

1 SOUTH FLORIDA WATER MANAGEMENT DISTRICT

2
3 RESOLUTION NO. 2010- _____

4
5 A RESOLUTION OF THE GOVERNING BOARD OF THE SOUTH FLORIDA WATER
6 MANAGEMENT DISTRICT TO APPROVE THE FIVE YEAR UPDATE OF THE LAKE
7 MARION CREEK AND REEDY CREEK GENERAL MANAGEMENT PLAN (2010-2015);
8 PROVIDING AN EFFECTIVE DATE
9

10 WHEREAS, the Lake Marion Creek and Reedy Creek Management Area was acquired by
11 the District under the Save Our Rivers and Preservation 2000 programs; and

12 WHEREAS, Section 140.25(6)(b), South Florida Water Management District Policies Code,
13 directs the District to (i) develop a General Management Plan for each Land Stewardship
14 Management Area that follows a designated form and provides recommended management for the
15 area, and (ii) update each General Management Plan every five (5) years; and

16 NOW THEREFORE, be it resolved by the Governing Board of the South Florida Water
17 Management District:

18 Section 1. The Governing Board of the South Florida Water Management District hereby
19 approves the five year update of the Lake Marion Creek and Reedy Creek Management Area
20 General Management Plan (2010-2015), a copy of which is attached hereto as "Exhibit "A".

21 Section 2. This Resolution shall take effect immediately upon adoption.
22

23 PASSED and ADOPTED this ____ day of _____, 2010.
24

25 SOUTH FLORIDA WATER MANAGEMENT
26 DISTRICT, BY ITS GOVERNING BOARD
27

28 By: _____

29 Chair
30

31 ATTEST:

Approved as to form:

32 By: _____

By: _____

33 District Clerk/Secretary

Office of Counsel

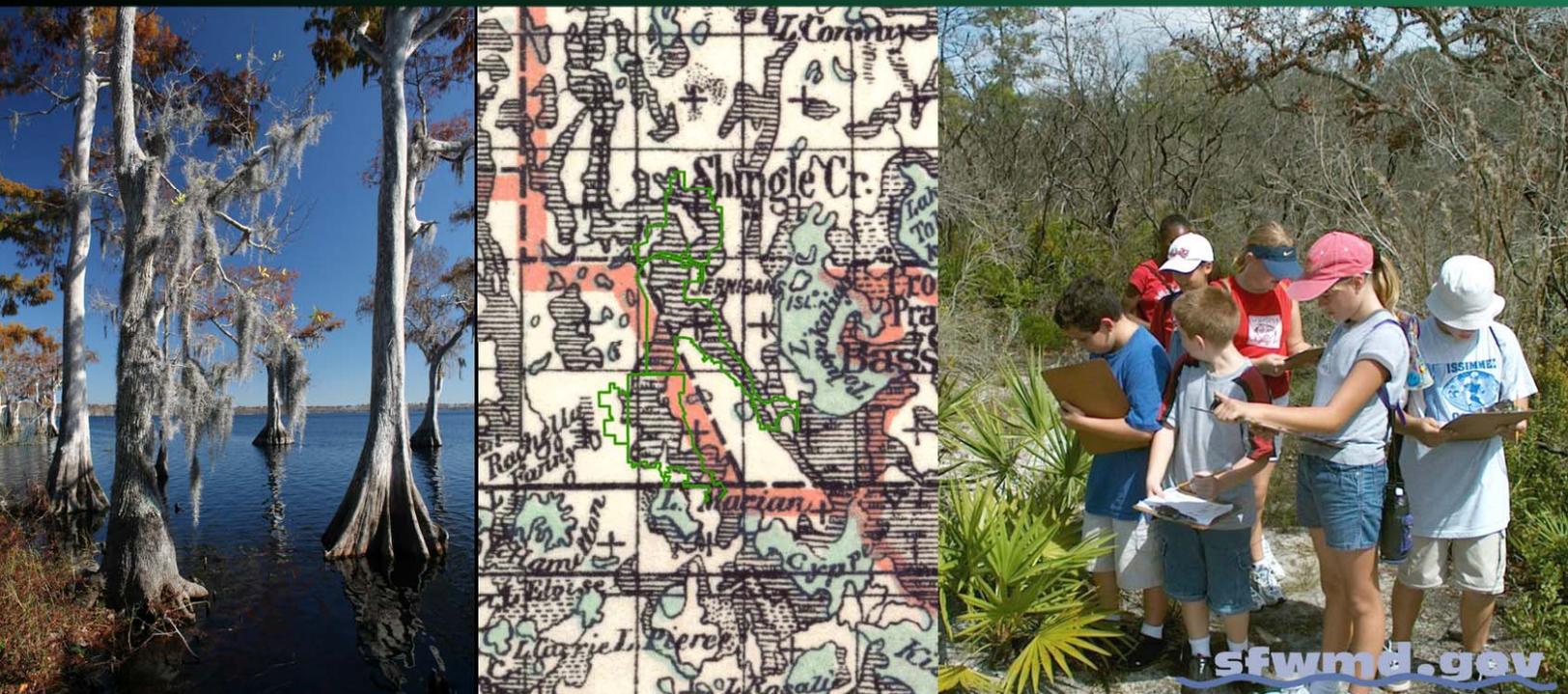
Land Stewardship Division

3301 Gun Club Road MSC 5212

West Palm Beach, Florida 33406



Lake Marion Creek and Reedy Creek
Management Area
Five-Year
General Management Plan
2010-2015
November, 2010



Lake Marion Creek and Reedy Creek Management Areas Five-Year General Management Plan (2010 – 2015)

August 2010

Land Stewardship Department
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33416-4680

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1. Executive Summary

The South Florida Water Management District (District) is responsible for the acquisition and management of lands vital to the restoration of the Everglades, the Kissimmee River, the Kissimmee Chain of Lakes and its headwaters. The District began purchasing lands within the Lake Marion Creek Project Area and Upper Reedy Creek Project Area in 1994 through the Save Our Rivers program. The majority of land was acquired from July 1994 to May 1997. This plan addresses management for the 12,915 acres that have been acquired by the District within the project area known as the Lake Marion Creek and Reedy Creek Management Area.

The District has taken a lead role in the acquisition and management of the project, while seeking assistance from other governmental agencies. This General Land Management Plan describes the historical, ecological, and managerial aspects of the area as a means to coordinate effective management programs. This plan is a compilation of assessments, research reports, and an earlier conceptual management plan combined with new information and proposals. The plan guides the District land management personnel toward logical and consistent land management practices. It also informs the public of operational procedures and organizational structures within the District and of management activities and objectives for the Management Area.

NATURAL SETTING

The natural character of the management area is defined by seven distinct soil categories as defined by the Natural Soil Landscape Positions soil classification system: flats soils, flatwood soils, knolls, central ridge and dunes, muck depression soils, sand depression soils, and water. Living on these soils are 17 distinct plant communities that are defined by criteria established by the Florida Natural Areas Inventory.

Wetlands comprise approximately fifty percent of the Lake Marion Creek Management Area, and most are within the 100-year flood plain of Lake Marion Creek, Snell Creek, Horse Creek, and Reedy Creek. Uplands include pine flatwood islands surrounded by forested wetlands, as well as several community types associated with a sand ridge on the southwestern portion of the management area: scrub, seepage slopes, sandhill, and scrubby flatwoods.

RESOURCE MANAGEMENT

Resource management programs for the management areas consist of:

- Prescribed fire to mimic the natural fire frequency in the fire-dependent natural communities.
- Forestry and vegetation management such as shredding or mowing overgrown understories.
- Wildlife management, including surveys, habitat management, and hunting programs.
- Exotic vegetation treatment.

- Monitoring the health of the natural communities and the impact of management practices on them.

RESTORATION PROJECTS

Past logging has removed the pine cover from most of the flatwoods on the property. Additional areas were found to be unnaturally dominated by slash pine as a result of long-term fire suppression. In order to restore longleaf pine to these systems, active reintroduction of longleaf pine will be necessary.

Also, the mid-successional shrub and red maple swamps in the Huckleberry Islands-South Management Unit, east of Lake Marion Creek, would benefit from fire to restore areas to a herbaceous dominated basin marsh.

MONITORING

The District performs vegetative community monitoring. As part of this effort, the District has installed two(2) 360 degree photomonitoring points in the Management Area. Species specific surveys are conducted as necessary, typically with a District contractor. Ongoing monitoring occurs for both vegetative communities and for certain wildlife species such as the Florida scrub jay and the Florida Sand Skink.

A baseline vegetation study was completed by a field botanist from the Fairchild Tropical Gardens in Miami-dade County in 1995-1996. The District re-hired the same botanist 10 years later in 2005 to re-survey the site. Both reports are on file at the District headquarters at West Palm Beach and are also available in an electronic format.

PUBLIC USE

Several recreational activities are provided for and encouraged in the management areas including fishing, hunting, camping, hiking, canoeing, birding, frogging, environmental education, and nature appreciation.

Introduction and Management Plan Purpose

This General Management Plan consolidates relevant information about the Lake Marion Creek and Reedy Creek Management Area (Management Area) including land management goals and objectives, past and present land uses, resource data, restoration and management needs, public use programs, and administrative duties to guide management actions for the period 2010 to 2015. Management activities described in this plan are based on requirements and directives of Florida Statutes and established District policies. District Policy 140-44 requires that general management plans be developed for each designated Save Our Rivers project.

District policy further states that the Land Stewardship Program's mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands. This mission statement and requirements set forth in Florida Statutes provide three primary goals for the Land Stewardship Program:

- Conserve and protect water resources
- Protect and/or restore land to its natural state and condition
- Provide appropriate public use

To accomplish these goals, the Land Stewardship Program performs six major functions:

- Strategic, project, and management planning
- The operation and maintenance of land resources
- Development of public use programs
- Development of restoration projects
- Evaluation of management activities
- Administration of land management contracts and leases

2.1 Management Area Goals and Objectives

The Land Stewardship Program's functions are incorporated in the specific management area goals and objectives for the period of this management plan 2010-2015. These goals are based on the Land Stewardship Program's overall success indicators and are necessary to achieve specific targets outlined in the indicators.

Goal 1: Manage natural communities and modified habitats to protect and enhance water, floral, and faunal resources

Objectives:

- Continue the regular application of fire through a well-planned and documented prescribed burning program. Prescribe burn 1,000-2,000 acres per year.

- Continue an aggressive, integrated exotic plant management program. Treatments will be documented and coordinated with other management activities. The entire project area will be surveyed every year and exotics treated as necessary.
- Continue habitat restoration by using heavy-duty shredding and mowing equipment to open up areas of overgrown wax myrtles. Continue appropriate management activities to enhance natural communities that have been hydrologically altered. Staff will contract mowing of approximately 3,000 acres per year.
- Coordinate with the Fl. Fish and Wildlife Conservation Commission to manage and enhance area wildlife.
- Continue and enhance the monitoring and evaluation of restoration activities on area vegetation and wildlife.
- Provide resource protection through partnership with the Fish and Wildlife Conservation Commission. Review enhanced patrol activities biweekly and review program annually.
- Protect sensitive cultural resources through cooperative law enforcement activities.
- Reduce non-native pest species populations and their associated impacts in the Management Area.
- Minimize ecological impacts associated with feral hogs located within the Management Area.
- Use mitigation programs to preserve, restore, enhance, and manage natural resources within the Management Area.
- Provide annual operational and capital improvement budgets sufficient for staff, equipment, and supply resources which are necessary to attain a level of responsible management as outlined in Management Area General Management Plan.
- Provide the staff necessary to successfully attain management goals and objectives as outlined in general management plans, activity plans, and annual work plans for the Management Area.
- Provide for, and take advantage of, volunteer and alternative work force opportunities within the Management Area.
- Provide the equipment, supplies, and tools necessary to successfully attain management objectives as outlined in the general management plan, activity plans, and annual work plans for the Management Area.
- Provide a long-term planning document that fulfills statutory, lease, and policy requirements and provides a framework for management implementation and public oversight.
- Plan management activities on an annual basis to meet program objectives detailed in the general management plan for the Management Area.
- Track and report progress in attaining management goals monthly, quarterly, and annually.
- Protect the natural and cultural resources within the Management Area through coordination with interested external entities.

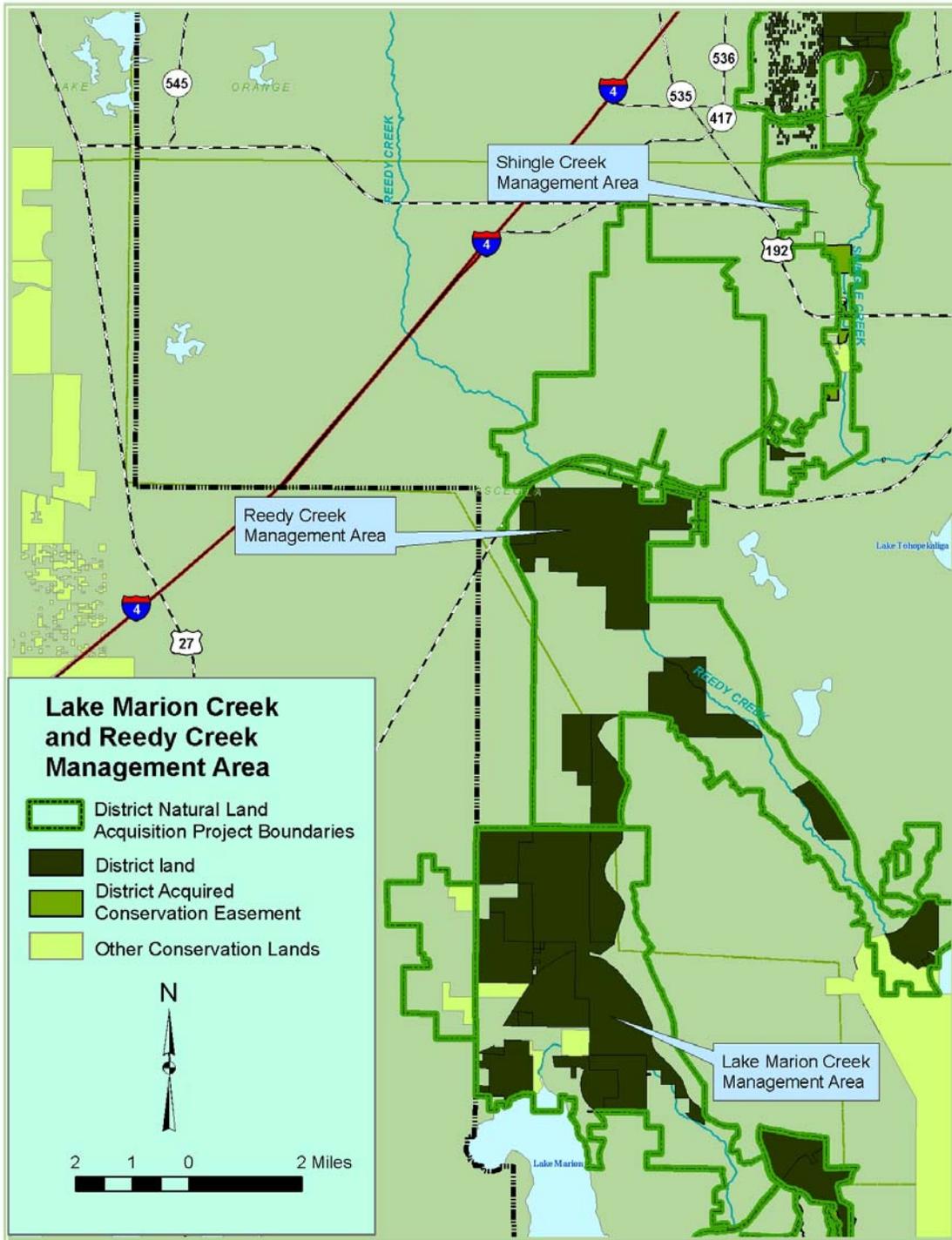
- Improve management efficiency and effectiveness of the Management Area by entering into and/or maintaining long-term cooperative land management agreements with other land management entities.
- Improve management efficiency by cooperating with other management entities in as-needed, non-contractual arrangements.
- Coordinate land management activities in the Management Area with adjacent landowners.

Goal 2: Provide resource-based public use opportunities

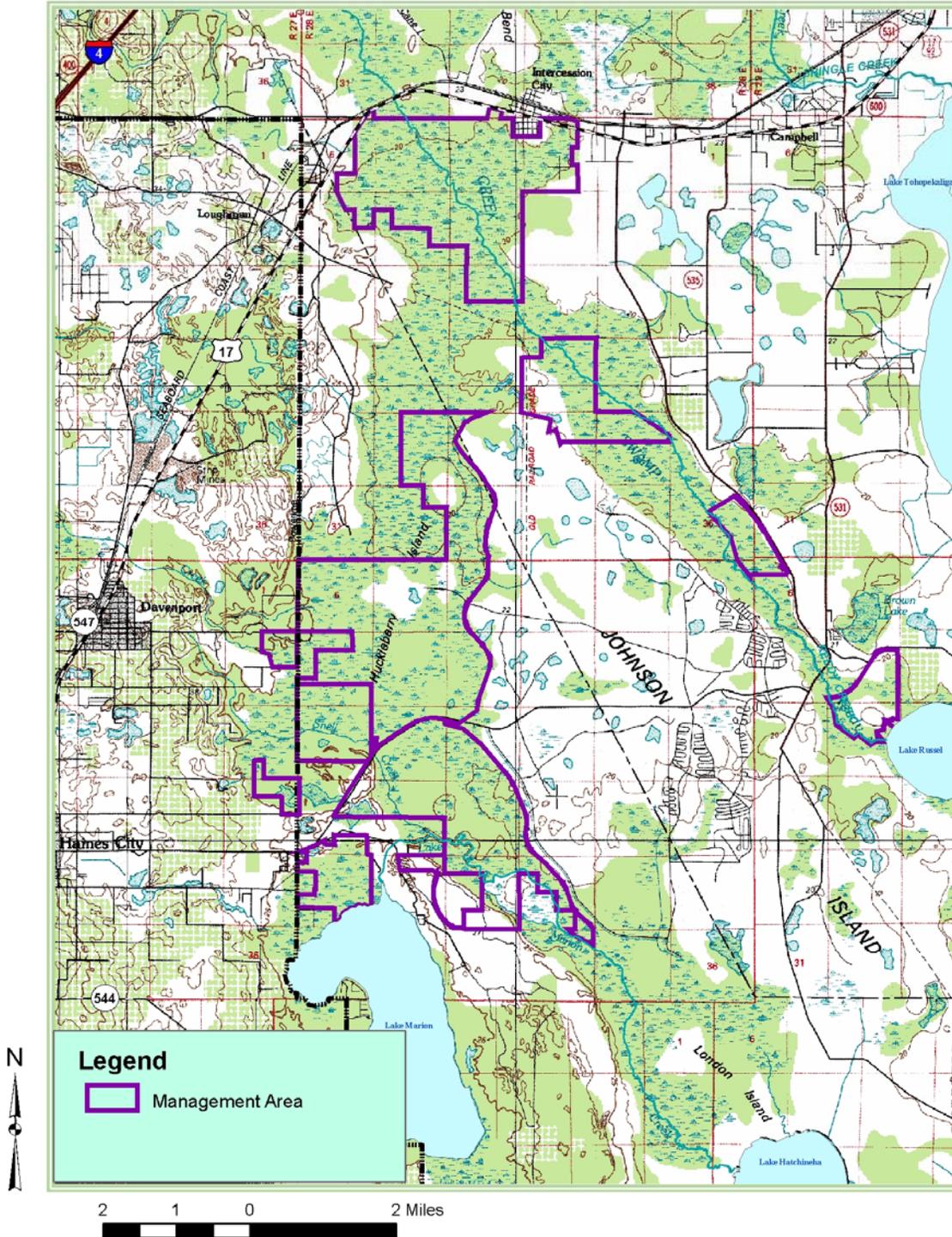
Objectives:

- Continue to provide environmentally compatible uses such as:
 - Fishing
 - Hunting
 - Camping
 - Hiking
 - Boating
 - Nature appreciation
- The public use program in the Management Area shall not require significant facility or infrastructure development (excluding the Lake Russell Environmental Center).
- Control types and levels of public use activities in the Management Area by the issuance of Special Use Licenses.
- Identify potential new access points for increased pedestrian and motorized vehicle access.
- Provide environmental education through maintenance and installation of kiosks at public access points, area brochures, and signage.
- Provide public outreach through the Public Use Guide, attending recreational user club meetings, and acting as a point of contact.
- Maintain existing public-use improvements (roads, signs, entrances, and structures) using a combination of District maintenance, construction contracts, and user group involvement.
- Delineate boundaries of the Management Area.
- Safeguard the public, natural resources, and cultural resources located within the Management Area.
- The public use program in the Management Area shall be low impact, nondestructive to environmental and/or ecological characteristics of the area.

Map 1. Lake Marion Creek and Reedy Creek Management Area and other public lands



Map 2. Lake Marion and Reedy Creek Management Area, U.S. Geological Survey 1:100,000 Quadrangle Map



3. Site History

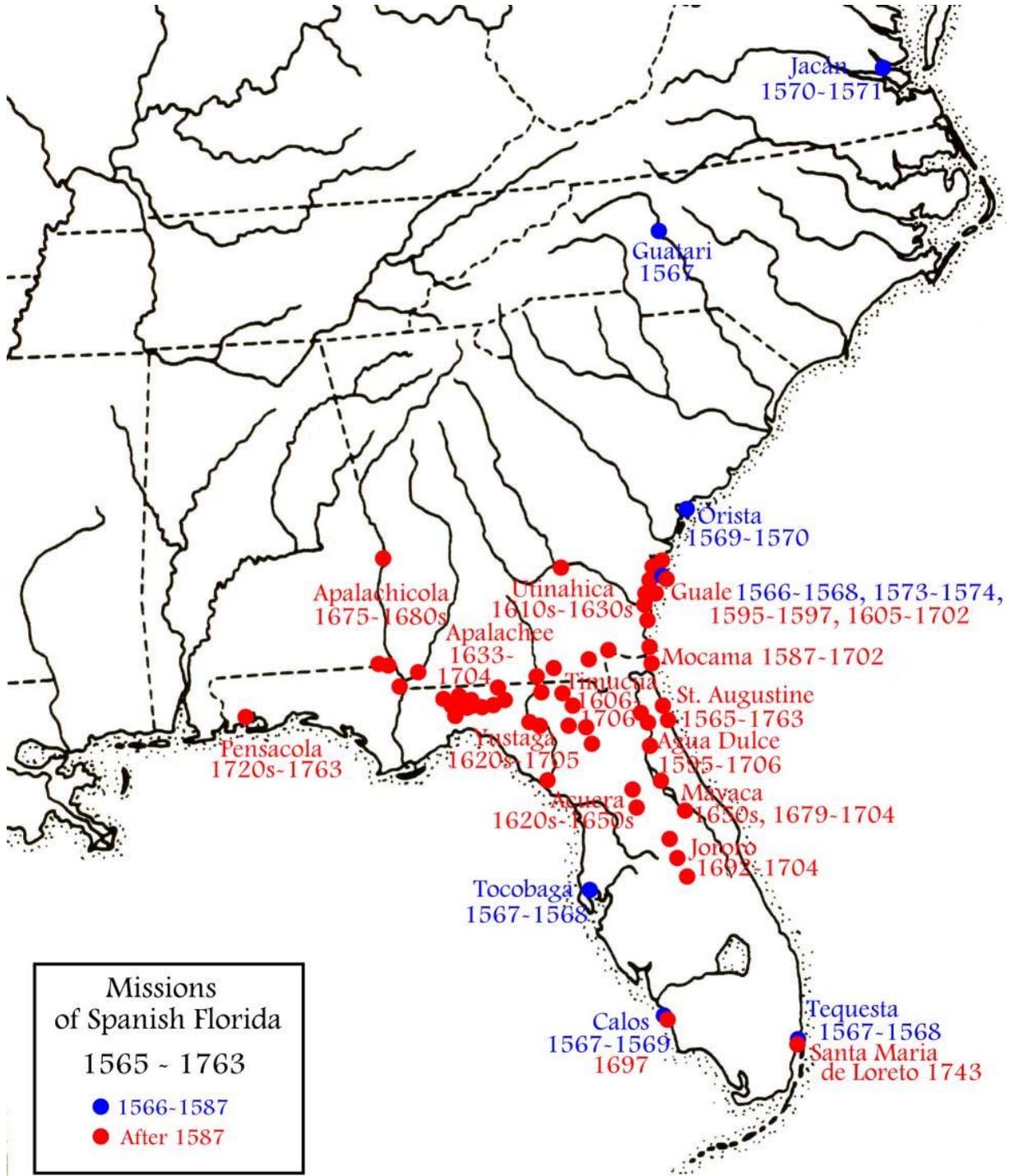
The Management Area has been inhabited by humans for at least 2000 and possibly up to 10,000 years. During the Spanish colonial period the area was regarded as wilderness and was seldom visited, and was not mapped or surveyed during their entire 300 year rule of Florida. The Spaniards apparently had difficulty penetrating the interior south of Orlando. The nearest Franciscan mission was likely the San Joseph de Jororo, occurring near present-day Orlando from 1692 to 1704 (**map 3.**). This frontier outpost had problems with several missionaries being killed by the local population, and was subsequently abandoned. The local population was a powerful tribe called the Jororo with a large cultural center at the present day Brahma Island in Lake Kissimmee. The Spanish were unable to maintain a mission south of San Joseph de Jororo that lasted more than a year.



Florida Indians as observed by early French settlers trapping fish - left, and tilling and sowing fields - right

The Jororo were hunter-gatherers who also tended small plots of maize and a few other vegetables. They were particularly known for raising coontie for its starch and remarkable baking flour. It likely remained a relatively unmolested stronghold for the early Native American culture until the Creek raids in the early to mid 1700s, although the impact of the Creek raids isn't certain in this area since nearly all accounts are from the northern Florida tribes and from the coastal areas. It is clear, though, that the raids were the start of massive declines in the tribes that were endemic to Florida. The Jororo, and most of the surrounding tribes, migrated to St. Augustine for protection and collectively became known as Costas, or Spanish Indians.

Map 3. Spanish Missions in Florida [long-term Spanish missions were not established in southern Florida (UWF-Archaeology Dept.)]



British Period 1763-1783

During the British period beginning in 1763, the region experienced in-migration from the Creek and Yamasee. Many of the surviving members of the coastal tribes evacuated to Cuba with the Spanish when the British took over. In 1765 the Treaty of Picolata (today Palatka) recognized all of the interior of Florida belonging to the Lower Creek Indians (the Seminoles), a territory that would have followed a line from the west bank of the St. John's River following it to its source then south to the edge of the Everglades and along the edge south to Cape Sabal on the southern tip of the Florida Peninsula. The coastal areas were specifically ceded by the Creeks to the British, with British law recognizing that the lands of Florida were the legal possessions of the Creeks.

Second Spanish Period (retrocession) 1783-1821

Throughout the Second Spanish Period the surviving Costas from the interior, and some who moved back from Cuba, worked for Spanish fishing villages. The second Spanish period (1783-1821) was more active in the region. The Spanish Monarchy felt their hold on the territory was tenuous following the departure of the British with unregulated migration from the north, so they began granting generous land grants to encourage settlement and economic development by immigrants who would swear loyalty to Spain. The interior land that had been recognized as being Seminole land by the British, had also been guaranteed to remain with the Seminoles by the Treaty of Pensacola in 1784, and again by the Treaty of Walnut Hills in 1793.

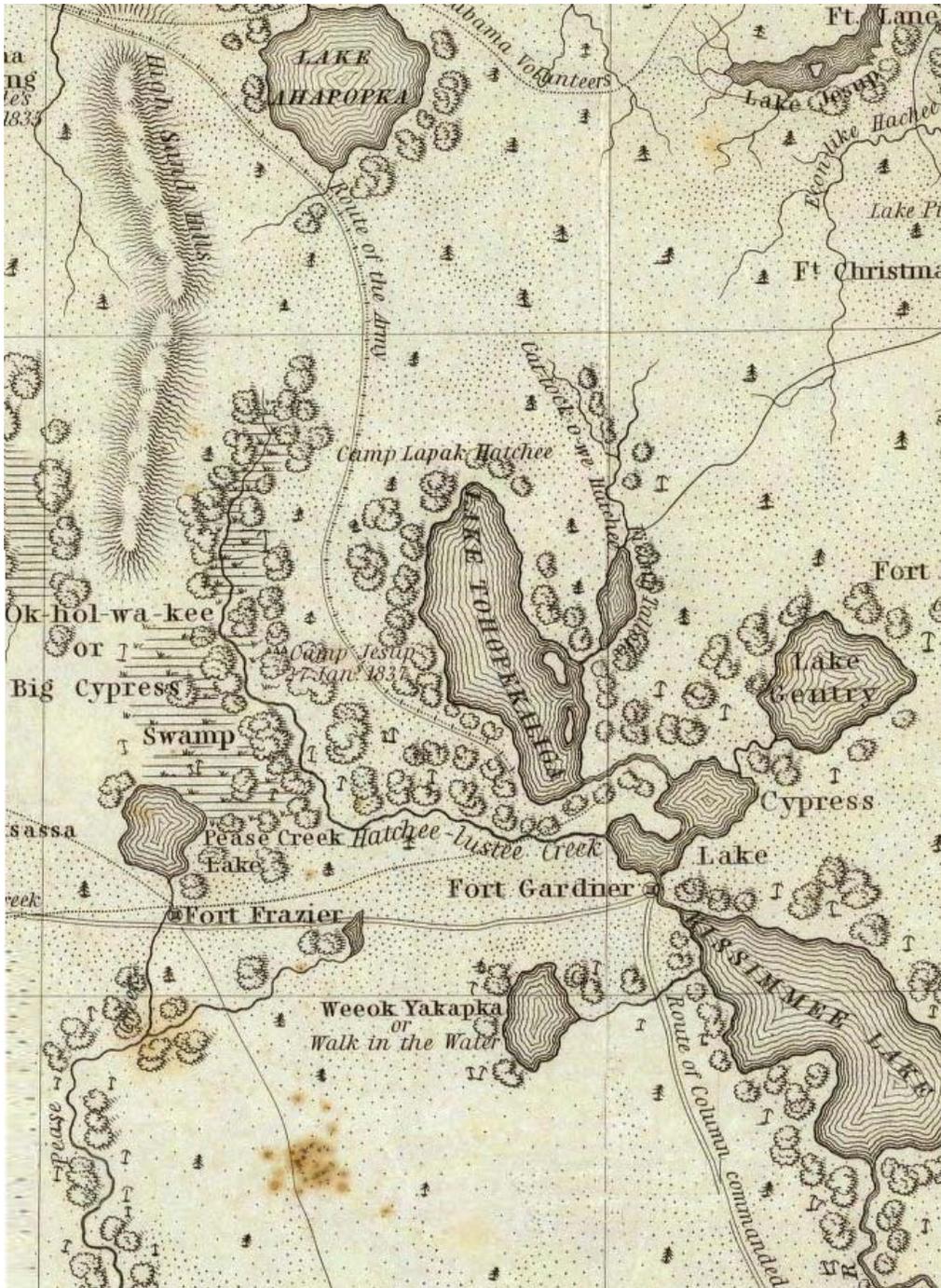
The Seminole Wars

In the years leading up to the Second Seminole War (1835-1842), there was a significant in-migration of Seminole Indians into the area. These were both Seminoles who had been living in Florida for many years as well as new arrivals following the Creek War of 1813-1814 in southern Georgia and Alabama. So when a large military column made its way down the center of the peninsula under the command of General Jessup in 1837, there were many Seminoles living on the pinelands between Reedy Creek and Lake Toho.

