to be made, it would have to be made to the east of the Fichter's Creek Project Limits. This area on Bob Janes Preserve is increasingly wet. While Lee County's Conservation 2020 Program own the Preserve, management of the preserve is through a third party (Genesis Group) which has already created a Recreation Master Plan for the Preserve. Public Access is part of their plan but the access trails do not connect to CRP.*
- Several questions centered on trail maintenance on the north side of the park. *Staff is happy to work with members of the public on scheduling workdays and educational opportunities for trail users to learn about exotics and trail maintenance.*

Comments/ Statements from members of the advisory group (Staff responses are presented in italicized text)

Roger Clark: Mr. Clark provided a brief overview of Zip Line process thus far and history of the Fichter's Creek Project. All programs and services [whether private or public] offered need to continue to be resource based. This is potentially the first proposed Zip Line on state-owned lands in Florida. This may set precedence for other state-owned lands.

Laura Layman: She was not opposed to the idea of a Zip Line. She recommended clarifying the impact of equestrian trial on water quality within the park.

Steve Edlin & Dan Scowden had similar concerns: Mr. Edlin was not familiar with the concept of a Zip Line, he was not sure how multiple uses such as, biking and horses could be accommodated. Mr. Edlin reiterated safety concerns expressed by the public regarding the proximately of the Zip Line to the equestrian trails. Mr. Scowden was neutral on the issue of the proposed Zip Line. Both gentlemen are concerned that the county will not be able to obtain necessary authorization to install the weir on Fichter's Creek Lane, a private road. The current condition of the weir and bridge present significant safety concerns to the neighbors of the park especially those neighbors north of the weir. Both gentlemen asked if the weir could be placed on state property or if a new road or weir could be constructed on state property for the neighbors to use. Mr. Edlin and Mr. Scowden expressed urgency towards a resolution to this issue; they do not want the bridge to collapse – resulting in a "tragic situation". *Anura from LCDNR stated that most of the project can be completed without the installation of a new weir and this would alleviate a majority of the water quality and flow concerns the county has. However, at some point chances are high that both the bridge and weir will fail. The county is trying to avoid this scenario. Building a road and a new weir on state land is cost prohibitive and the impact on wetlands would be increased under this option. The county will not do any work on the bridge or weir (located on the private road) without proper landowner authorization.*

Kim Hawk: Mr. Hawk was concerned whether the dredge soils were only on state property (CRP) because he has seen high lands on other property in the community. He was neutral on the issue of the Zip Line. He would like to see the wetlands restored and the canopy be restored to the north side of the park. *The Army Corps has multiple north-south easements*

all along the northern shore of the Caloosahatchee River. Wetland restoration is part of the stewardship goals for the park.

John Hawkins: Mr. Hawkins was worried that the vendor would not be able to profit from the Zip Line and local people may not be able to afford the price.

Frank Mann: Commissioner Mann strongly opposes the Zip Line in the natural setting of CRP. He feels the staff needs to listen to the concerns and outcries from the community. He agrees with all of the other proposals set forth in the ten-year update of the land stewardship plan. He also commented on the Fichter's Creek Project. He agreed with the staff that it would be too costly to build a road and bridge on state land but the project can continue without the alterations of the weir or bridge on Fichter's Creek Lane as it will improve the water flow. *At some point the bridge will have to be addressed.*

Recommendation made by the advisory group

Mr. Hawkins made a motion to remove the proposed Zip Line from the ten-year plan and approve the remainder of the plan; seconded by Mr. Hawk. Motion passed 6-0 (Mr. Scowden abstained).

The following emails were sent to LCPR staff pertaining to the ten-year update of the CRP Land Stewardship Plan 2011 – 2021. The emails are provided here without the publics' contact information (except where specific purpose was to provide contact information). The only alteration made to these emails was the removal of contact information – this information is available upon request. A line separates unrelated correspondences. *Staffs' responses are presented in italicized text.* Staff's automatic email signature was sent with each reply but only appears once here.

From: Bruce Hildreth
Sent: Tuesday, February 22, 2011 10:09 AM
To: Karim, Annisa
Cc: Robert Bagans
Subject: Comments regarding CRP

Hello,

I want to submit comments regarding the CRP. I and my fiancee have enjoyed this park several times over the years by mtn. biking, camping, and participating in River, Roots and Ruts x4 and the old Adventure Tri. We think it is a beautiful park and are happy with the management. The participation of Mudcutters is a significant positive.

One limiting factor, however, keeps us from using the park more frequently. We have a DOG - A very well behaved small dog well liked by everyone. We take him with us mostly everywhere. He bikes with us in a rear basket, kayaks with us, runs with us, camps with us, and even jet skiis with us. He doesn't like to stay home and we don't like to leave him home. When we travel during the summer throughout the eastern states, we have very few problems with him staying at parks. We would definitely like to be able to take our dog to CRP. Limiting dogs is really an unusual rule. Please consider changing the rule. Thanks,

Bruce Hildreth
Anke Stimpson

From: Annisa Karim
Sent: Tuesday, February 22, 2011 10:31 AM
To: Bruce Hildreth
Cc: Loomis, Kathleen
Subject: RE: Comments regarding CRP

Bruce,
Thank you for your input! We value your comments and will address this issue during the public meeting on March 24th.
Annisa
****
Annisa Karim
Land Stewardship Coordinator
Lee County Department of Parks & Recreation: "The natural place to play"
17980 State Road 80.
Alva, FL. 33920
Phone: (239) 229-7247
e-mail: AKarim@leegov.com
website: www.leeparks.org
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reduce, reuse, recycle

From: Lynda Rehse
Sent: Thursday, March 24, 2011 9:32 AM
To: Karim, Annisa
Subject: (no subject)

Hello. I am Lynda Rehse from Bonita Springs. I have ridden horseback at Caloosahatchee Park over the past 10 years. It is the only county park that allows horseback riding, and I live on the southern boundary of the county.

The problem is, the park is shared with bicycles, and horses and bicycles do not mix. It is too dangerous, so I do not frequent the park anymore. What a shame. It is a beautiful place to ride. My friends, especially Patti Bell, works hard to maintain trails there.

Could there be a plan made that would allow horses to have the whole park to ride on certain days of the week, month, and bikers on the other days? I think the number of horseback riders would triple. There is a serious safety question about shared use at that particular park, as the trails intersect many times and there is no way to allow safe crossings. We cannot adequately see or hear each other (bikers and horses). Perhaps, if the vegetation were cleared out, we could see better, but that would spoil the appearance, shade and beauty of the area. Yelling, "Horse coming", to possible bikers coming through, does not make me feel safe. Sorry.

Another concern is regarding equestrian camping. I understand that the equestrian camping is located on the south side of the road, but we cannot ride on the south side, so we would have to trailer the horses to the north side of the park or cross the busy road. Neither are good solutions. How many equestrian campers do you get? Could this be addressed in a meeting of some sort, to figure out a way to make better use of this park ? Horse people need to be involved in any planning to take place, as their needs are special. The Caloosa Saddle Club members are involved, concerned, and a good resource.

Thank you for your kind consideration.
Lynda

From: Annisa Karim
Sent: Thursday, March 24, 2011 9:52 AM
To: Lynda Rehse
Cc: Loomis, Kathleen; Ball, Kathryn; Carr, Laura

Hello Ms. Rehse,
Thank you for your interest and comments about Caloosahatchee Regional Park. Staff at the park has been working diligently to address trail conflict issues and I assure you that this work will continue. Only yesterday, staff at the park had a work day to address a safety issue with the bike and horse trails on Calcutta Ridge.

We will be discussing the ten-year plan, specifically land stewardship and public access goals, for the park this evening at a Public Meeting to be held in the Caloosa Lodge (Campground Entrance) at 6PM. You are welcome to attend this meeting and share your comments and concerns.
I have copied some of my colleagues on this email so that we can discuss your concerns in the near future.

Again, thank you for taking an interest in the park. We appreciate it very much.

Sincerely,
Annisa Karim

From: Adele Smith
Sent: Sunday, March 27, 2011 1:53 AM
To: Karim, Annisa
Cc: patti bell
Subject: Caloosa Regional ParK Zip Line and 10 Year Plan

Annisa, First I want to compliments you on a fine presentation you gave Thursday night. It was very well prepared and presented. I thought you handled all the questions very professionally and did not become defensive as people so often do.

I am one of the equestrians riders and these are my concerns:

The **zip line** just does not belong in a park where people are riding horses. Horses are "flight animals" and will take off when frightened. The noise, screaming and etc. brought on by the zip line is an accident waiting to happen and some rider is going to get severely hurt. The little bit of riding we now have on the south side of the park will not be usable that close to the zip line.

I am not a **camper or hiker**, but most people who go camping ,go for the rest and quiet, serene setting of the park. The zip line will certalinly inferfere with their "quiet time" and I think will in the long run affect the number of campers who utilize the park. That would be a real shame. If you want noise and excitement of a zip line, go to an amusement park, but don't ruin the beautiful serenity of Caloosa. You have all worked to hard to get it to that level and the numbers show people appreciate what has been done. I think the zip line will have an adverse affect on all people now riding, hiking or camping in the park. Also the zip line is likely to attract a diffenrt "group" of people and this may not be in the best interest of the entire area or park.

Hog traps should not be placed right on the horse trails as they are now. A big trapped boar hog will charge at the cage when riders so by and will frighten the horses into flight. Another accident waiting to happen. We have a ranch and I know what a difficult thing it is to get rid of the hogs, and trapping and replacement are about your only alternative, but don't let the trappers put their traps on our trails, PLEASE!!!

Toxic plants: I know there is a tremendous amount of crotileria in the park which although very pretty with its yellow flowers, it highly toxic to horses. If it can't be eradicated, at least put up pictures or something to educate to riders. Night shade (Belladonna) is the most toxic plant in the western hemisphere and I am sure there is plenty of that in the park as well. I found some recently in my horse pasture 2 miles from the park. It should also be pictured.

We are very pleaseed with the **rerouting of the trails** to avoid crossing of the bikes and horses. This is a very good move and we appreciate the thought and effort which went into making these changes.

As for the **skills area** for the mountain bikers, that doesn't concern me too much unless it interfers with the parking of the horse trailers. I would imagine that this will be mostly utilized on weekends and most of the equestrians avoid the park on the weekend anyway because of all the bikers. I assume if it does become a parking problem, some measures will be taken to protect our parking area.

Thanks again for all the effort you have all put into this 10 year plan and for sharing it with us. I do hope you will rethink the zip line and consider putting it at an underutilized park with **no horses** as a way of generating more revenue for that park.

Adele E. Smith
Board Member Special Equestrians

Adele E. Smith

From: Karim, Annisa
To: Adele Smith
Cc: patti bell ; Loomis, Kathleen ; Ball, Kathryn ; Derums, Deborah
Sent: Saturday, March 26, 2011 8:14 AM
Subject: RE: Caloosa Regional ParK Zip Line and 10 Year Plan

Ms. Smith,

Your attention and interest in Caloosahatchee Regional Park is very much appreciated. Thank you so much for taking the time to attend the public meeting and for summarizing your comments here. I can assure you that all of your comments will be taken into consideration as we move forward. Your comments will also appear, as you have written them in this email, in the plan that is presented to the state.

We value your input!

Thank you once again,

Annisa

From: Patti Bell
Sent: Monday, March 28, 2011 6:55 PM
To: Karim, Annisa; Jeanne Cornele
Subject: 10 year Stewardship Plan for CRP

I am a frequent volunteer for the Equestrian Trails as well as an avid rider at the Caloosa Regional Park and these are my concerns regarding the 10 Year Stewardship Plan.

1. Including a Zip Line on the property does not meet the Vision Statement standards. Referring to ... "Safeguarding and enhancing the environmental integrity and biological diversity of the site will be the guiding principle for the stewardship and operation of the park".

2. The Caloosa Saddle Club, in the 10 year Plan Recommendations, requested specifically that the "River Trail" on the Southwest side of the Park be "re-established through the wooded area". A current road and short path along the river is used now, however this specific request was to lengthen the current trail whereby passing through the beautiful woods and "loop" or connect to the current road trail. This request and trail is not on the map of the 10 Year Stewardship Plan. This request should not be contingent upon the "Completion of the Fichter's Creek Restoration Project". The Bikers are allowed many, many miles of beautiful winding trails and there is no reason that Equestrians should be denied the same.

Patti Bell
Caloosa Saddle Club Member

From: Karim, Annisa
Sent: Tuesday, April 12, 2011 5:08 PM
To: Patti Bell
Cc: Jeanne Cornele; Loomis, Kathleen; Ball, Kathryn; Carr, Laura
RE: 10 year Stewardship Plan for CRP

Ms. Bell,
Thank you for your interest and comments about Caloosahatchee Regional Park. I assure you that all suggestions are taken into account.
I am aware that you and some of the members of the Caloosa Saddle Club have proposed to schedule at least 2 workdays a year to maintain the equestrian trails and I applaud this effort.
As I mentioned to you at the Public Hearing on March 24, the more assistance staff gets from groups such as yours, the better the experience will be for all equestrians.

To address the points you made in your email...
1) I have been one of the staff members involved in researching the appropriateness of the zip line from almost the beginning. As an ecologist and the Land Stewardship Coordinator for CRP, I assure you that every effort has been made to make sure that proper constraints have been placed on the siting, design and construction guidelines for the zip line. Staff has placed these stipulations in the Request for Proposal (currently on hold) and has been working hard to ensure a comprehensive set of guidelines ever since we got approval from the state in December 2009. I truly believe that many members of the public have a misconception of what the zip line would actually be like. Staff toured a similar attraction in central Florida, twice. This Zip Line was appropriately constructed in a natural area (you wouldn't even know it was there if you weren't looking for it) where equestrian trails did come into close (approx. 200 feet) proximity to it at several locations. As you know, any public access opportunity can be offered in the right way or the wrong way. If designed ***incorrectly,*** *a hiking trail, equestrian trail, mountain bike trail, etc. could be in discord with "Safeguarding and enhancing the environmental integrity and biological diversity of the site". However,* ***if done appropriately****, all of these could enhance the public's appreciation for the site. We feel the same way about the zip line and that is why we have worked so hard to make sure it was addressed appropriately.*
Patti - I certainly value your input and have forwarded your comments to other members of staff and will include them in the public comment section of the Land Stewardship Plan.
2) Staff reviewed the "wish lists" of the Caloosa Saddle Club and the Mudcutters when we laid down our goals for the next ten years. As you know, our first public access priority is to address all safety concerns dealing with user conflict on the north side of the park. Most of our actions will focus on removing bike/ horse intersections where feasible. We had to look at the Fichter's Creek Project as a big component of this because we must address how trails are to be laid out to accommodate this project. We will also be investing some time and money into creating a better marked trail system with better maps for our kiosks. It would be cost prohibitive to change these maps before the Fichter's Creek Project and then after it. It is for this reason that some of the horse and bike trails are contingent upon the completion of this project. The Horse trails, as laid out, will increase by 7% in the next ten years while the bike trails

will increase by only 1.7%. We feel that given the amount volunteer hours we receive from both groups, that our proposed public access plan is more than fair.
Once again - thank you for your comments and I look forward to working with you and the Saddle Club in the days to come.

Sincerely,
Annisa

From: Jeanne Cornele
Sent: Wednesday, April 13, 2011 11:23 AM
To: Karim, Annisa
Cc: Patti Bell; Loomis, Kathleen
Subject: Re: 10 year Stewardship Plan for CRP

At the Caloosa Saddle Club meeting on April 7, we discussed the 10 year plan and our need to be involved in trail maintenance. We all agreed that having 2 workdays a year would keep the trails open and if needed more can be arranged. However, placing the responsibility of the trail maintenance on a group that may or may not exist in the next 10 years is a disservice to the equestrian population who are not members. The Caloosa Saddle Club is a small group of equestrians whose numbers fluctuate with the economy. There are many more users of that facility than just our club. The potential of closing trails for lack of maintenance because there is no organization to "lead the charge" would deny equestrians the use of a public facility. I would like to have that reference stricken from the 10 year plan. Perhaps there is some way to get other equestrians involved.

From: Karim, Annisa
To: Jeanne Cornele
Cc: Patti Bell; Loomis, Kathleen; Carr, Laura; Ball, Kathryn
Sent: Thu, Apr 14, 2011 1:47 pm
Subject: RE: 10 year Stewardship Plan for CRP

Hi Jeanne,
Thank you for your feedback. I believe there has been a misunderstanding. I assure you that the staff has no intention of denying equestrians the use of this public facility. When looking at the current trail system and propositions for the next ten years, staff sat down with the Saddle Club and the Mudcutters to obtain their "wish lists". Additionally, we looked at safety issues, staffing constraints and land stewardship goals for the park. We did notice areas of the trail system where intersections between horse trails and bike trails could be reduced by altering one or both of these trails. We have proposed trail alterations that would (1) reduce trail intersections and (2) increase the distance of trails offered. However, we also acknowledge that we have staffing limitations and can not maintain a huge increase in the trail system.
Both the Saddle Club and the Mudcutters are finding it difficult to increase and/ or maintain membership in these hard times and we certainly understand that. However, we can not commit to maintaining safe trails if involvement from either group decreases while the number of trails is increased - we simply do not have the adequate staff. That is why we have challenged both groups to work with us and together to maintain the trail system. Except for where safety is a concern, we have not proposed the closure of a current trail and will not propose closure. However, when looking at blazing new trails, we must be assured that we can offer safe trails to all that want to use them in the long term.
I urge you to work with Laura Carr (copied here) to set up your workdays, post information on our website and post information for new members and/or volunteers on our kiosks. Perhaps advertising the Saddle Club workdays at stables and nearby restaurants will also help. Please let us know how we can help to get the word out!
Jeanne - your comments will be included in the Public Comment Section of the Land Stewardship Plan. Thank you once again.
Respectfully,
Annisa

From: Jeanne Cornele
Sent: Thursday, April 14, 2011 2:28 PM
To: Karim, Annisa
Re: 10 year Stewardship Plan for CRP
Thanks for the clarification. My interpretation was that trails would be closed.if they,(Saddle Club) didn't help maintain them. At our meeting, we discussed how to get non members involved in helping maintain trails. Patti was going to pursue getting answers to some of our questions.

From: Sherry Gilbert
Sent: Tuesday, March 29, 2011 12:43 PM
To: Karim, Annisa
Subject: Caloosa Park Zip Line

Dear Ms. Karim,

I am writing you about the proposed Zip line at the park. I use the park to ride my horse and feel adding a Zip line will be a safety hazard for many of us that ride.

Please reconsider...Lakes Park would be an excellent place to put the zip line.

Sherry Gilbert
Lehigh Acres, FL

From: Karim, Annisa
Sent: Tuesday, April 12, 2011 5:17 PM
To: Sherry Gilbert
Cc: Loomis, Kathleen; Ball, Kathryn; Carr, Laura
RE: Caloosa Park Zip Line

Dear Ms. Gilbert,
Thank you for your input. I assure you that it will be included in the Public Comment section of the Land Stewardship Plan.
Sincerely,
Annisa Karim

From: Mary Swann
Sent: Tuesday, March 29, 2011 1:58 PM
To: Karim, Annisa
Cc: Wewerka, Laura
Subject: Caloosa and 20/20 land managment proposal

Dear Ann and Laura,

I frequently use the caloosa park for horseback riding and would like to share with you some of my concerns.. I really feel that it is not an appropriate place for a zip line. The trees are not high enough nor stable/strong enough for a zip line which means they would have to put somekind of platforms. The zip line throws people through the air that will not only spook a horse but scare the deer, animals, birds etc. I love the beauty of the park and I feel the zip line will take away from the natural setting that we have. Wouldn't this be more appropriate at a place near the beach rather then in the flat country. It would also be niche to have a trial added on the south riverside that would crat a loop through the beautiful woods away from the bikes. Many people who use to ride at caloosa have stopped due to having their horse spook from a bike and this way there would be at least one area that they could ride without fear of having a bike shoot out of the woods at them. There would be alot more equiestrians use

and hopefully volunteers for the park if we could have a loop through the woods without any bikes around. Many parks such as alafia are set up like this where the bikes and horses never cross or see each other. I also hope that telegraph creek access will be for hikers and horses only. I would also like to see the proposed entrance being set for hikers also accessible to equines as well. And why can't telegraph creek be open to equeistrians this year, does it really take that long? Would you be interested in having some equestrians blaze some trails and hlep mark trails... maybe even our local 4h equestrians would be interested in helping set up trails, why not make it an equestrian community project and allow us to help.

Sincerely,
Mary Swann
Cape Coral FL

From: Karim, Annisa
Sent: Tuesday, April 12, 2011 5:32 PM
To: Mary Swann
Cc: Wewerka, Laura; Loomis, Kathleen; Carr, Laura; Ball, Kathryn
RE: Caloosa and 20/20 land managment proposal

Dear Ms. Swann,
Thank you for your input on the Caloosahatchee Regional Park Land Stewardship Plan. I can only comment on the trails at Caloosahatchee and not on those at Telegraph Creek Preserve. Laura Wewerka (copied here) is the perfect person to contact regarding Telegraph Creek Preserve.

Our first public access priority at Caloosahatchee Regional Park is to address all safety concerns dealing with user conflict on the north side of the park. Most of our actions will focus on removing bike/ horse intersections where feasible. We will also be placing better directional signs on the trails and have better maps at our kiosk areas to educate our visitors on the layout of our trails. Staff has proposed a 7% increase in the horse trails over the next ten years...this is contingent upon receiving enough volunteer hours from equestrian clubs to maintain these trails. At this point we would like to concentrate on the trails proposed before blazing new trails through sensitive wetland areas that may not be maintained. Not only would a south side loop have to be designed carefully (to address water quality issues), it would also have to be maintained appropriately and we do not have enough staff to commit to that project at this time.
Once again, thank you for your comments. They will be included in the Public Comment Section of the Land Stewardship Plan.
Sincerely,
Annisa

From: Laura Ketchem
Sent: Monday, March 28, 2011 8:34 PM
To: Ball, Kathryn; Karim, Annisa; Wewerka, Laura
Cc: p.bell@hotmail.com
Subject: Horse Trails

Ms. Ball,

I try hard to stay away from politics and political activities. But I strongly object to several things the Parks and Rec are doing in my neighborhood and community.

The first thing is the proposed Zip line on the North side of the Caloosahatchee Regional Park. The horses will freak! Especially, when some of the zip line users drop purses, bags, lotions, glasses, phones, cups, cans, clothes, shoes, keys, blow whistles, scream etc.

The second is the declining use of the horse trails. It's not that we have more areas to ride; it's that the bike riders do NOT yield to horses!!! They have 2X's more trails and get to ride in the shade. What does that leave the equestrians? The horses were to dominate the park not bikes in the original plan if you recall. I'm all for the construction of new trails for the horses on the North/South side of the park, construction of trails on Babcock or Fichter's creek that join to the existing trails in Caloosa.

The third thing is existing parking… The bikers hog all the spots for horse trailers – where am I supposed to park a 53 foot rig when I can't guess a heavy bike day and stay away?

The 4th is the Daniels' Preserve… Why do the Daniel's get a cattle lease and the privilege to run their horses over the property after you all paid them 3 million dollars? Why am I not allowed to use the preserve as a thorough fare for my horse activities and benefit? Why do I have to go around the whole property on either side but not through it if it's truly park land?

I moved to Alva for more freedom to exercise my rights as an equestrian and rancher. The Ketchem family has been in Alva for the last 25 years. You all are making it another Davie, FL. Fences and rules are springing up everywhere there was once open access and respect. Now there's just disharmony and frustration towards other users. Unfortunately, people ride more bikes than horses in these modern times for obvious economic and cultural reasons but that doesn't mean the equestrians should be tossed aside like old shoes. Our spaces should be preserved. Equestrians own more land and do more to preserve the environment than city dwellers and suburbanites. We deserve to have our spaces protected and preserved if not revered!

That plan needs to be rewritten prior to going to state for approval. It is not kosher. Unfortunately, I was out of town during your meeting. I don't think you heard the equestrians clearly. Please reconsider the plan's approval in its current state. The plan must mirror the property's original intent. The current changes are not acceptable.

Sincerely,
Laura Ketchem
Alva, FL

From: Ball, Kathryn
Sent: Tuesday, March 29, 2011 9:20 AM
To: Laura Ketchem; Karim, Annisa; Wewerka, Laura
Cc: Loomis, Kathleen; Derums, Deborah; Harner, David; Manzo, Barbara; Olson, Cathy; Clark, Roger
Subject: RE: Horse Trails

Thanks Laura for all your comments and concerns, I will forward this email to all parks and recreations staff that have a need to know. Respectfully Kathy Ball
Kathryn M. Ball

Parks and Recreations Supervisor
East District
19130 North River Rd.
Alva, Fl 33920
Office: 239-694-0398/693-2690
Cell: 239-229-4134
Email:Kball@leegov.com
Website:www.leeparks.org

From: Karim, Annisa
Sent: Tuesday, April 12, 2011 6:17 PM
To: Laura Ketchem
Cc: Loomis, Kathleen; Carr, Laura; Ball, Kathryn; Furnari, Sherryl

RE: Horse Trails

Ms. Ketchum,
Thank you for your comments on the Caloosahatchee Regional Park 10- year Land Stewardship Plan. We value your input and your comments will be included in the Public Comment Section of the Plan.
Any comments regarding Daniels Preserve at Spanish Creek should be forwarded to Sherry Furnari (copied here).
Our first public access priority at Caloosahatchee Regional Park is to address all safety concerns dealing with user conflict on the north side of the park.
The zip line is not slated for the north side of the park. Most of our actions will focus on removing bike/ horse intersections where feasible. We will also be placing better directional signs on the trails and have better maps at our kiosk areas to educate our visitors on the layout of our trails. Staff has proposed a 7% increase in the horse trails over the next ten years...this is contingent upon receiving enough volunteer hours from equestrian clubs to maintain these trails.
Concurrently, we will be working on making sure that all users park in the appropriate spots.
Thank you for your comments,
Annisa

From: Donna Wilkerson
Sent: Monday, March 28, 2011 11:31 PM
To: Karim, Annisa
Subject: southside loop for equestrians

Please let it be known to the deciding boards etc that equestrians need more trails on the caloosa southside thru the woods….wooded trails at the telegraph creek site as well. There are a lot of tax paying equestrians and we need more places to ride. thanks.