The large basin swamp that is the defining feature of the management area was called Ok-hol-wa-kee or "Big Cypress Swamp" by the Seminoles, and Reedy Creek was known as Hatchee-Lustee Creek. A significant skirmish took place near the banks of Reedy Creek on January 27, 1837 between General Jessup's column and the Seminole Warriors under the command of Chief Osuchee, whom the column was pursuing from an earlier skirmish near Lake Apopka. The brief battle in the swamp left 30 soldiers dead and 15 wounded, while the army took two Seminole women and three children prisoner. The army could only confirm a single Seminole warrior killed in the battle.

Following the battle on the Hatchee-Lustee, the military established the frontier outpost, Ft. Davenport, to the northwest of the Intercession City unit of the management area.

Map 4a. 1838 Military Map of the area around the Lake Marion Creek and Reedy Creek Management Area

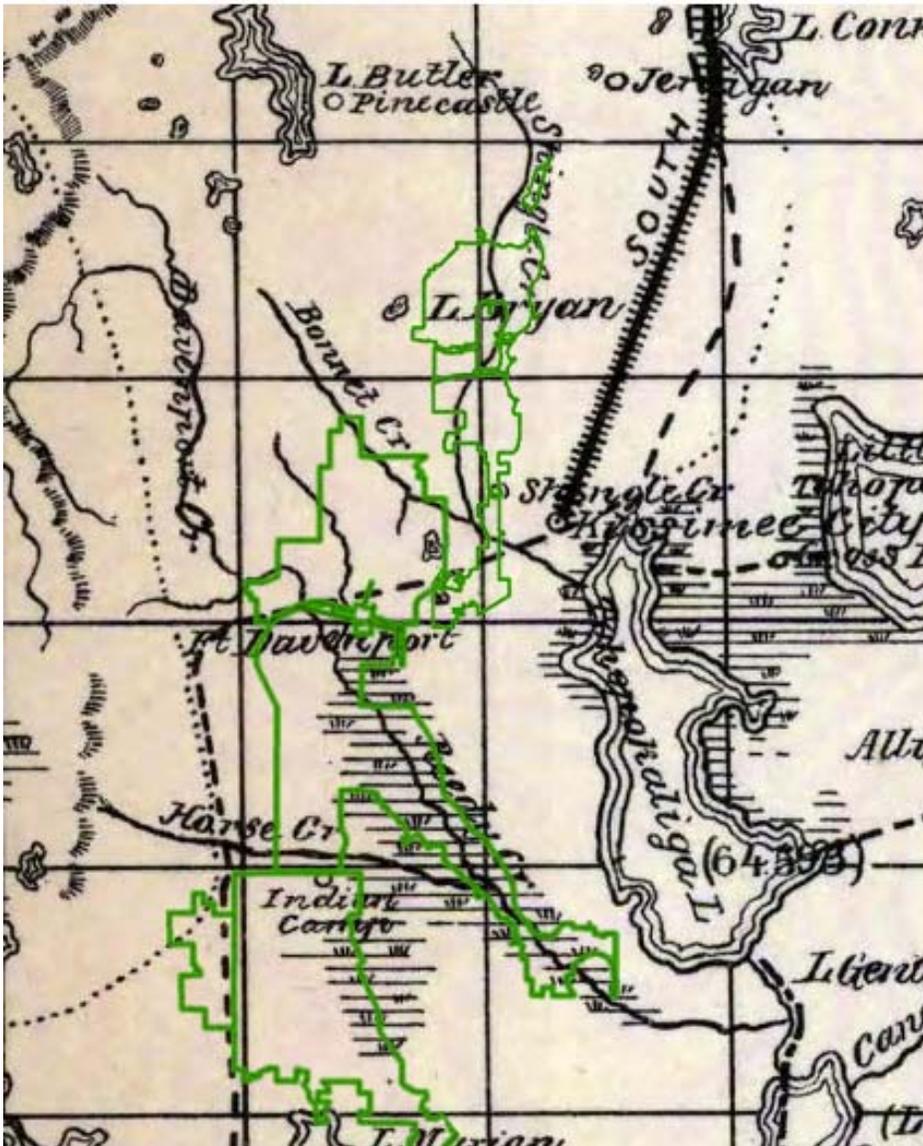


Map 4b. 1839 Military Map of the area around the Lake Marion Creek and Reedy Creek Management Area



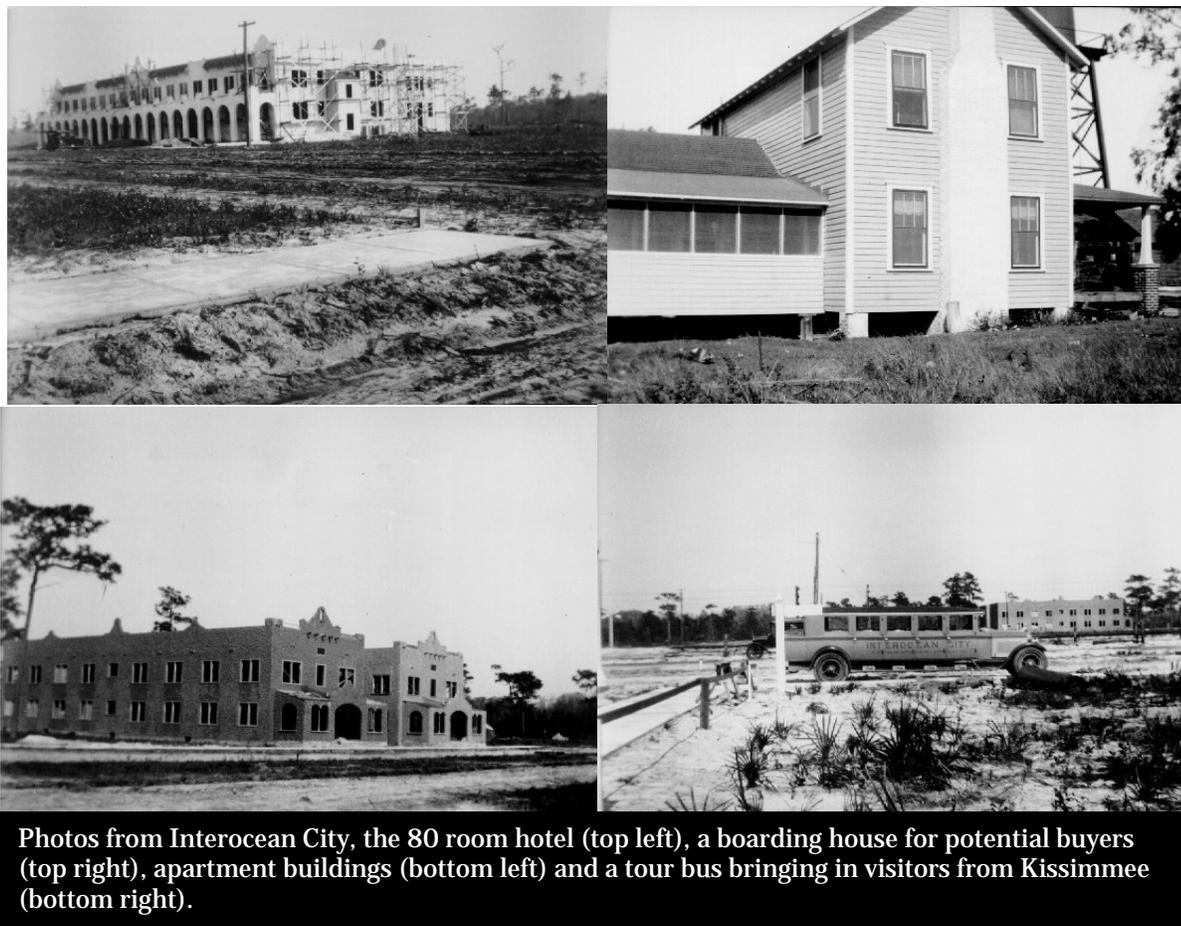
1840s-1860s

English speaking settlers began moving in to present day Polk and Osceola Counties during the 1840s and 1850s and were for the most part cattlemen and homesteaders who lived mainly off the land and had their own small vegetable plots. The government would routinely grant 160 acre tracts to single men or heads of households through successive acts of Congress, such as the Armed Occupation Act of 1842. This act granted 160 acres to anyone who submitted a permit to the regional land office to build and live in a house on the parcel and cultivate at least 5 acres of it for at least 5 years. Many settlers were veterans of the Second Seminole War who had familiarized themselves with choice parcels during their routine patrols. These early settlers were few and far between, the Armed Occupation Act of 1842 only authorized 1,250 homesteads for the entire peninsula south of Palatka.



Map 5: The Shingle Creek and Lake Marion and Reedy Creek management areas in 1882, with the location of an Indian Camp and Ft. Davenport shown. The present-day management areas are overlaid in green.

Atlantic Ocean and the Gulf of Mexico. The developers anticipated the planned Cross-Florida Barge Canal would pass through their city, so they were intent on making it a central feature of the community. They developed a Spanish-Mission inspired architecture and built a water-plant and several other buildings. They advertised all over the country and arranged tours of their several thousand acres. Alas, the grand city was not to be, the boom-times went bust – as boom-times tend to do – leaving the speculators broke and the buildings empty.



The buildings and surrounding 5,000 acres were eventually given as a philanthropic gift to a group of orphans, whose caretaker had moved them to Florida without a plan as to what to do with them and was desperate for a place for her 50 children. The caretaker, rented a camp near lake Apopka but eventually found herself with 70 cents in her pocket and 50 children looking to be fed. The orphans had it rough, it was during the depression and they resorted to eating the wild huckleberries growing in the woods and whatever fruits and vegetables would happen to fall off of passing farm trucks. In the 1940's the site became the "Intercession City Bible College", then renamed to "Intercession Institute" in 1949. The school finally closed in 1953.



A cover to advertisement booklet for home sites in Interocean City.

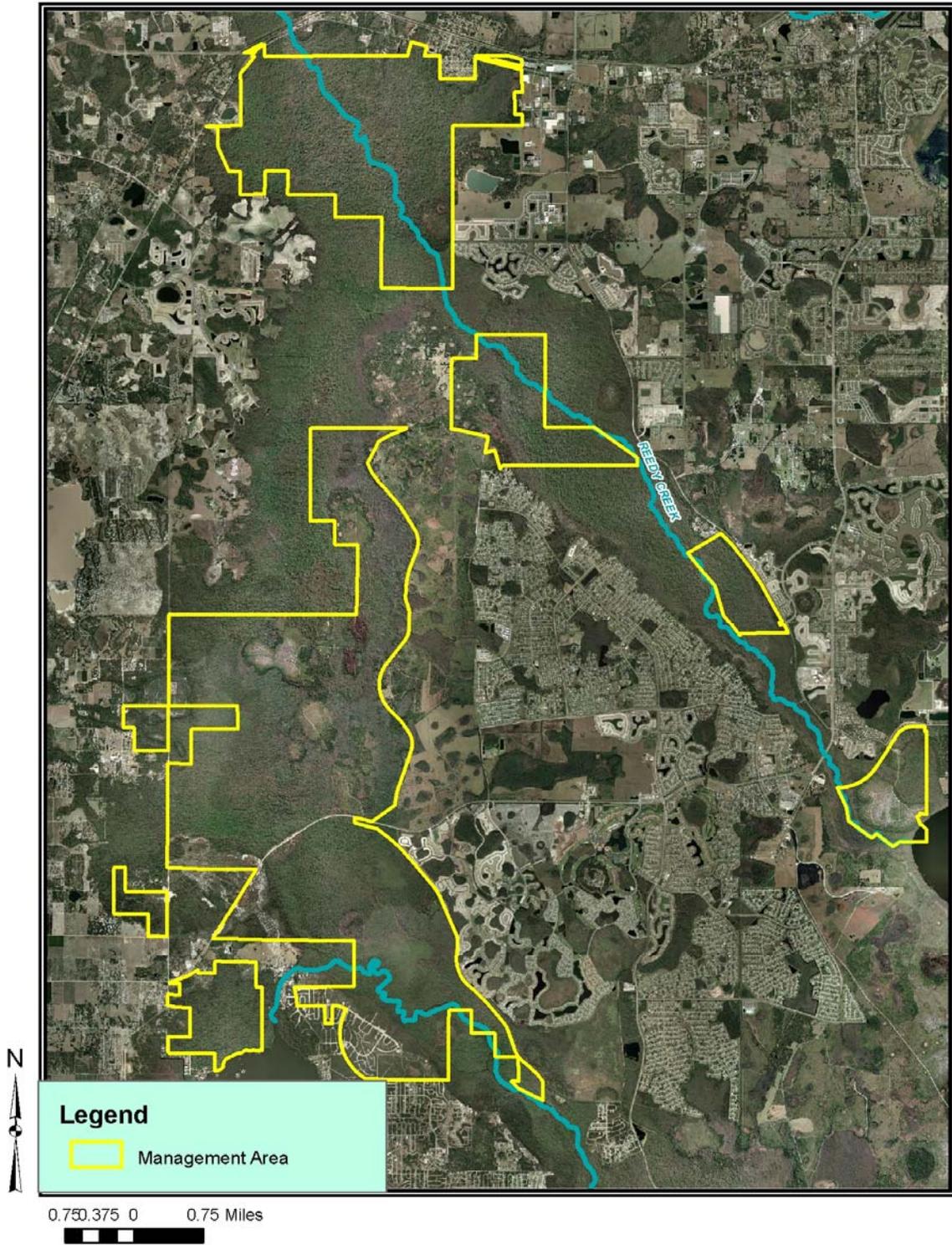


Photo of the Intercesion Institute founded on the former speculative development of Interocean City

In 1981, the Florida Legislature established the Save Our Rivers program for the five water management districts to acquire environmentally sensitive land. The legislation (§373.59 F.S.) produced the Water Management Lands Trust Fund and empowered the water management districts to acquire lands needed to manage, protect, and conserve the state's water resources. Once acquired, the lands should be managed in an environmentally acceptable manner and restored to their natural state. Districts may make certain capital improvements, i.e. fencing, access roads/trails, and provide basic public facilities. In addition, habitat management such as control of exotic species and controlled burning may be conducted. The legislation also requires the districts to develop appropriate public use.

The District began purchasing lands within the Lake Marion Creek Project Area and Upper Reedy Creek Project Area in 1994 through the Save Our Rivers program. The majority of land was acquired from July 1994 to May 1997. The Management Area comprises approximately 12,915 acres located in eastern Polk and western Osceola counties.

Map 7. 2007 aerial photo



4. Resource Inventory

Policy 140-25(3)(e) Inventories of natural and historic resources shall be performed to provide information for effective land management planning, natural community maintenance and ecological restoration.

Floral and faunal species are inventoried, and natural communities are mapped by Land Stewardship personnel, volunteers, or private contractors. The data helps District land managers with resource management planning.

Inventory data is on file within the Planning Section of the Land Stewardship Program. Land Stewardship shares natural areas and species data with the Florida Natural Areas Inventory through a Memorandum of Understanding.

Floral and faunal inventories of the Management Area were included in the environmental assessment initiated shortly after acquisition to determine the presence of listed species and serve as baselines. Additional surveys have been completed with species' lists being updated regularly by volunteers, contractors, and District staff (**Appendix E**). Archeological inventories were conducted by the Department of State, Division of Historical Resources and described in subsequent reports (section 4.5).

4.1 Hydrology

Policy 140-25(1) The basis for the Land Stewardship Program is the protection and management of natural hydrologic resources.

White (1970) divides the state of Florida into three major hydrogeologic divisions. The Management Area lies within the central zone defined by discontinuous highlands in the form of sub-parallel ridges and valleys. The major geomorphic feature that affects area hydrology is the Osceola Plain, a generally broad terrace bounded by the Lake Wales Ridge to the west and the Eastern Valley to the east, both of which are marine scarps. The Osceola Plain has locally little relief and generally has an elevation of 60 to 70 feet National Geodetic Vertical Datum. The Management Area is located in the western edge of the Osceola Plain, with the eastern edge of the Lake Wales Ridge to the west.

For management purposes, the Management Area includes two hydrologic basins: the Reedy Creek and Lake Hatchineha (Map 2). Intercession City Unit, Poinciana Unit, Reedy Creek Unit and the northern portion of the Lake Marion Creek WMA (the area within the Upper Reedy Creek Management Area) lie within the Reedy Creek basin. The remaining portion of Lake Marion Creek Wildlife Managment area, including the Torelli South Unit, lie within the Lake Hatchineha basin. The Reedy Creek basin area is approximately 269 square miles and the Lake Hatchineha basin area is approximately 128 square miles.

Wetlands comprise approximately fifty percent of the Lake Marion Creek Management Area, and most are within the 100-year flood plain. The area is of critical importance to the recharge of the Floridan Aquifer because the deep sands of the Lake Wales Ridge allow water to infiltrate, rather than run off. Lake Marion serves as the headwaters for Lake Marion Creek, which combines with Snell and Horse Creeks to provide a constant supply of high quality water to Lake Hatchineha, which in turn discharges to Lake Kissimmee, the Kissimmee River and Lake Okeechobee. All three lakes are priority water bodies under South Florida Water Management District's Surface Water Improvement & Management Plan program (SFWMD 1997).

Three aquifer systems underlay the two management units: the Surficial, Intermediate and Floridan. The water table aquifer is contained within the Surficial Aquifer System (Powell 1991). The Intermediate Aquifer acts as a confining layer for the Floridan Aquifer, which supplies much of the water used in Polk County and is a source of both potable and non-potable water for a substantial portion of south Florida. The highly permeable Lake Wales Ridge has been identified as an area of high recharge, providing from 10 to 20 inches of groundwater recharge per year to the Floridan Aquifer (David 1992). The adjacent Osceola Floridan Aquifer to the east, provides base flows via spring-fed creeks to the headwaters of the Kissimmee River (South Florida Water Management District 1992).

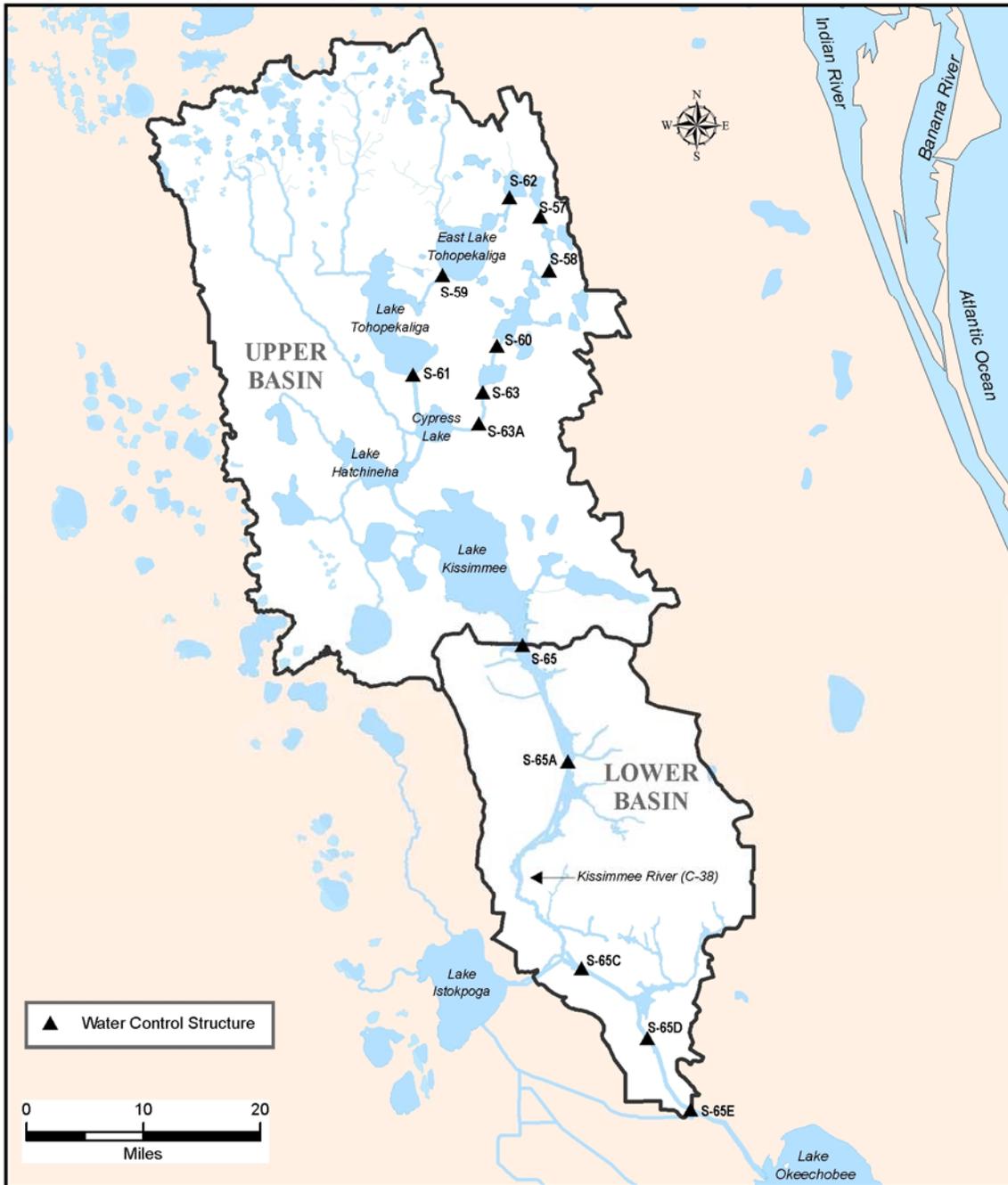
Surface waters within or associated with the Lake Marion Creek Management Area include Lake Marion, Lake Marion Creek, Snell Creek and a portion of Horse Creek. According to Powell (1991), Lake Marion covers 3,456 acres at elevation 67.0 feet (National Geodetic Vertical Datum). It drains an area in excess of 22,500 acres and is fed by springs. It has the fourth best water quality of all public lakes in Polk County. Lake Marion Creek is the primary outlet for Lake Marion. It originates at the north end of the lake and flows north, east, and then southeasterly for about 10 miles to Lake Hatchineha. It has similar water quality to Lake Marion (Polk County 1989). Snell Creek originates approximately 4.5 miles north of Lake Marion, near the edge of the Lake Wales Ridge, and meanders southeasterly for five miles before intersecting Lake Marion Creek about 0.5 miles downstream of the Lake Marion Creek Road Bridge. Its water quality is similar to Lake Marion Creek (Polk County 1989). Horse Creek forms in the Lake Wales Ridge approximately 10 miles northwest of Lake Marion. It flows into the Huckleberry Islands Swamp, east of Davenport and then discharges into Lake Marion Creek via Snell Creek. Its upper reaches are extensively channeled (SFWMD 1992).

Base flow in the creeks results from year round discharges from the Floridan Aquifer and are of critical importance in maintaining high quality flows to the headwaters of the Kissimmee River. During droughts, Floridan Aquifer discharge is usually the only visible flows in the creeks. Stormwater runoff is associated with high discharge events and constitutes that portion of rainfall that does not seep into the ground or evaporate. Base flow measurements by South Florida Water Management District staff on March 6, 1991, for Lake Marion Creek, Snell Creek and Horse Creek are listed in Table 1 below (SFWMD 1992).

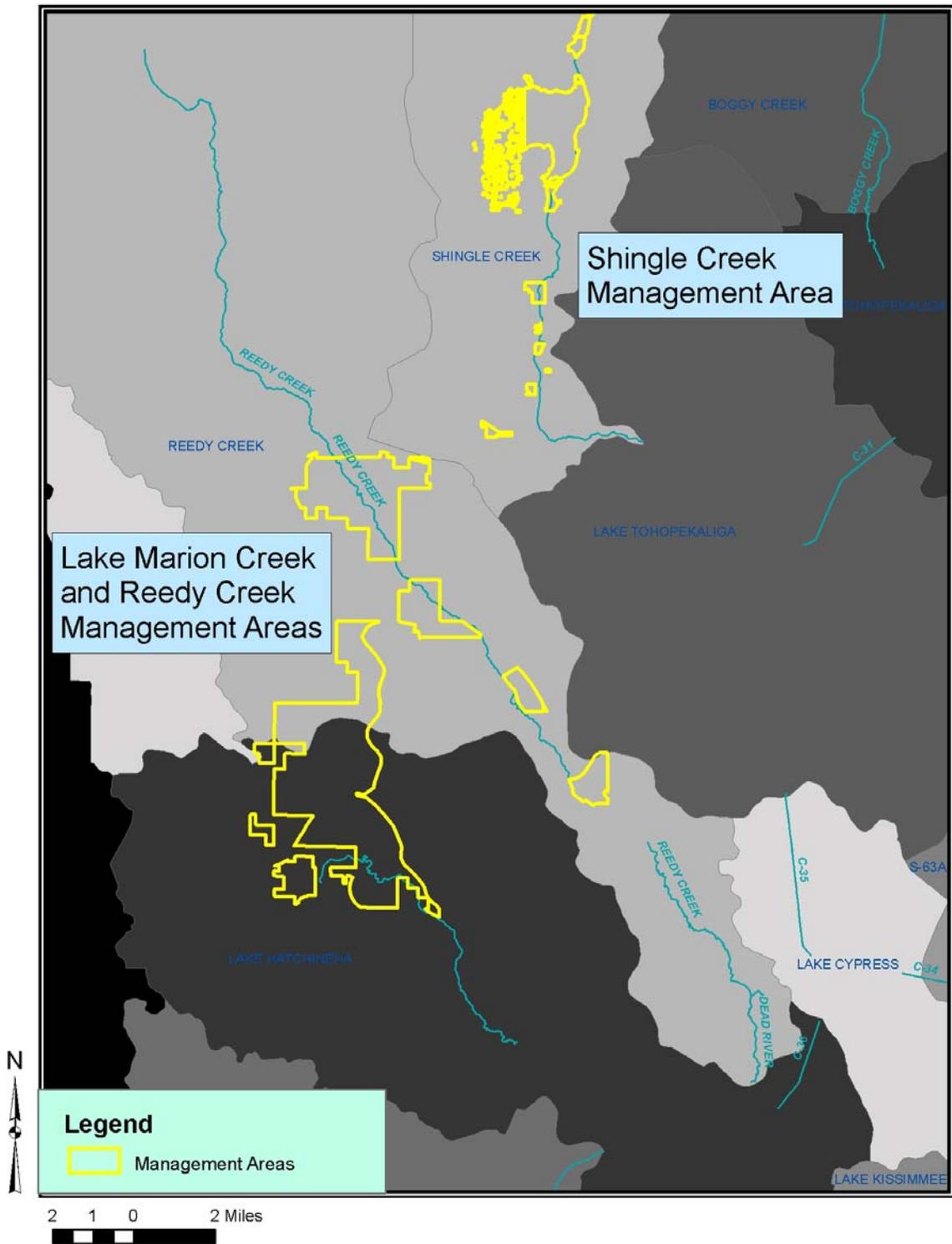
Table 1: Base Flow Measurements

LOCATION	DISCHARGE (cfs)
Horse Creek at Horse Creek Road	7.47
Lake Marion Creek at Lake Marion Creek Rd.	17.87
Snell Creek at County Road 580	15.60
TOTAL	40.94