From: Karim, Annisa
Sent: Tuesday, April 12, 2011 6:19 PM
To: Donna Wilkerson
Cc: Loomis, Kathleen; Ball, Kathryn; Carr, Laura
RE: southside loop for equestrians

Ms. Wilkerson,
Thank you for your input. Your Comments will be added to the Public Comments Section of the Land Stewardship Plan.
We have proposed a 7% increase in horse trails over the next ten years contingent upon the ability of our volunteers to help us maintain them.
We look forward to working with you and your peers to continue to offer trails at the park.
Sincerely,
Annisa Karim.

From: Bob Rude
Sent: Thursday, April 07, 2011 9:39 AM
To: Karim, Annisa
Subject: CRP 10 Year Plan

Hey Annisa,
I would like to comment on the Ten Year Plan proposed for Caloosahatchee Regional Park. I like the plan as presented by county staff, and it is my opinion that the plan should include the "Zip Line & Canopy Tours". I think the zip line would provide users with a different perspective of the park as viewed from above. The tours can be presented in a way which would inform participants of the natural areas that

surround them. This type of tour in the woods is exciting for the people using it and is something they will remember and tell their friends about.

Maintaining a separation of the zip line from the horse trails is a good idea. Laughter and screams of excitement from folks as they challenge themselves to zip down the line and master their fear of heights will no doubt be heard for some distance. The fact that 400 yards (1/4 mile) and a highway is between the two activities would rule out issues of noise bothering the horses.

The zip line & canopy tours have the potential of increasing visitation at the park, raising awareness of the beauty and uniqueness of the Florida canopy, and introducing residents and tourists to all activities available at CRP.

Thank you,
Robert S. Rude, PE, LEED AP
Fort Myers, Florida
BobRudeStructures.com

From: Karim, Annisa
Sent: Tuesday, April 12, 2011 6:23 PM
To: Bob Rude [bobr@bobrudestructures.com]
Cc: Loomis, Kathleen; Carr, Laura; Ball, Kathryn
RE: CRP 10 Year Plan

Hello Mr. Rude,
Thank you for your input on the Ten-year Plan of the Caloosahatchee Regional Park Land Stewardship Plan.
As you know, any public access opportunity can be offered in the right way or the wrong way. If designed incorrectly, a hiking trail, equestrian trail, mountain bike trail, etc. could be in discord with "Safeguarding and enhancing the environmental integrity and biological diversity of the site". However, if done appropriately, all of these could enhance the public's appreciation for the site. We feel the same way about the zip line and that is why we have worked so hard to make sure it was addressed appropriately. I thank you once again. Your comments will be included in the Public Comment Section of the Land Stewardship Plan.
Sincerely,
Annisa

From: Mike Hanley [mike.aerialadventureslg@live.com]
Sent: Tuesday, April 12, 2011 9:11 AM
To: Karim, Annisa
Subject: ZipLine/Mike Hanley

To Whom it May Concern
On October 20, 2009, the Advisory Board of the Caloosahatchee Regional Park met regarding an amendment to the current plan for the Park.
This amendment was to include the installation of a Zip Line Canopy Tour. After significant discussion, the Board voted 5 to 2 to recommend the amendment to the State of Florida. The only 'negative' in the discussion was from people that ride horses on the equestrian trail of the Park. County Officials demonstrated that the location of the Zip Line Canopy Tour would be in a location far from the equestrian trail, across the road in fact.

The positive recommendation of The Board was sent to The State of Florida, where it was unanimously approved in December, 2009 and sent back to Lee County Commissioners where the Zip Line Canopy Tour was approved as an appropriate activity in The Park.

Much later an RFP (Request For Proposal) was issued by Lee County Parks and Recreation and then recalled for revision.

Substantial time went by and another meeting of The Park's Advisory Board took place. This meeting was to give the public a chance to see and comment on the new 10 year plan for The Park prepared by Lee County Parks and Recreation which included the already approved Canopy
Tour. Since the Zip Line Canopy Tour was already approved by the earlier Board, The State of Florida, and Lee County, proponents of the Canopy Tour did not feel the need to attend the meeting.

A member of The Advisory Board (also a Lee County Commissioner) opened the meeting with his strong opposition to the Canopy Tour. A very organized group of about 20 people spoke up in opposition to the Canopy Tour, most of whom were equestrians.
The proposed location of the Canopy tour and the location of the equestrian trails have not changed - still very far apart.

Since The Advisory Board heard only opposition, they voted to approve the ten year plan for The Park without a Zip Line Canopy Tour.
This recommendation is now at The State of Florida for a recommendation to Lee County Commissioners.

We as a group, feel the State of Florida should also hear from some of the Lee County residents who think a Zip Line Canopy Tour is an excellent addition to The Park.

Here are their names and telephone numbers:

Starr Ramsey Ft Myers, Fl 239/433-5069
Gail Hamlett Ft Myers, Fl 239/433-5069
Barbara & Richard Galvin Sanibel, Fl. 239/395-8683
Joe Giriffi Ft Myers, Fl 239/472-6298
Patricia & John Barker Ft Myers, Fl. 262/348-8419
Luann Martin Ft Myers, Fl 239/472-6298
Joseph Macnamara Sanibel, Fl. 216/298-1913
Dave Hanley Sanibel, Fl 262/374-1571
Mike Hanley Sanibel, Fl 262/215-0172
Michelle & Ed Lockard Sanibel, Fl. 239/472-2360
Mark Cimiluca Sanibel, Fl 201/207-9258
Dick & Jan Howell Ft Myers, Fl. 239/362-2288
Samantha & Mark Herink Sanibel, Fl 239/634-1133
Simpson St. Fort Ft Myers, Fl 239/384-2443
Bob Rude Fort Myers, Fl 239/277-7771
Alaina Olson Sanibel, Fl. 239/395-7667
Carol & Felix Cucuru Sanibel, Fl 239/305-0405

From: Karim, Annisa
Sent: Tuesday, April 12, 2011 6:28 PM
To: Mike Hanley [mike.aerialadventureslg@live.com]
Cc: Loomis, Kathleen; Ball, Kathryn; Carr, Laura
RE: ZipLine/Mike Hanley

Thank you Mike...I will certainly include this list in the public comment section of the land stewardship plan.
Annisa

From: Andrew Hill
Sent: Wednesday, April 13, 2011 3:16 PM
To: Karim, Annisa

Subject: zip line

Hi Anise:

I live in Collier County but find myself up at Caloosahatchee park biking the trails a couple times a month. Also I was the contractor that built Revolution the cable water park off Bayshore. So I know the area.

I'm typing you in strong favor the Zip Line Eco tours. A couple years back we thought it was a go…where are we with this now?

People go on vacation to do fun activities like a zip line tour. Could be another feather in Lee County's cap if they could get this going. It is a growing activity all over the world.
I hope you can help make this happen. I would love another reason to visit the park!
Cheers,
Andrew Hill
Naples, FL

From: Karim, Annisa
Sent: Wednesday, April 13, 2011 5:59 PM
To: Andrew Hill
Cc: Loomis, Kathleen; Ball, Kathryn; Carr, Laura
RE: zip line

Dear Mr. Hill,
Thank you for your input. I assure you that your comments will be included in the Public Comment section of the Land Stewardship Plan.
Sincerely,
Annisa

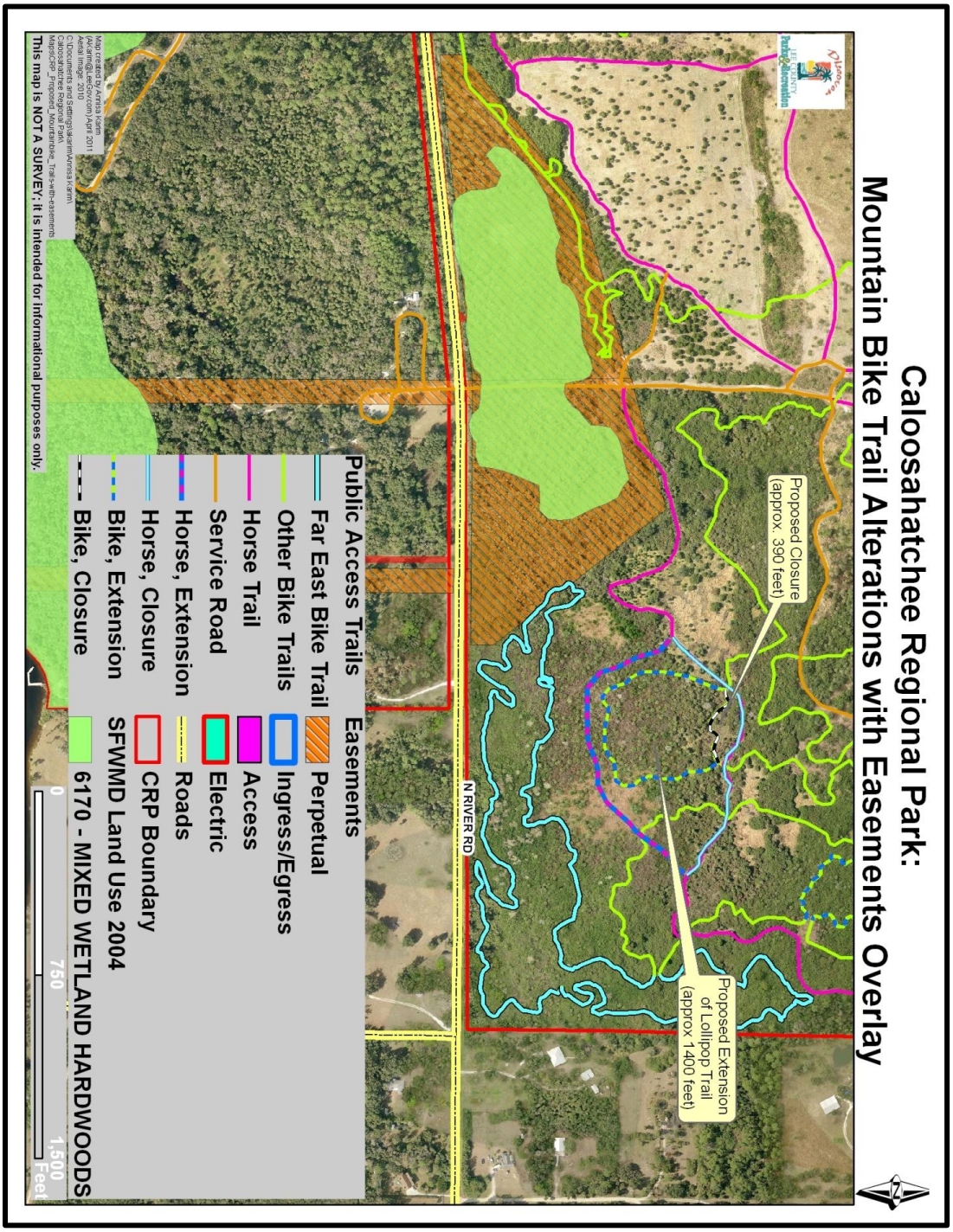
From: Karim, Annisa
Sent: Thursday, April 21, 2011 3:54 PM
To: Connie Kurash (President, Florida Mudcutters)
Cc: Loomis, Kathleen; Ball, Kathryn; Carr, Laura
Subject: Response to Mudcutter Comment Cards

Hi Connie,
I want to thank you and other members of the Florida Mudcutters for attending the Public Meeting on the ten-year update of the CRP Land Stewardship Plan.
A number of the Mudcutters filled out comment cards in which you requested that the Far East mountain bike trail be extended between 1000 to 1500 feet westward. Unfortunately, we are unable to accommodate this request.
The attached map [next page] *shows the proximity of the western end of the far east trail to the equestrian (horse) trail to its north, the spoil easement to the west (on border) and the wetlands approximately 200 feet away. Additionally, the spoil easement is roughly the same area underlain by poorly drained soils (Wabasso Sand, Limestone Substratum).*

1. *The proximity of the Far East trail to the horse trail precludes extending the Far East trail northwards for safety reasons. As you know, we are trying to reduce trail conflicts by removing intersections between mountain bike and horse trails and increasing the distance between these trails where feasible.*
2. *We are unable to extend into the spoil area because of constraints by the Army Corps and the underlying soils. Getting any trail approved by the Army corps is a lengthy and cost prohibitive process (number of staff reviews involved, correspondence time, planning, design, etc.) Additionally, the soils in this area make it inappropriate to place a bike trail on this*

portion of CRP. The Wabasso Sand, Limestone Substratum are poorly drained and function as wetland soils...meaning that they will be highly impacted by a bike trail and often impassable due to water levels. All bike trails are planned to be maintained or developed on Caloosa Fine Sand (dredge spoil) areas.

We look forward to working with the Mudcutters in the future. Thank you for your commitment to the park.
Sincerely,
Annisa



From: Dist5, Mann
Sent: Friday, March 25, 2011 2:14 PM
To: Clark, Roger
Cc: Manzo, Barbara; Loomis, Kathleen

MEMORANDUM
From
The Office of
FRANK MANN
BOARD OF COUNTY COMMISSIONERS
CHAIRMAN
DISTRICT #5
Office 239-533-2225
Fax: 239-485-2092

DATE: March 25, 2011

TO: Roger Clark, Land Stewardship Mgr.
Lee County Parks and Recreation

FROM: Frank Mann, Commissioner
Chairman

RE: Caloosahatchee Regional Park Meeting of March 24, 2011

It's important to me to restate my message from last night's meeting at the CRP regarding my great pleasure and satisfaction with the job being done by the entire team associated with the park. My very strong opposition to the proposed zip line should in no way be taken as a criticism of any staffer.

I do hope that what I heard as almost universal opposition to the line will find its way into your final report to Tallahassee. Additionally, let me say that I believe the ten year management plan that staff has developed is very well done, with the only exception being the inclusion of the zip line itself.

My thanks and congratulations to all the people who worked so diligently in bringing the plan together.

cc: Barbara Manzo, Director Lee County Parks and Recreation
Kathy Loomis, Sr. Supervisor, East District, Lee County Parks and Recreation

Comment Cards submitted at Public Meeting on March 24, 2011

These comment cards are provided here without the publics' contact information.

Public Hearing: Review of the ten-year update to the Caloosahatchee Regional Park Land Stewardship Plan

Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code	Email	Phone #
Paul Schmuck	33920	----------on file----------	

Comment:

As I stated at the October meeting, as I was on the advisory board, I really don't think the Zip line is compatible with the National "sense of place" at C.R.P.

Public Hearing: Review of the ten-year update to the Caloosahatchee Regional Park Land Stewardship Plan

Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code		
Julie Griffin	33919	----------on file----------	

Comment: * Fence the whole property with an automatic gate for base horses. This will eleminate hog running though.

* Barn for out of town egestian to camp to bring in more people.

* NO ZIP LINE IF HORSES ARE WITHIN 1/2 mile. Put it in the camp grounds

Public Hearing: Review of the ten-year update to the Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code
[illegible] Harder	33917

----------on file----------

Comment: I am very much opposed to the zip line. It does not fit in well at this park. Please do not put in the zip line.

Public Hearing: Review of the ten-year update to the Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code
Curt Girardin	33912

----------on file----------

Comment: We would like more "helmets required" signage.

Also- we'd like to extend the mountain bike trail at the "far east" extended 1000 feet at the west-most end, south of the newly-built culvert.
NO ZIP LINES

Public Hearing: Review of the ten-year update to the Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code	Email	Phone #
Paul Eaton	33920		

----------on file----------

Comment:
TO EXTEND "FAR EAST" MT-BIKE TRAILS A 1000' TO THE WEST.

Public Hearing: Review of the ten-year update to the
Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code	Email	Phone #
Russ Ringland	33920	r	----------on file----------

Comment:

Please set well defined goal of reforesting the Park. I think the goal should include the % of TREE Canopy and the timeframe for reaching the %.

Thank You.

Public Hearing: Review of the ten-year update to the
Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code	
Charles Whitford	33905	----------on file----------

Comment:

① In favor of zip line

② Extend "Far East" trail further to west, can use boardwalk (per IMBA) ~~just~~ south of new culvert.

Public Hearing: Review of the ten-year update to the
Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code	
JM MAWN	33908	----------on file----------

Comment: EXTEND FAR EAST TRAILS APPROX 1500 FT TO THE WEST

Mod cutback

Public Hearing: Review of the ten-year update to the
Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code	Email	Phone #
Glenn Harris	33907	G ----------on file----------	

Comment: - Possible Extension on western End of Far East -
- Adding more Technical Obsticales on Lollipop - Tractor Ln.
- Finishing the Berms + Humps on Sunburn Meadow
- Adding more Berms thru out Trails

Public Hearing: Review of the ten-year update to the
Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code	Email	Phone #

Comment:
(1) extend the Far East trail to continue on the Ridgeline about ¼ mile out + Back, (C advanced Trail is only 1 mile (disproportionate to 9 mile of Beginner + Intermediate) will need a small advert - just like The one Built just North on the horse trail
(2) Helmets mandatory for Bikes + Equestrians
(3) ~~NO~~ Zip Line

Public Hearing: Review of the ten-year update to the Caloosahatchee Regional Park Land Stewardship Plan

Caloosahatchee Regional Park; March 24, 2011

Comment Card: Please Print Legibly

Name	Zip Code	Email	Phone #
Connie Dennis	33920	----------on file----------	

Comment:

We don't need a zip line to encourage people to come to the park – we see a great increase in visitors every year – people who come to appreciate the beauty & ~~nature~~ natural wild life of the real Florida. I don't want to this disturbed. As a teacher who has done a zip line with middle school students, I know how excited & noisy children are to do something new & wild & ~~crazy~~ to them.

The rest of the plan shows a lot of cooperation & forethought. You've done a lot of work. Thank you.

Sign-in Sheets from Public Meeting

Public Hearing: Review of the ten-year update to the
Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Sign-in sheet: Please Print Legibly

Name	Zip Code	Email	Phone #	Affiliation (Public, Advisory Board, Staff, etc.)
Kathy Loomis	33917			Staff
Paul Eaton	33920			Mud Cutter
Glenn R. Harris	33907			Mud cutter
Annisa Karim	33920			LCPR Staff
Kathy Ball	33920			LCPR Staff
Patti Bell	33905			Equestrian
Steve Edlin	33920			Neighbor
Anura Karuna-Muni	33901			Lee Co DNR
Daniel Calvert	33905			Lee Co Parks + Rec
John Hawkins	33920			Resident
Paul Schmidt	33920			Neighbor
Debbie Dennis	33920			Lee Co. Park + Rec
Connie Dennis	33920			Alva Eng
Mary Carroll	33920			29 Equestrian
Ruby Daniela	33920			
Kim Hawk	33917			Soil + Water Board
Robert Rude	33905			Neighbor
Curt Girardin	33912			Mudcutter
Russ Ringland	33920			7711
Connie Kurash	33901			Mudcutter

Public Hearing: Review of the ten-year update to the
Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Sign-in sheet: Please Print Legibly

Name	Zip Code	Email	Phone #	Affiliation (Public, Advisory Board, Staff, etc.)
Laura Carr	33919			LCPR
Julie Griffin	33919			872-9811
Steven McIntire	3396C			
Cecile Arnold	33920			
Jim Mole	33908			Mudcutters

Public Hearing: Review of the ten-year update to the Caloosahatchee Regional Park Land Stewardship Plan
Caloosahatchee Regional Park; March 24, 2011

Sign-in sheet: Please Print Legibly

Name	Zip Code	Email	Phone #	Affiliation (Public, Advisory Board, Staff, etc.)
Glenn Dyess	33920			
Cindy Snowden	33920			
	33920			
JOHN U. SONES	33920			1254
BJ Gerath	33920			177
Annette Petzel	33905			Caloosa Saddle Club
Jeanne Coenen	33917			Caloosa Saddle
EJ Hornick				CRP CAMP
CARL HORNICK	34001			" "
Laura Layman	33901			SFWMD
MIKE STOTTLEMYER	33920			ALVA, INC.
Charles Whitford	33905			Mudcutter
Dee Hollander	33920			rider
Don Ruane	33920			
Jo Harder	33917			Caloosa South

A comprehensive record of all public comments received on the issue of the proposed Zip Line, the summary of the public hearing where the Zip Line was discussed in full detail (held in October 2009) is provided on the following pages.

Summary of Public Meeting on October 20, 2009

A public hearing was held on October 20, 2009 at 6:30 PM at the Olga Community Center (2325 South Olga Drive., Fort Myers, FL. 33905) to allow for input by an advisory group and the public pertaining to the proposed changes to the CRP Resource Management Plan [as required by Section 259.032(10)(b), F.S.].

The following individuals were invited to serve as members of the advisory group:

Name	**Affiliation**	**Criteria satisfied under to Section 259.032 (10)(b), F.S.**
Roger Clark	Manager LCPR	representative of the lead land managing agency
*Jim Goodwin	*Senior Environmental Analyst SFWMD	*representative of the comanaging entity
Robin Jones	neighboring property owner	local private property owner
Paul Schmidt	neighboring property owner	local private property owner
Ron Edenfield	Supervisor Seat 1: Lee Soil and Water Conservation District	representative of local soil and water conservation district
Marti Daltry	Past President Caloosahatchee River Citizen's Association – currently on the Board for the CRCA	representative of local conservation organization
**Ruby Daniels	**President Alva, Inc.	**representative of local conservation organization
Brian Bigelow	Lee County Commissioner	local elected official

* Jim Goodwin was invited but could not attend. In reality, the SFWMD is not a comanaging entity; LCPR has a lease with them for approximately 50 acres of CRP but they do not help to manage the property with LCPR on a daily basis.

** Alva, Inc is not exclusively a conservation organization. Their aim is to preserve the rural character of the town of Alva. Many issues that are discussed at the Alva, Inc. meetings are related to the protection of natural resources within Alva.

The public meeting consisted of an introduction, overview of proposal and a question/ answer session for public input. The advisory group discussed the content of the prospectus, asked questions of LCPR staff and provided their input. Finally, the panel voted on the appropriateness of the zip line at CRP and the potential location if deemed an appropriate use by the ARC. Approximately forty-six people attended this public hearing. The following is a summary of input provided and comments made by members of the public, the advisory group and the motions made at the end of the meeting.

Input from members of the public

The members of the public in attendance had several observations, comments, concerns, suggestions and questions in regard to the proposed zip line. These have been summarized in the following paragraph. Where similar questions/ concerns were posed by the advisory group, they have been summarized in the next section. Some of the public's questions were directed to the private vendor who originally proposed the zip line. It was stressed that his presence at the meeting did not give him any preferential treatment if the proposed zip line were to be approved by the ARC. If approved, a vendor will be chosen via an open bid process.

- Will the zip line be ADA accessible? How would someone with a disability be taken to the beginning of the course or back to their vehicle? *The gentleman that proposed the zip line stated that if he were awarded the bid, the zip line would be ADA accessible. A piece of machinery (similar to a crane) with a pivot arm would raise the visitor onto the first platform where their harness could then be clipped on to the guide wire. Transportation would be provided via a golf-cart or similar vehicle.*

- Zip lines are nothing new to Alva. They exist at the Alva Middle School and at a drug rehabilitation center. They are used for confidence building exercises. While they are fun, they are also very noisy. Concerns center around increase in noise levels, impacts to wildlife and impacts to traffic patterns. A traffic study should be conducted before the installation of the zip line.

- While the character of the town of Alva is trying to be preserved, progress at some level should not be denied. County parks enhance the quality of life (as per LCPR mission) and the addition of a zip line may increase revenue to CRP thereby increasing the ability of LCPR to fulfill its mission. CRP's budget is based on visitation numbers and if increased visitation is seen because of the zip line, CRP's budget will increase. This would be a draw to Alva and may help to keep families in the area.

- Visitors cannot be sustained if the amenities offered are not sufficient. The recent extension of mountain bike trails increased usage of northside of park. Is option B adequate to build a zip line long enough to draw people in? *LCPR discussions with Forever Florida staff revealed that their zip line initially brought in more tourists and now visitation for local residents is also increasing. The gentleman that proposed the zip line stated that option B is large enough. It could support an approximately 2,000 ft. run with seven to eight platforms.*

- Over the years, CRP has seen increased visitation from families, scout groups, etc. The zip line would increase visitation to the park. Option B would be the best location for a zip line for all to enjoy.

- Why is option B so long and options A and C so short? *Map (Figure 2) is just a visual representation of the areas considered by LCPR staff. Zip line will not run the whole length of option B but because such a large area is accessible by foot, it was considered.*

- Why was CRP chosen for the site of the proposed zip line? *CRP is a large park where many people go for an "outdoor" experience. CRP offers a variety of recreational opportunities including hiking, kayaking, camping, horseback riding and mountain biking. LCPR wants to provide visitors with the most diverse recreational opportunities while maintaining the balance between the conservation of natural resources and opportunities available for outdoor recreation.*

- Option B looks like it is very close to the road (County Road 78/ North River Road). If chosen to be installed in this area, the zip line should be moved as far south as possible. Hiking trails could be used to also serve as emergency access.
- Option A is undesirable because of its potential impacts to wildlife and its proximity to equestrian trails.
- How would prescribed burns be conducted if proposed zip line is placed in option B? Who would be responsible for permitting the zip line? *Option B is within a pyric community; most vegetation around zip line would have to be mechanically reduced. There are possibilities to ignite spot-fires in some areas. The rest of the unit would be managed via prescribed fire. If option B is selected, a prescribed burn would be required to be conducted before installation begins. If approved by the ARC, the vendor awarded the bid for the installation, maintenance and operation of the zip line would assume all permitting responsibilities.*
- Myakka State Park has a canopy walkway that is accesses via a hiking trail. Some visitors do scream because of the height but it is an exceptional experience.
- The zip line in Lake Geneva, WI (operated by the same company that proposed the zip line to LCPR) has hiking and biking trails in close proximity and wildlife such as deer do not seem to mind it.