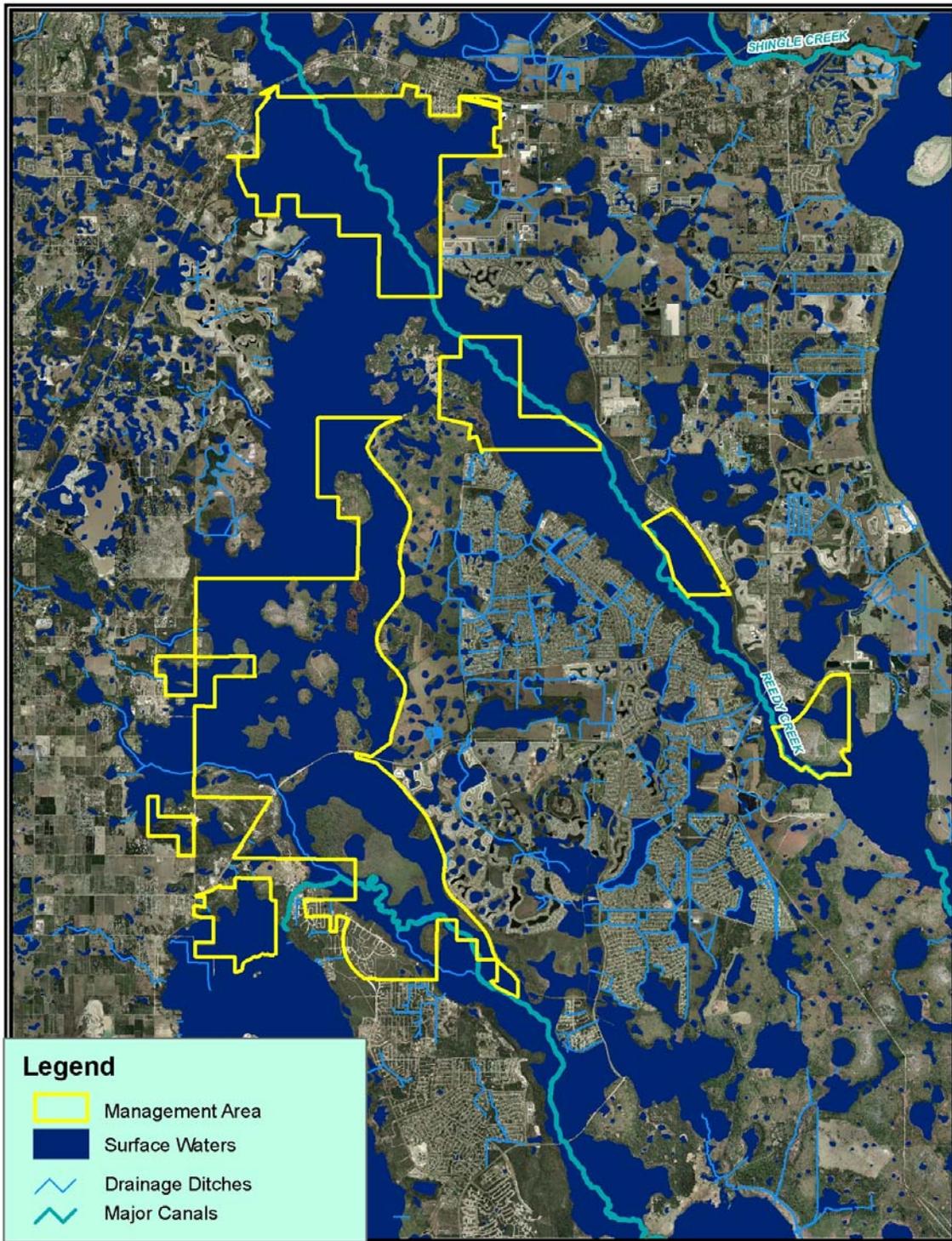
Map 8. The Regional Upper and Lower Kissimmee River Basins



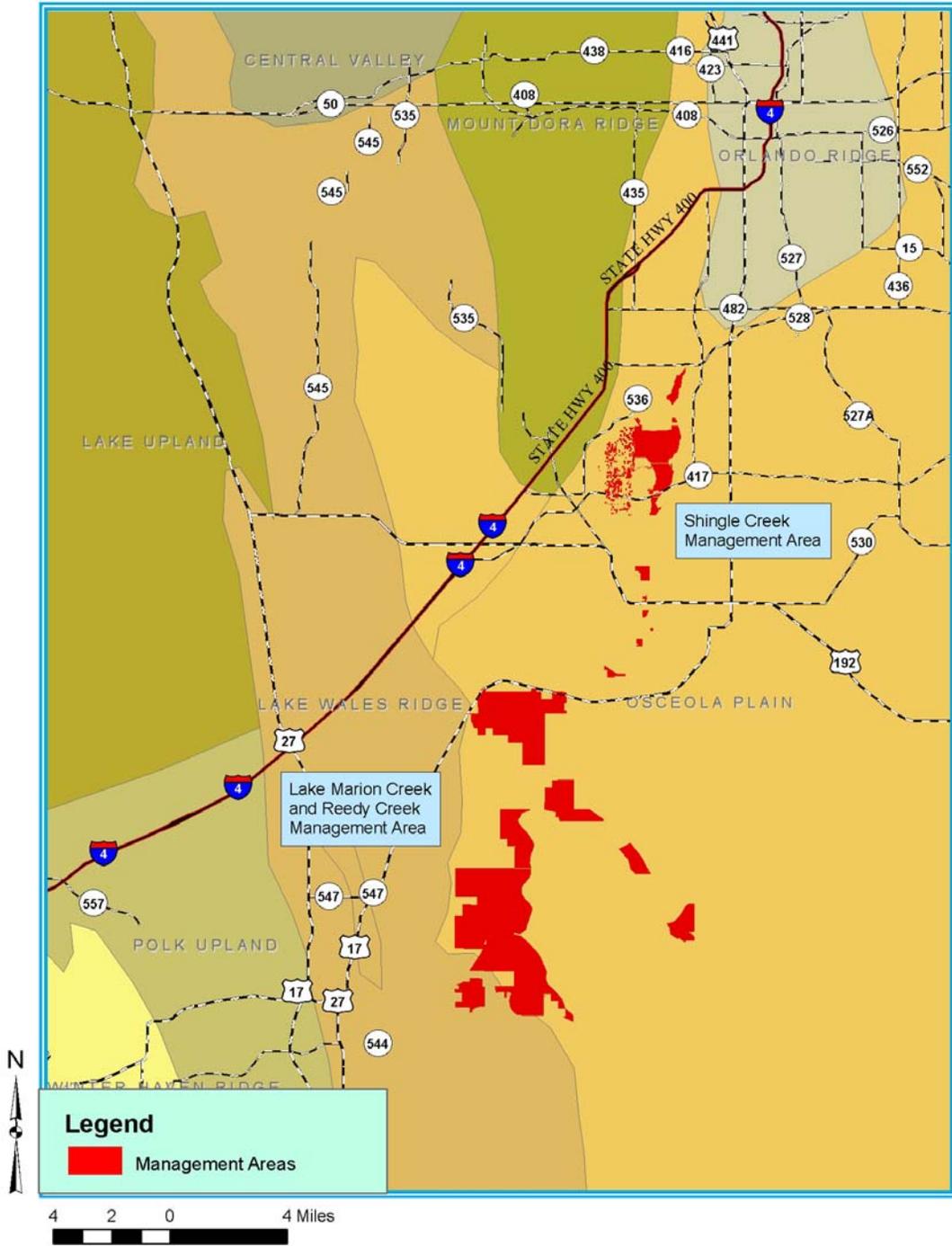
Map 9. Local Hydrologic Basins



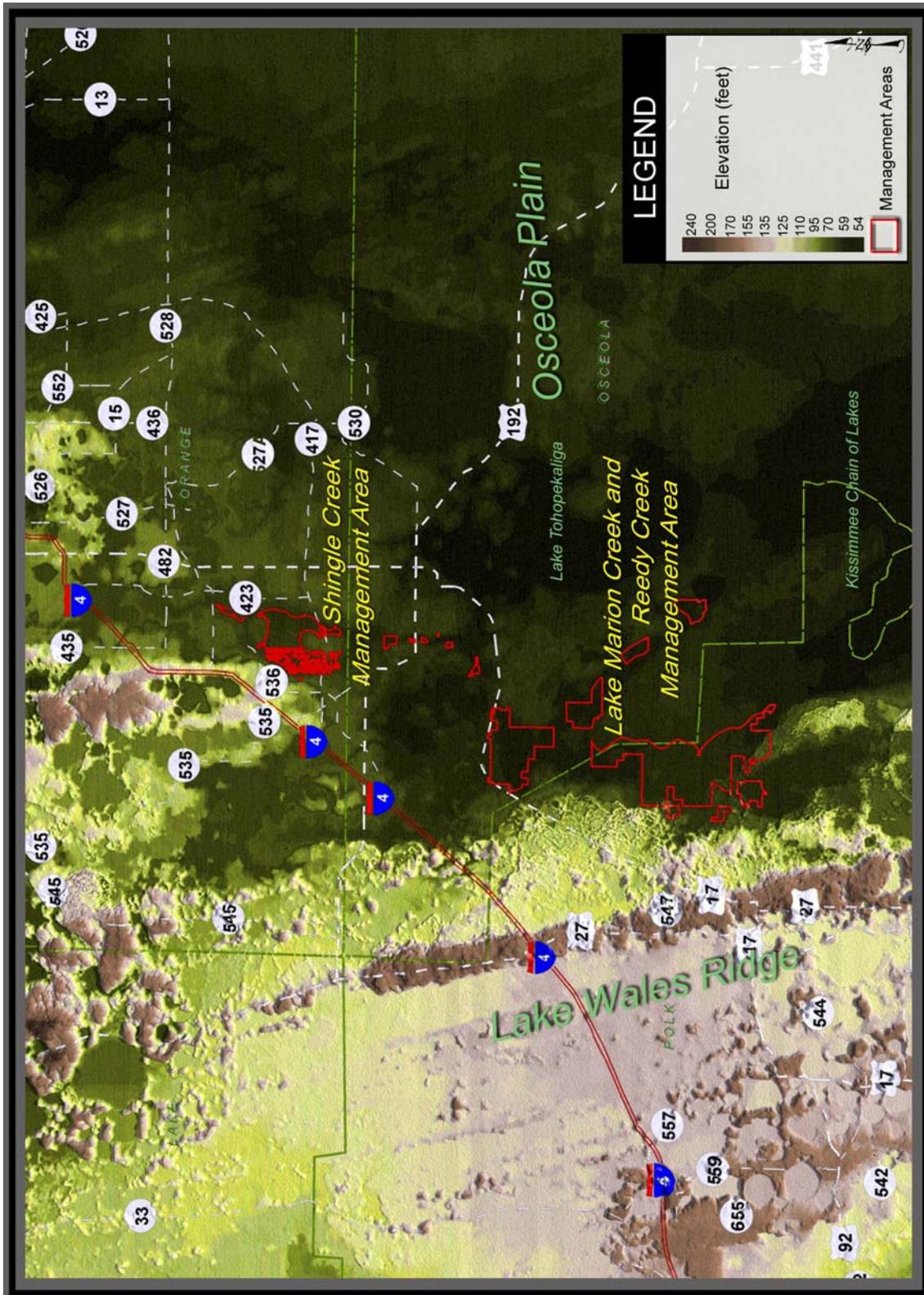
Map 10. Surface Water



Map 11a. Regional Major Geomorphic Features



Map 11b. Regional Topography



4.2 Soils

There are seven distinct soil categories within the Management Area as defined by the Natural Soil Landscape Positions soil classification system: flats soils, flatwood soils, knolls, central ridge and dunes, muck depression soils, sand depression soils, and water. This classification system groups South Florida soils into 12 categories based on hydrology and soil morphology that reflect the local relative topography, hydrology, and vegetation of the area. Classification descriptions are included as **Appendix C**.

Soil Contamination and Excavation Sites

Throughout the acquisition process, District Environmental Assessments have revealed no known areas of soil contamination (i.e. cattle dipping vats, chemical dumping) or excavation within the Management Area.

4.3 Natural Communities

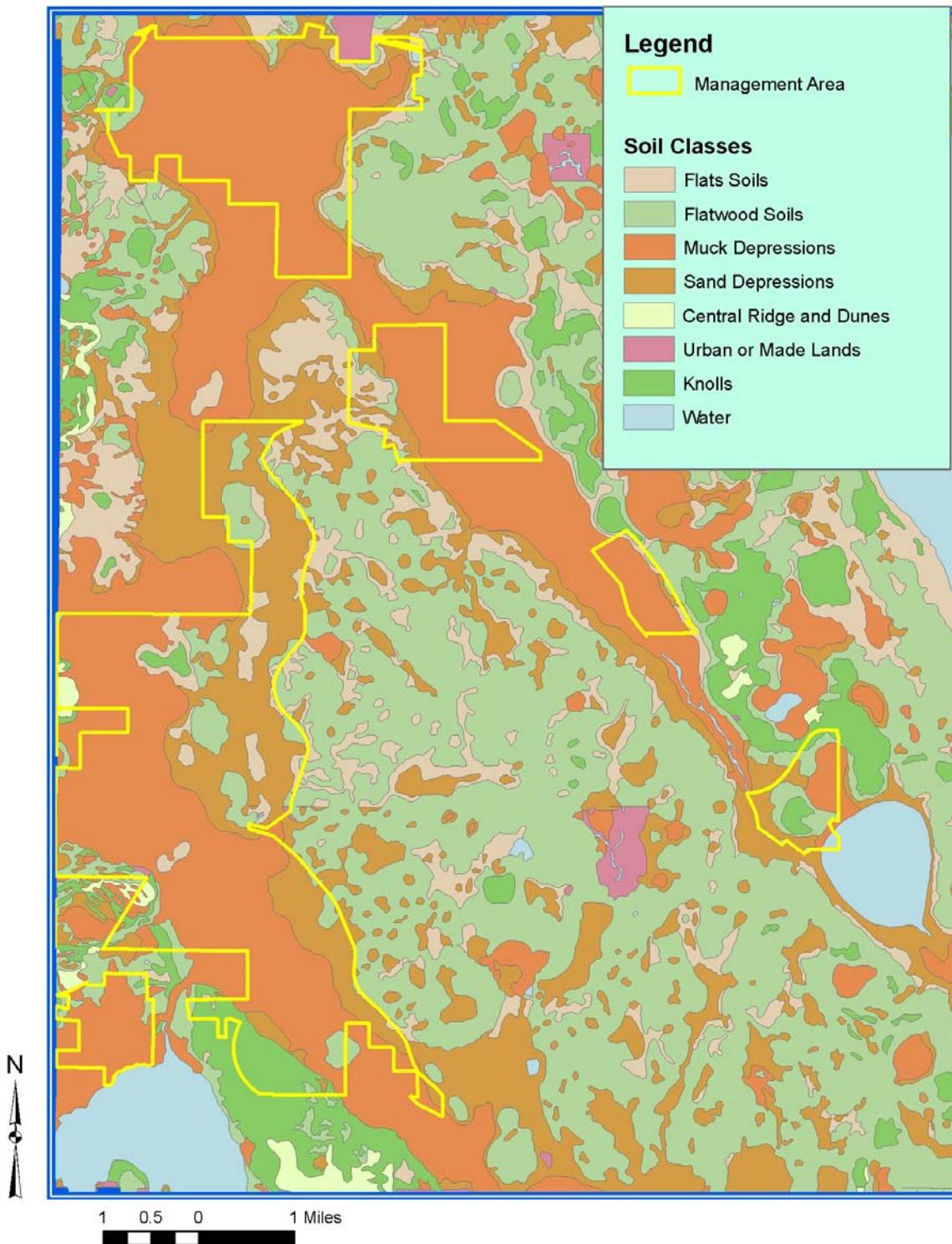
Fifteen natural community types, as classified by the Florida Natural Areas Inventory, are present in the Management Area. Descriptions are included in **Appendix D**. Habitat condition varies widely depending on current management activities and exotic plant infestation. Wetlands are identified for the Management Area in the National Wetlands Inventory Map produced by the U.S. Fish and Wildlife Service. The natural communities for each management unit are shown in **Map 13**. A summary of natural community types found in the Lake Marion Creek and Reedy Creek management units are shown in Table 2. Plant inventories were completed by District staff, contractors, Polk County, and the Audubon Society within the Management Area.

Table 2: Ecological Community Type Summary by Management Unit

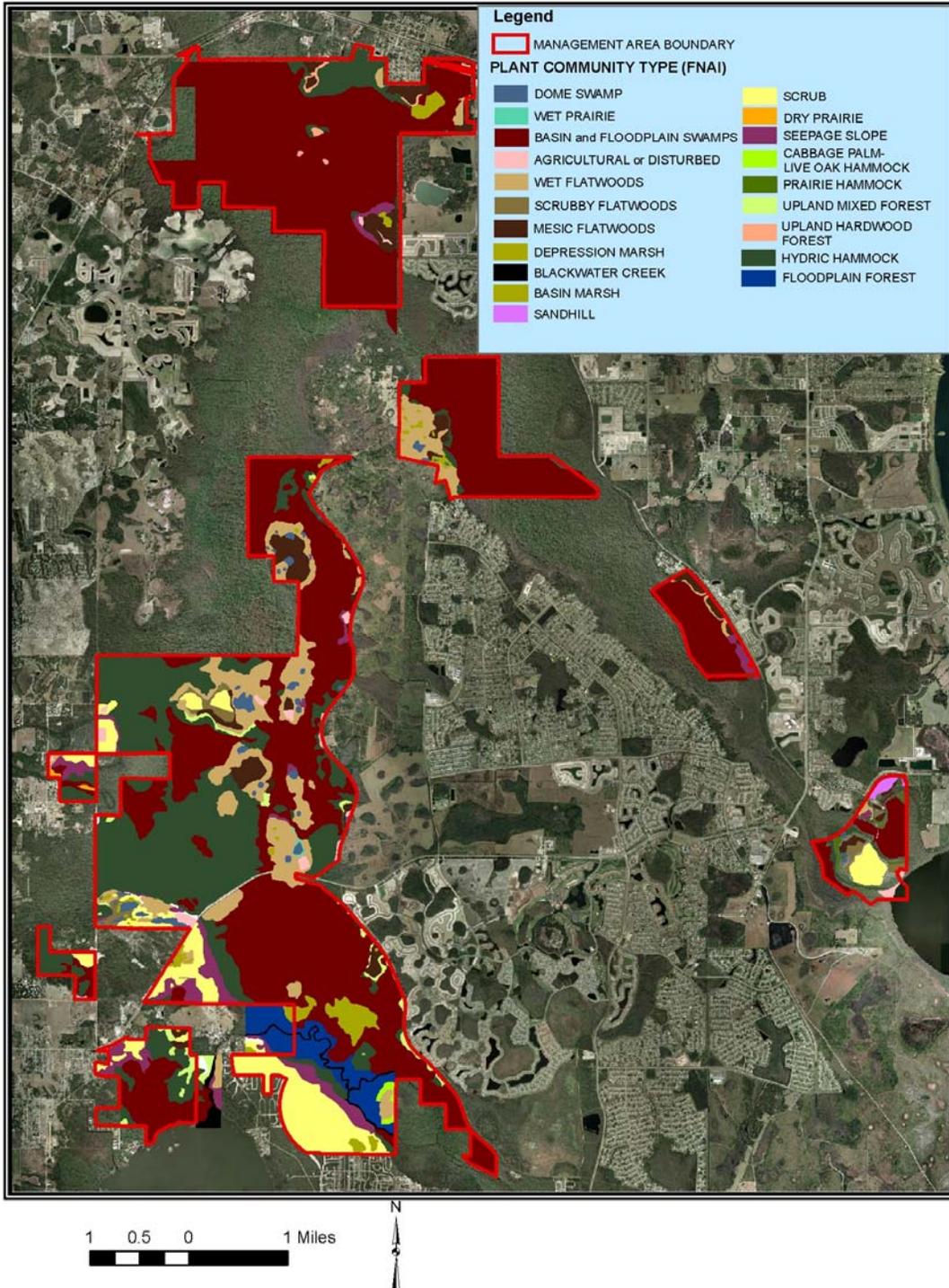
X = documented

FNAI Community Type	Lake Marion Creek WMA	Intercession City Unit	Poinciana Unit	Reedy Creek Unit	Lake Russell Unit
Basin Marsh	X				
Basin Swamp	X	X	X	X	X
Blackwater Stream	X				
Depression Marsh	X		X		
Dome Swamp	X	X	X		X
Floodplain Forest	X				
Hydric Hammock	X	X	X	X	X
Mesic Flatwoods	X	X	X	X	X
Prairie Hammock					X
Sandhill					X
Scrub	X				X
Scrubby Flatwood	X				X
Seepage Slope	X	X			X
Upland Mixed Forest	X	X			
Wet Flatwoods	X	X	X	X	X
Wet Prairie	X				
Xeric Hammock	X				

Map. 12. Soils



Map 13. Natural Communities: Florida Natural Areas Inventory classification



4.4 Wildlife

Inventories have documented 343 animal species within the Management Area. (**Appendix E**). Wildlife species observed utilizing the property include 215 bird, 46 mammal, 58 reptile, and 24 amphibian species. At least 35 species considered rare, endangered, threatened, or of special concern have been noted. Further documentation of mammals, amphibian, reptiles, and fishes are needed at Intercession City Unit, Poinciana Unit, and Reedy Creek Unit. At least 19 species considered rare, endangered, threatened, or of special concern have been noted.

4.5 Cultural Resources

Policy 140-25(3)(j) Archaeological and historic resources are protected by site identification and inter-agency coordination with the Florida Division of Historical Resources. Land Stewardship planning shall include an analysis of archaeological data accompanied by appropriate public education opportunities.

The District plans to promote research of the site to safeguard its integrity, primarily through prohibiting ground disturbing activities. Management activities planned for this area are exotic plant control, vegetation management, and prescribed burning. Staff from Florida Division of Historical Resources may revisit these sites to conduct additional investigations.

In 1997 the Florida Division of Historical Resources conducted a search of the Florida Master Site File for archaeological and historical sites known to exist in the Lake Marion Creek/Reedy Creek Management Area. Eleven such sites existed. In 2003 another site was located and placed on file. However, the Florida Division of Historical Resources personnel emphasized that because the Lake Marion Creek area has not been completely surveyed, it may contain unrecorded archaeological sites or historical structures. The listing of these archaeological sites does not indicate whether any of the sites are significant. Further research will consequently be required to determine if there are sensitive historical and/or cultural resources, which need protection within the Management Area.

In 2009, the District assembled a cross-departmental team to review the District's responsibilities towards cultural resources and to make recommendations to enhance existing policies and procedures. These enhanced procedures included:

- Improving training for District staff members.
- Improving communication with contractors working on public lands.
- Raising awareness about cultural resources with a public education campaign, including a press release, fliers posted on public land, use of social media such as Twitter and Web site information.
- Developing Standard Operating Procedures and workflows for unanticipated cultural resource finds on District land.

5. Natural Resource Management

Policy 140-23 The Land Stewardship Program mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands.

Resource management includes all applied programs wherein activities manipulate, modify, and control natural features within the Management Area. All lands that were acquired through the Save Our Rivers program are managed and maintained in an environmentally acceptable manner and, to the extent practicable, restored and protected in their natural state and condition. Management responsibilities are defined by statute, and directed by best management practices. Standard Operating Procedures have been developed for primary management activities. Goals and objectives for the Management Area clarify resource management guidelines necessary to fulfill the District's land stewardship responsibilities. Site specific objectives are developed to both provide the management activities that the site and its resources need, as well as to contribute to the cumulative programmatic success of the Land Stewardship Program, measured by its success indicators as reported annually in the South Florida Environmental Report (available online at sfwmd.gov and using the search tool for SFER).

Land Stewardship resource management activities include the the application of vegetation control activities to restore natural forest structure and composition, the continuation of an aggressive exotic plant control program, and the application of a prescribed burn program for fire dependent plant communities.

5.1 Restoration Projects

Policy 140-25(1) The basis for the Land Stewardship Program is the protection and management of natural hydrologic resources.

Policy 140-25(1)(c) Where feasible, an attempt shall be made to restore a more natural hydroperiod on tracts where the drainage patterns have been altered.

The District's Preliminary Environmental Assessment in 1991 determined that the floodplain of Lake Marion Creek was in a relatively natural state, requiring little, if any, immediate restoration measures. It identified limited restoration opportunities in areas such as the scrub communities, where logging and land clearing operations had removed much of the overstory (SFWMD 1992).

Past logging has removed the pine cover from most of the flatwoods on the property. Additional areas were found to be unnaturally dominated by slash pine as a result of long-term fire suppression. In order to restore longleaf pine to these systems, active reintroduction of longleaf pine would be essential. Areas should be selected where experimental seeding of longleaf pine could be attempted. If the seeding were to be effective, shrub competition would also need to be controlled, which may be difficult in

the long-unburned sites. Bridges and Reese (1996) thought it may be necessary to resort to direct planting of longleaf pine seedlings, and monitoring of their success, in order to obtain sufficient numbers of longleaf pine for self-perpetuation.

In particular, a high priority management prescription for the Snell Creek Management Unit scrub would be the planting of scattered longleaf pine. In 1996 this tree was found in densities lower than what would be expected for a natural area (Bridges and Reese 1996). Also, the mid-successional shrub and red maple swamps in the Huckleberry Islands-South Management Unit, east of Lake Marion Creek, would benefit from fire to restore areas to a herbaceous dominated basin marsh. This condition was present at the sites as recently as the 1950s, based on interpretation of historical aerial photographs (Bridges and Reese 1996).

5.1.1 Mitigation

The American Equities mitigation bank falls within the Lake Marion Creek Project Area boundary, on privately owned land, and totals 3,572 acres. Mitigation bankers acquire property which has inherent restoration potential. They are then responsible for creating and implementing restoration and management plans for the property. This privately owned and operated Bank submitted a permit request to the South Florida Water Management District in January 1997 and was approved by the Governing Board in February 1997 (File No. 492924779).

5.1.2 Monitoring

Policy 140-25(3)(f)(2) Monitoring shall be conducted to identify landscape changes resulting from management activities.

Tracking environmental response to management and restoration activities provides valuable information on progress toward restoration objectives. Information obtained by monitoring specific sites assists land managers in making sound ecological choices for each unique parcel. The FL. Fish & Wildlife Conservation Commission monitors wildlife within the Lake Marion Creek Wildlife Management Area.

Monitoring has also focused on documenting vegetative changes following the Acquisition of the property by the District and the implementation of a regular prescribed fire program. Baseline inventories have been established, and two permanent photo monitoring stations were installed that will enable panoramic photos to be taken to document changes over time. The baseline vegetation study was completed by a field botanist from the Fairchild Tropical Gardens in Miami-dade County in 1995-1996. The District re-hired the same botanist 10 years later in 2005 to re-survey the site. Both reports are on file at the District headquarters at West Palm Beach and are also available in an electronic format.

5.2 Vegetation Management

Policy 140-25(2)(d) Where practicable, an attempt shall be made to restore and maintain desirable vegetation to promote habitat diversity in areas where invasive exotic vegetation, grazing practices, or improved land uses have substantially altered the historic landscape.

Policy 140-25(3)(l) Mechanical equipment may be used in conjunction with prescribed burning and other management tools to control vegetation and restore habitat structure.

Vegetation management is a program component where the composition and/or structure of a vegetative community is physically altered to meet a management objective. The techniques used in vegetation management include mowing, disking, shredding, roller-chopping, timber thinning, and planting. These techniques are applied to one or more management objectives that may include:

- Restoring a degraded vegetative community
- Improving an area's suitability as wildlife habitat
- Exotic species control or weed management
- Fuel management in relation to prescribed burning or minimizing wildfires
- Clearing for maintenance or project management purposes

Vegetation control and maintenance is completed by District staff or through contracts. The Management Area contains a few areas that may benefit from mechanical vegetation management, particularly in the overgrown portions of the historic pine islands in the Huckleberry Island Unit.

5.2.1 Exotic/Invasive Plants

Policy 140-25(2)(c) Management practices will strive to identify existing infestations and implement appropriate control or eradication measures.

Policy 140-25(3)(b) Exotic plant control in all management areas shall strive to attain a level of success where periodic maintenance eliminates the infestation or reduces the coverage of exotic plants.

South Florida's subtropical climate provides an excellent growth environment for the rapid spread of exotic plants that can cause extensive alterations to natural ecosystems. Environmental changes caused by extensive hydroperiod alterations have been an important factor in exotic plant invasion. Exotic plant invasion can result in partial or total displacement of native plants, loss of wildlife habitat, and the degradation of public use areas.

Land Stewardship targets Category I and II non-native plant species as identified in the Florida Exotic Pest Plant Council's biennially updated list of *Florida's Most Invasive Species* (<http://www.fleppc.org/>). Category I species include non-native plants that invade and disrupt Florida native plant communities. Category II plants have the potential to invade and disrupt natural successional processes. Both Category I and II exotics are considered invasive and a threat to the function and ecological stability of Florida's natural communities.

Invasive and exotic plant control measures include a combination of herbicide application, biological control, prescribed fire, roller chopping, mowing, cattle grazing and physical removal. Selection of control measures is dependent upon species type, environmental factors, and natural communities impacted. Private contractors conduct exotic plant control activities in cooperation with the District's Vegetation Management Division.

Exotic plant control is conducted primarily by a contracted crew of applicators, hired by the Vegetation Management Division. District field technicians also provide supplemental support especially on small or sporadically distributed infestations. Generally, treatments are scheduled so that each unit is covered bi-annually; however schedules are adjusted based on current conditions. The District treats and surveys the infested areas several times a year to control established infestations and locate new ones. Areas of treatment are scheduled based on groundwater conditions, time since last treatment, virulence of infestation, public use, in accordance with other management operations. All treatments follow herbicide best management practices and use the best available science. Treatment dates, locations, and herbicide are noted and recorded in a GIS database. Additional procedures are being developed to provide more specific plant locations and herbicide use data so that treatment efficacy may be better estimated.