The following correspondence was sent to the Director of LCPR on October 21, 2009:
From: Laura Ketchem
Sent: Wednesday, October 21, 2009 10:02 AM
To: Manzo, Barbara
Subject: Proposed Zip Line
Importance: High

Zip lines are great playground additions… However, they do not belong on a large scale in the Caloosahatchee regional park for several reasons:

1. The park is Flat
2. The park is accessible by foot in every area
3. A zip line can pose an added danger to bikers and horse-back riders
4. People need exercise – walking, biking, paddling and horseback riding.

Please forward to those concerned as this email is a vote against a large zip line system from a frequent park user.

Sincerely,

Laura Ketchem

Comments/ Questions from members of the advisory group

Roger Clark made the following statements:

- Mr. Clark has been visiting CRP for quite a while and has also been responsible for the land stewardship of the park in the past. It is hard to visualize a zip line at CRP but as time has passed the park has grown in visitation, due in part to the addition of new programs and services provided within the park. Visitors are able to get a "sense of place" while at the park because of the availability of resource based recreational opportunities offered. All programs and services [whether private or public] offered need to continue to be resource based. This may be the first proposed zip line on state-owned lands in Florida. This may set precedence for other state-owned lands.

Robin Jones posed the following questions/ concerns:

- Ms. Jones was concerned about the safety of the existing users of the equestrian trail near option B. *While the majority of equestrian trails are located on the northside of the park, the southside of CRP does have one trail that runs in a north to south direction on the western boundary. This was considered by LCPR staff. This trail is the least utilized by horseback riders and option B was offset to the east of this trail (providing a buffer) to accommodate for the users.*

- Have there been any studies on the impacts to wildlife posed by a zip line? *There have been no formal studies within CRP. There are listed species to be considered within all of the options. Option A has a known pair of nesting crested caracaras near it, option B is in an area of known inhabitance by gopher tortoises and option C is in an area with a variety if listed plant species. If approved by the ARC, the vendor awarded the bid for the zip line would have to hire an environmental consultant to conduct a site assessment to determine potential impacts to listed species and take steps to avoid impacts to those species.*

Paul Schmidt made the following statements:

- Mr. Schmidt has seen a drastic change in the wildlife on the northside of CRP since the mountain bike trails were initially installed. The mountain bikers have run-out the horseback riders and the zip line would have an impact on the wildlife. The towers needed to operate the zip line would not provide for a sense of place. A zip line is not a compatible use for CRP.

Ron Edenfield posed the following questions/ concerns:

- Mr. Edenfield asked if the proposed public-private relationship for the zip line exists in other areas. *The gentleman that proposed the zip line stated that this type of relationship is rare. Most zip lines (in the U.S.A.) operate on college campuses, cruise ships, and on private lands. The "industry" is growing quickly in the private sector and is becoming more main-stream.*

- Mr. Edenfield asked who would assume liability for the zip line and if emergency access would be available. *The vendor awarded the bid for the installation, maintenance and operation of the zip line would assume all liabilities. Emergency access would need to be installed under the zip line in the form of a dirt path or trail. This "trail" would have to provide access for authorized vehicles during certain situations (evacuating visitors*

during inclement weather, repairing or adjusting zip line guide wires, some maintenance of vegetation), but otherwise would be maintained as a hiking trail would be.

- Mr. Edenfield asked if additional staff would be needed and who would be liable if the proposed zip line was unsuccessful. *No additional LCPR staff will be needed. If approved, this project would be the sole responsibility of the vendor awarded the zip line bid. If it was unsuccessful, the vendor would be responsible for all associated costs. The details would be provided in the bid process.*

- Mr. Edenfield stated that this project should be "revenue positive" for LCPR and that a revenue neutral outcome should not be the goal or result.

Marti Daltry posed the following question:

- How would the proposed zip line be secured at night or when not in use? *The gentleman that proposed the zip line stated that it depended on the design of the towers but in general, if a ladder was present – it would be retracted onto the tower at a height of twelve feet above ground level. If a pole with pegs on the side for footholds was installed, the pegs would be removed. The height of twelve feet is mandated by the organization that performs safety checks on zip lines. If for some reason a person were still able to get to the top of a tower, they would have no equipment (e.g., harness, pulley) so they would not be able to get onto the guide wire.*

Ruby Daniels posed the following questions/ concerns:

- Ms. Daniels asked if LCPR could provide estimates of how much revenue would be generated by the installation of the zip line. *Current revenue sources for CRP include the parking fee, kayak rental fee, Lodge rental fee and campground fee. While LCPR can not provide exact numbers, revenue in these areas is expected to increase with the installation of the zip line. During the recent visit to Forever Florida (see page 7), the General Manager of the EcoSafari operation informed LCPR staff that the zip line has bolstered visitation to the site and has increased participation in other recreational offerings by approximately 25%. Furthermore, any vendor awarded the contract for the proposed zip line would most likely pay a flat fee per month to LCPR. The vendor would set the price charged to zip line visitors.*

- Ms. Daniels asked if any parking areas would have to be expanded if the proposed zip line was approved. *The parking area that would potentially serve a zip line if placed in option B or option C would be the main entrance. Currently, this parking lot receives the least amount of visitors and may accommodate zip line visitors. However, if it were necessary to expand any parking area, the expansion would have to be approved by the state via this process (public meeting, approval by ARC) first.*

- Ms. Daniels asked if the zip line would be a one-way ride for participants. *The gentleman that proposed the zip line stated that it would be a one-way ride and if option B were chosen it would be approximately 0.5 miles participants could reach speeds of 22 miles per hour. Zip line groups would consist of eight to twelve people and it would take approximately ninety minutes to complete the course.*

- Ms. Daniels stated that she and members of her organization (Alva, Inc.) are concerned about the proximity of equestrian trails to proposed zip line areas. Ms. Daniels was also concerned that the installation of a zip line at CRP would take away from the rural

character of the community and does not want something that may make the town or CRP take on the tone of an amusement park.

Brian Bigelow posed the following concern:

- Commissioner Bigelow was concerned about the cost of the zip line to visitors. *The zip line vendor awarded the bid would ultimately determine the price charged to the public for a ride on the zip line. The gentleman that proposed the zip line stated that he estimated the price would be between $30 and $50 but a decision has not been reached. LCPR staff indicated that while visiting Forever Florida, they discovered that the charge there was $85 per ride but discounts were provided and that they have seen repeat visitation for local residents and tourists.*

Recommendations made by the advisory group

The advisory group made two recommendations regarding the proposed zip line at CRP. No action was taken on the recent extension of mountain bike trails, the recent extension of a parking area and the new location of the Lodge because these were included to provide an all-inclusive view of what CRP looks like today and were already deemed as appropriate by the lead managing agency (LCPR). The following recommendations were made in the form of formal motions.

- Ron Edenfield made a motion that the zip line is compatible and an appropriate use for CRP with the reservation that other users need to be considered if zip line is installed. Roger Clark seconded the motion. Commissioner Bigelow made the following comments during the discussion phase of the vote: he feels that through the course of the meeting the wildlife impacts were addressed and that the potential for impact would be further reviewed [paid for] by the vendor (via an environmental site assessment), noise levels and traffic concerns need to be considered, smoking on the trails is prohibited and would also be prohibited on the zip line, fire hazards should be considered but are a natural part of natural areas, the conflict with existing users especially equestrian and bikes were adequately addressed, the costs were addressed and he feels that the vendor assuming all costs is a good idea and the fact that there will be no night use of the zip line is good. Ruby Daniels asked if all the reservations and concerns brought up at the meeting be forwarded and considered by the ARC. Mr. Edenfield stated that this was part of his motion and Mr. Clark stated that it was part of his second. Motion carried 5-2 (Robin Jones and Paul Schmidt dissenting).
- Roger Clark made a motion to recommend option B for the proposed zip line. Paul Schmidt seconded the motion. Mr. Edenfield encouraged that option B is thoroughly vetted with respect to overall biological and ecological impacts as well as impacts to traffic and other users. Mr. Clark added Mr. Edenfield's comments to his motion. Mr. Schmidt added Mr. Edenfield's comments to his second of the motion. Motion as amended carried unanimously 7-0.

APPENDIX G: Approval Letter from DEP for the Proposed Zip Line.

Florida Department of Environmental Protection
Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

December 14, 2009

Roger S. Clark
Land Stewardship/Coastal Areas Manager
Lee County Department of Parks & Recreation
3410 Palm Beach Boulevard
Fort Myers, Florida 33916

RE: Caloosahatchee Regional Park Management Plan Amendment. Lease Number 3698

Dear Mr. Clark:

The Division of State Lands (DSL), Office of Environmental Services, acting as agent for the Board of Trustees of the Internal Improvement Trust Fund, approves the Caloosahatchee Regional Park management plan amendment for the Zip Line along with all the conditions in the agenda item approved by ARC on December 11, 2009.

Approval of this management plan amendment does not waive the authority or jurisdiction of any governmental entity that may have an interest in this project. Implementation of any upland activities proposed by this plan may require a permit or other authorization from federal and state agencies having regulatory jurisdiction over those particular activities. Pursuant to the conditions of your lease, please forward copies of all permits to this office upon issuance.

Sincerely,

Paula L. Allen
Office of Environmental Services
Division of State Lands
Department of Environmental Protection

"More Protection, Less Process"
www.dep.state.fl.us

APPENDIX H: Arthropod Control Plan.

CHARLES H. BRONSON
COMMISSIONER

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

ARTHROPOD MANAGEMENT PLAN - PUBLIC LANDS

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

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

Name of Designated Land:
Caloosahatchee Regional Park

Is Control Work Necessary: (Yes) No

Location:
Alva, Florida (Lee County)

Land Management Agency:
Lee County Department of Parks and Recreation (under authority of the Lee County Board of County Commissioners)

Are Arthropod Surveillance Activities Necessary? (Yes) No
If "Yes", please explain:
To monitor mosquito populations in larval and adult stages.

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

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

If "Other", please explain:

DACS-13668 07/08
Page 1 of 4

Arthropod Species for Which Control is Proposed:
Nuisance and disease vectoring mosquitoes

Proposed Larval Control:
Ground Larviciding

Proposed larval monitoring procedure:

Are post treatment counts being obtained: (Yes) No

Biological Control of Larvae:

Might predacious fish be stocked: Yes (No)

Other biological controls that might be used:

Material to be Used for Larvaciding Applications:

(Please Check All That Apply:)

Bti

Bs

Methoprene

✓ Non-Petroleum Surface Film

✓ Other, please specify:

Please specify the following for each larvacide:

Chemical or Common name:

✓ Ground Aerial

Rate of application: 0.03 lb ai/ac Temephos and 20 oz/ac Monomolecular Film

Method of application: Truck

Proposed Adult Mosquito Control:

Aerial adulticiding	✓ Yes	No
Ground adulticiding	✓ Yes	No

Please specify the following for each adulticide:

Chemical or common name: Naled, Malathion, Permethrin, Sumithrin

Rate of application: Naled (0.05 to 0.1lb ai/ac); Malathion (0.17 to 0.23lb ai/ac); Permethrin (0.0035 to 0.007lb ai/ac); Sumithrin (0.0024 to 0.0036 lb ai/ac)

Method of application: Naled, Malathion and Sumithrin by aircraft and Permethrin by ground

Proposed Modifications for Public Health Emergency Control: Arthropod control agency may request special exception to this plan during a threat to public or animal health declared by State Health Officer or Commissioner of Agriculture.