Plant inventories have documented 14 exotic species within the Management Area with those denoted with an "*" not on the Exotic Pest Plant Council list (see **Appendix E** for a complete plant list):

- Alligator Weed (*Alternanthera philoxeroides*)
- Sour Orange (*Citrus aurantium*)*
- Water Hyacinth (*Eichhornia crassipes*)
- Hydrilla (*Hydrilla verticillata*)
- Cogon Grass (*Imperata brasiliensis*)
- Pineland Elder (*Iva microcephala*)*
- Primrose Willow (*Ludwigia peruviana*)
- Old World Climbing Fern (*Lygodium microphyllum*)
- Japanese Climbing Fern (*Lygodium japonicum*)
- Chinaberry (*Melia azedarach*)
- Torpedo Grass (*Panicum repens*)
- Sour Paspalum (*Paspalum conjugatum*)*

- Bahia Grass (*Paspalum notatum*)*
- Vasey Grass (*Paspalum urvillei*)*
- Watter Lettuce (*Pistia stratiotes*)
- Indian Cupscale Grass (*Sacciolepis indica*)*
- Tropical Soda Apple (*Solanum viarum*)
- Giant Smutgrass (*Sporobolus indicus* var. *pyramidalis*)
- Small Smutgrass (*Sporobolus indicus*)
- Chinese tallow (*Triadica sebifera*)
- Caesar Weed (*Urena lobata*)
- Paragrass (*Urochloa mutica*)

Exotic plant management within the Management Area consists of follow up treatments to maintain minimum population levels or further reduce populations of exotic and nuisance native plants. The follow-up treatments may be conducted on an annual basis by District contractors, on an as-needed basis by grazing lessees, or directly by District staff.

5.2.2 Rare, Threatened and Endangered Species

Policy 140-25(2)(b) Particular emphasis shall be placed on the identification, protection and management of rare, threatened and endangered species.

Listed species are those plants and animals considered rare within a specific geographic area by the U.S. Fish and Wildlife Service, the Florida Fish and Wildlife Conservation Commission, Florida Natural Areas Inventory, or the Florida Department of Agriculture and Consumer Services. The plant list of the Management Area (**Appendix E**) contains several listed species (reproduced in **Table 3**).

Table 3: Listed Floral Species

(LE) - Listed Endangered (LT) - Listed Threatened

Common Name	Scientific Name	State Listing
Chapman's sedge	<i>Carex chapmannii</i>	LE
Scrub mint	<i>Dicerandra frutescens</i>	LE
Scrub buckwheat	<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	LE
Star ainse	<i>Illicium parviflorum</i>	LE
Pine pinweed	<i>Lechea divaricata</i>	LE
Celestial lily	<i>Nemastylis floridana</i>	LE
Britton's beargrass	<i>Nolina brittoniana</i>	LT
Paper-like nailwort	<i>Paronychia chartacea</i>	LE
Plume polypody	<i>Pecluma plumula</i>	LE
Swamp plume polypody	<i>Pecluma ptilodon</i> var. <i>caespitosa</i>	LE
Lewton's polygala	<i>Polygala lewtonii</i>	LE
Scrub plum	<i>Prunus geniculata</i>	LE

Giant orchid	<i>Pteroglossaspis ecristata</i>	LT
Florida willow	<i>Salix floridana</i>	LE

Land Stewardship establishes appropriate fire and hydrologic regimes, and controls invasive exotics in natural communities with the intent of perpetuating listed plant species. District Public Use Rules aid in the protection of native habitat and specifically prohibit destroying, defacing, or removing any natural feature or native plant on District lands. In this manner, listed plants are given lawful protection and environmental conditions suitable for their growth and reproduction.

Several listed bromeliad species occurring in the Management Area may be threatened by the exotic Mexican weevil (*Metamasius callizona*) that have caused destruction of native bromeliads in other south Florida locations. Two species of once abundant bromeliads, *Tillandsia utriculata* and *Tillandsia fasciculata*, have been placed on the state’s list of endangered plant species as a direct result of this weevil. Land Stewardship staff will conduct periodic surveillance of areas of potential infestations to assess management needs.

5.2.3 Forest Resources

Policy 140-25(3)(h) Sustainable use of forest resources shall be conducted where these activities adhere to a series of environmental criteria (see 1999 Forest Management Plan) that meet Land Stewardship Program goals. Timber contractors will be required to meet silvicultural Best Management Practices (BMP) developed for Florida forests.

Policy 140-25(5)(b)(3) Timber sales will be conducted to improve forest health or to support specific forest management goals.

District policy designates its properties as multiple-use resources, which include timber harvesting. However, such activity must be compatible with Land Stewardship goals and objectives and meet strict environmental criteria:

- The area planned for silvicultural rotation is currently in an “improved” or disturbed state (i.e. bahia pasture, existing pine plantation)
- The site to be planted is not scheduled for future hydrologic restoration, or the site to be harvested is scheduled for hydrologic restoration and existing timber will be lost as a result of flooding
- The area does not contain any valuable resources (e.g. endangered species) that may be harmed by changes in land use
- Forest operations would not require major road construction or improvement for accessing and processing timber, particularly within or across wetlands or other sensitive plant communities
- The area to be managed currently requires maintenance (i.e., burning, mowing)

- District costs would be reduced as a result of inclusion in the forest management plan
- The area contains timber that requires salvage following fire and/or insect or disease damage, and could be subject to a sanitation harvest with minimal environmental impact
- The area provides special needs for endangered species (e.g., red-cockaded woodpecker) management that requires timber stand improvement
- Harvest or planting will not create an aesthetically unpleasant scene or an impediment to public use
- Timber harvests will return forests to a more natural structure and improve forest health

There are currently no sites within the Management Area that meet District criteria for timber harvest, although it is a goal for the Land Stewardship Program to re-establish the longleaf pine forest to its historic extent on the site, potentially offering future harvest opportunities.

5.2.4 Range Resources

Policy 140-25(3)i Range management and grazing will be considered on improved or native ranges when the introduction of cattle will not conflict with other natural resource management and public use goals.

The District neither plans nor anticipates any grazing or agricultural activities for the Management Area.

5.3 Fire

Policy 140-25(3)(c) Prescribed fire will be a primary management tool on District lands and will be applied within fire-maintained communities at appropriate intervals.

The majority of natural communities on District lands rely on frequent fire to maintain their vegetative characteristics and biodiversity. Wildfires no longer occur with historical frequency or extent, and this has altered natural community structure and function. Prescribed fire attempts to mimic the benefits of natural wildfires that historically reduced fuel loads, recycled soil nutrients, and maintained natural communities by inhibiting hardwood encroachment and stimulating fire-adapted plant growth and reproduction. The Land Stewardship Program recognizes the benefits of fire and has integrated prescribed fire planning and application into its land management strategy.

5.3.1 Fire History

The District began its prescribed fire planning for the Management Area in 1999, following acquisition of enough parcels to make logistically feasible burn units. Fire data (prescribed and wild) is maintained in GIS to produce historical burn maps of the property.

5.3.2 Prescribed Fire Planning

A fire management plan is developed for each Management Area. Each plan includes a description of location and natural community types, fire history, fire management objectives and constraints, and a burn prescription. The Land Stewardship Program bases all fire management plans on ecological research and professional experience. Fire frequency schedules for each natural community consider recommendations provided in *The Natural Communities of Florida* (Florida Natural Areas Inventory, 1990). To mimic historic fire conditions, Land Stewardship emphasizes growing or lightning season burns (March-June) where practical. Natural firebreaks are utilized where possible to promote historic fire patterns, avoid soil disturbance, and reduce hydrologic flow disruption created by fire lines. Listed species life requirements are elements of prescribed fire planning. Application of fire, with appropriately timed herbicide treatments, are used as a tool for control of invasive and nuisance plants.

Burns are executed using proven methods as defined by the Prescribed Burning Act of 1990, Section 590.026, Florida Statutes. This legislation and associated administrative rules outline accepted forestry burn practices and are administered through the Division of Forestry. Land Stewardship has a three person prescribed fire crew in the Upper Lakes Land Management Region and utilizes other cooperating agency staff—especially the Division of Forestry and the Florida Fish and Wildlife Conservation Commission to conduct burns. All Land Stewardship staff on the fire crew have completed the state certified burn course to ensure safety and proper technique.

Prescribed fire is applied within the Management Area at appropriate fire intervals for each natural community. The District concentrates on applying fire to each area of the property, in order to reduce accumulated fuel loads, improve habitat, and provide a safer basis for future burns of increased frequency and lower intensity. Planning will emphasize yearly burn acreage to attain a 3 year rotation for flatwoods. Typically burns are conducted by ground crews.

Lake Marion Creek Management Unit

Fuel reduction and ecological restoration are primary objectives on this unit. Fire exclusion appeared to be the cause of heavy fuel buildup in many of the plant communities. Most of the upland communities are fire adapted. Prescribed fire reduces liability risks, fire suppression costs, and damage to fire sensitive areas. Prescribed burning will also benefit the plants and animals living in these fire dependent communities.

Prescribed fire can also be used to restore and maintain the natural condition of the plant communities on this unit. Each plant community has its unique natural fire regime, restoration goal, and management needs. Much of the upland areas of the property are scrub and pine flatwoods and require fire. The gopher tortoise is one species that would benefit from prescribed fire. Many rare animals are commensal with gopher tortoises and their burrows (i.e., sand skink (*Neoseps reynoldsi*) and gopher frog (*Rana capito*)).

Reedy Creek Management Units

Fuel reduction and ecological burning (mimicking natural fire cycles) are the primary objectives on this unit. The upland areas of this unit contains mostly fire adapted plant communities that burn readily and build up heavy fuels, causing dangerous wildfires. Regular fuel reduction through prescribed burning reduces liability risks, fire suppression costs, and damage to fire sensitive areas. Prescribed burning will also benefit the plants and animals living in these fire dependent communities. Prescribed burning has been conducted by the District since 1999 (Table 4). Wildfire suppression actions will attempt to avoid hydrologic changes and minimize disturbance of natural areas. Existing access roads will serve as control lines during prescribed fires and wildfires.

Lake Russell Management Unit

Fuel reduction and ecological restoration are primary objectives on Lake Russell. Fire exclusion appeared to be the cause of heavy fuel buildup in many of the plant communities. Most of the upland communities are fire adapted. Regular fuel reduction through prescribed burning is important due to the close proximity of this property to residential developments and a major roadway. Prescribed fire reduces liability risks, fire suppression costs, and damage to fire sensitive areas. Prescribed burning will also benefit the plants and animals living in these fire dependent communities.

Prescribed fire can also be used to restore and maintain the natural condition of the plant communities on Lake Russell. Each plant community has its unique natural fire regime, restoration goal, and management needs. Much of the interior of the property is scrub and pine flatwoods, and requires fire.

Prescribed Fire and Carbon Sequestration

Carbon is stored on District lands in vegetation and organic soils. Each year, the amount of carbon increases as young forests grow and marshes steadily fix carbon into peat. This is also known as carbon sequestration. It is important to manage the District's land resources in a manner to maximize the amount of carbon that is sequestered, while minimizing carbon dioxide and other greenhouse gas emissions. Prescribed fire is a tool that if used under the right conditions and with the right frequency can increase the rate at which a fire-dependent natural community can grow and store carbon. A typical prescribed fire more than replaces the greenhouse gases released by the fire in the understory. There is a subsequent spike in primary

productivity caused by a release of nutrients and exposure of more surface area to sunlight, as well as a post-burn swelling of both above and below ground carbon stores.

Some prescribed fire guidelines for maximizing carbon storage that the District follows include:

- A return interval of 3 to 5 years
- Late winter burns are best for storing carbon
- A proper mop-up phase of the prescribed fire to extinguish smoldering stumps is important to reduce unnecessary carbon and nitrous oxide releases, flaming combustion releases much less carbon than smoldering combustion
- Avoid muck fires and conditions that lead to muck fires as they release large quantities of carbon and nitrous oxide
- Keep fuel density low to avoid the possibility of massive carbon releases in wildfire

5.3.3 Wildfire Suppression

Policy 140-25(3)(d) The Division of Forestry will be notified of all wildfires on District lands. Land Stewardship will provide initial suppression when commensurate personnel and equipment are available.

Wildfires ignited by lightning are a common occurrence throughout Florida, and the Management Area receives numerous lightning strikes as indicated by past wildfires. It is District policy, and state law, that the Division of Forestry is notified when a wildfire occurs on Land Stewardship-managed properties. The Land Stewardship staff assigned to the area will respond to and, if appropriate, begin suppression of area wildfires when detected. The Division of Forestry will be called immediately and a fire assessment is made.

If District manpower is available and other conditions are favorable, a permit will be requested from the Division of Forestry to incorporate the wildfire into a controlled burn. Although infrequent, allowing these wildfires to burn will help achieve burn objectives and will prevent counterproductive and unnecessary suppression efforts. It is recognized that the best wildfire mitigation for the Management Area is to maintain the area with frequent prescribed fires promoting a healthy open forest of light fire fuel loads.

5.4 Wildlife Management

A primary objective in the stewardship of the Management Area is to maintain healthy fish and wildlife populations. Wildlife management in the Management Area is directed toward production of native species diversity consistent with the biological community types present. Land Stewardship accomplishes this in several ways:

- Performing land management activities that maintain and/or improve native wildlife habitat

- Conducting specific management beneficial to protected species
- Conducting wildlife inventories through the Fish and Wildlife Conservation Commission where management operations may negatively impact listed species
- Following management guidelines for listed species protection as determined by the *Multi-species Recovery Plan for the Threatened and Endangered Species of South Florida, Volume 1*, (U.S. Fish and Wildlife Service. 1998)
- Reducing non-native wildlife species populations where appropriate
- Maintaining a master file of confirmed and potential wildlife species
- Cooperating with the and Wildlife Conservation Commission on wildlife management issues, including wildlife inventories and evaluating management actions.

Management occurs through the actions mentioned above, primarily through regular prescribed fire and the control of exotic species. Additionally, the District conducts various plant and animal inventories through volunteers, staff, and private contractors to evaluate the health and dynamics of Management Area's natural communities.

5.4.1 Game Management

Policy 140-25(4)(b)(4) Florida Fish and Wildlife Conservation Commission regulations shall govern hunting in areas opened for such use.

The Management Area supports a number of game species. The three most common are white-tailed deer, feral hog, and wild turkey. Small game includes quail, dove, rabbit, snipe, and gray squirrel. The Lake Marion Creek portion of the Management Area has been established as a Wildlife Management Area by the Florida Fish and Wildlife Conservation Commission. The Commission administers several hunting seasons in the fall, small game and hog hunts in late winter, and spring turkey hunts. Management activities directed towards game management include establishing bag limits for game species, regulating hunting pressure, mowing openings for wildlife, burning, chopping and shredding vegetation, and occasionally planting food plots. The hunting program is detailed in **Appendix F**.

5.4.2 Exotic/Invasive Fauna

Invasive exotic animal species are those non-native species that are harmful to native wildlife, that negatively impact native vegetation or seriously interfere with management objectives. The Land Stewardship's goal for wildlife pest management is to reduce populations to attain an acceptable level of impact to natural plant and animal communities. The District's land manager uses personal knowledge of the problem and consultation with the Commission to define the acceptable level of impact. When population control measures are warranted, land managers consult with the Commission to determine an appropriate control technique that is humane and cognizant of public safety. The effects of pest population control efforts are monitored by periodic site evaluations.

The feral hog is a pest species within the Management Area. Disturbance caused by this species negatively impacts natural communities and interferes with land management operations. Although valued by some members of the public as a game animal, wild hogs are an exotic species and the hogs’ high fecundity, adaptability, rooting behavior, omnivorous diet, and ability to quickly colonize areas raises serious environmental concerns. Their disruption of soil and vegetation alters natural communities and can be especially damaging in sensitive habitats that are slow to recover. Hog disturbance has occurred within most of the Management Area including wetland communities. Land management objectives are affected when rooting disturbance disrupts prescribed burns by preventing the spread of fire. Areas of disturbed soil are also more susceptible to exotic plant invasion. Soil rooting can create perilous conditions on hiking trails, and hog foraging can have a detrimental impact on small animal populations, ground-nesting birds, and infrastructure.

Control methods are determined in cooperation with the Fish and Wildlife Conservation Commission, when necessary, and in conjunction with a District trapping contract.

5.4.3 Rare, Threatened and Endangered Species

Policy 140-25(2)(b) Particular emphasis shall be placed on the identification, protection and management of rare, threatened and endangered species.

Wildlife inventories have documented federally, state, and Florida Natural Areas Inventory-listed species (endangered, threatened, and species of special concern) occurring within the Management Area (**Appendix E**). The distribution of listed species is summarized in Table 4). Impacts to these species from planned land management and recreational activities are of special concern. Activities that might jeopardize the well being of these species may be altered or cancelled. District land management activities including prescribed burning, hydrologic restoration, exotic vegetation eradication, understory control, and selective forest thinning improve natural environmental characteristics that benefit listed species as well as a variety of other indigenous wildlife.

Table 4: Number of Documented Listed Species for Management Area

Species	Endangered		Threatened		Species Of Special Concern	FNAI Listed
	Fed	State	Fed	State		
Birds	5	3	3	6	10	19
Mammals	1	2		2	3	5
Amphibians					1	1
Reptiles		1	4	4	2	7

Management emphasis concerning rare and/or listed wildlife species within the Lake Marion Creek Wildlife Management Area has been centered on scrub jays, gopher tortoise, Florida mouse, and sand skinks.

Florida Scrub-Jay

A Florida Scrub-Jay survey was completed for the Torelli South unit in 2003 by Glatting, Jackson, Kercher, Anglin, Rinehart Incorporated for the District and the report submitted in February 2004. The report estimated a total of 25 scrub-jay territories and a total count of 73 birds.

Management Objective

- Protect nesting and foraging Florida scrub-jays and habitat

Management Action

- Implement management practices that are beneficial to scrub-jays
- Propose management practices that are beneficial to scrub-jays
- Avoid implementing management practices that adversely affect scrub-jays
- Propose management strategies that avoid adversely affecting scrub-jays.

Florida Mouse

A small mammal trapping survey was conducted by Quest Ecology for the Florida Fish & Wildlife Conservation Commission in 2005 from mid-March to mid-May to determine the presence of Florida mouse at five scrub sites at Lake Marion Creek Wildlife Management Area. A total of 200 traps were set for the five sites. There were eighteen captures during the trapping period, sixteen were Florida mouse, two cotton mice, and four Florida mouse recaptures. The traps were placed at or near the entrance to gopher tortoise burrows.

Management Objective

- Implement management practices that are beneficial to Florida mouse
- Propose management practices that are beneficial to Florida mouse
- Avoid implementing management practices that adversely affect Florida mouse
- Propose management strategies that avoid adversely affecting Florida mouse

Management Action

- Implement management practices that are beneficial to Florida mouse
- Propose management practices that are beneficial to Florida mouse
- Avoid implementing management practices that adversely affect Florida mouse
- Propose management strategies that avoid adversely affecting Florida mouse

Florida Sand Skink

The District contracted with Glatting Jackson Kercher Anglin Lopez Rinehart, Inc. to perform a sand skink survey on the Torelli South unit in the spring of 2004 with the report submitted to the District in July 2004. A total of 607 coverboards were placed for the presence of sand skinks. Sand skink swim trails were found under a total of 107 coverboards. Sand skink activity appeared to be primarily concentrated on the edges of field roads that have large amounts of open sand and low scattered vegetation that provides suitable habitat. Evidence of sand skink presence was noted at the Horse Creek scrub site during the Small Mammal Trapping Survey conducted in 2003.

Management Objective

- Implement management practices that are beneficial to Florida sand skink
- Propose management practices that are beneficial to Florida sand skink
- Avoid implementing management practices that adversely affect Florida sand skink
- Propose management strategies that avoid adversely affecting Florida sand skink

Management Action

- Implement management practices that are beneficial to Florida sand skink
- Propose management practices that are beneficial to Florida sand skink
- Avoid implementing management practices that adversely affect Florida sand skink
- Propose management strategies that avoid adversely affecting Florida sand skink

Gopher Tortoise

A small mammal trapping survey was conducted by Quest Ecology for the Fl. Florida Fish & Wildlife Conservation Commission in 2005 from mid-March to mid-May to determine the presence of Florida mouse at five scrub sites at the Lake Marion Creek Wildlife Management Area, and to locate, measure, and assess gopher tortoise burrow activity. The study did not study the population or habitat of the gopher tortoise only the location of the burrows and whether the burrows are active, inactive, or abandoned. In the five scrub sites where the survey was conducted, one hundred burrows were located. Of the one hundred burrows; thirty-seven were active, thirty-two were inactive, and thirty-one were abandoned. Burrows are dug just wide enough so the tortoise can turn around. The average width of the burrows was 25.7 cm.

Management Objective

- Implement management practices that are beneficial to the gopher tortoise
- Propose management practices that are beneficial to the gopher tortoise
- Avoid implementing management practices that adversely affect the gopher tortoise
- Propose management strategies that avoid adversely affecting the gopher tortoise
- Conduct a population survey of the gopher tortoise for the Management Area

Management Action

- Implement management practices that are beneficial to the gopher tortoise
- Propose management practices that are beneficial to the gopher tortoise
- Avoid implementing management practices that adversely affect the gopher tortoise
- Propose management strategies that avoid adversely affecting the gopher tortoise

Bald Eagle

An indepth eagle survey of the SOR Upper Lakes Management Area was completed in January 2002 (7.4.1).

Management Objective

- Protect nesting, roosting, and foraging bald eagles located within the Management Area.

Management Actions

- Implement management practices that are beneficial for bald eagles.
- Propose management practices that are beneficial for bald eagles.
- Avoid implementing management practices that adversely affect bald eagles.
- Propose management strategies that avoid adversely affecting bald eagles.
- Coordinate and/or contract the identification of bald eagle roosting and feeding sites and seasonal usage patterns within all management units.

6. Public Use

Policy 140-23 The Land Stewardship Program mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands.

Section 373.1391(1)(a), Florida Statutes states that wherever practical, lands acquired by the Land Stewardship Program shall be open to the general public for recreational uses. The District encourages public use of management areas for appropriate natural resource-based activities. All District lands are available for public use, except in rare instances where there is no legal public access or where lease restrictions or construction activities prohibit public entry.

The determination of compatible public uses will be based on the following criteria:

- Consistency with the reason the lands were acquired
- Restrictions and/or prohibitions imposed by easements, leases, reservations, adjacent land ownership, and other conditions of the purchase agreement
- Infrastructure and support facility requirements, such as fences, gates, signage, entry design, stabilized off-road parking, trails, campsites, maintenance, and other operational and budgetary impacts
- Opportunities for persons with disabilities

- Limitations on use resulting from endangered species, other sensitive natural resources, archeological resources, or land management practices
- Public health, safety and welfare
- Environmental education program opportunities

Public use activities that are appropriate for the Management Area include, but are not limited to, fishing, hunting, camping, hiking, canoeing, birding, frogging, environmental education, and nature appreciation. Table 5 summarizes current recreational opportunities in the Management Area. User information concerning recreational activities is located at the District’s regional service centers and West Palm Beach offices, and at each entrance to the Management Area. Information may also be obtained at: www.sfwmd.gov and selecting Recreation.

The District is exploring the creation of a canoe launch on Lake Marion Creek. While canoeing is allowed on the creek, there is no canoe launch or take-out platform along the Management Area. Proper facilities would enhance creek access and provide a better opportunity to enjoy the creek system.

Table 5: Recreational Opportunities* Lake Marion Creek/Reedy Creek Management Area

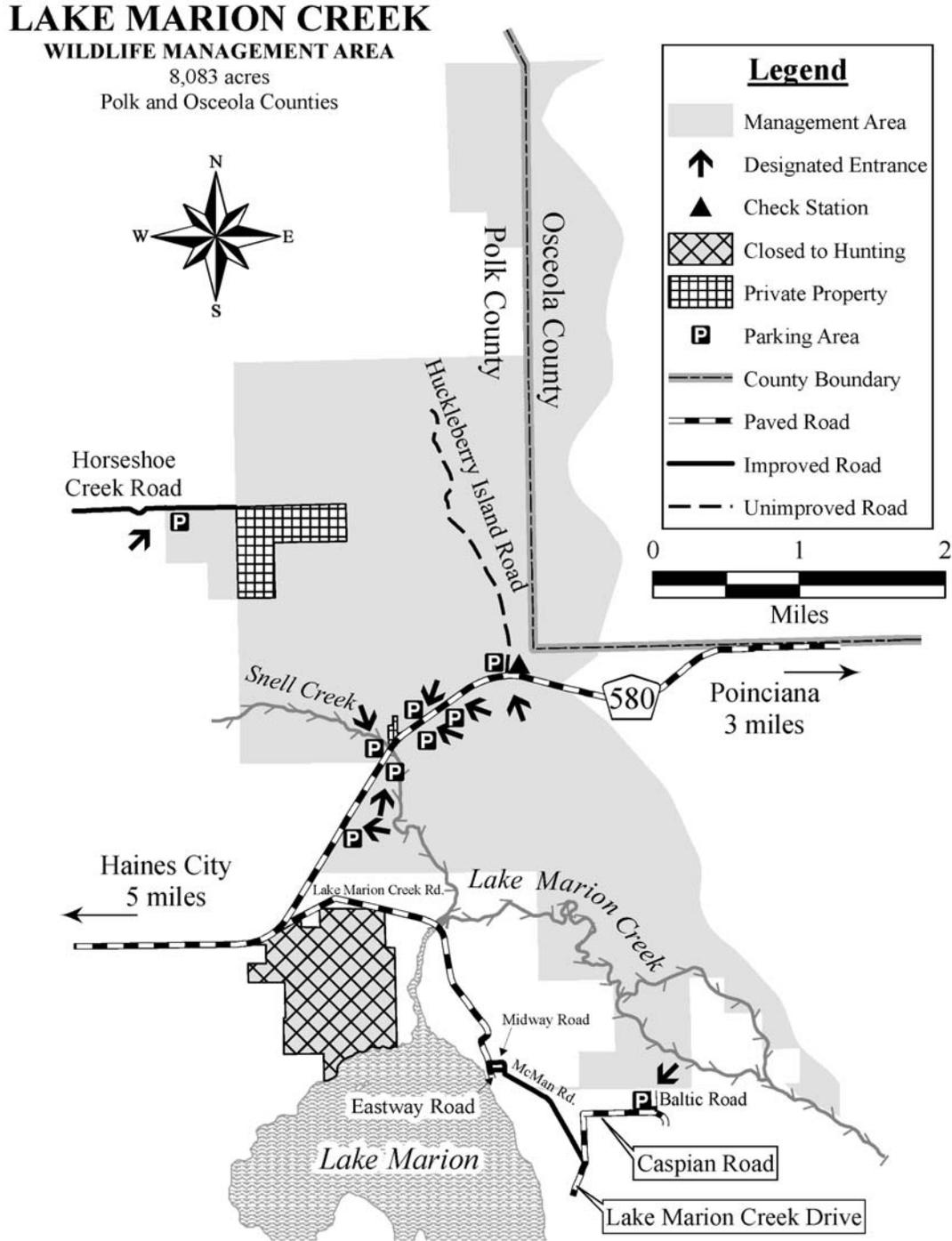
Management Unit	Fishing	Hunting	Hiking	Camping	Canoeing	Nature Study	Frogging
Lake Marion Creek	X	X	X	S	X	X	X
Torelli South			X			X	
Intercession City			X			X	
Poinciana			X			X	
Reedy Creek	X		X		X	X	X
Lake Russell			X	S		X	

*Before participating in any type of public use activity on District owned and/or managed lands, consult with the regional land manager of the current *Public Use Guide* concerning area regulations.

“X” indicates an activity that is regulated by statewide laws and regulations and District rules.

“S” indicates an activity that requires a District Special Use License.

Map 14. Lake Marion Creek Wildlife Management Area



6.1 Resource Protection

Policy 140-25(1)(d) Public use shall not result in detrimental impacts to water resources. When a public use activity produces detrimental effects on water resources, it shall be discontinued until an evaluation determines that such use is compatible.

Policy 140-25(3)(g) Resource protection shall be provided by professional law enforcement services through funded and unfunded contractual agreements to safeguard the public and protect natural and cultural resources on District-managed natural areas.

Policy 140-25(4)(b)(1) Public use regulations are set forth in 40E-7.511, Florida Administrative Code, to implement Section 373.1391(1)(b), Florida Statutes. Accordingly, the District shall publish and make available to the public a "Public Use Guide" for designated land management areas.

Regulations that govern activities within the Management Area are in the District's 40E-7 rule and the Commission's regulations. The 40E-7 rules are available online and at agency headquarters in West Palm Beach. Allowed activities include hiking, fishing, boating, canoeing, camping, hunting, equestrian use, biking, and nature study. The Florida Fish and Wildlife Conservation Commission is responsible for enforcing laws, rules, and regulations applicable to the Management Area, along with the local county sheriffs' offices.

Management of public activities on District lands requires a commitment to resource protection while simultaneously promoting all appropriate public uses. The Land Stewardship Program emphasizes the enforcement of pertinent rules and regulations to protect natural resources and also provide a safe recreational opportunity. The resource protection program integrates contractual law enforcement to protect the natural resources and District assets. As part of the District's enhanced patrol contract with the Commission, law enforcement officers conduct regular patrols throughout the year, increasing their presence during hunting seasons and at other times when public use is high. Law enforcement surveillance protects natural and cultural resources, deters illegal activity, and safeguards the public. Patrols are conducted with 4-wheel drive vehicles, all terrain vehicles, aircraft, and on foot. The District's resource protection coordinator and the regional land manager review biweekly reports and meet with officers to structure patrols based on resource needs.

Resource protection is also greatly enhanced by the presence and maintenance of continual, posted boundary signs that delineate property boundaries. All exterior boundaries within the Management Area are posted. However, reposting of boundaries must be done at least semi-annually (once immediately prior to the hunting season in August or September). Much of the perimeter boundary is fenced. In perimeter boundary areas that abut public waterways and private lands, or where vegetation may obscure posting or fences, the District also mows the boundary one to two times per year.

6.2 Environmental Education

Educational programs are developed and implemented on select management areas by cooperators interested in promoting increased visitor awareness and appreciation of natural areas and cultural resources. A central theme to these programs is the vital role of water management in maintaining resource viability and productivity. The Land Stewardship Program encourages educational partnerships through memorandums of understanding, lease, and contract agreements.

The District entered into a cooperative agreement (Contract #C-7947) in 1996 with the Osceola County School Board for the development and management of environmental education and public use programs at the Lake Russell Unit through 2021. The contract authorizes the School Board to create and operate an educational facility on the management unit, in conjunction with the School Board's existing Reedy Creek Environmental Education Facility. The School Board subsequently submitted (and received approval for) a development and implementation plan to the District, which is filed at the District's Orlando Service Center. The School Board teaches environmental education programs to grade school, middle school, and high school students out of two mobile education classrooms. Two administrative buildings, a storage area, and an interpretive trail had also been established under the agreement. The public is allowed access to the facility and the Management Unit (during programs and/or weekends) when School Board staff is present. The School Board began development of an extended-day educational program that enables them to teach techniques to environmental trainers during two to three day programs (participants will stay overnight in four travel trailers).

7. Administration

Administration of Land Stewardship Program lands is directed through the Land Stewardship Division. Policy decisions, planning and budgeting, procurement of personnel and equipment, contract administration, and issues of program development are administrative tasks coordinated through the Division. Input is provided from the public and regional land managers located at District Service Centers over the 16-county area. Public input into the management of the area is solicited at bi-monthly Water Resource Advisory Committee Recreational Issues Workshops. Regional land stewards handle regular administrative duties from their field locations to assure quick response to local concerns and management issues. Administrative activities for the Management Area are handled through the Orlando Service Center.

7.1 Planning and Budgeting

Planning is a major function of the Land Stewardship Program mission and is critical to maintain proper program focus, direction, and coordination with other agencies. Planning is accomplished by division planning staff in coordination with land stewards. Division level planning develops land acquisition strategy and project evaluation, produces the Land Stewardship Activity Report for the Florida Forever Workplan, and coordinates acquisition planning with other District and outside agency personnel.

Policy 140-25(6)(b) General Management Plan: Provides a description of recommended management and is required for each Land Stewardship Management Area. The GMP follows a designated format and is updated every five years.

General Management Plans are developed that detail strategies to guide management activities on individual project areas. These plans define goals and objectives, identify major management issues, and describe management activities. Each plan is subject to a draft revision period where public comment and professional review is requested prior to plan approval. Each plan is revised on a five-year cycle by planning team staff.

Policy 140-25(6)(d) Annual Work Plan: Summarizes activities corresponding with annual budget development and is prepared by the Operations Section of the Land Stewardship Program.

Annual work plans are developed each fiscal year for budget preparation and to address activities and projects targeted for completion within the upcoming fiscal year on individual properties. The Annual Work Plan includes performance objectives for exotic plant control, vegetation management, prescribed burning, resource protection, public use development, environmental monitoring, and contract administration.

For the Lake Marion Creek and Reedy Creek Management Area, the Annual Work Plan and budget are developed in concert with program-wide operational priorities and the budgetary cycle. Current year annual plans are available at the District headquarters in West Palm Beach.

Policy 140-25(6)(e) Summaries of management activities for each management area will be reported quarterly within the District and annually as part of the Florida Forever Work Plan.

Each month land managers submit regional management reports to document progress toward achieving annual work plan objectives. The monthly reports are kept on file at District headquarters. Land Stewardship semiannual meetings address management problems and plan for future management operations.

Policy 140-25(5) The District will secure dedicated funding sources, personnel and other resources to support program goals and objectives. Project funding needs and sources for cooperative management agreements with government and non-government entities will be identified during acquisition. A cooperative management agreement will designate a lead manager and identify whether District funding is required.

The principal source of funding for the Land Stewardship Program is the Water Management Lands Trust Fund, administered by the Florida Department of Environmental Protection, and more recently by ad valorem revenue. Money for this dedicated fund is generated from the sale of state documentary tax stamps and is used

for property acquisition and management. Additional funding and support have been obtained from grants, mitigation, the harvest of renewable resources, land use leases, in-kind management services from cooperating management partners, or no-cost services from user groups and volunteers.

Budget planning begins in March during the work planning process for the following fiscal year (October-September). Overall funding availability generally determines management activities. Budget distribution among the District's five land management regions is based on a programmatic prioritization of management activities. Operational funds are distributed to most effectively accomplish the management objectives of each management area.

7.2 Infrastructure

Policy 140-25(3)(k) Infrastructure support shall be developed and maintained to provide safe access for responsible management and public use on District lands. Such infrastructure may include access points, roads, trails, signs, utilities, and minimal public facilities.

Current Management Area infrastructure includes eight entrances, perimeter posting and fencing, firelines, hiking trails and roads, a bridge and culvert crossings, picnic tables and fire rings, a hunting check-station, and kiosks; all of which require regular maintenance. Future plans include developing a canoe launch for access to Lake Marion Creek

7.3 Personnel and Equipment

The Land Stewardship Program is separated into five geographic regions, each staffed with professional land managers directed by the supervising land manager. Highly trained land management technicians are based at the DuPuis Management Area, the West Coast Field Office, and at the Orlando, Okeechobee, and Miami Service Centers. The Land Stewardship Division director and additional planning staff are headquartered at the main West Palm Beach office.

Management of the Management Area is the primary responsibility of the Upper Lakes Regional land manager and land management technician. Additional management input and support comes from District planning and field station personnel.

Staff has access to tools, supplies, equipment, four-wheel drive vehicles, vessels, fire suppression trucks, all terrain vehicles, swamp buggies, an airboat, a dump truck, tractors, a road grader, a backhoe, and a large plow. The District's Kissimmee Field Station crew and equipment, as well as leased equipment, are also available to assist in the Management Area on a limited basis.

7.4 Volunteers and Alternative Work Force

Policy 140-25(5)(d)(1) Volunteers, interns and alternative work forces will be used when possible to supplement existing staff and services.

Section 373.1391(3) F.S. encourages the District to use volunteers for land management and other services. The District recognizes the merits of volunteerism and welcomes participation in activities appropriate for public involvement. Selection of appropriate management activities is at the discretion of the land manager and may fall under the general guidance of the supervising land manager. Volunteers have contributed many hours to maintenance and wildlife surveys. All volunteer activities help accomplish management objectives, promote citizen involvement, and allow area staff to focus on other needs.

Land management objectives are also occasionally met by alternative work forces. When available, alternative work forces can be used for projects that demand manual labor and have low technical skill requirements. Under the cooperative agreement with the Osceola County School Board (section 7.5), numerous volunteers donated time and materials toward the development and operation of the environmental education facility at the Lake Russell Unit. These volunteers are recruited and coordinated by the Osceola County School Board. School Board use of volunteers is an essential component of the program and expected to continue throughout the duration of the contract.

7.5 Contractual Management

Policy 140-25(5)(a). The private sector may be solicited to furnish certain management-related facilities and services through the execution of leases and agreements. These leases/agreements will assure mutual benefits to both the District and private parties and be consistent with the program management objectives.

Effective operation and management of District properties requires the services and cooperation of private organizations, other governmental agencies, and volunteers. Contractual management is authorized through a management agreement signed by both the District and contracting entity with the document defining responsibilities of each party.

The District has established and maintains five contractual management agreements to assist with management of the Lake Marion Creek and Reedy Creek Save Our Rivers project:

Contract#C-9804: Southwest Florida Water Management District

The Southwest Florida Water Management District acquired 300 acres of land within the Lake Marion Creek and Reedy Creek Project Area in 1997. Other lands, totaling approximately 2,600 acres, within the Southwest Florida Water Management District are targeted for future acquisition. Because these lands are in close proximity to the

South Florida Water Management District / Southwest Florida Water Management District boundary, and because the South Florida Water Management District has a large Management Area adjacent to the Southwest Florida Water Management District parcels, the districts have agreed to enter into a management agreement for the property. Under the agreement, the South Florida Water Management District manages Southwest Florida Water Management District's property since it lies within the Lake Marion Creek and Reedy Creek Management area.

Contract #4600000961

A cooperative agreement with the Florida Fish and Wildlife Conservation Commission that establishes Lake Marion Creek as a Wildlife Management Area and authorizes the commission to establish rules and regulate public recreation opportunities such as hunting.

Contract#C-10162: Enhanced Patrols

The District contracted with the Florida Fish and wildlife conservation Commission for enhanced law enforcement services (Contract C-10162). These services cover areas throughout the District and include supplemental patrols on the Management Area. The District's resource protection coordinator schedules patrols with input from the Management Area's land manager and the Commission.

Contract#C-7947: Osceola County School Board – 1996-2021

The District has developed a partnership with Osceola County School Board to develop an environmental education center on the Lake Russell Unit. This center provides summer camps and several other ongoing programs for county students.

Contract#C-6346 and C-8332: Polk County

Polk County has entered into formal agreements (contract numbers C-6346, C-8332), with the District to jointly purchase lands within the Lake Marion Creek/Reedy Creek Management Area, which have been identified as sensitive habitat areas. Under the agreement, the County and the District equally share acquisition costs while the District is responsible for land management activities after acquisition. The County will reimburse the District for management costs up to \$9.00 per acre per year, for those parcels jointly acquired. These lands totaled approximately 2,153 acres. Joint acquisition for other parcels is planned, pending negotiations with landowners. The Polk County Natural Resources & Drainage Division located in Bartow is the contact agency for this agreement.

Annual work plans and proposed budgets, for the upcoming South Florida Water Management District fiscal year (October–September), will be submitted to the County in January of each year. Four quarterly reports for the periods October–December, January–March, April–June, and July–September, will be submitted to Polk County at the end of each quarter. In October of each year (after the end of the County fiscal year in September), an invoice for reimbursement of annual management expenses shall be submitted to the County.

7.6 Management Review

Policy 140-22(j) Section 373.591, Florida Statutes, mandates the District to solicit input on current management programs through professional peer reviews.

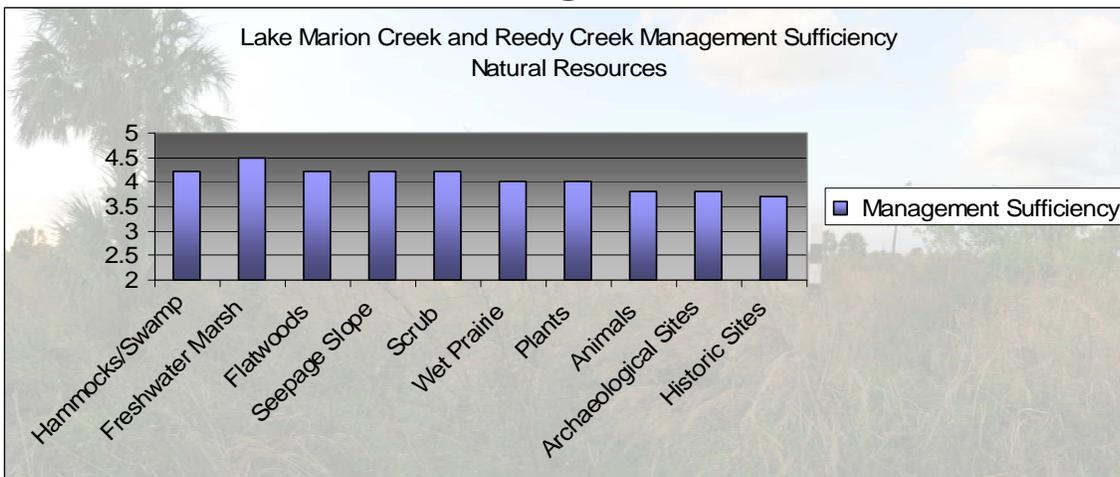
Each District project area has a land management review team comprised of state, county, and private entities that periodically review management activities to assure they are consistent with acquisition intent and program objectives. Management assessments are conducted in light of the goals and objectives defined in the area's general management plan. If the review team determines that management is not in accordance with the management plan, the lead management agency provides a written explanation to the review team.

A management review was conducted in April, 2005. The review team had overall positive comments on the condition of the land and the management of the Lake Marion Creek and Reedy Creek Management Area. The most positive comments focused on the District's consistent use of prescribed fire, aggressive exotic control, and the dedication and performance of the land management staff.

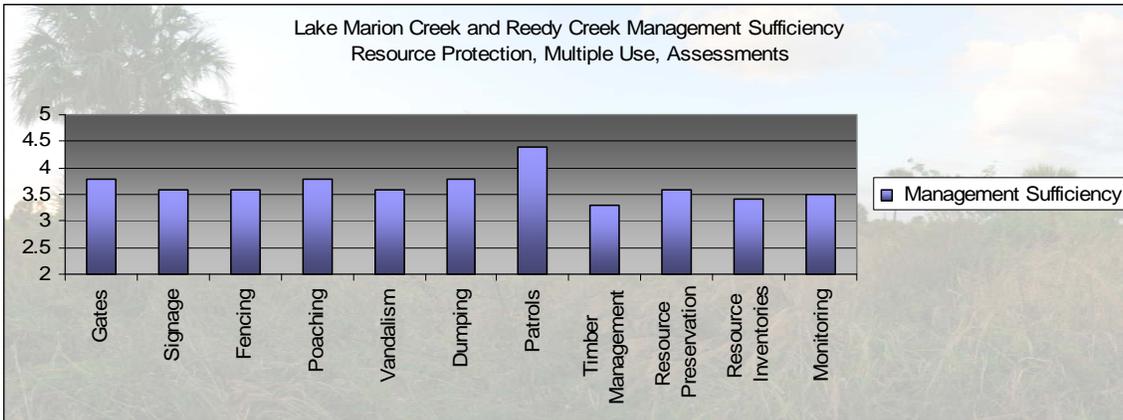
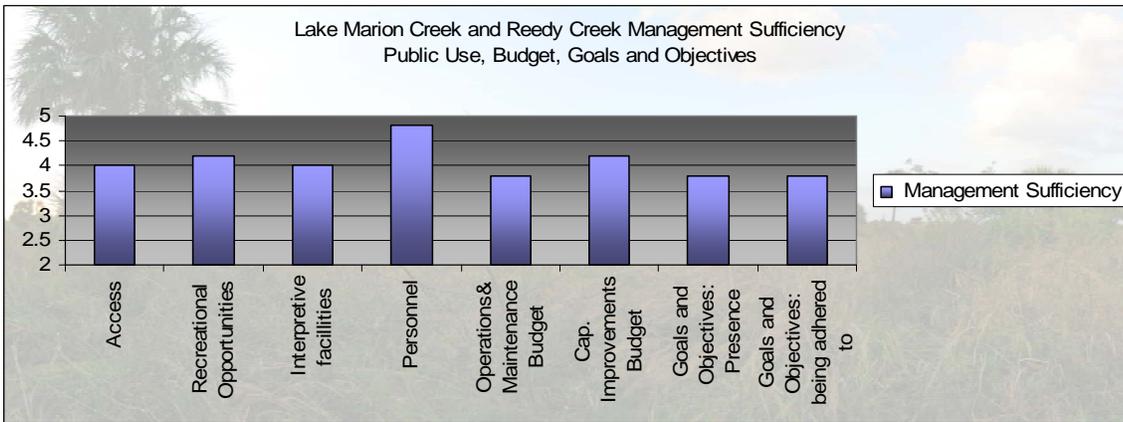
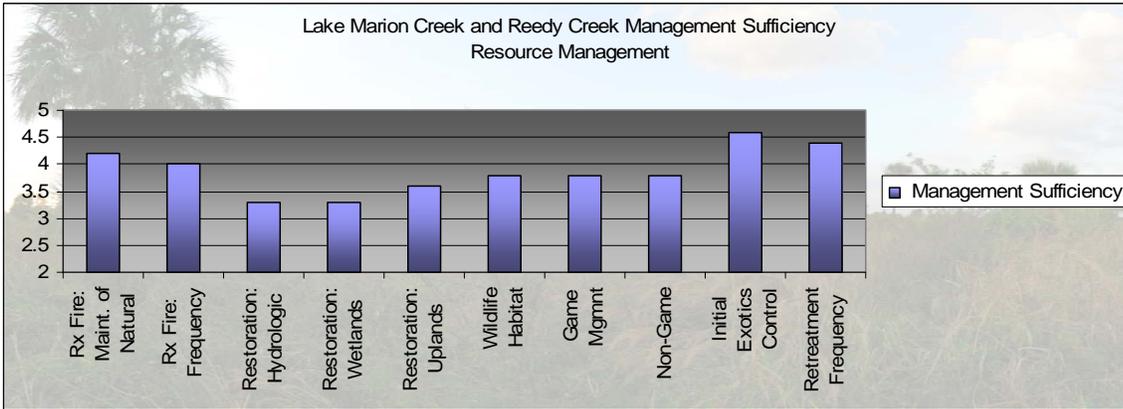
The review did not expressed concern as a group about any management insufficiencies. There were individual comments that some areas could use more fencing, and that some of the mesic flatwoods may benefit from roller-chopping.

The team rated the management sufficiency of the Management Areas on a scale from 1 to 5 on criteria such as: the natural resources, resource management activities, public use, budget, goals and objectives, resource protection, multiple use, and biological assessments and monitoring. The average scores by category are indicated on the graphs below:

2005 Land Management Review Results



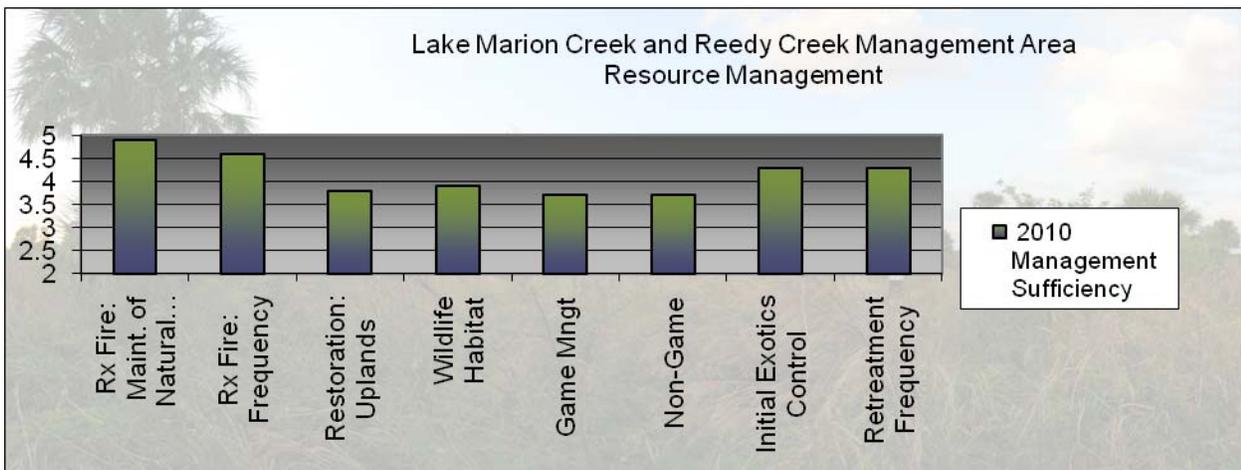
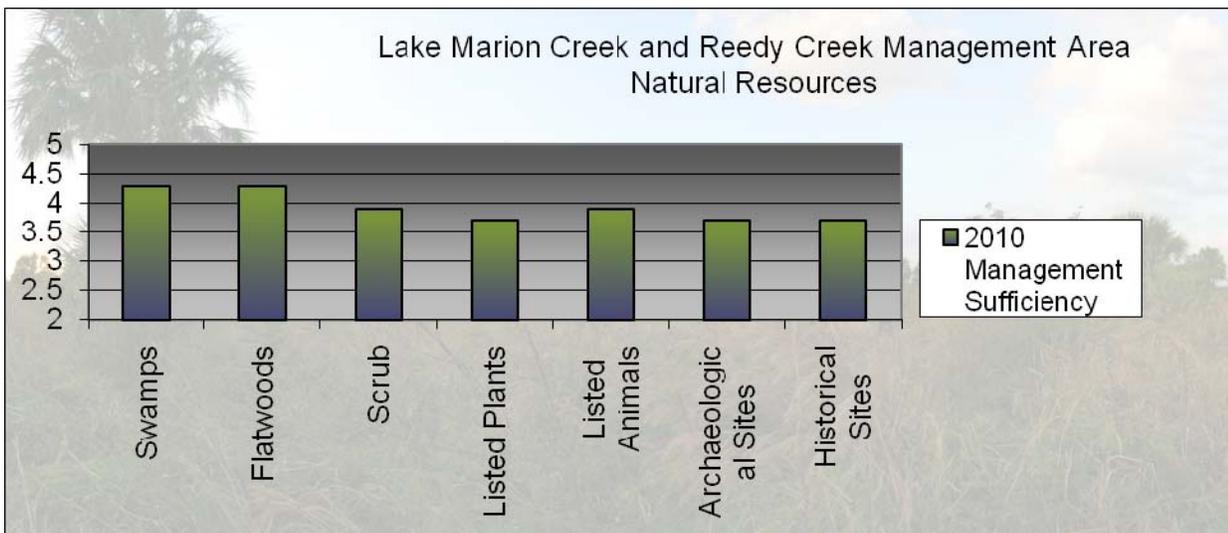
Lake Marion Creek and Reedy Creek Management Area General Management Plan 2010 – 2015
 South Florida Water Management District, Land Stewardship Division

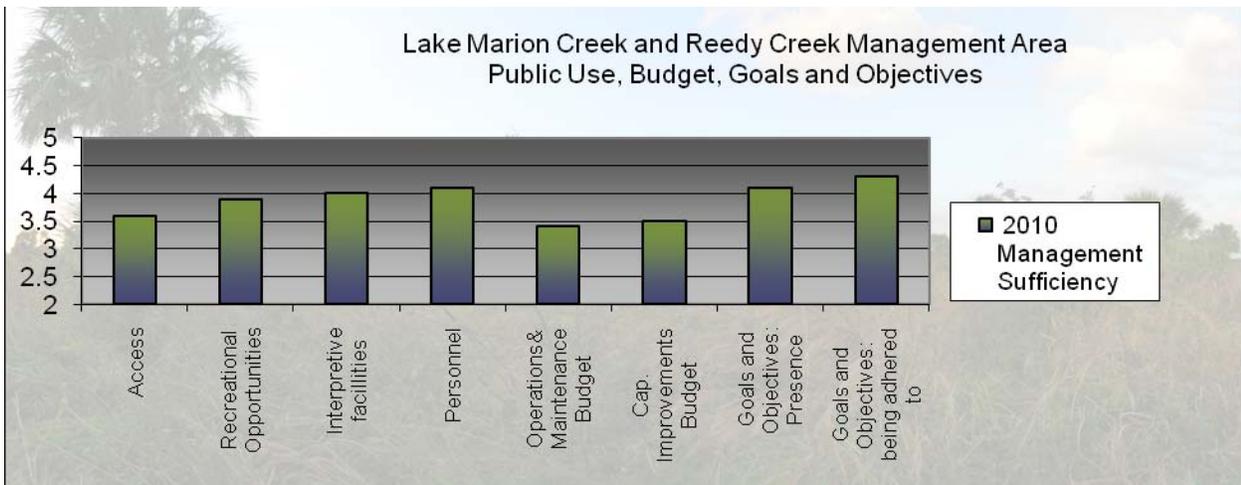
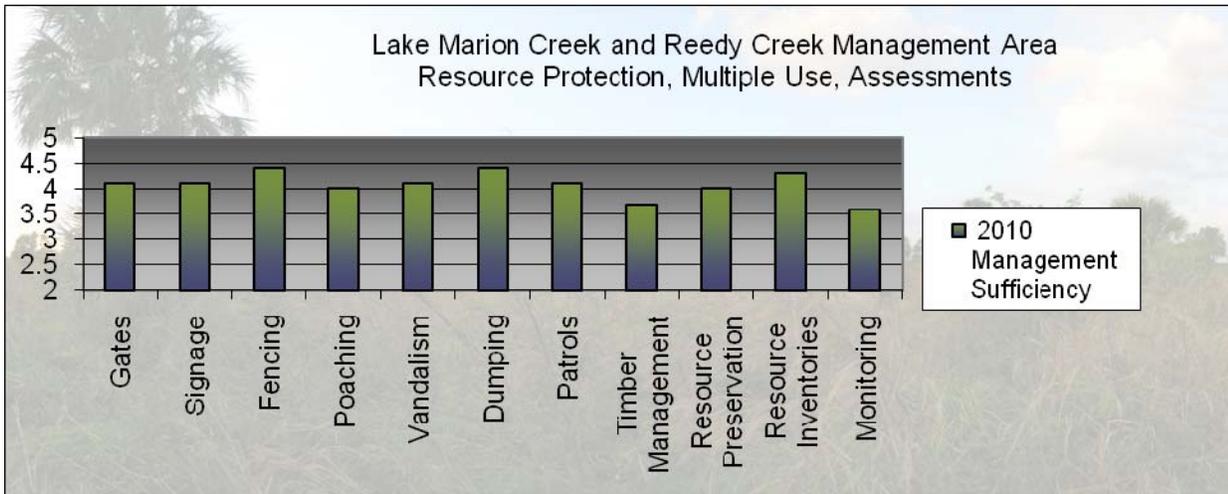


Another management review was conducted in August, 2010 in conjunction with the development of this plan. Again, the review team had overall positive comments on the condition of the land and the management of the Management Area. The most positive comments focused on the use of prescribed fire, clarity of plan objectives and the adherence to them, aggressive exotic control, and the dedication and performance of the land management staff.

A couple comments recommended the development of a monitoring program for Florida sand skinks in the scrub areas. There were two comments suggesting public access improvements: one in general and the other specifically suggesting canoe access to Lake Marion Creek. There were two comments on mechanical vegetation management: one suggesting that we employ shredding in a few areas of mesic flatwoods to enhance restoration, and the other recommending narrowing the width of mowed trails to enhance the hiking experience. Finally, there were three comments on monitoring vegetative communities: one comment suggesting the District do more of it, one commending the District for a monitoring program that exceeds other public land managers, and one recommending a continuance of our existing monitoring program. The average management sufficiency scores for the 2010 review, by category, are indicated on the graphs below:

2010 Land Management Review Results





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Appendix A

Definitions

Adaptive Management – a cyclical process in which inventories document resource presence, management actions are applied, and monitoring and research activities evaluate the effectiveness of those actions; management actions are then revised and applied again.

Archaeological / Historic Resources - any prehistoric or historic district, site, building, object, or property of historic, architectural, or archaeological value relating to the history, government, and/or culture of a historic or pre-historic people.

Best Management Practices - the best available technology or process that is practical and achieves the desired goal or objective.

Cooperating Agencies - two or more agencies working together to operate a specific management area.

Cooperative Management Agreement - an agreement between two or more agencies outlining the respective duties and responsibilities of each agency in the management of a specific tract of land.

Easement - an interest in the land of another that provides the easement holder specified rights without fee-title ownership.

Endemic - native to, and restricted to, a particular geographic region

Enhancement - modification of select physical attributes of a natural community to improve ecosystem function.

Exotic - an organism whose origin is of another continent.

Lease - a legal agreement that defines rights and responsibilities for use of land owned by another party.

Listed Species - species considered at risk (species of special concern, threatened, or endangered) within a specific geographic area by the USFWS and the FWC.

Maintenance - work performed to preserve property conditions on a regular basis.

Management - planned control and manipulation of factors affecting property conditions.

Management Area - a single tract or combination of tracts under one management program.

Management Assessment - a brief summary of the management issues completed when the site is identified for acquisition.

Mitigation Banking - wetland acquisition, creation, restoration, or enhancement undertaken expressly to provide compensation in advance of wetland losses from development activities.

Multiple-Use - the management of renewable resources for a variety of purposes such as recreation, range, timber, wildlife habitat, and water resource development.

Native Species - species considered indigenous to the North American continent prior to European settlement.

Natural Community - a distinct and reoccurring assemblage of plant and animal populations naturally associated with each other and their physical environment.

Prescribed Fire - application of fire to natural communities according to a written prescription; the prescription executed with a defined goal and under specific environmental and physical parameters.

Regional Mitigation Area - Permitted wetland impacts offset through payment for the acquisition, restoration, enhancement, and perpetual management of a Save Our Rivers-identified and duly noticed project.

Reservation - a legal agreement between a property seller and buyer that defines the seller's rights and responsibilities of post-sale property use

Responsible Management - that level of management described in the General Management Plan.

Restoration - re-creation of physical attributes of a natural system with the intent to return original ecological function.

Sustainable Use - to provide continued use of a natural resource without long-term degradation or loss of that resource

Appendix B

Land Stewardship Program Goals and Policies

ARTICLE II. LAND STEWARDSHIP

Sec. 140-21. Scope.

This policy shall apply to all lands managed by the Land Stewardship Program, including property acquired with Save Our Rivers, Preservation 2000 or mitigation funding. Nothing in this policy shall negate any statute, administrative rule, or other policy requirement. This policy may be reviewed and approved by the District Governing Board at five-year intervals or earlier and updated as required. Public comment may be solicited as part of the review process.

(R.M. No. 139)

Sec. 140-22. Purpose.

(a) This policy establishes a commitment to the responsible management of District lands in a manner consistent with legislative directives and the District's mission.