Proposed Notification Procedure for Control Activities:
All adulticide treatments are posted on the District webpage www.lcmcd.org

Records:

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

Yes No

Records Location: 19151 Homestead Rd, Lehigh Acres, Fl 33971

How long are records maintained:
7 yrs

Vegetation Modification:

What trimming or altering of vegetation to conduct surveillance or treatment is proposed?
None at this time

Proposed Land Modifications:

Is any land modification, i.e., rotary ditching, proposed:
None at this time

Include proposed operational schedules for water fluctuations:
N/A

List any periodic restrictions, as applicable, for example peak fish spawning times.
N/A

Proposed Modification of Aquatic Vegetation:
None at this time

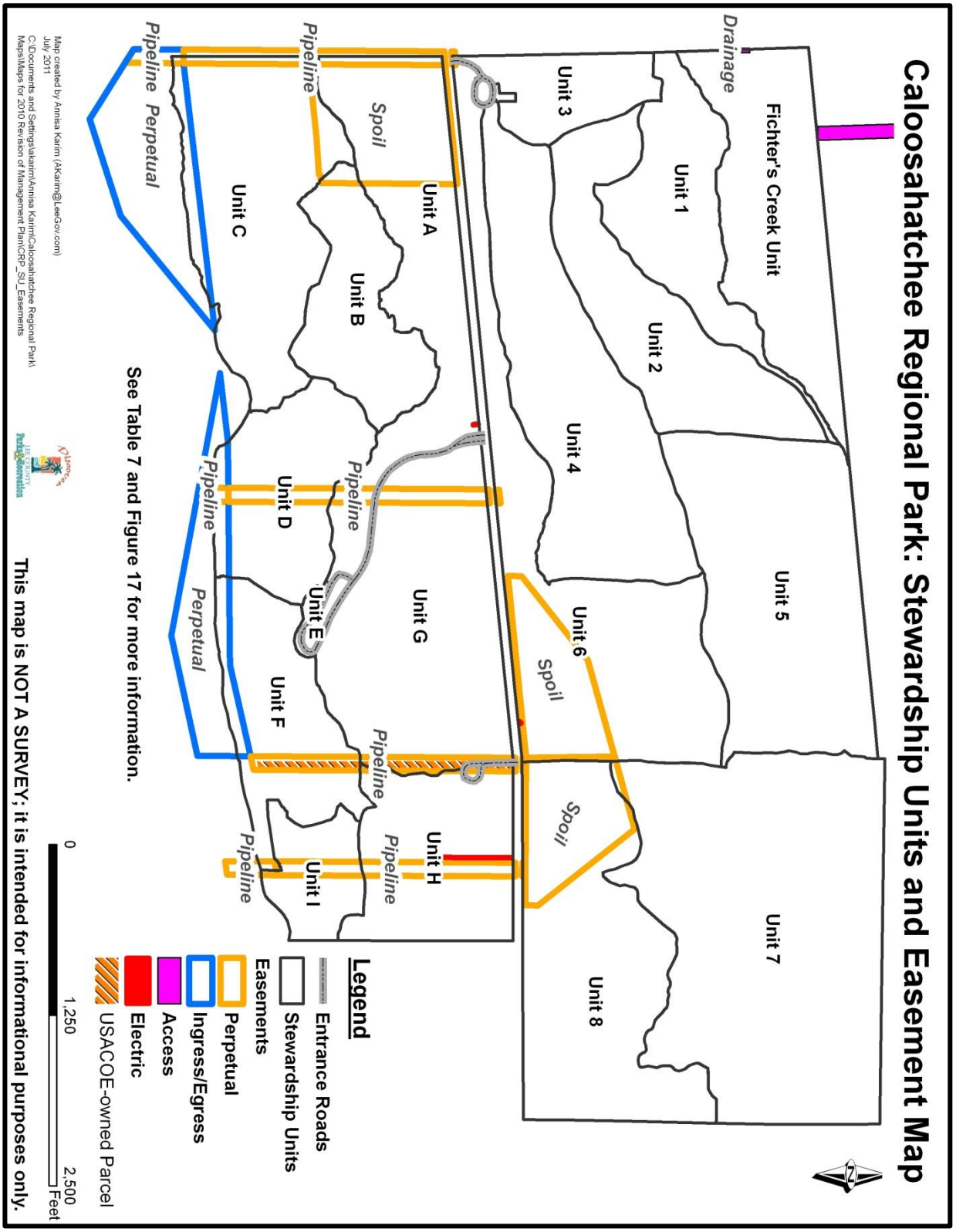
Land Manager Comments:

Arthropod Control Agency Comments:

(Annisa Karim) 8/19/10
Signature of Lands Manager or Representative Date

9-11-2010
Signature of Mosquito Control Director / Manager Date

APPENDIX I: CRP: Stewardship Units and Easement Map.



APPENDIX J: Fichter's Creek Restoration, Maintenance and Monitoring Plan.

Boylan Environmental Consultants

Wetland & Wildlife Surveys, Environmental Permitting, Impact Assessment

20 Years of Excellence

Fichter's Creek Restoration

Section 18, Township 43 South, Range 27 East
Lee County, Florida

Restoration, Maintenance, and Monitoring Plan

South Florida Water Management District
Application No.: ***090504-3***

U.S. Army Corps of Engineers
Application No.: ***SAJ-2009-01712 (NW-CJE)***

September 2009
Revised August 2010
Revised July 2011

Project No.: 2007-77

INTRODUCTION

Restoration work for the Fichter's Creek Restoration project will occur within and immediately adjacent to the Caloosahatchee Regional Park site. The Park site is located within Section 18, Township 43, South; and Range 27, East; in Lee County. More specifically, the park site is located north of North River Road and east of Fichter's Creek Lane. A Project Location Map (Exhibit A).

The proposed project is for the restoration and storm water management of Fichter's Creek, within and adjacent to Caloosahatchee Regional Park. The restoration and storm water management of Fichter's Creek will include:

- Elevating a portion of Fichter's Creek Lane and replacing the existing Fichter's Creek Lane Bridge where it crosses the Creek with a 6'x10' box culvert and concrete spillway.
- Construction of a lake/aquascape and dry detention ponds, including control structures, within the Caloosahatchee Regional Park.
- Replacement of existing dilapidated outfall pipes along the northern portion of the Park.
- Regrading the existing manmade ditch to create a filter marsh, replacing the existing 36" culvert in the manmade ditch at North River Road (C.R. 78) with a water control structure and double 36" culvert pipes under C.R. 78.
- Regrading the berm between the proposed filter marsh and Fichter's Creek Lane to the west and filling existing breaches.
- Creating a meandering swale connection, to divert part of the flow from the existing manmade ditch, where it ties into the Caloosahatchee River.
- Reconstruction of existing berms to block breaches between the Park, the Creek and the filter marsh.

The purpose of the project is to provide hydrologic restoration through water quality treatment and flood protection. Currently, there is reason for health and safety concerns for the areas within and immediately adjacent to the proposed restoration work. Furthermore, the restoration work should provide ecological restoration and improved water quality through regulated hydro-periods, removal of exotics, and installation of native plants which provide treatment within the created filter marsh.

RESTORATION PLAN

The restoration areas will correspond to the habitats depicted on the Restoration Plan Map (Exhibit B), also described below. The areas to be restored are currently owned by the State and managed by Lee County Parks and Recreation. Perpetual maintenance of the restoration areas is therefore evident, by the issuance of an Environmental Resource Permit.

A. Initial Site Preparation

The location of the detention and lake areas and the limits of mechanical removal will be staked, survey located, and a point map will be prepared. An updated protected species survey will be conducted within the restoration area, four weeks prior to restoration work. This survey will ensure the protection of any listed species inhabiting these areas.

B. Hydrologic Restoration Work

The following work will be conducted as part of the restoration plan:

- **Lake and Dry Detention**
  - Construction of a lake and dry detention ponds, including control structures, within the Caloosahatchee Regional Park.
  - Replace the dillapidated outfall pipes currently in this area, within existing berms.
  - Providing hydrologic connection between Creek and lake/detention areas.
  - Hydrate the drained cypress habitat contained within the detention area.
  - Rework existing berms to block breaches between the Park and the Creek and ditch; berms will not be removed as part of this project, as they are an amenity to the Park.
  - Plant the lake/aquascape area with native species according to the Aquascape Planting Plan (Exhibit C).
- **Western Ditch**
  - Regrade the existing manmade ditch according to site plan and cross-section elevations, to create a filter marsh.
  - Replace the existing single 36" culvert in the manmade ditch at North River Road with a water control structure and double 36" culvert pipes under C.R.78.
  - Regrade the berm between the ditch and Fichter's Creek Lane to the west and fill existing breaches.
  - Place rip-rap within the ditch, adjacent to the replaced pipes on the south side of C.R. 78.
  - Plant this area with native species according to the Western Ditch Planting Plan (Exhibit D).
- **Fichter's Creek Lane Bridge**
  - Elevate a portion of Fichter's Creek Lane and replace the existing Fichter's Creek Lane Bridge where it crosses the Creek with a 6'x10' box culvert and concrete spillway.
  - Replant area following culvert installation, with native species as necessary to promote natural recruitment.
- **Bypass Swale**
  - Create a meandering swale connection, to divert part of the flow from the existing manmade ditch, where it ties into the Caloosahatchee River.
  - Swale will meander to avoid impacts to existing native mature vegetation.

C. Ecological Restoration Work

Exotics will be killed in a manner consistent with current exotic removal practices, while ensuring that native plants are left unharmed and the soil is left as undisturbed as possible. It is recommended that any use of herbicides be applied by a licensed herbicide applicator, utilizing approved methods, and best management practices. Exotic debris will be removed from the proposed enhancement areas; no stacking, tee-peeing, log cabin, or girdling methods will be utilized, unless otherwise approved by South Florida Water Management District (SFWMD) staff.

- Wetland Forested Mixed (>75% Exotics) (FLUCFCS 630E4) (11.90± acres)
  This area is dominated by Brazilian pepper (*Schinus terebinthifolius*), but does contain scattered native trees including cabbage palms, red-maple, laurel oak, and slash pine. Due to the nature of this restoration project, mechanical removal will be permitted; however, coordination with SFWMD staff must be made prior to any clearing. The areas

to be mechanically cleared will be staked and any native trees will be flagged. Mechanical clearing will only occur within the hydric Brazilian pepper wetland, as approved. Overall native tree, sub-canopy, and groundcover coverage shall meet the 80% native coverage requirement at the end of two years, or additional plantings will be provided. If plantings are necessary, the installed plants will be consistent with native species currently found in the surrounding habitat onsite. Table 1 provides a list of species identified previously in this area, which may be utilized for supplemental planting as appropriate. An estimated total number of plantings have also been provided in the table below.

TABLE 1. WETLAND FORESTED MIXED WETLAND PLANTINGS, SPECIES, SIZE, AND SPACING

Common Name	Scientific Name	Minimum Size or Better	Spacing	Notes
Trees*				Spacing will consider the location of existing native vegetation, approximately 12-15' spacing to allow for natural recruitment and long term growth. Trees to be planted within the wetland can be transplanted from the Park site as practicable.
Laurel Oak	*Quercus laurifolia*	8' tall	12-15' on center	
Slash Pine	*Pinus elliottii*	8' tall	12-15' on center	
Cypress	*Taxodium distichum*	8' tall	12-15' on center	
Cabbage Palm	*Sabal palmetto*	8' tall	12-15' on center	
Red Maple	*Acer rubrum*	8' tall	12-15' on center	
Dahoon Holly	*Ilex cassine*	8' tall	12-15' on center	
Sweet Bay Magnolia	*Magnolia virginiana*	8' tall	12-15' on center	
Red Mulberry	*Morus rubra*	8' tall	12-15' on center	
Pop Ash	*Fraxinus caroliniana*	8' tall	12-15' on center	
Pond Apple	*Anona glabra*	8' tall	12-15' on center	
Total estimated trees based on planting area of 11.90± acres :				**3,600**

*Species type and number may vary depending on availability. For additional tree species, see the Caloosahatchee Regional Park Management Plan.

- Lake/Aquascape (4.04 ± acres)
  Once the aquascape area has been prepared; this area will be planted with native species. The Aquascape Planting Plan depicts in more detail the location of the planting zones within the 4.04± acres of created aquascape (Exhibit C).
  - Zone A will be planted between elevation 10.5' NAVD and 11.5' NAVD.
  - Zone B will be planted between elevation 11.5' NAVD and 12.50' NAVD.
  - Zone C will be planted between elevation 12.5' NAVD and 13.50' NAVD.
  - Above elevation 13.50' NAVD to the top-of-bank, approximately 16.50' NAVD, bahia sod (*Paspalum notatum*) will be installed and includes approximately 27,379 ft².

  The plantings will be clustered to promote their establishment and survival. Table 2 identifies the plant species to be utilized in Zone A, B, and C, also included as part of Exhibit C.

TABLE 2. AQUASCAPE PLANTINGS BY ZONE

Zone A Plantings				
Elevation of 10.5' NAVD to 11.5' NAVD				
Common Name	**Scientific Name**	**Size**	**Spacing**	**Quantity**
Arrowhead	*Sagittaria lancifolia*	2" liners or bare root.	3' center	2,087
Coastal Spikerush	*Eleocharis cellulosa*	2" liners or bare root.	3' center	2,087
Fireflag	*Thalia geniculate*	2" liners or bare root.	3' center	2,087
Giant Bulrush	*Scirpus californicus*	2" liners or bare root.	3' center	2,087
Maidencane	*Panicum hemotomon*	2" liners or bare root.	3' center	2,087
Pickerelweed	*Pontederia cordata*	2" liners or bare root.	3' center	2,087
Spikerush	*Eleocharis interstincta*	2" liners or bare root.	3' center	2,087
Total estimated plants based on planting area of 131,463ft²:				**14,609**

***Zone B Plantings**				
Elevation of 11.5' NAVD to 12.5' NAVD				
Common Name	**Scientific Name**	**Size**	**Spacing**	**Quantity**
Maidencane	*Panicum hemitomon*	2" liners or bare root.	3' center	156
Pickerelweed	*Pontederia cordata*	2" liners or bare root.	3' center	156
Spikerush	*Eleocharis interstincta*	2" liners or bare root.	3' center	156
Muhly Grass	*Muhlenbergia expansa*	2" liners or bare root.	3' center	156
Fakahatchee Grass	*Tripsacum dactyloides*	2" liners or bare root.	3' center	156
Sand Cord Grass	*Spartina bakeri*	2" liners or bare root.	3' center	156
Total estimated plants based on planting area of 8,447ft²:				**936**

Zone C Plantings				
Elevation of 12.5' NAVD to 13.50' NAVD				
Common Name	**Scientific Name**	**Size**	**Spacing**	**Quantity**
Muhly Grass	*Muhlenbergia expansa*	2" liners or bare root.	3' center	321
Fakahatchee Grass	*Tripsacum dactyloides*	2" liners or bare root.	3' center	321
Sand Cord Grass	*Spartina bakeri*	2" liners or bare root.	3' center	321
Total estimated plants based on planting area of 8,674ft²:				**963**

*Plants within Zone B will be located based on elevation and species preference for water depth. The planting zones are preliminary and may be modified based on field conditions.