(b) In 1981, the Florida Legislature established the "Save Our Rivers" program (SOR) for the five water management Districts to acquire water resource lands. This legislation (Section 373.59, Florida Statutes) produced the Water Management Lands Trust Fund, empowering the water management Districts to acquire lands needed to protect, manage, and conserve the state's water resources. Preservation 2000 (P2000), enacted by the Legislature in 1990, also added land acquisition funds to the Save Our Rivers program. The 1999 Florida Forever Act consolidated the legislative directives of SOR/P2000 and expanded the funding to take over when P2000 terminates. The 1999 legislation authorized funds to be appropriated for acquisition, management, maintenance and capital improvements, including perimeter fencing, signs, control of invasive exotic species, controlled burning, habitat inventory and restoration, law enforcement, access roads and trails, and minimum public accommodations.

(c) Land acquired by the District's Save Our Rivers program and managed by the Land Stewardship program must satisfy several requirements set forth in Sections 373.139 and 373.1391, Florida Statutes. Section 373.139, Florida Statutes, declares it necessary for the public health and welfare that water and water-related resources be conserved and protected. The acquisition of real property for this objective shall constitute a public purpose for which public funds may be budgeted.

(d) Section 373.1391(1)(a), Florida Statutes, states that lands titled to the water management districts shall be managed and maintained to the extent practicable to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

(e) Section 373.1391(1)(b), Florida Statutes, states, in part, that "Whenever practicable, such lands shall be open to the general public for recreational uses. General public recreational uses shall include, but not be limited to, fishing, hunting, horseback riding, swimming, camping, hiking, canoeing, boating, diving, birding, sailing, jogging, and other related outdoor activities to the maximum extent possible considering the environmental sensitivity and suitability of those lands."

(f) Section 373.1391(1)(d), Florida Statutes, states that the District shall first consider using soil and water conservation Districts to administer agricultural leases.

(g) Section 373.1391(3), Florida Statutes, encourages each District to use volunteers to provide land management and other services.

(h) Section 373.1391(4), Florida Statutes, encourages each District to enter into cooperative land management agreements with state agencies or local governments to provide the coordinated and cost-effective management of lands.

(i) Section 373.1391(5), Florida Statutes, authorizes water resource and supply projects, stormwater management projects, linear facilities, and sustainable agriculture and forestry where it is compatible with the natural resource values and the public interest and is consistent with the project management plan, the proposed use is appropriately located on the property and other lands have been considered, and the titleholder of the property has been properly compensated.

(j) Section 373.591, Florida Statutes, mandates the District to solicit input on current management programs through professional peer reviews.

(R.M. No. 139)

Sec. 140-23. Statements of Policy.

The Land Stewardship Program mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands. The mission statement, together with requirements set forth in the Florida Statutes, provide three primary goals for the District Land Stewardship Program, each of which is linked to sections in this Land Stewardship Policy document:

(1) Conservation and protection of water resources (section 140-25(1)).

(2) Protection and/or restoration of land to its natural state and condition:

a. Restoration and Protection of Natural Communities (section 140-25(2)); and

b. Resource Operations and Maintenance (section 140-25(3)).

(3) Provide public use (section 140-25(4)).

(R.M. No. 139)

Sec. 140-24. Definitions.

For the purpose of this article, the following words and terms shall have the meanings respectively ascribed:

Archaeological/Historic Resources means any prehistoric or historic district site, building, object, or property of historic, architectural, or archaeological value relating to the history, government, and culture of a historic or pre-historic people.

Best Management Practice (BMP) means the best available technology or process that is practical and achieves the desired goal or objective.

Capital Improvement means activities relating to the restoration, public access, recreational uses and necessary services for land and water areas, including the initial removal of invasive plants, and the construction, improvement, enlargement or extension of facilities' signs, fire lines, access roads, and trails. Such activities shall be identified prior to the acquisition of a parcel or the approval of a project.

Cooperating Agencies means two or more agencies working together to operate a specific management area.

Cooperative Management Agreement means an agreement between two or more agencies outlining the respective duties and responsibilities of each agency in the management of a specific tract of land.

Critical Habitat means areas designated for the survival and recovery of state/federally listed rare, threatened, endangered or other sensitive species.

Desirable Vegetation means native plant species that are appropriate for a specific community type and provide benefits to wildlife in the form of food, cover and nesting.

Habitat Diversity means richness and variety of native plant communities within a particular area of the landscape.

Hydroperiod means flooding duration, depth, and timing that influences species composition, ecosystem structure and function.

Interim Land Management means management of non-natural areas that provides revenue without impacting long-term water-development projects.

Invasive/Exotic Vegetation means certain plants that displace native species and adversely affect wildlife habitat, water quality, recreation, and biological diversity.

Lead Manager means the prime managing entity designated for a given tract of land; generally provides the on-site staff.

Management Area means a single tract or combination of tracts under one management program.

Mitigation means, for purposes of this policy, the actual acquisition, restoration, creation, or enhancement of wetlands to compensate for permitted wetland impacts.

Mitigation Banking means wetland acquisition, restoration, creation or enhancement undertaken expressly to provide compensation in advance of wetland losses from development activities.

Multiple-Use means the management of renewable resources for a variety of purposes such as recreation, range, timber, wildlife habitat, and water resource development.

Prescribed Fire means burning of vegetative fuels using controlled application of fire within specified environmental conditions.

Primary Resource Lands means lands having high water resource, fish, wildlife, and recreational values requiring acquisition or protection.

Regional Mitigation Area means, for purposes of this policy, permitted wetland impacts offset through payment for the acquisition, restoration and perpetual management of a Save Our Rivers identified and duly noticed project.

Responsible Management means level of management described in the General Management Plan.

Sustainable Use means to provide continued use of a natural resource without degradation or loss of that resource.

Water Resource Buffer means that portion of a Preservation 2000 or Save Our Rivers project necessary to protect the aquatic environment.

Wildlife Corridor means a connection between natural areas that allows the safe movement of wildlife.

(R.M. No. 139)

Cross references: Definitions and rules of construction, § 100-2.

Sec. 140-25. Responsibilities.

The Land Stewardship Program is responsible for:

(1) Water Resource Protection. The basis for the Land Stewardship Program is the protection and management of natural hydrologic resources. The following policies guide implementation of this objective:

- a. Acquired lands shall be managed to provide water resource-related benefits.
- b. Land uses or activities that significantly or permanently alter or degrade the quality, quantity and/or natural movement of ground or surface water are not allowed unless they are a part of a regional water management system.
- c. Where feasible, an attempt shall be made to restore a more natural hydroperiod on tracts where the drainage patterns have been altered.
- d. Public use shall not result in detrimental impacts to water resources. When a public use activity produces detrimental effects on water resources, it shall be discontinued until an evaluation determines that such use is compatible.
- e. Water resource lands designated as necessary to implement the Central and Southern Florida "Restudy" Project shall, upon acquisition, become the responsibility of the (Interim) Land Management Program, and follow the guidelines set forth under Section 373.1391(5), Florida Statutes.

(2) Restoration and Protection of Natural Communities:

- a. The Land Stewardship Program will encourage the acquisition of large or regionally significant areas that protect important natural resources and provide wildlife corridors.
- b. Particular emphasis shall be placed on the identification, protection and management of rare, threatened and endangered species.
- c. The planting of invasive exotic plant species shall be prohibited in all management areas. Management practices will strive to identify existing infestations and implement appropriate control or eradication measures.
- d. Where practicable, an attempt shall be made to restore and maintain desirable vegetation to promote habitat diversity in areas where invasive exotic vegetation, grazing practices, or improved land uses have substantially altered the historic landscape.

(3) Resource Operations and Maintenance:

- a. Lands acquired for natural and/or hydrologic resource benefits shall be managed to conserve and protect those resources.
 - b. Exotic plant control in all management areas shall strive to attain a level of success where periodic maintenance eliminates the infestation or reduces the coverage of exotic plants.
 - c. Prescribed fire will be a primary management tool on District lands and will be applied within fire-maintained communities at appropriate intervals.
 - d. The Division of Forestry will be notified of all wildfires on District lands. Land Stewardship will provide initial suppression when commensurate personnel and equipment are available.
 - e. Inventories of natural and historic resources shall be performed to provide information for effective land management planning, natural community maintenance and ecological restoration.
 - f. Evaluation and monitoring of management activities shall be conducted to improve program effectiveness and efficiency.
-

1. Research shall evaluate the environmental response of certain management activities to assist staff in making appropriate management decisions.

2. Monitoring shall be conducted to identify landscape changes resulting from management activities.

3. Legislative-mandated management reviews will provide input from professional peers.

g. Resource protection shall be provided by professional law enforcement services through funded and unfunded contractual agreements to safeguard the public and protect natural and cultural resources on District-managed natural areas.

h. Sustainable use of forest resources shall be conducted where these activities adhere to a series of environmental criteria (see 1999 Forest Management Plan) that meet Land Stewardship Program goals. Timber contractors will be required to meet silvicultural Best Management Practices (BMP) developed for Florida forests.

i. Range management (grazing) will be considered on improved or native ranges when the introduction of cattle will not conflict with other natural resource management and public use goals.

j. Archaeological and historic resources are protected by site identification and inter-agency coordination with the Florida Division of Historical Resources. Land stewardship planning shall include an analysis of archeological data accompanied by appropriate public education opportunities.

k. Infrastructure support shall be developed and maintained to provide safe access for responsible management and public use on District lands. Such infrastructure may include access points, roads, trails, signs, utilities, and minimal public facilities.

l. Mechanical equipment may be used in conjunction with prescribed burning and other management tools to control vegetation and restore habitat structure.

m. Agricultural developments previously existing on acquired natural areas may be maintained if management of these developments is consistent with other land stewardship goals.

(4) Public Use and Environmental Education:

a. Public use of management areas that is consistent with other management goals shall be encouraged. Public use that may have detrimental impacts on sensitive environmental resources shall be restricted until an evaluation determines such use is compatible. A public use compatibility assessment will be included in the General Management Plan completed for each management area and will be based on the following criteria:

1. Consistency with the reason the lands were acquired.

2. Restrictions and/or prohibitions imposed by easements, leases, reservations, adjacent land ownership, conditions of the purchase agreement, and any other agreements concerning the property.

3. Infrastructure and support facility requirements, such as fences, gates, signage, entry design, stabilized off-road parking, trails, campsites, maintenance, and other operational and budgetary impacts.

4. Opportunities for persons with disabilities.

5. Limitations resulting from endangered species, other sensitive natural resources, archaeological resources, or land management practices.

6. Public health, safety and welfare.

7. Environmental education program opportunities.

b. Public Use Regulation:

1. Public use regulations are set forth in 40E-7.511, Florida Administrative Code, to implement Section 373.1391(1)(b), Florida Statutes. Accordingly, the District shall publish and make available to the public a "Public Use Guide" for designated land management areas. The Public Use Guide will be adopted by the Governing Board at a public meeting advertised in accordance with Chapter 120, Florida Statutes.

2. Rules and regulations governing the public use of each management area shall be enforced by agencies with appropriate law enforcement jurisdiction.

3. Pursuant to Section 373.609, Florida Statutes, the District shall seek the cooperation of every state and county attorney, sheriff, police officer, and appropriate city and county official in the enforcement of the provisions set forth according to 40E-7.511, Florida Administrative Code.

4. Florida Fish and Wildlife Conservation Commission regulations shall govern hunting in areas opened for such use.

(5) Implementation Strategies. The District will secure dedicated funding sources, personnel and other resources to support program goals and objectives. Project funding needs and sources for cooperative management agreements with government and non-government entities will be identified during acquisition. A cooperative management agreement will designate a lead Manager and identify whether District funding is required.

a. The private sector may be solicited to furnish certain management-related facilities and services through the execution of leases and agreements. These leases/agreements will assure mutual benefits to both the District and private parties and be consistent with the program management objectives.

b. Mitigation:

1. Mitigation Banking: Mitigation banking provides an opportunity to accomplish large-scale restoration that may otherwise go unfunded. Pursuant to Section 373.4135, Florida Statutes, the District is encouraged to develop mitigation banks. Land managers will evaluate opportunities in their regions to implement mitigation banks that are consistent with the guidelines established in the Joint State and Federal Mitigation Bank Review Team Process for Florida.

2. Regional Mitigation Areas: The acquisition, restoration and management of District lands as mitigation shall be consistent with Chapter 2000-133, amending Sections 373.414 and 373.4135, Florida Statutes. This includes the establishment of Memorandums of Agreement (MOA) that include restoration plans, success criteria, and monitoring requirements. The MOAs will be used to implement mitigation using full-cost accounting, public noticing, and approval by the Governing Board for use as a mitigation area. The mitigation shall meet restoration objectives as provided in the General Management Plan.

c. Revenue Generation:

1. Private concessions and/or agreements with non-profit organizations will be considered to implement needed services through concession contracts.

2. Entrance and user fees, permits, licenses and/or advance reservations may be required where considered necessary by the managing agency.

3. Timber sales will be conducted to improve forest health or to support specific forest management goals.

4. Grazing leases will be encouraged on selected rangeland to generate revenue or to provide services that offset program management costs.

d. Volunteers and Interns:

1. Volunteers, interns and alternative work forces will be used when possible to supplement existing staff and services.

2. Any volunteer services must meet the standards and procedures prescribed by the District (Risk Management Manual, Volume 1).

(6) Program Components:

a. Management Assessment: A brief summary of the management issues completed when the site is identified for acquisition.

b. General Management Plan (GMP): Provides a description of recommended management and is required for each Land Stewardship Management Area. The GMP follows a designated format and is updated every five years.

c. Activity Plan (AP): Provides a detailed implementation strategy for specific activities such as prescribed burning, exotic removal and restoration. The plan shall be developed by the lead Manager in consultation with the cooperating agencies for each major tract of land (or group of tracts) to be operated as a single management unit. The AP may be included in the GMP and is updated when necessary.

d. Annual Work Plan (AWP): Summarizes activities corresponding with annual budget development and is prepared by the Operations Section of the Land Stewardship Program.

e. Reporting: Summaries of management activities for each management area will be reported quarterly within the District and annually as part of the Florida Forever Work Plan.

(R.M. No. 139)

Secs. 140-26--140-40. Reserved.

Appendix C. Soil Descriptions

Flats Soils

Flats soils (previously referred to as slough) are poorly drained hydric soils with sandy marine sediments throughout the profile, or more rarely with loamy sand or sandy loam. Some areas within this unit are frequently flooded alluvial areas that have a sandy surface for the majority of the area. Flats are located between the flatwood and depressional landscapes, and are generally regarded as transition areas. The seasonal high water table can range from the soil surface to one foot below the surface for four to ten months annually. In most years, the seasonal high water table begins in June and ends from September to March (typically by February). Some areas may be inundated for less than a few weeks by large storm events. Examples of these soils include Boca, Felda, and Riviera. Wet-dry prairies dominated by grasses are typical to this landscape position.

One of the ecological communities most typical of the flats landscape is the slough. Slough soils are nearly level and very poorly drained with organic surfaces underlain by sand. Representative soils include Hontoon, Sanibel and Okeelanta. Most sloughs serve as drainage ways for water during periods of heavy and prolonged rainfall. Surface water may move over this area for up to a few weeks during the rainy season. Most sloughs are relatively long and narrow and slightly lower in elevation than the surrounding flatwoods and hammocks. Vegetation within the slough may be open expanse of grasses, sedges and rushes with scattered pines and cypress in an area where the surface soil is saturated during the wet season. Grasses are the most common plant found in sloughs. Other plants that characterize this community are pickerelweed, sundew, milkwort (*Polygala sp.*), beak rushes, blue maidencane (*Amphicarpum muhlenbergianum*), and sloughgrass (*Scleria sp.*).

Flatwood Soils

Flatwood soils are poorly drained non-hydric, upland soils with sandy marine sediments throughout the profile. Most of the soil series have a subsurface spodic horizon, some of which may have loamy sand substrates. The seasonal high water table can range from 6 to 18 inches below the soil surface for three to six months annually. Some areas may become inundated for less than a couple of weeks during large storm events. Examples of these soils include Immokalee, Malabar, and Wabasso. The soils affect plant-water relationships and cause differences in plant composition. Natural communities typical of flatwood soils are dry prairie, mesic flatwoods, and scrubby flatwoods. Typical flatwood soil vegetation includes pine trees with an understory of saw palmetto. Other common plants are live oak, shiny blueberry, gallberry, tarflower, wax myrtle, chalky bluestem (*Andropogon virginicus glaucopsis*), and wiregrass.

Knolls

Knoll soils are non-hydric, upland soils with sandy marine sediments throughout the profile. These soils typically have no unique diagnostic horizons within the soil profile and are well to somewhat poorly drained. The seasonal high water table can range from

one and a half to six feet below the soil surface for four to seven months annually. Examples of these soils include Archbold, Canaveral, and Pomello.

One ecological community that is typical to the knolls landscape is sand pine scrub. Natural vegetation may typically be even-aged sand pine trees with a dense under-story of oaks, saw palmetto, and other shrubs. Ground cover under the trees and shrubs is scattered. Large areas of light colored sand are often noticeable. Satellite soils, which have a high water table for part of the year, support scrubby growth. Myrtle oak, Chapman's oak, and sand pine become infrequent and gallberry becomes prominent. Plants that characterize this community are: Chapman's oak, myrtle oak, sand live oak, sand pine, prickly pear (*Opuntia sp.*), and panicum (*Dichanthelium sp.*).

Central Ridge and Dunes

Central Ridge and Dune landscapes are well drained, non-hydric, high upland soils with sandy marine sediment throughout the profile. These soils are typically populated with xeric species. The water table is more than six feet below the soil surface throughout the year. Common soils of this landscape position include Chandler, Palm Beach, Paola, and St. Lucie. One ecological community that is typical of this landscape position is the South Florida Coastal Strand. Another community that may be found on this landscape position is Sand Pine Scrub.

Muck Depression Soils

Muck depression soils are very poorly drained hydric soils that have an organic surface layer underlain by sandy marine sediments. These areas are often depressions adjacent to flats and flatwood landscapes. The seasonal high water table can range from six inches below to two feet above the soil surface for up to 11 months annually. In most years, the seasonal high water table begins in June and ends between December and April (typically in April). Examples of these soils include Gator, Hontoon, and Sanibel. Some areas within this unit are frequently flooded alluvial areas that have muck surface. These frequently flooded map units are known to have surface flooding at least one out of every two years. A few areas may have a thin organic surface layer less than a few inches thick.

Ecological communities often found in this landscape are basin swamp, dome swamp, strand swamp or floodplain swamp. Typically occurring along rivers, lake margins, slough and strands, these communities may be interspersed throughout other communities such as flats and flatwoods. Water is at or above ground level a good portion of the year. Tree species diversity is low in cypress domes, but increases in cypress strands and along stream margins. Plants which characterize this community are: bald cypress (*Taxodium disticum*), pond cypress, coastal plain willow, red maple, buttonbush, wax myrtle, cinnamon fern, royal fern (*Osmunda regalis*), Spanish moss, giant wild pine (*Tillandsia utriculata*), and maidencane. Some of the protected plants that may be found in these communities include the climbing dayflower (*Commelina gigas*), fuzzy wuzzy airplant (*Tillandsia pruinosa*), giant water dropwort (*Oxypolis greenmani*), hidden orchid (*Maxillaris crassifolia*), nodding catopsis (*Catopsis nutans*), and grass of Parnassus (*Parnassia graniflora*).

This soil classification is the largest represented in the Management Area.

Sand Depression Soils

Sand depression soils are very poorly drained hydric soils that typically have sandy marine sediments throughout the profile. A few areas may have mucky sand, loamy sand, or sandy loam surfaces with sandy or loamy subsurfaces. Often, these areas are depressions adjacent to flats and flatwood landscapes. The seasonal high water table can range from one foot below to two feet above the soil surface for seven to ten months annually. In most years, the seasonal high water table begins in June and ends from October to March (typically in March). Some areas within this unit are frequently flooded alluvial areas that have a sandy surface for the majority of the area. Soils commonly associated with this community are nearly level and very poorly drained with organic surfaces underlain by sand. Flooding at least one out of every two years. Examples of Sand Depression soils include Basinger, Boca, Chobee, Felda, and Riviera.

Natural communities often found in this landscape are the freshwater marsh and ponds. Vegetation varies widely within marshes, and may be composed of: flag, sawgrass, arrowhead, and other non-grass herbs marsh, cattail, spike-rush, bulrush, and maidencane marsh.

Water (open)

Water areas are permanently inundated, usually to a depth of two feet or greater. This includes freshwater, saltwater, natural and excavated sites.

One small area within the Intercession City Unit contains this soil classification.

Appendix D. Natural Communities

Basin Wetlands

Basin Marsh

Basin marshes are herbaceous or shrubby wetlands situated in relatively large and irregular shaped basins. Basin marshes are associated with and often grade into Wet Prairie or Lake Communities (Florida Natural Areas Inventory). This community is typified by marsh openings within basin swamps, or extensive marshes occupying large, shallow basin landscape positions (Bridges and Reese 1996). Common species identified are panicum (*Panicum sp.*), cutgrass (*Leersia sp.*), pennywort (*Hydrocotyle sp.*), Spanish needle (*Bidens bipinnata*), soft rush (*Juncus sp.*), arrowhead (*Sagittaria sp.*), elderberry (*Sambucus canadensis*), spikerush (*Eleocharis sp.*), buttonbush (*Cephalanthus occidentalis*), and dog fennel (*Eupatorium compositifolium*).

Basin Swamp

Basin swamp is generally characterized as a relatively large and irregularly shaped basin that is not associated with rivers, but is vegetated with hydrophytic trees and shrubs that can withstand an extended hydroperiod (Florida Natural Areas Inventory). Dominant trees include cypress (*Taxodium sp.*), Swamp black gum (*Nyssa sylvatica var. biflora*), and Florida slash pine (*Pinus elliottii var. densa*). Other typical plants include red maple (*Acer rubrum*), swamp bay (*Persea palustris*), sweetbay (*Magnolia virginiana*), loblolly bay (*Gordonia lasianthus*), fetterbush (*Lyonia lucidi*), wax myrtle (*Myrica cerifera*), and buttonbush.

Depression Marsh

Depression marsh is characterized as a shallow, usually rounded depression in sand substrate with herbaceous vegetation often in concentric bands (Florida Natural Areas Inventory). Typical plants include St. John's wort (*Hypericum sp.*), yellow-eyed grass (*Xyris sp.*), chain fern (*Woodwardia sp.*), primrose willow (*Ludwigia peruviana*), maidencane (*Panicum hemitomum*), wax myrtle, buttonbush, pickerelweed (*Pontederia cordata*), and bladderwort (*Utricularia sp.*).

Dome Swamp

Dome swamps are characterized as shallow, forested, usually circular depressions that generally present a domed profile because smaller trees grow in the shallower waters at the outer edge, while larger trees grow in the deeper water in the interior. Pond cypress (*Taxodium ascendens*) and slash pine (in transition areas) are common trees. Other typical plants include red maple, dahoon holly (*Ilex cassine*), swamp bay, sweetbay, loblolly bay, virginia willow, fetterbush, chain fern (*Woodwardia virginiana*), netted chain fern (*Woodwardia areolata*), poison ivy (*Toxicodendron radicans*), Spanish moss (*Tillandsia usneoides*), wild pine (*Tillandsia sp.*), royal fern (*Osmunda regalis*), cinnamon fern (*Osmunda cinnamomea*), maidencane, wax myrtle, St. John's wort, floating heart (*Nymphoides aquatica*), buttonbush, and alligator flag (*Thalia geniculata*).

Mesic Uplands

Upland Mixed Forest

This community is characterized as well-developed, closed-canopy forests of upland hardwoods on rolling hills. Upland Mixed Forest is found on sandy-clays or clayey sands with substantial organic and often calcareous components. The topography and clayey soils increase surface water runoff, although this is counterbalanced by the moisture retention properties of clays and by the often thick layer of leaf mulch. This community is the climax community for their geographic locations. Southern magnolia, hickory, sweetgum, Florida maple, loblolly pine, and live oak are typical plants found in this community.

Mesic Flatlands

Mesic Flatwoods

Mesic Flatwoods are characterized as an open canopy forest of widely spaced pine trees with little or no understory but a dense ground cover of herbs and shrubs. Mesic flatwoods are found on poorly drained, but rarely if ever inundated soils. They occupy extensive flat inter-drainageway plains in central Florida. Several variations of mesic flatwoods are recognized, the most common in the Management Area being slash pine-gallberry-saw palmetto.

Scrubby Flatwoods

Scrubby flatwoods are characterized as an open canopy forest of widely scattered pine trees with a sparse shrubby understory and numerous areas of barren white sand (Florida Natural Areas Inventory). This community occurs on sites slightly higher in elevation than mesic flatwoods, but lower than scrub. Soils are well drained and dry, even during maximum rainfall events. Unlike scrub, the water table is relatively close to the soil surface. As with typical scrubby flatwoods, Drasdo and Lightsey Units harbor species common to both scrub and mesic flatwoods. Typical species include slash pine, saw palmetto, myrtle oak, sand live oak, fetterbush, goldenrod (*solidago sp.*), and wiregrass. Due to floristic and geographic similarities, some ecologists speculate that this community is merely a form of mesic flatwoods where fire has been excluded. This theory is based on the natural occurrence of hardwood (oak) invasion without sufficient fire frequency patterns. In addition, scrubby flatwoods provide habitat for the gopher tortoise and the Florida scrub jay (*Aphelocoma coerulescens*) – both threatened species.

Prairie Hammock

Prairie hammock is characterized as a clump of tall cabbage palms and live oaks in the midst of prairie or marsh communities (Florida Natural Areas Inventory). Prairie hammocks establish on elevated soils surrounded by lower topography. These islands are generally sandy marl flooding only for a short duration during the highest water levels.

Canopy species include live oak (*Quercus virginiana*) and cabbage palm, with occasional laurel oak (*Quercus laurifolia*) in lower elevations. An abundance of epiphytes, including listed species, are found in mature canopy trees. As in most prairie hammocks, there is a sparse under-story due to over-story shading, but cover is also reduced by cattle grazing and trampling of shrub and ground layer vegetation. Many species common to undisturbed hammocks are sparse or lacking, replaced by disturbance species such as broomweed (*Sida* sp.), tropical soda apple (*Solanum viarum*) and caesarweed (*Urena lobata*). Typical under-story plants of pristine prairie hammocks include wax myrtle, water oak, beautyberry (*Callicarpa americana*), and saw palmetto.

Wet Flatlands

Hydric Hammock

Hydric hammock is characterized as a well-developed hardwood and cabbage palm forest with a variable understory often dominated by palms and ferns. Typical plants include cabbage palm (*Sabal palmetto*), red maple, swamp bay, sweetbay, water oak (*Quercus nigra*), wax myrtle, saw palmetto, poison ivy, dahoon holly, royal fern, pepper vine (*Ampleopsis arborea*), and virginia creeper (*Parthenocissus quinque*).

Wet Flatwoods

Wet flatwoods are characterized as relatively open-canopy forests of scattered pine trees or cabbage palms with either a thick shrubby under-story and very sparse ground cover, or a sparse understory and a dense ground cover of hydrophytic herbs and shrubs, with variations between these extremes (Florida Natural Areas Inventory). Native ground cover species are frequently displaced by non-native Bahia.

Wet Prairie

Wet prairie is characterized as a treeless plain with a sparse to dense ground cover of grasses and herbs, including wiregrass, maidencane, spikerush (*Eleocharis* sp.), and beakrush (*Rhynchospora* sp.). Other typical plants include tickseed (*Bidens* sp.), wax myrtle, St. John's-wort (*Hypericum* sp.), and Panicums (Florida Natural Areas Inventory).

Xeric Uplands

Scrub

Scrub occurs in many forms, but is often characterized as a closed to open canopy forest of sand pines with dense clumps or vast thickets of scrub oaks and other shrubs dominating the understory (Florida Natural Areas Inventory). Typical plants include sand live oak, myrtle oak (*Quercus myrtifolia*), scrub oak (*Quercus inopina*), saw palmetto, fetterbush, and wiregrass. Highest elevations in the Management Area support this community.

Scrub is being lost at an alarming rate throughout the state, as high elevations and fast drainage make this community highly desirable for development. This association

occurs almost exclusively in Florida. State ranking of scrub is “S2,” imperiled in the state because of its rarity and vulnerability (Florida Natural Areas Inventory).

Xeric Hammock

Xeric Hammock is characterized as either a scrubby, dense, low canopy forest with little understories other than palmetto, or a multi-storied forest of tall trees with an open or closed canopy. Several gradations between these extremes exist. Typical plants include live oak (*Quercus virginiana*), sand live oak (*Quercus geminate*), laurel oak (*Quercus laurifolia*), and saw palmetto. (Florida Natural Areas Inventory)

Seepage Wetlands

Seepage Slope

Seepage slopes are wetlands characterized as shrub thickets on or at the base of a slope where moisture is maintained by downslope seepage such that the ground is usually saturated but rarely inundated. They generally occur where water percolating down through the sand hits an impermeable layer, such as clay or rock. Typical plants include pond pine, wax myrtle, wiregrass, bluestem, longleaf pine, and slash pine. Seepage slope soils are acidic, loamy sands with low nutrient availability that are constantly saturated by seepage except during droughts. They are rarely inundated, although small pools and rivulets are common.

Floodplain Wetlands

Floodplain Forest

Floodplain forests are hardwood forests that occur on drier soils at slight elevations within floodplains, such as on levees, ridges and terraces, and are usually flooded for a portion of the growing season. The dominant trees are sweetgum, red maple, silver maple, sweetbay magnolia, and poison ivy.

Soils of floodplain forests are variable mixtures of sand, organics, and alluvials. Hydroperiod is the primary physical feature of floodplain forests, which are inundated by flood waters nearly every year for up to 50% of the growing season. Floodplain forests usually do not have standing water in the dry season.

Riverine

Blackwater Stream

Blackwater streams are characterized as perennial or intermittent seasonal watercourses originating deep in sandy lowlands where extensive wetlands with organic soils function as reservoirs, collecting rainfall and discharging it slowly to the stream. The tea-colored waters are laden with tannins, particulates, and dissolved organic matter and iron translocated by drainage through swamps and marshes. Typical plants include sedges, grasses, smartweed, and golden club.

Blackwater streams have sandy bottoms overlain by organics and frequently underlain by limestone. Limestone outcrops may occur. These streams typically have high, steep banks alternating with floodplain swamps.

Lake Marion Creek and Reedy Creek Management Area General Management Plan 2010 – 2015
South Florida Water Management District, Land Stewardship Division

Appendix E - Species List
Flora

Inventoried by: Edwin Bridges and Gary Reese, 1996-1997, and 2005-2006: Fairchild Tropical Gardens
Darla Fousek and Mia VanHorn, 1997, South Florida Water Management District
Rufinao Osario, 1997, Independent Contractor for the South Florida Water Management District

	GENUS SPECIES	COMMON NAME
1	<i>Justicia angusta</i>	Everglades or Pineland Water-willow
2	<i>Ruellia caroliniensis</i> subsp. <i>caroliniensis</i>	Carolina Wild-petunia
3	<i>Acer rubrum</i> var. <i>trilobum</i>	Southern Red Maple
4	<i>Nolina brittoniana</i>	Bear-grass
5	<i>Yucca filamentosa</i>	Adam's Needle
6	<i>Sagittaria graminea</i> var. <i>chapmanii</i>	Grass-leaf Arrowhead; Baygalls
7	<i>Sagittaria graminea</i> var. <i>graminea</i>	Grass-leaf Arrowhead
8	<i>Sagittaria lancifolia</i>	Bull-tongue Arrow-head
9	<i>Sagittaria latifolia</i>	Common or Broad-leaf Arrowhead; Duck Potato; Wapato
10	<i>Alternanthera philoxeroides</i>	Alligator-weed
11	<i>Amaranthus australis</i>	Southern Water Hemp; Giant or Southern Amaranth
12	<i>Froelichia floridana</i>	Cottonweed; Plains Snake-cotton
13	<i>Iresine diffusa</i>	Bloodleaf; Juba's Bush
14	<i>Crinum americanum</i>	String-lily; Southern Swamplily; Seven Sisters
15	<i>Rhus copallina</i>	Winged or Shining or Dwarf Sumac
16	<i>Toxicodendron radicans</i>	Poison Ivy
17	<i>Asimina obovata</i>	Flag or Big-flower Pawpaw
18	<i>Asimina parviflora</i>	Small-flower Pawpaw
19	<i>Asimina reticulata</i>	Reticulate or Netted Pawpaw
20	<i>Centella asiatica</i>	Coinwort; Asian Coinleaf; Spade-leaf
21	<i>Cicuta mexicana</i>	Mexican or Spotted Water-hemlock
22	<i>Cyclosporum leptophyllum</i>	Marsh Parsley
23	<i>Eryngium aquaticum</i>	Corn Snakeroot; Marsh Coyote-thistle
24	<i>Eryngium aromaticum</i>	Fragrant Eryngium; Fragrant Coyote-thistle
25	<i>Eryngium baldwinii</i>	Matted Button Snakeroot; Baldwin's Coyote Thistle
26	<i>Eryngium yuccifolium</i>	Rattlesnake-master; Button Snakeroot
27	<i>Hydrocotyle bonariensis</i>	Coastal Plain Marsh or Water Pennywort
28	<i>Hydrocotyle ranunculoides</i>	
29	<i>Hydrocotyle umbellata</i>	Marsh or Many-flower Pennywort
30	<i>Hydrocotyle verticillata</i>	Whorled Pennywort; Whorled Marsh-pennywort
31	<i>Oxypolis filiformis</i>	Water Dropwort; Water Cowbane
32	<i>Sanicula canadensis</i>	Clustered or Canadian Black-snakeroot
33	<i>Ilex ambigua</i> var. <i>ambigua</i>	Carolina Holly; Sand Holly
34	<i>Ilex cassine</i>	Dahoon Holly; Dahoon
35	<i>Ilex coriacea</i>	Large or Sweet Gallberry
36	<i>Ilex glabra</i>	Inkberry; Gallberry
37	<i>Ilex opaca</i> var. <i>arenicola</i>	Scrub or American Holly
38	<i>Ilex opaca</i> var. <i>opaca</i>	American Holly
39	<i>Arisaema triphyllum</i>	Swamp Jack-in-the-pulpit; Indian Turnip
40	<i>Orontium aquaticum</i>	Golden Club; Neverwet
41	<i>Peltandra virginica</i>	Green Arum; Green Arrow Arum
42	<i>Pistia stratiotes</i>	Water-lettuce
43	<i>Rhaphidophyllum hystrix</i>	Needle Palm
44	<i>Sabal etonia</i>	Scrub Palmetto
45	<i>Sabal minor</i>	Dwarf or Bluestem Palmetto
46	<i>Sabal palmetto</i>	Cabbage Palm
47	<i>Serenoa repens</i>	Saw Palmetto
48	<i>Syagrus romanzoffianum</i>	Queen Palm
49	<i>Asclepias cinerea</i>	
50	<i>Asclepias curtissii</i>	Curtiss' Milkweed
51	<i>Asclepias feayi</i>	Feay's Milkweed
52	<i>Asclepias pedicellata</i>	Savannah Milkweed
53	<i>Asclepias perennis</i>	Aquatic Milkweed

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54	<i>Asclepias tuberosa</i> subsp. <i>rolfsii</i>	Butterfly-weed
55	<i>Cynanchum scoparium</i>	Leafless Cynanchum; Leafless Swallow-wort
56	<i>Matelea gonocarpus</i>	Angle-Pod; Spiny-Pod
57	<i>Dryopteris ludoviciana</i>	Florida or Southern Shield Fern; Southern Wood Fern
58	<i>Polystichum acrostichoides</i>	Christmas Fern
59	<i>Thelypteris dentata</i>	Downy Shield Fern; Downy Maiden Fern
60	<i>Thelypteris hispidula</i> var. <i>versicolor</i>	Rough Hairy Maiden Fern
61	<i>Thelypteris interrupta</i>	Willdenow's Maiden Fern
62	<i>Thelypteris kunthii</i>	Widespread Maiden Fern
63	<i>Thelypteris palustris</i> var. <i>pubescens</i>	Eastern Marsh Fern
64	<i>Acmelea oppositifolia</i> var. <i>repens</i>	Button of Gold; Creeping Spotflower
65	<i>Ageratina jucunda</i>	Hammock Thoroughwort
66	<i>Ambrosia artemisiifolia</i>	Common or Annual Ragweed
67	<i>Aster caroliniensis</i>	Climbing Aster
68	<i>Aster dumosus</i>	Bush Aster
69	<i>Aster eliottii</i>	Elliott's Aster
70	<i>Aster reticulatus</i>	Pine Barren White-top Aster
71	<i>Aster subulatus</i>	Annual Saltmarsh Aster
72	<i>Aster tortifolius</i>	White-topped Aster
73	<i>Baccharis glomeruliflora</i>	Groundsel Tree; Silverling
74	<i>Baccharis halimifolia</i>	Groundsel Tree; Seagrass Myrtle; Eastern False-willow
75	<i>Balduina angustifolia</i>	Yellow Buttons; Coastal-plain Honeycomb-head
76	<i>Bidens alba</i> var. <i>radiata</i>	Common Beggar-ticks
77	<i>Bidens bipinnata</i>	Spanish Needle(s)
78	<i>Bidens mitis</i>	Marsh or Small-fruited Beggar-ticks
79	<i>Bigelovia nudata</i> subsp. <i>australis</i>	South Florida Rayless-goldenrod
80	<i>Boltonia diffusa</i>	False Aster; Small-head Doll's Daisy; Saltmarsh Boltonia
81	<i>Carphephorus corymbosus</i>	Coastal-plain Chaffhead
82	<i>Carphephorus odoratissimus</i>	Odorless Vanilla-leaf
83	<i>Carphephorus paniculatus</i>	Hairy Chaffhead
84	<i>Chrysopsis scabrella</i>	Coastal-plain Golden-aster
85	<i>Cirsium horridulum</i>	Yellow or Horrid Thistle
86	<i>Cirsium muticum</i>	
87	<i>Cirsium nuttallii</i>	Nuttall's Thistle
88	<i>Conoclinium coelestinum</i>	Blue Mistflower
89	<i>Conyza canadensis</i> var. <i>pusilla</i>	Dwarf Horseweed
90	<i>Coreopsis floridana</i>	Florida Tickseed
91	<i>Coreopsis leavenworthii</i>	Leavenworth's Tickseed
92	<i>Elephantopus</i> species	Elephant's Foot
93	<i>Erechtites hieracifolia</i>	Fireweed; American Burn
94	<i>Erigeron quercifolius</i>	Southern or Oakleaf Fleabane
95	<i>Erigeron vernus</i>	Daisy or Early White-top Fleabane
96	<i>Eupatoriadelphus fistulosus</i>	Hollow Joe-pye-weed
97	<i>Eupatorium capillifolium</i>	Small Dog-fennel Thorough-wort; Dog Fennel
98	<i>Eupatorium compositifolium</i>	Dog Fennel; Yankee Weed
99	<i>Eupatorium leptophyllum</i>	Marsh Fennel
100	<i>Eupatorium mohrii</i>	Dog-fennel; Pale Boneset; Mohr's Thoroughwort
101	<i>Eupatorium recurvans</i>	Coastal Plain Thoroughwort
102	<i>Eupatorium rotundifolium</i>	False Horehound; Round-leaf Thorough-wort
103	<i>Eupatorium serotinum</i>	Late-flowering Thoroughwort
104	<i>Euthamia tenuifolia</i>	Slender Fragrant or Flat-topped Goldenrod
105	<i>Garberia heterophylla</i>	Garberia
106	<i>Gnaphalium obtusifolium</i>	Sweet Everlasting; Rabbit's Tobacco
107	<i>Helenium pinnatifidum</i>	Southeastern Sneezeweed
108	<i>Helianthus angustifolius</i>	Swamp Sunflower
109	<i>Helianthus floridanus</i>	Florida Sunflower
110	<i>Heterotheca subaxillaris</i>	Camphor-weed
111	<i>Hieracium megacephalon</i>	Hawk's Beard; Coastal-plain Hawkweed
112	<i>Iva microcephala</i>	Piedmont Sumpweed; Piedmont Marsh-elder
113	<i>Krigia virginica</i>	Virginia Dwarf-dandelion
114	<i>Lactuca floridana</i>	Wild or Woodland Lettuce
115	<i>Liatris chapmanii</i>	Chapman's Gayfeather

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116	<i>Liatris gracilis</i>	Blazing-star; Slender Gayfeather
117	<i>Liatris spicata</i>	Spiked Gayfeather
118	<i>Liatris tenuifolia</i> var. <i>quadriflora</i>	Blazing Star; Short-leaf Gayfeather
119	<i>Liatris tenuifolia</i> var. <i>tenuifolia</i>	Blazing Star; Short-leaf Gayfeather
120	<i>Lygodesmia aphylla</i>	Roserush
121	<i>Melanthera nivea</i>	Snow Squarestem; Cat-tongue
122	<i>Mikania cordifolia</i>	Florida Keys Hempweed; Florida Key Hempvine
123	<i>Mikania scandens</i>	Climbing Hempweed; Climbing Hempvine
124	<i>Palafoxia feayi</i>	Feay's Palafox
125	<i>Phoebanthus grandiflorus</i>	Florida False Sunflower
126	<i>Pityopsis graminifolia</i>	Golden-Aster
127	<i>Pityopsis graminifolia</i> var. <i>aequilifolia</i>	Florida Sand Golden-Aster
128	<i>Pityopsis graminifolia</i> var. <i>latifolia</i>	Golden-Aster
129	<i>Pityopsis graminifolia</i> var. <i>tracyi</i>	Golden Aster; Coastal-plain Silkgrass
130	<i>Pluchea foetida</i>	White or Marsh Fleabane; Stinking Camphor-weed
131	<i>Pluchea longifolia</i>	Long-leaf Camphor-weed
132	<i>Pluchea odorata</i>	Saltmarsh Fleabane; Shrubby Camphorweed
133	<i>Pluchea rosea</i>	Godfrey's Fleabane; Rosy Camphor-weed
134	<i>Polymnia uvedalia</i>	Bear's-foot; Yellow Leafcup
135	<i>Pterocaulon pycnostachyum</i>	Wand or Coastal Blackroot; Rabbit Tobacco
136	<i>Pyrrhopappus carolinianus</i>	Carolina False Dandelion
137	<i>Senecio glabellus</i>	Butterweed; GoldenorGrass-leafRagwort; Gr. Groundsel
138	<i>Solidago fistulosa</i>	Pinebarren Goldenrod
139	<i>Solidago leavenworthii</i>	Leavenworth's Goldenrod
140	<i>Solidago odora</i> var. <i>chapmanii</i>	Sweet Golden-rod
141	<i>Verbesina virginica</i>	Frostweed; White Crownbeard
142	<i>Vernonia gigantea</i>	Tall or Giant Ironweed
143	<i>Youngia japonica</i>	Oriental Hawksbeard
144	<i>Monarda punctata</i>	Horsemint; Spotted Beebalm
145	<i>Begonia cucullata</i>	Wax Begonia
146	<i>Carpinus caroliniana</i>	American Hornbeam; Bluebeech; Musclewood
147	<i>Campsis radicans</i>	Trumpet-vine; Trumpet Creeper
148	<i>Blechnum serrulatum</i>	Toothed Mid-sorus Fern
149	<i>Woodwardia areolata</i>	Netted or Dimorphic Chain Fern
150	<i>Woodwardia virginica</i>	Virginia Chain Fern
151	<i>Cardamine bulbosa</i>	Spring-cress; Bulbous Bitter-cress
152	<i>Lepidium virginicum</i>	Poorman's Pepper; Poorman's Pepper-wort
153	<i>Nasturtium microphyllum</i>	One-row Water-cress
154	<i>Tillandsia bartramii</i>	Wild Pine; Bartram's Air Plant
155	<i>Tillandsia fasciculata</i> var. <i>densispica</i>	Wild Pine; Giant Air Plant
156	<i>Tillandsia recurvata</i>	Small Ball-Moss
157	<i>Tillandsia setacea</i>	Wild Pine; Southern Needleleaf Air Plant
158	<i>Tillandsia simulata</i>	Wild Pine; Air Plant
159	<i>Tillandsia usneoides</i>	Spanish Moss
160	<i>Tillandsia utriculata</i>	Wild Pine; Spreading Air Plant
161	<i>Apteria aphylla</i>	Nodding Nixie
162	<i>Opuntia humifusa</i>	Prickly-pear Cactus; Devil's-tongue
163	<i>Opuntia pusilla</i>	Cock's-spur Prickly-pear
164	<i>Lobelia cardinalis</i>	Cardinal Flower
165	<i>Lobelia feayana</i>	Bay Lobelia
166	<i>Lobelia glandulosa</i>	Glandular or Glade Lobelia
167	<i>Canna flaccida</i>	Golden or Yellow Canna; Bandana-of-the-Everglades
168	<i>Canna x generalis</i>	Common Garden or Common Canna
169	<i>Polanisia tenuifolia</i>	
170	<i>Lonicera sempervirens</i>	Coral Honeysuckle
171	<i>Sambucus canadensis</i>	Elderberry; American Elder
172	<i>Viburnum nudum</i>	Possum Haw Viburnum; Possum Haw
173	<i>Viburnum obovatum</i>	Small or Walter Viburnum; Black Haw
174	<i>Drymaria cordata</i>	West Indian Chickweed; West Indian Drymary
175	<i>Paronychia americana</i>	American Nailwort
176	<i>Paronychia chartacea</i>	Paper-like Nailwort
177	<i>Paronychia patula</i>	Pineland Nailwort

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178	<i>Stipulicida setacea</i> var. <i>lacerata</i>	Pineland Scaly-pink
179	<i>Euonymus americanus</i>	American Strawberry-bush
180	<i>Chenopodium ambrosioides</i>	Mexican Tea; American Wormseed
181	<i>Licania michauxii</i>	Gopher Apple; Licania
182	<i>Helianthemum corymbosum</i>	Rockrose; Pine-barren Frostweed
183	<i>Helianthemum nashii</i>	Florida Scrub Frostweed
184	<i>Lechea cernua</i>	Nodding Pinweed
185	<i>Lechea deckertii</i>	Deckert's Pinweed
186	<i>Lechea divaricata</i>	Pine or Dry-sand Pinweed
187	<i>Lechea mucronata</i>	Hairy Pinweed
188	<i>Lechea sessiliflora</i>	Pineland Pinweed
189	<i>Lechea torreyi</i>	Piedmont Pinweed
190	<i>Callisia repens</i>	Basket Plant; Creeping Inchplant
191	<i>Commelina erecta</i>	Day-flower
192	<i>Cuthbertia ornata</i>	
193	<i>Tradescantia hirsutiflora</i>	Spiderwort
194	<i>Dichondra carolinensis</i>	Carolina Pony-foot
195	<i>Evolvulus sericeus</i>	Creeping Morning-glories; Silky False-morning-glory
196	<i>Ipomoea cordatotriloba</i>	Morning-glory; Tievine
197	<i>Ipomoea pandurata</i>	Wild Potato Vine; Morning-glory; Man-of-the-earth
198	<i>Ipomoea sagittata</i>	Saltmarsh or Glade Morning-glory
199	<i>Stylisma abdita</i>	
200	<i>Cornus foemina</i>	Stiff Cornel; Stiff Cornel Dogwood; Swamp Dogwood
201	<i>Melothria pendula</i>	Creeping Cucumber; Guadeloupe-cucumber
202	<i>Juniperus silicicola</i>	Southern Red Cedar
203	<i>Bulbostylis barbata</i>	Watergrass
204	<i>Bulbostylis ciliatifolia</i>	Capillary Hair-sedge
205	<i>Bulbostylis warei</i>	Ware's Hairsedge
206	<i>Carex alata</i>	Broadwing Sedge
207	<i>Carex atlantica</i> subsp. <i>capillacea</i>	Howe or Prickly Bog Sedge
208	<i>Carex bromoides</i>	Brome-like Sedge
209	<i>Carex chapmannii</i>	Chapman's Sedge
210	<i>Carex comosa</i>	Bottle-brush or Bearded Sedge
211	<i>Carex floridana</i>	Southern Black-edge Sedge
212	<i>Carex gigantea</i>	Large Sedge
213	<i>Carex godfreyi</i>	Godfrey's Sedge
214	<i>Carex granularis</i>	Limestone Meadow Sedge
215	<i>Carex leptalea</i>	Bristly-stalk Sedge
216	<i>Carex longii</i>	Greenish-white Sedge
217	<i>Carex lupuliformis</i>	Hop Sedge
218	<i>Carex styloflexa</i>	Bent Sedge
219	<i>Carex verrucosa</i>	Warty Sedge
220	<i>Carex vexans</i>	Confusing or Florida Hammock Sedge
221	<i>Cladium jamaicense</i>	Jamaica Sawgrass
222	<i>Cyperus compressus</i>	Poorland Flatsedge
223	<i>Cyperus croceus</i>	Baldwin Flatsedge
224	<i>Cyperus distinctus</i>	Marshland Flatsedge
225	<i>Cyperus flavescens</i>	Yellow Flatsedge
226	<i>Cyperus haspan</i>	Sheathed Flatsedge
227	<i>Cyperus lecontei</i>	Leconte's Flatsedge
228	<i>Cyperus nashii</i>	Nash's Flatsedge
229	<i>Cyperus odoratus</i>	Rusty Flatsedge
230	<i>Cyperus polystachyos</i>	Texas Sedge; Many-spike Flatsedge
231	<i>Cyperus pumilus</i>	Low Flatsedge
232	<i>Cyperus retrorsus</i>	Retorse or Pine-barren Flatsedge; Galingale
233	<i>Cyperus stenolepis</i>	Pale Marsh Cyperus
234	<i>Cyperus strigosus</i>	Straw-colored Flatsedge
235	<i>Cyperus surinamensis</i>	Tropical Flatsedge
236	<i>Cyperus tetragonus</i>	Four-angle Flatsedge
237	<i>Eleocharis baldwinii</i>	Roadgrass; Baldwin's Spikerush
238	<i>Eleocharis equisetoides</i>	Knotted or Horse-tail Spikerush
239	<i>Eleocharis flavescens</i>	Pale Spikerush
240	<i>Eleocharis quadrangulata</i>	Square-stem Spikerush

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241	<i>Eleocharis tuberculosa</i>	Long-tubercle Spikerush
242	<i>Eleocharis vivipara</i>	Viviparous Spikerush
243	<i>Fimbristylis autumnalis</i>	Slender Fimbry
244	<i>Fimbristylis dichotoma</i>	Tall or Annual or Woolly Fimbry
245	<i>Fimbristylis puberula</i>	Vahl's Hairy Fimbry
246	<i>Fuirena breviseta</i>	Saltmarsh Umbrella-sedge
247	<i>Fuirena pumila</i>	Dwarf Umbrella-sedge
248	<i>Fuirena scirpoidea</i>	Southern Umbrella-sedge
249	<i>Kyllinga odorata</i>	Fragrant Flatsedge
250	<i>Kyllinga pumila</i>	Thin-leaf Flatsedge
251	<i>Lipocarpa maculata</i>	American Lipocarpa
252	<i>Rhynchospora caduca</i>	Falling Beakrush; Falling Beaksedge
253	<i>Rhynchospora careyana</i>	Horned Beakrush
254	<i>Rhynchospora cephalantha</i>	Clustered Beakrush; Bunched Beaksedge
255	<i>Rhynchospora ciliaris</i>	Ciliate or Fringed Beakrush
256	<i>Rhynchospora colorata</i>	Starbrush White-topped Sedge; Star Rush
257	<i>Rhynchospora corniculata</i>	Horned-rush; Short-bristle Horned Beak(rush)(sedge)
258	<i>Rhynchospora decurrens</i>	Decurrent or Swamp-forest Beak(rush)(sedge)
259	<i>Rhynchospora divergens</i>	Spreading Beakrush; Spreading Beaksedge
260	<i>Rhynchospora fascicularis</i>	Fasciculate Beakrush; Fasciculate Beaksedge
261	<i>Rhynchospora fernaldii</i>	Fernald's Beakrush; Fernald's Beaksedge
262	<i>Rhynchospora intermedia</i>	Pinebarren Beakrush; Pinebarren Beaksedge
263	<i>Rhynchospora inundata</i>	Narrow-fruited Horned Beak(rush)(sedge)
264	<i>Rhynchospora megalocarpa</i>	Sandy-field Beaksedge
265	<i>Rhynchospora microcarpa</i>	Southern Beakrush; Southern Beaksedge
266	<i>Rhynchospora microcephala</i>	Capitate Beakrush
267	<i>Rhynchospora miliacea</i>	Millet Beakrush; Millet Beaksedge
268	<i>Rhynchospora mixta</i>	Mingled Beakrush; Mingled Beaksedge
269	<i>Rhynchospora nitens</i>	Short-beak Bulrush
270	<i>Rhynchospora odorata</i>	Fragrant Beakrush; Fragrant Beaksedge
271	<i>Rhynchospora plumosa</i>	Plumed Beakrush; Plumed Beaksedge
272	<i>Rhynchospora rariflora</i>	Few-flower Beakrush; Few-flower Beakrush
273	<i>Scirpus cubensis</i>	Cuban Bulrush
274	<i>Scirpus cyperinus</i>	Woolgrass; Cotton-grass Bulrush
275	<i>Scirpus lineatus</i>	Pendulous or Drooping Bulrush
276	<i>Scirpus tabernaemontani</i>	Soft-stem(med) Bulrush
277	<i>Scleria oligantha</i>	Little-head Nutrush
278	<i>Scleria pauciflora</i>	Few-flower Nutrush
279	<i>Scleria reticularis</i>	Netted or Torrey's Nutrush
280	<i>Scleria triglomerata</i>	Tall Nutgrass; Whip Nutrush
281	<i>Cyrtilla parviflora</i>	Swamp Titi
282	<i>Nephrolepis exaltata</i>	Boston Fern; Boston Swordfern
283	<i>Drosera brevifolia</i>	Dwarf Sundew
284	<i>Drosera capillaris</i>	Pink Sundew
285	<i>Diospyros virginiana</i>	Common Persimmon
286	<i>Ceratiola ericoides</i>	Florida Rosemary
287	<i>Agarista populifolia</i>	
288	<i>Befaria racemosa</i>	Tarflower
289	<i>Gaylussacia dumosa</i>	Dwarf Huckleberry
290	<i>Gaylussacia nana</i>	Dangleberry; Creeping Huckleberry
291	<i>Leucothoe axillaris</i>	Coastal Dog-Hobble
292	<i>Lyonia ferruginea</i>	Rusty Lyonia; Rusty Staggerbush
293	<i>Lyonia fruticosa</i>	Coastal-plain Staggerbush
294	<i>Lyonia ligustrina</i> var. <i>foliosiflora</i>	Maleberry; He-huckleberry
295	<i>Lyonia lucida</i>	Fetterbush; Shinyleaf
296	<i>Monotropa uniflora</i>	One-flower Indian-pipe
297	<i>Rhododendron viscosum</i>	Swamp Honeysuckle; Northern Swamp Azelea
298	<i>Vaccinium corymbosum</i>	Highbush or Fuscous Blueberry
299	<i>Vaccinium darrowii</i>	Darrow's or Glaucous Blueberry
300	<i>Vaccinium elliotii</i>	
301	<i>Vaccinium myrsinites</i>	Shiny Blueberry
302	<i>Vaccinium stamineum</i>	Deerberry; Blueberry
303	<i>Elephantopus carolinianus</i>	Carolina Elephant's-foot

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304	<i>Elephantopus elatus</i>	Florida or Tall Elephant's-foot
305	<i>Eriocaulon decangulare</i>	Ten-angle Pipewort
306	<i>Lachnocaulon anceps</i>	White-head Bog-buttons
307	<i>Lachnocaulon beyrichianum</i>	Southern Bog-button
308	<i>Lachnocaulon engleri</i>	Engler's Bogbutton
309	<i>Syngonanthus flavidulus</i>	Bantam-buttons; Yellow Hatpins
310	<i>Ptilimnium capillaceum</i>	Hair-like Mock Bishop's-weed
311	<i>Acalypha gracilens</i>	Three-seeded Mercury
312	<i>Cnidocolus stimulosus</i>	Tread Softly; Stinging or Spurge Nettle; Finger-rot
313	<i>Croton argyranthemus</i>	Silver Croton
314	<i>Crotonopsis linearis</i>	Narrow-leaf Rushfoil
315	<i>Phyllanthus caroliniensis</i> subsp. <i>caroliniensis</i>	Carolina Leaf-flower
316	<i>Stillingia sylvatica</i> ssp. <i>sylvatica</i>	Queen's Delight
317	<i>Tragia urens</i>	Noseburn
318	<i>Aeschynomene americana</i>	American Joint-vetch; Shyleaf
319	<i>Alysicarpus ovalifolius</i>	False Moneywort
320	<i>Amorpha herbacea</i>	Lead Plant; Cluster-spike Indigo-bush
321	<i>Apios americana</i>	Groundnut; American Potato-bean
322	<i>Chamaecrista fasciculata</i>	Partridge Pea
323	<i>Chamaecrista nictitans</i> var. <i>aspera</i>	Wild Sensitive Plant; Sensitive Partridge-pea
324	<i>Chamaecrista nictitans</i> var. <i>nictitans</i>	Sensitive Partridge-pea
325	<i>Chapmannia floridana</i>	Florida Alicia
326	<i>Crotalaria lanceolata</i>	Lance-leaf Rattlebox
327	<i>Crotalaria pallida</i> var. <i>obovata</i>	Smooth Rattlebox
328	<i>Crotalaria rotundifolia</i>	Rabbit-bells; Prostrate Rattle-box
329	<i>Dalea feayi</i>	Feay's Prairie-clover
330	<i>Dalea pinnata</i> var. <i>adenopoda</i>	Florida Summer-farewell
331	<i>Desmodium paniculatum</i>	Marrow-leaf or Panicked Tick-trefoil
332	<i>Desmodium triflorum</i>	Three-flower Tick-trefoil
333	<i>Desmodium viridiflorum</i>	Wide-leaved Tick-trefoil
334	<i>Erythrina herbacea</i>	Coral Bean
335	<i>Galactia eliottii</i>	Elliott's Milk-pea
336	<i>Galactia mollis</i>	
337	<i>Galactia regularis</i>	Eastern or Florida Milk-pea
338	<i>Galactia volubilis</i>	Downy Milk-pea
339	<i>Indigofera caroliniana</i>	Carolina Indigo
340	<i>Indigofera hirsuta</i>	Rough Hairy Indigo
341	<i>Lespedeza hirta</i> var. <i>hirta</i>	Hairy Bush-clover
342	<i>Lupinus diffusus</i>	Sky-blue or Oak-ridge Lupine
343	<i>Macroptilium lathyroides</i>	Wild Bush-bean
344	<i>Rhynchosia cinerea</i>	Snout-Pea
345	<i>Schrankia microphylla</i> var. <i>floridana</i>	Bashful Sensitive Briar
346	<i>Sesbania vesicaria</i>	Bladderpod; Bag-pod Rattle-bush; Bag-pod River Hemp
347	<i>Tephrosia chrysophylla</i>	Scurf Hoary-pea
348	<i>Tephrosia florida</i>	Florida Hoary-pea
349	<i>Tephrosia hispidula</i>	Spreading Hoary-pea
350	<i>Tephrosia spicata</i>	Spiked Hoary-pea
351	<i>Vicia acutifolia</i>	Four-leaf Vetch
352	<i>Quercus chapmanii</i>	Chapman's Oak
353	<i>Quercus geminata</i>	Sand or Scrub Live Oak
354	<i>Quercus hemispherica</i>	Upland Laurel Oak
355	<i>Quercus incana</i>	Bluejack or Gray Oak
356	<i>Quercus inopina</i>	Scrub Oak
357	<i>Quercus laevis</i>	Turkey Oak
358	<i>Quercus laurifolia</i>	Laurel Oak; Diamond (-leaf) Oak
359	<i>Quercus minima</i>	Dwarf Live Oak
360	<i>Quercus myrtifolia</i>	Myrtle Oak
361	<i>Quercus nigra</i>	Water Oak
362	<i>Quercus pumila</i>	Runn(ing)(er) Oak
363	<i>Quercus virginiana</i>	Virginia Live Oak
364	<i>Sabatia brevifolia</i>	White Sabatia; Short-leaf Rose-gentian
365	<i>Sabatia calycina</i>	Coast(al) Rose-gentian