- Berms (FLUCFCS 747) (1.16± acres)
  Exotics along the berm in the northern portion of the park will be removed by hand to ensure the berm remains intact. Gopher tortoises (*Gopherus polyphemus*) were previously identified within this portion of the property. A buffer meeting FWC guidelines will be provided around all gopher tortoise burrows to ensure equipment does not impact these areas. Access and staging areas will be limited to ensure preservation of existing native plants and gopher tortoise burrows. Following the exotic removal along the berm, native trees will be planted, outside of the gopher tortoise buffer areas. If practicable, trees removed as part of the restoration work will be transplanted to the berm. However, if this is not feasible, supplemental tree plantings will be installed according to Table 3. The exact number of tree plantings is unknown at this time; however, it is estimated to be 100 trees. Since this community contains foraging habitat for Gopher tortoise, the requirement for 80% coverage of native species at all strata would not necessarily be appropriate. Therefore, the vegetation will be evaluated after two years of natural recruitment to determine the native species coverage and planting requirements of each stratum.

TABLE 3. BERM PLANTINGS, SPECIES, SIZE, AND SPACING

Common Name	Scientific Name	Minimum Size or Better	Spacing	Notes
Trees*				Spacing will be based on location of existing native vegetation, approximately 12-15' spacing to allow for natural recruitment and long term growth. Trees to be planted within berm can be transplanted from the Park site as practicable.
Live Oak	*Quercus virginiana*	8' tall	12-15' on center	
Laurel Oak	*Quercus laurifolia*	8' tall	12-15' on center	
Slash Pine	*Pinus elliottii*	8' tall	12-15' on center	
Cabbage Palm	*Sabal palmetto*	8' tall	12-15' on center	
Gumbo Limbo	*Bursera simaruba*	8' tall	12-15' on center	
Stopper(s)	*Eugenia* spp.	8' tall	12-15' on center	
Chapman's Oak	*Quercus chapmanii*	8' tall	12-15' on center	
Persimmon	*Diospyros virginiana*	8' tall	12-15' on center	
American elm	*Ulmus americana*	8' tall	12-15' on center	
Pop Ash	*Fraxinus caroliniana*	8' tall	12-15' on center	
			Total estimated trees:	**100**

- Cypress, Drained (FLUCFCS 6215 E2) (0.91± acres)
  The habitat identified as Cypress, Drained, will be incorporated into the on-site detention area. This area currently is dominated in the groundcover by invasive exotic species, such as cogon grass (*Imperata cylindrical*) and guinea grass (*Panicum maximum*); with

various other non-native species making up the remaining cover. During the initial establishment of the detention area, these species will be treated with an approved herbicide, in order to promote the establishment of native species in this stratum. Subsequent hand spraying will occur as necessary to ensure exotic coverage remains at less than thirty percent coverage. As part of the hydrologic restoration proposed on-site, this area will be incorporated into the detention area providing water treatment and attenuation in a drained portion of the site. No supplemental plantings are proposed.

- Ditch (FLUCFCS 510) and Bypass Swale (2.37 ± acres)
  Once the culverts and control structure have been installed, and the ditch re-graded, this area will be planted with native species. The Western Ditch Planting Plan depicts in more detail the location of the planting zones within the 2.09± acres of created filter marsh (Exhibit D).
  - Zone A will be planted between elevation 8.0' NAVD and 10.5' NAVD.
  - Zone B will be planted between elevation 10.5' NAVD and 11.5' NAVD.
  - Zone C will be planted between elevation 11.5' NAVD and 12.75' NAVD.
  - Above elevation 12.75' NAVD to the top-of-bank, approximately 14.75' NAVD, bahia sod (*Paspalum notatum*) will be installed and includes approximately 18,879 ft².

  The plantings will be clustered to promote their establishment and survival. Plantings will be installed in combination with perforated biodegradable erosion control fabric. The fabric used for this application, will be consistent with the fabric utilized for other successful Lee County restoration projects. Table 4 identifies the plant species to be utilized in Zone A, B, and C, also included as part of Exhibit D.

TABLE 4. WESTERN DITCH PLANTINGS BY ZONE

Zone A Plantings				
Elevation of 8.0' NAVD to 10.5' NAVD				
Common Name	**Scientific Name**	**Size**	**Spacing**	**Quantity**
Arrowhead	*Sagittaria lancifolia*	2" liners or bare root.	1' center	2,722
Coastal Spikerush	*Eleocharis cellulosa*	2" liners or bare root.	1' center	2,722
Fireflag	*Thalia geniculate*	2" liners or bare root.	1' center	2,722
Giant Bulrush	*Scirpus californicus*	2" liners or bare root.	1' center	2,722
Jointed Spikerush	*Eleocharis interstincta*	2" liners or bare root.	1' center	2,722
Maidencane	*Panicum hemitomon*	2" liners or bare root.	1' center	2,722
	Total estimated plants based on planting area of 32,663 ft²:			**16,332**

Zone B Plantings				
Elevation of 10.5' NAVD to 11.5' NAVD				
Common Name	**Scientific Name**	**Size**	**Spacing**	**Quantity**
Arrowhead	*Sagittaria lancifolia*	2" liners or bare root.	1' center	1,766
Pickerelweed	*Pontederia cordata*	2" liners or bare root.	1' center	1,766
Spikerush	*Eleocharis interstincta*	2" liners or bare root.	1' center	1,766
Total estimated plants based on planting area of 10,596 ft²:				**5,298**

Zone C Plantings				
Elevation of 11.5' NAVD to 12.75' NAVD				
Common Name	**Scientific Name**	**Size**	**Spacing**	**Quantity**
Muhly Grass	*Muhlenbergia expansa*	2" liners or bare root.	1' center	2,225
Fakahatchee Grass	*Tripsacum dactyloides*	2" liners or bare root.	1' center	2,225
Sand Cord Grass	*Spartina bakeri*	2" liners or bare root.	1' center	2,225
Total estimated plants based on planting area of 13,350 ft²:				**6,675**

The planting zones are preliminary and may be modified based on field conditions. Erosion control fabric will be installed in combination with plantings.

The bypass swale on the southern end of the ditch will meander and avoid impacts to existing mature vegetation. This area will be planted with the same or similar species utilized in Zone A of the Western Ditch Planting Plan. Erosion control fabric will also be installed in this location, in combination with the plantings to ensure the establishment.

- Temporary Impact Areas (0.09± Acres)
  Approximately 0.09± acres of Streams and Lake Swamps will be temporarily impacted as a result of the proposed restoration work. An additional, 0.09± acres of temporary impacts are proposed within the Brazilian pepper wetland, which currently has a planting plan. Due to the existing mature vegetation adjacent to the work areas (FLUCFCS 615E1), trimming may be necessary to allow for equipment access and installation. As a result, supplemental plantings may be necessary following the completion of the restoration work in these areas. Plantings will meet minimum shrub or tree size requirements and will be planted to enhance the trimmed areas. The exact number of plants will be determined subsequent to the hydrologic restoration work. Spacing will mimic that of the existing native vegetation, which likely include tree spacing approximately 12 to 15 feet apart, while shrubs will be spaced approximately 3 to 6 feet apart. The following table includes potential supplemental plant species for this area and species will be chosen based on hydrology of the area to be planted. Native tree, shrub, and groundcover species cover will meet 80% coverage at the end of two years, or additional plantings will be installed. If plantings are necessary, the species planted will mimic the native species which already exist on-site.

TABLE 5. TEMPORARY IMPACTS SUPPLEMENTAL PLANTINGS (FLUCFCS 615E1)

Common Name	Scientific Name	Minimum Size or Better	Notes
Trees*			Spacing will be based on location of existing native vegetation, approximately 12-15' spacing to allow for natural recruitment and long term growth. Trees to be planted within the wetland can be transplanted from the Park site as practicable.
Laurel Oak	*Quercus laurifolia*	8' tall	
Slash Pine	*Pinus elliottii*	8' tall	
Cypress	*Taxodium distichum*	8' tall	
Cabbage Palm	*Sabal palmetto*	8' tall	
Red Maple	*Acer rubrum*	8' tall	
Dahoon Holly	*Ilex cassine*	8' tall	
Sweet Bay Magnolia	*Magnolia virginiana*	8' tall	
Gumbo Limbo	*Bursera simaruba*	8' tall	
Stopper(s)	*Eugenia* spp.	8' tall	
Chapman's Oak	*Quercus chapmanii*	8' tall	
Persimmon	*Diospyros virginiana*	8' tall	
American elm	*Ulmus americana*	8' tall	
		Total estimated trees:	**15**
Shrubs*			Spacing will be based on location of existing native vegetation, approximately 3-6' spacing to allow for natural recruitment and long term growth. Shrubs will be installed as necessary.
Saltbush	*Baccharis halimilifolia*	1 gallon	
Cordgrass	*Spartina bakeri*	1 gallon	
Fakahatchee Grass	*Tripsacum dactyloides*	1 gallon	
Wax Myrtle	*Merica cerifera*	1 gallon	
		Total estimated shrubs:	**20**

*Substitutes to the above plant lists may occur after review and approval by SFWMD staff. All planted material will be watered as necessary, to ensure survivability.

MAINTENANCE PLAN

The intent of this plan is to provide assurance that the designated restoration areas are maintained free of exotic plants in perpetuity. This is achieved by establishing a scheduled program to maintain the restoration area free of exotic plants (as defined by the latest exotic plant list published by the Florida Exotic Pest Plant Council). The exotic and nuisance species should constitute no more than five percent of total cover at all times. In addition, at the end of the first annual monitoring period, the restoration areas shall contain an 80% survival of planted vegetation. The 80% survival rate shall be maintained throughout the remainder of the monitoring program. At the end of the five years of monitoring, the mitigation areas shall contain an 80% survival of planted vegetation, with 80% coverage of desirable obligate and facultative wetland species.

MONITORING PLAN

The objective of the monitoring will be to determine the health of the designated restoration areas in terms of vegetation composition. Monitoring will include a baseline, time-zero and

annual monitoring for five years. A report will be prepared and submitted to the SFWMD and Corps documenting the following parameters:

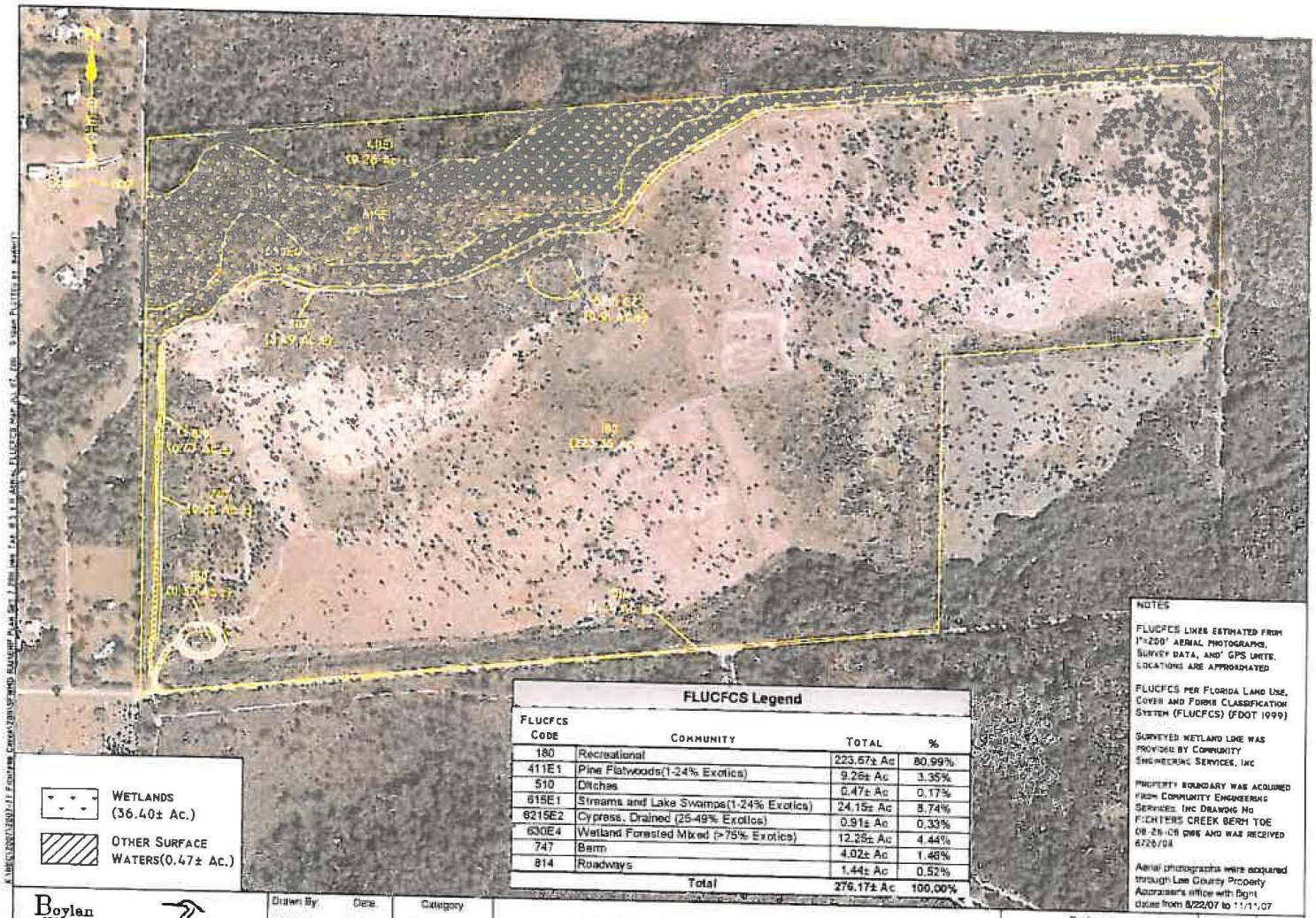
- Restoration area condition documented through panoramic photographs
- Vegetation composition and percent coverage along a transect
- Percent cover of nuisance and exotic plant species
- Wildlife observations
- Water level observations and rainfall data

The report will evaluate the success of the restoration and maintenance efforts, activities conducted to date, and any remedial activities that are necessary to ensure the success of the restoration areas. The attached Monitoring Map identifies the location of the proposed transects and photopoints, which will be utilized during the above monitoring events (Exhibit E). An approximate monitoring and maintenance schedule is provided in Table 6, below.

Table 6. Approximate Monitoring and Maintenance Schedule

Completion Date	Activity
September 2011	Baseline Monitoring report
February 2012	Initial Exotic Removal
March 2012	Time Zero Monitoring Report
February 2013	Maintenance Activity
March 2013	First Annual Monitoring Report
February 2014	Maintenance Activity
March 2014	Second Annual Monitoring Report
February 2015	Maintenance Activity
March 2015	Third Annual Monitoring Report
February 2016	Maintenance Activity
March 2016	Fourth Annual Monitoring Report
February 2017	Maintenance Activity
March 2017	Fifth Annual Monitoring Report

**Adjustments to the above schedule can be made with SFWMD approval.*



FLUCFCS Legend

FLUCFCS Code	Community	Total	%
180	Recreational	223.67± Ac	80.99%
411E1	Pine Flatwoods(1-24% Exotics)	9.26± Ac	3.35%
510	Ditches	0.47± Ac	0.17%
615E1	Streams and Lake Swamps(1-24% Exotics)	24.15± Ac	8.74%
6215E2	Cypress, Drained (25-49% Exotics)	0.91± Ac	0.33%
630E4	Wetland Forested Mixed (>75% Exotics)	12.25± Ac	4.44%
747	Berm	4.02± Ac	1.46%
814	Roadways	1.44± Ac	0.52%
	Total	276.17± Ac	100.00%

NOTES

FLUCFCS LINES ESTIMATED FROM 1"=200' AERIAL PHOTOGRAPHS. SURVEY DATA, AND GPS UNITS. LOCATIONS ARE APPROXIMATED

FLUCFCS PER FLORIDA LAND USE, COVER AND FORMS CLASSIFICATION SYSTEM (FLUCFCS) (FDOT 1999)

SURVEYED WETLAND LINE WAS PROVIDED BY COMMUNITY ENGINEERING SERVICES, INC

PROPERTY BOUNDARY WAS ACQUIRED FROM COMMUNITY ENGINEERING SERVICES, INC DRAWING NO FICHTERS CREEK BERM TOE 08-26-06 DWG AND WAS RECEIVED 8/28/08

Aerial photographs were acquired through Lee County Property Appraiser's office with flight dates from 8/22/07 to 11/1/07

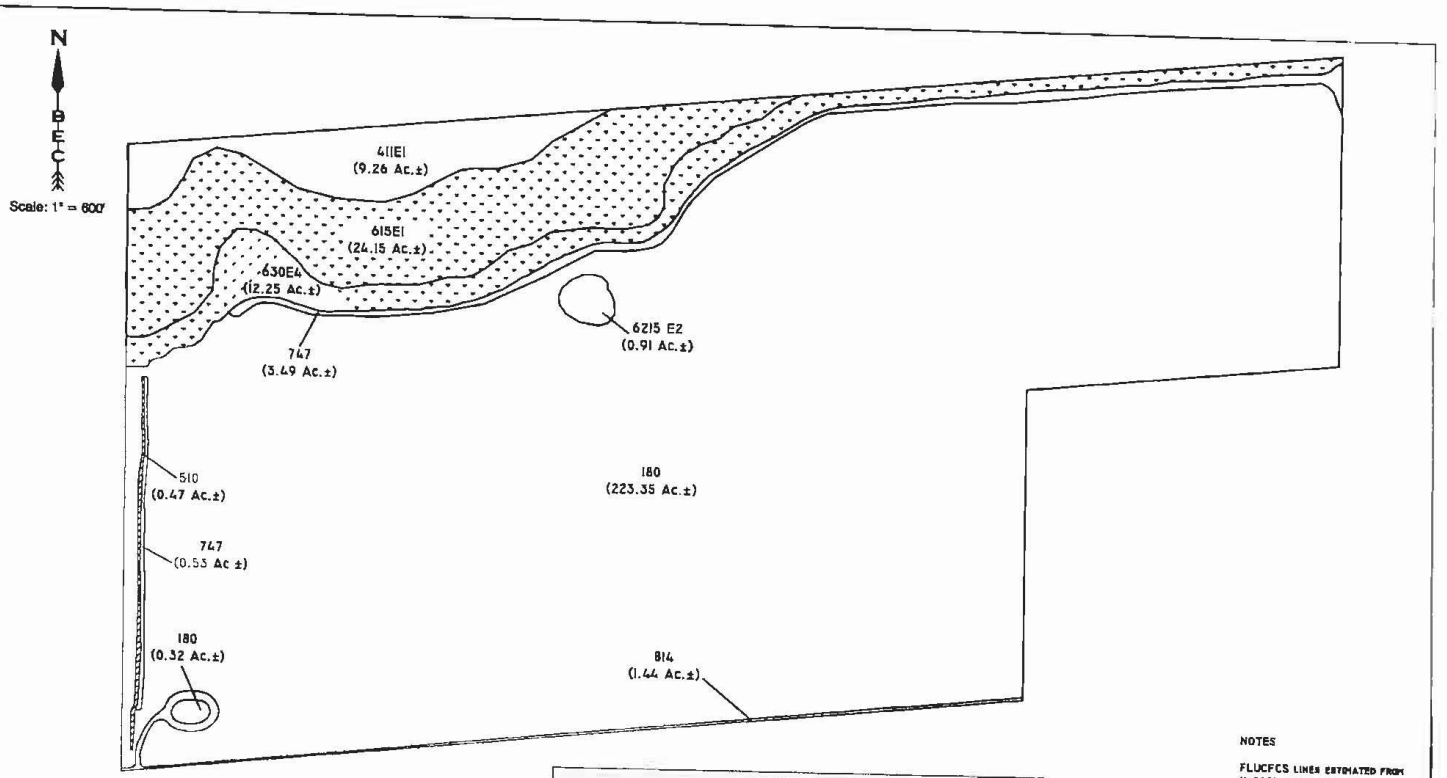
Boylan Environmental Consultants, Inc.
Wetland & Wildlife Surveys, Environmental Permitting, Impact Assessments
12000 Metro Parkway, Suite 4, Ft. Myers, FL 33966 (239)418-0571

Drawn By:	Date:	Category
B.K.M.	8/28/08	FLUCFCS
Job Number:		Scale:
2007-77		1" = 600'
S/T/R		County
18/43S/27E		Lee

Fichter's Creek Restoration

Aerial FLUCFCS Map

Revisions	Date	Page
		Exhibit



WETLANDS (36.40± Ac.)

OTHER SURFACE WATERS(0.47± Ac.)

FLUCFCS Legend

FLUCFCS CODE	COMMUNITY	TOTAL	%
180	Recreational	223.57± Ac	80.99%
411E1	Pine Flatwoods(1-24% Exotics)	9.26± Ac	3.35%
510	Ditches	0.47± Ac	0.17%
615E1	Streams and Lake Swamps(1-24% Exotics)	24.15± Ac	8.74%
6215E2	Cypress, Drained (25-49% Exotics)	0.91± Ac	0.33%
630E4	Wetland Forested Mixed (>75% Exotics)	12.25± Ac	4.44%
747	Berm	4.02± Ac	1.46%
814	Roadways	1.44± Ac	0.52%
	Total	276.17± Ac	100.00%

NOTES

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Boylan Environmental Consultants, Inc.
Wetland & Wildlife Surveys, Environmental Permitting, Impact Assessments
11000 Metro Parkway, Suite 4, Ft. Myers, FL 33966 (239)418-0671

Drawn By:	Date:	Category
B.K.M.	8/28/08	FLUCFCS
Job Number		Scale:
2007-77		1" = 600'
S/T/R		County
18/43S/27E		Lee

Fichter's Creek Restoration

FLUCFCS Map

Revisions	Date:	Page
		Exhibit

TABLE 3. WETLAND AND OTHER SURFACE WATERS IMPACT AND RESTORATION SUMMARY

Assessment Area ID	WL & SW Type	WL & SW Size	WL & SW Not Impacted / Enhanced	Temporary WL & SW Impacts			Permanent WL & SW Impacts			Mitigation Area ID
				WL & SW Type	Impact Size	Impact Type	WL & SW Type	Impact Size	Impact Type	
WL 1	630E4	12.29± ac	11.81± ac	630E4	0.09± ac	Vegetation Clearing	630E4	0.06	Fill	N/A
								0.33	Excavate	
WL 1	615E1	1.32± ac.	1.16± ac.	615E1	0.08± ac.	Vegetation Clearing	615E1	0.06	Fill	N/A
								0.02	Excavate	
OSW 1	510	1.36± ac.	0.98± ac.	--	--	--	510	0.06	Fill	N/A
								0.32	Excavate	
WL 2	615E1	0.05± ac	0.04± ac	615E1	0.01± ac	Vegetation Clearing	--	--	Fill	N/A
								--	Excavate	
OSW 2	510	1.47± ac.	1.47± ac.	--	--	--	--	--	Fill	N/A
								--	Excavate	
	Totals:	16.49± ac.	15.46± ac.					0.18	Fill	
								0.67	Excavate	

MITIGATION ANALYSIS

Uniform Mitigation Assessment Method (UMAM) summary tables are provided below with the detailed worksheets attached as Exhibit O.

TABLE 4. FUNCTIONAL LOSS FOR DIRECT WETLAND IMPACTS

Assessment Area ID	FLUCFCS Code	*Impact Acreage	UMAM Scores				
			Landscape Support	Water Environment	Community Structure	Delta	Functional Loss
1	630E4	0.39± ac.	7	6	3	0.53	0.21
2	615E1	0.08± ac.	7	7	6	0.67	0.05
	Totals:	0.47± ac.					0.26

*Impact acreage does not include temporary impacts, which will occur to vegetation as a result of the proposed work. No permanent structures will be placed in these areas and supplemental plantings are proposed as necessary.

TABLE 5. FUNCTIONAL GAIN FOR RESTORATION

Assessment Area ID	Existing FLUCFCS Code	Proposed FLUCFCS Code	*Restoration/ Enhancement Acreage	UMAM Scores												
				Current Condition				With Enhancement/Preservation								
				Landscape Support	Water Environment	Community Structure	Current Score	Landscape Support	Water Environment	Community Structure	With Score	Delta	Time Lag	Risk Factor	Adj. Delta	Restoration Functional Gain
1	630E4	617	11.81± ac.	7	6	3	0.53	8	7	7	0.73	0.20	1.46	2	0.07	0.83
2	615E1	615	1.20± ac.	7	7	6	0.67	7	8	7	0.73	0.06	1	1.50	0.04	0.05
3	510	510/641	1.30± ac.	6	6	3	0.50	6	7	8	0.70	0.20	1.07	2	0.09	0.12
4	180/747	510/641	1.07± ac.	--	--	--	--	6	7	8	0.70	0.70	1.07	2.25	0.29	0.31
		Totals:	15.38± ac.													1.31

*Restoration/Enhancement acreage does not include wetland impacts resulting in the creation of the ditch/filter marsh. These acreages were included in the above wetland impact calculations