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366	<i>Sabatia difformis</i>	Lance-leaf Rose-gentian
367	<i>Sabatia grandiflora</i>	Large-flower Rose-gentian
368	<i>Geranium carolinianum</i>	Carolina Cranesbill
369	<i>Lachnanthes caroliniana</i>	Bloodroot; Carolina Redroot
370	<i>Proserpinaca palustris</i>	
371	<i>Proserpinaca pectinata</i>	Comb-leaf Mermaid-weed
372	<i>Liquidambar styraciflua</i>	Sweetgum
373	<i>Hydrolea corymbosa</i>	Sky-flower; Corymb False-fiddleleaf
374	<i>Hydrilla verticillata</i>	Hydrilla; Waterthyme
375	<i>Limnobiom spongia</i>	Frog's-bit; American Spongeplant
376	<i>Vallisneria americana</i>	Tape-grass; American Eel-grass; Wild-celery
377	<i>Hypericum cf. limosum</i>	Coastal-plain St. John's-wort
378	<i>Hypericum cistifolium</i>	Round-pod St. John's-wort
379	<i>Hypericum crux-andreae</i>	St. Peter's-wort; Saint Andrew's-cross; St. John's Wort
380	<i>Hypericum fasciculatum</i>	Sandweed or Swampy or Peel-bark St. John's-wort
381	<i>Hypericum hypericoides</i>	St. Andrew's Cross; Edison's St. John's-wort
382	<i>Hypericum mutilum</i>	Dwarf or Slender St. John's-wort
383	<i>Hypericum myrtifolium</i>	Myrtle-leaf St. John's-wort
384	<i>Hypericum reductum</i>	Atlantic St. John's-wort
385	<i>Hypericum tetrapetalum</i>	Four-petal St. John's-wort; St. Andrew's Cross
386	<i>Triadenum virginicum</i>	Virginia Marsh St. John's-wort
387	<i>Hypoxis curtissii</i>	Yellow or Swamp Stargrass; Clubpod Goldstar
388	<i>Hypoxis juncea</i>	Fringed Yellow or Common Stargrass
389	<i>Illicium parviflorum</i>	Star Anise; Ocala Anise-tree
390	<i>Iris hexagona var. savannarum</i>	Prairie or Dixie Iris
391	<i>Nemastylis floridana</i>	Fall-flowering Ixia; F-flw. Pleatleaf
392	<i>Sisyrinchium atlanticum</i>	Pointed or Sandplain or Michaux's Blue-eyed-grass
393	<i>Sisyrinchium xerophyllum</i>	White Sand or Jeweled Blue-eyed Grass
394	<i>Isoetes flaccida</i>	Florida or Southern Quillwort
395	<i>Carya aquatica</i>	Water Hickory
396	<i>Carya floridana</i>	Scrub Hickory
397	<i>Carya glabra</i>	Pignut Hickory
398	<i>Juncus coriaceous</i>	Leathery Rush
399	<i>Juncus dichotomus</i>	Two-parted or Forked Rush
400	<i>Juncus effusus subsp. solutus</i>	Soft or Lamp Rush
401	<i>Juncus elliotii</i>	Bog Rush
402	<i>Juncus marginatus var. biflorus</i>	Shore or Grass-leaf Rush
403	<i>Juncus megacephalus</i>	Large-headed or Big-headed Rush
404	<i>Juncus polycephalus</i>	Many-headed Rush
405	<i>Juncus repens</i>	Lesser Creeping Rush
406	<i>Juncus scirpoides</i>	Needle-pod Rush
407	<i>Dicerandra frutescens</i>	
408	<i>Hyptis alata</i>	Musky Mint; Cluster Bushmint
409	<i>Hyptis mutabilis</i>	Tropical Bushmint
410	<i>Lycopus rubellus</i>	Taper-leaf Water Hoarhound
411	<i>Piloblephis rigida</i>	Wild Pennyroyal
412	<i>Salvia lyrata</i>	Lyre-leaved Sage
413	<i>Scutellaria arenicola</i>	Florida Scrub Skullcap
414	<i>Scutellaria integrifolia</i>	Skullcap
415	<i>Teucrium canadense</i>	American Germander; Wood-sage
416	<i>Trichostema dichotomum</i>	Blue-curls
417	<i>Trichostema suffruticosum</i>	Shrubby Blue-curls
418	<i>Lindera benzoin</i>	Spicebush
419	<i>Persea borbonia var. borbonia</i>	Red Bay
420	<i>Persea borbonia var. humilis</i>	Silkbay; Scrub Bay
421	<i>Persea palustris</i>	Swamp Bay; Swamp Red-bay
422	<i>Pinguicula lutea</i>	Yellow Butterwort
423	<i>Pinguicula pumila</i>	Small Butterwort
424	<i>Utricularia inflata</i>	Floating or Swollen Bladderwort
425	<i>Utricularia purpurea</i>	Eastern Purple Bladderwort
426	<i>Utricularia subulata</i>	Zigzag Bladderwort
427	<i>Aletris lutea</i>	Yellow Colic-root
428	<i>Lilium catesbaei</i>	Catesby's or Pine or Southern Red Lily

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429	<i>Melanthium virginicum</i>	Virginia Bunchflower
430	<i>Gelsemium sempervirens</i>	Yellow Jessamine; Evening Trumpet-
431	<i>Mitreola petiolata</i>	Miterwort; Lax Hornpod
432	<i>Mitreola sessilifolia</i>	Miterwort; Swamp Hornpod
433	<i>Polypremum procumbens</i>	Rustweed; Juniper-leaf
434	<i>Phoradendron leucarpum</i>	Oak Mistletoe
435	<i>Cuphea carthagenensis</i>	Columbia Waxweed
436	<i>Lythrum alatum</i> var. <i>lanceolatum</i>	Wing(ed)(-angle) Loosestrife
437	<i>Rotala ramosior</i>	Lowland Toothcup
438	<i>Magnolia grandiflora</i>	Southern or Large-flower Magnolia
439	<i>Magnolia virginiana</i>	Sweet Bay; Sweetbay Magnolia
440	<i>Hibiscus coccineus</i>	Scarlet Rosemallow
441	<i>Hibiscus grandiflorus</i>	Swamp Hibiscus; Swamp Rose-mallow
442	<i>Kosteletzkya virginica</i>	Virginia Saltmarsh Mallow; Virginia Fen-rose
443	<i>Pavonia spinifex</i>	Yellow Hibiscus; Barb-fruit Swamp-mallow
444	<i>Urena lobata</i>	Caesar-weed
445	<i>Thalia geniculata</i>	Fire or Alligator Flag
446	<i>Rhexia cubensis</i>	West Indi(an)(es) Meadow-beauty
447	<i>Rhexia mariana</i>	Pale or Maryland Meadow-beauty
448	<i>Rhexia nashii</i>	Nash's Meadow-beauty
449	<i>Rhexia nuttallii</i>	Nuttall's Meadow-beauty
450	<i>Rhexia petiolata</i>	Ciliate Meadow-beauty
451	<i>Melia azedarach</i>	Chinaberry; Chineseberry
452	<i>Broussonetia papyrifera</i>	Paper-Mulberry
453	<i>Morus rubra</i>	Red Mulberry
454	<i>Myrica cerifera</i>	Wax Myrtle; Southern Bayberry
455	<i>Ardisia escallonioides</i>	Island Marlberry
456	<i>Myrsine floridana</i>	Guiana Rapanea; Guiana Myrsine; Guiana Colicwood
457	<i>Nelumbo lutea</i>	Lotus Lily; American Lotus; Water Chestnut
458	<i>Nuphar lutea</i> subsp. <i>advena</i>	Spatter-dock; Yellow Pond-lily
459	<i>Nymphaea odorata</i>	White or Fragrant Waterlily; Alligator Bonnet
460	<i>Nyssa sylvatica</i> var. <i>biflora</i>	Swamp Black or Sour Gum; Swamp Tupelo
461	<i>Ximenia americana</i>	Tallowwood; Hog Plum
462	<i>Chionanthus pygmaeus</i>	Pigmy Fringe Tree
463	<i>Chionanthus virginicus</i>	White Fringe Tree
464	<i>Fraxinus caroliniana</i>	Carolina or Water or Pop Ash
465	<i>Fraxinus pennsylvanica</i>	Red or Green Ash
466	<i>Osmanthus americanus</i>	Wild Olive; Devil-wood
467	<i>Osmanthus megacarpus</i>	Florida Wild Olive
468	<i>Ludwigia alata</i>	Winged Seedbox; Winged Primrose-willow
469	<i>Ludwigia arcuata</i>	Piedmont Seedbox; Piedmont Primrose-willow
470	<i>Ludwigia curtissii</i>	Curtiss' Seedbox; Curtiss' Primrose-willow
471	<i>Ludwigia erecta</i>	Yerba de Jicotea
472	<i>Ludwigia leptocarpa</i>	River Seedbox; River Primrose-willow
473	<i>Ludwigia linearis</i>	Narrow-leaf Seedbox; Narrow-leaf Primrose-willow
474	<i>Ludwigia maritima</i>	Seaside Primrose-willow; Seaside Seedbox
475	<i>Ludwigia microcarpa</i>	Small-fruit Seedbox; Small-fruit Primrose-willow
476	<i>Ludwigia octovalvis</i>	Mexican Seedbox; Mexican Primrose-willow
477	<i>Ludwigia palustris</i>	Swamp Primrose; Marsh Primrose-willow
478	<i>Ludwigia peruviana</i>	Peruvian Primrose-willow
479	<i>Ludwigia pilosa</i>	Hairy Seedbox; Hairy Primrose-willow
480	<i>Ludwigia repens</i>	Water Primrose; Creeping Seedbox
481	<i>Ludwigia suffruticosa</i>	Shrubby Seedbox; Shrubby Primrose-willow
482	<i>Oenothera laciniata</i>	Cut-leaved Evening Primrose
483	<i>Ophioglossum</i>	Adder's Tonge Fern
484	<i>Beadlea cranichoides</i>	Tropical forest Ladies'-tresses
485	<i>Encyclia tampensis</i>	Tampa Butterfly Orchid
486	<i>Epidendrum conopseum</i>	Green-fly Orchid
487	<i>Habenaria floribunda</i>	Toothed Habenaria; Tooth-petal False Rein Orchid
488	<i>Platanthera flava</i>	Gypsy-spikes; Pale Green Orchid
489	<i>Ponthieva racemosa</i>	Hairy Shadow Witch
490	<i>Pteroglossaspis ecristata</i>	Wild Coco; Giant Orchid
491	<i>Spiranthes odorata</i>	Fragrant Ladies'-tresses

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492	<i>Osmunda cinnamomea</i>	Cinnamon Fern
493	<i>Osmunda regalis</i> var. <i>spectabilis</i>	Royal Fern
494	<i>Oxalis corniculata</i>	Lady's Sorrel; Creeping or Yellow Wood Sorrel
495	<i>Petiveria alliacea</i>	Garlic Guinea-hen Weed
496	<i>Phytolacca americana</i>	Pokeberryweed; Common or American Pokeweed
497	<i>Phytolacca rigida</i>	Florida Pokeweed
498	<i>Rivina humilis</i>	Rouge Plant
499	<i>Pinus clausa</i>	Sand Pine
500	<i>Pinus elliottii</i>	Slash Pine
501	<i>Pinus palustris</i>	Longleaf Pine
502	<i>Peperomia humilis</i>	Terrestrial Peperomia
503	<i>Plantago virginica</i>	Southern or Pale-seed Plantain
504	<i>Amphicarpum muhlenbergianum</i>	Little Blue Maidencane; Perennial Goobergrass
505	<i>Andropogon brachystachyus</i>	Short-spike Bluestem
506	<i>Andropogon floridanus</i>	Florida Bluestem
507	<i>Andropogon glomeratus</i> var. <i>glaucoopsis</i>	Big Chalky Bluestem
508	<i>Andropogon glomeratus</i> var. <i>hirsutior</i>	Hairy Bushy Bluestem
509	<i>Andropogon glomeratus</i> var. <i>pumilus</i>	Big Bushy Bluestem
510	<i>Andropogon gyrans</i> var. <i>gyrans</i>	Elliott's Bluestem
511	<i>Andropogon ternarius</i> var. <i>cabanisii</i>	Silver Bluestem
512	<i>Andropogon virginicus</i> var. <i>decepiens</i>	Broomsedge
513	<i>Andropogon virginicus</i> var. <i>glauca</i>	Little Chalky Bluestem
514	<i>Andropogon virginicus</i> var. <i>virginicus</i>	Broomsedge
515	<i>Aristida beyrichiana</i>	Wiregrass; Pineland Threeawn
516	<i>Aristida gyrans</i>	Corkscrew Threeawn
517	<i>Aristida palustris</i>	Long-leaf Three-awn Grass
518	<i>Aristida patula</i>	Tall Threeawn; Tall Wiregrass
519	<i>Aristida purpurascens</i> var. <i>purpurascens</i>	Slim-spike Three-awn Grass
520	<i>Aristida spiciformis</i>	Bottlebrush or Pinebarren Threeawn
521	<i>Axonopus fissifolius</i>	Common or Southern Carpetgrass
522	<i>Axonopus furcatus</i>	Big Carpetgrass
523	<i>Cenchrus echinatus</i>	Southern Sandspur
524	<i>Cenchrus incertus</i>	Coast Sandspur
525	<i>Chasmanthium laxum</i>	Spike Chasmanthium; Slender Spikegrass
526	<i>Chasmanthium nitidum</i>	Shiny Chasmanthium; Shiny Spikegrass
527	<i>Chasmanthium sessiliflorum</i>	Longleaf Chasmanthium; Longleaf Spikegrass
528	<i>Dichanthelium aciculare</i>	Needle-leaf Witchgrass; Panic Grass
529	<i>Dichanthelium commutatum</i>	Variable Witchgrass; Panic Grass
530	<i>Dichanthelium dichotomum</i>	Cypress Witchgrass; Panic Grass
531	<i>Dichanthelium ensifolium</i> var. <i>breve</i>	Panic Grass
532	<i>Dichanthelium ensifolium</i> var. <i>ensifolium</i>	Panic Grass
533	<i>Dichanthelium ensifolium</i> var. <i>unciphylum</i>	Panic Grass
534	<i>Dichanthelium erectifolium</i>	Erect-leaf Witchgrass
535	<i>Dichanthelium laxiflorum</i>	Lax-flower Witchgrass; Panic Grass
536	<i>Dichanthelium leucothrix</i>	Panic Grass
537	<i>Dichanthelium ovale</i>	Panic Grass; Egg-leaf Witchgrass
538	<i>Dichanthelium portoricense</i>	Hemlock Witchgrass
539	<i>Dichanthelium scabriusculum</i>	Woolly Panic Grass
540	<i>Dichanthelium strigosum</i> var. <i>glabrescens</i>	Panic Grass
541	<i>Digitaria ciliaris</i>	Southern Crabgrass
542	<i>Echinochloa walteri</i>	Coast(al) Cockspur
543	<i>Eleusine indica</i>	India Goosegrass
544	<i>Eragrostis atrovirens</i>	Thalia Lovegrass
545	<i>Eragrostis elliottii</i>	Elliott('s) Lovegrass
546	<i>Eragrostis spectabilis</i>	Purple Lovegrass; Petticoat Climber
547	<i>Eragrostis virginica</i>	Coastal or Meadow Lovegrass
548	<i>Eustachys glauca</i>	Saltmarsh Fingergrass
549	<i>Eustachys petraea</i>	Pinewoods Fingergrass
550	<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass

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551	<i>Imperata brasiliensis</i>	Cogongrass; Brazilian Satintail
552	<i>Leersia hexandra</i>	Southern or Clubhead Cutgrass
553	<i>Leersia virginica</i>	White Grass
554	<i>Muhlenbergia capillaris</i> var. <i>filipes</i>	Long-awn Muhly
555	<i>Oplismenus setarius</i>	Wood(s)grass; Short-leaf Basketgrass
556	<i>Panicum anceps</i>	Beaked Panicum; Beaked Panic Grass
557	<i>Panicum hemitomon</i>	Maidencane
558	<i>Panicum hians</i>	Gaping Panic Grass
559	<i>Panicum longifolium</i>	Panic Grass
560	<i>Panicum repens</i>	Torpedo Grass
561	<i>Panicum rigidulum</i>	Redtop Panicum; Redtop Panic Grass
562	<i>Panicum tenerum</i>	Bluejoint or Southeastern Panicum
563	<i>Panicum verrucosum</i>	Warty Panicum; Warty Panic Grass
564	<i>Panicum virgatum</i>	Switchgrass; Wand-shape Panicum
565	<i>Paspalum conjugatum</i>	Sour Paspalum; Sour Crowngrass
566	<i>Paspalum floridanum</i>	Florida or Giant Paspalum; Florida Crowngrass
567	<i>Paspalum notatum</i> var. <i>saurae</i>	Bahiagrass
568	<i>Paspalum praecox</i>	Early Paspalum; Early Crowngrass
569	<i>Paspalum setaceum</i>	Thin Paspalum; Slender Crowngrass
570	<i>Paspalum urvillei</i>	Vaseygrass
571	<i>Phanopyrum gymnocarpon</i>	Savannah Panicum; Savannah Panic Grass
572	<i>Pharus lappulaceus</i>	Creeping Leafstalkgrass
573	<i>Piptochaetium avenaceum</i>	Blackseed Needle Grass
574	<i>Rhynchelytrum repens</i>	Red Natalgrass
575	<i>Saccharum giganteum</i>	Sugarcane Plumegrass
576	<i>Sacciolepis indica</i>	India Cupscale; Glenwood Grass
577	<i>Sacciolepis striata</i>	American Cupscale
578	<i>Schizachyrium rhizomatum</i>	Florida Bluestem
579	<i>Schizachyrium sanguineum</i>	Crimson False Bluestem
580	<i>Schizachyrium stoloniferum</i>	Creeping Bluestem
581	<i>Setaria geniculata</i>	Knotroot Foxtail; Knotroot Bristle Grass
582	<i>Sorghastrum secundum</i>	Lopsided Indiangrass
583	<i>Spartina bakeri</i>	Sand or Bunch Cordgrass
584	<i>Stipa avencioides</i>	Florida Needlegrass
585	<i>Tridens flavus</i> var. <i>flavus</i>	Tall Redtop; Purpletop; Purpletop Triends
586	<i>Triplasis americana</i>	Perennial Sandgrass
587	<i>Tripsacum dactyloides</i>	Eastern Gamagrass; Eastern Mock Grama
588	<i>Urochloa mutica</i>	Paragrass
589	<i>Polygala cruciata</i>	Cross-leaf Milkwort; Drumheads
590	<i>Polygala lewtonii</i>	
591	<i>Polygala lutea</i>	Wild Batchelor's Button; Orange Milkwort
592	<i>Polygala nana</i>	Wild Batchelor's Button; Dwarf Milkwort
593	<i>Polygala polygama</i>	Jointweed; Racemed Milkwort
594	<i>Polygala rugelii</i>	Yellow Batchelor's Button; Yellow Milkwort
595	<i>Polygala setacea</i>	Coastal-plain Milkwort
596	<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	Scrub Buckwheat
597	<i>Eriogonum tomentosum</i>	Wild Buckwheat
598	<i>Polygonella gracilis</i>	Wireweed; Tall Jointweed
599	<i>Polygonella polygama</i> var. <i>polygama</i>	Jointweed; October-flower
600	<i>Polygonella robusta</i>	Sandhill Wireweed; Large-flower Jointweed
601	<i>Polygonum densiflorum</i>	Dense-flower Smartweed; Dense-flower Knotweed
602	<i>Polygonum hirsutum</i>	Hairy Smartweed
603	<i>Polygonum hydropiperoides</i>	Mild or Swamp Water-pepper; Swamp Smartweed
604	<i>Polygonum punctatum</i>	Dotted Smartweed
605	<i>Rumex hastatulus</i>	Hastate-leaved Dock; Heart-wing Sorrel
606	<i>Campyloneurum phyllitidis</i>	Long Strap Fern
607	<i>Pecluma plumula</i>	Plumy Polypody
608	<i>Pecluma ptilodon</i> var. <i>caespitosa</i>	Comb Polypody
609	<i>Phlebodium aureum</i>	Golden Polypody
610	<i>Polypodium polypodioides</i> var. <i>michauxianum</i>	Resurrection Fern
611	<i>Eichhornia crassipes</i>	Common Water Hyacinth

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612	<i>Pontederia cordata</i>	Pickernelweed
613	<i>Samolus valerandi</i> subsp. <i>parviflorus</i>	Water or Pineland Pimpernel; Seaside Brookweed
614	<i>Psilotum nudum</i>	Whisk Fern
615	<i>Pityrogramma trifoliata</i>	Goldenrod or Split-pinna Fern
616	<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	Bracken Fern
617	<i>Clematis catesbyana</i>	Virgin's Bower; Satin-curled
618	<i>Clematis crispa</i>	Swamp Leather Flower
619	<i>Berchemia scandens</i>	Rattan Vine; Alabama Supple-jack
620	<i>Rhamnus caroliniana</i>	Carolina Buckthorn
621	<i>Sageretia minutiflora</i>	Small-flower Mock Buckthorn; Sagaretia
622	<i>Crataegus lepida</i>	Scrub Hawthorn
623	<i>Prunus caroliniana</i>	Carolina Laurel Cherry
624	<i>Prunus geniculata</i>	Scrub Plum
625	<i>Prunus serotina</i> var. <i>serotina</i>	Black or Wild Cherry
626	<i>Prunus umbellata</i>	Flatwoods or Hog Plum
627	<i>Pyrus arbutifolia</i>	Red Chokeberry
628	<i>Rubus argutus</i>	Highbush Blueberry; Serrate-leaf Blackberry
629	<i>Rubus betulifolius</i>	Blackberry
630	<i>Rubus cuneifolius</i>	Sand Blackberry
631	<i>Rubus trivialis</i>	Southern Dewberry
632	<i>Cephalanthus occidentalis</i>	Common Buttonbush
633	<i>Chiococca alba</i>	Snowberry; West Indies Milkberry
634	<i>Diodia teres</i>	Poor Joe; Rough Button-weed
635	<i>Diodia virginiana</i>	Virginia Buttonweed
636	<i>Galium aparine</i>	Goose Grass; Spring Cleavers; Catchweed Bedstraw
637	<i>Galium hispidulum</i>	Coastal Bedstraw
638	<i>Galium pilosum</i>	Hairy Bedstraw
639	<i>Galium tinctorium</i>	Stiff Marsh Bedstraw
640	<i>Galium uniflorum</i>	One-flower Bedstraw
641	<i>Hamelia patens</i>	Firebush; Scarletbush
642	<i>Hedyotis procumbens</i>	Innocence; Round-leaf Bluet
643	<i>Hedyotis uniflora</i>	Flat-top Bluet; Clustered Bluet
644	<i>Mitchella repens</i>	American Partridge Berry; Twinberry
645	<i>Psychotria nervosa</i>	Wild Coffee; Seminole Balsamo
646	<i>Psychotria sulzneri</i>	Sulzner's Wild Coffee
647	<i>Richardia brasiliensis</i>	Tropical Mexican-clover
648	<i>Richardia scabra</i>	Rough Mexican-clover
649	<i>Citrus aurantium</i>	Sour Orange
650	<i>Zanthoxylum clava-herculis</i>	Hercules'-club; Prickly Ash
651	<i>Zanthoxylum fagara</i>	Wild Lime; Lime Prickly-ash
652	<i>Salix caroliniana</i>	Carolina or Coastal Plain Willow
653	<i>Salix floridana</i>	Florida Willow
654	<i>Azolla caroliniana</i>	Carolina Mosquito Fern
655	<i>Salvinia minima</i>	Water Sprangles
656	<i>Sapindus saponaria</i>	Wing-leaf Soapberry; False Dogwood
657	<i>Bumelia reclinata</i>	Florida Bumelia; Florida Bully
658	<i>Bumelia tenax</i>	Tough Bumelia; Tough Buckthorn
659	<i>Saururus cernuus</i>	Lizard's-tail
660	<i>Decumaria barbara</i>	Cowitch-vine; Woodvamp
661	<i>Itea virginica</i>	Virginia Willow; Virginia Sweetspire
662	<i>Lygodium japonicum</i>	Japanese Climbing Fern
663	<i>Agalinis fasciculata</i>	Beach False-foxglove
664	<i>Agalinis linifolia</i>	Flax-leaf False-foxglove
665	<i>Bacopa caroliniana</i>	Blue Hyssop; Carolina or Blue Water-hyssop
666	<i>Bacopa monnieri</i>	Coastal Water-hyssop
667	<i>Buchnera americana</i>	American Blueheart(s)
668	<i>Gratiola hispida</i>	Rough Hedge-hyssop
669	<i>Gratiola pilosa</i>	Shaggy Hedge-hyssop
670	<i>Gratiola ramosa</i>	Branching Hedge-hyssop
671	<i>Gratiola virginiana</i>	Round-fruit Hedge-hyssop
672	<i>Linaria canadensis</i>	Blue or Oldfield Toadflax
673	<i>Linaria floridana</i>	Florida Toadflax
674	<i>Lindernia anagallidea</i>	False-pimpernel

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675	<i>Lindernia grandiflora</i>	Savannah False-pimpernel
676	<i>Mecardonia acuminata</i>	Purple Mecardonia; Purple Axil-flower
677	<i>Micranthemum umbrosum</i>	Shade Mudflower
678	<i>Penstemon multiflorus</i>	
679	<i>Scoparia dulcis</i>	Sweet Broom; Licorice Weed
680	<i>Seymeria pectinata</i>	Piedmont Seymeria
681	<i>Selaginella apoda</i>	Meadow Spikemoss
682	<i>Selaginella arenicola</i>	Sand Spikemoss
683	<i>Smilax auriculata</i>	Ear-leaf Greenbrier; Catbrier
684	<i>Smilax bona-nox</i>	Saw Greenbrier; Catbrier
685	<i>Smilax glauca</i>	WildSarsaparilla;Glaucous(-leaf)Greenbrier;Catbrie
686	<i>Smilax laurifolia</i>	Catbrier; Bamboo-vine; Laurel(-leaf) Greenbrier
687	<i>Smilax pumila</i>	SarsaparillaVine;Small Greenbrier;Woolly Cat-brier
688	<i>Smilax smallii</i>	Jackson Vine; Lance-leaf Greenbrier
689	<i>Smilax tamnoides</i>	Catbrier;Bristly/Halberd-leaf Greenbrier;Chinaroot
690	<i>Smilax walteri</i>	
691	<i>Capsicum annuum</i> var. <i>glabrisculum</i>	Bird Pepper
692	<i>Physalis angulata</i>	Cut-leaf Ground-cherry
693	<i>Physalis arenicola</i> var. <i>arenicola</i>	Cypress-head Ground-cherry
694	<i>Physalis pubescens</i>	Low Hairy Ground-cherry
695	<i>Solanum americanum</i>	American Black or Common Nightshade
696	<i>Sphagnum</i> spp.	Sphagnum Mosses
697	<i>Styrax americanus</i>	Storax; American Snowbell
698	<i>Taxodium ascendens</i>	Pond Cypress
699	<i>Taxodium distichum</i>	Bald Cypress
700	<i>Gordonia lasianthus</i>	Loblolly Bay
701	<i>Macrothelypteris torresiana</i>	Mariana Maiden Fern
702	<i>Tilia americana</i>	Basswood
703	<i>Tilia caroliniana</i>	Carolina Basswood
704	<i>Piriqueta caroliniana</i>	Piriqueta; Carolina Stripeseed
705	<i>Typha domingensis</i>	Southern Cattail
706	<i>Typha latifolia</i>	Common or Broad-leaf Cattail
707	<i>Celtis laevigata</i>	Hackberry; Sugarberry
708	<i>Ulmus americana</i>	American Elm
709	<i>Boehmeria cylindrica</i>	Small-spike False-nettle; Bog Hemp
710	<i>Parietaria praetermissa</i>	Pellitory; Clustered Pellitory-of-the-wall
711	<i>Pilea pumila</i>	Canada Clearweed
712	<i>Valeriana scandens</i>	Florida Valerian
713	<i>Callicarpa americana</i>	Beautybush; American Beauty-berry
714	<i>Verbena brasiliensis</i>	Brazilian Vervain
715	<i>Verbena scabra</i>	Harsh Verbena; Sandpaper Vervain
716	<i>Viola affinis</i>	Leconte's Violet
717	<i>Viola lanceolata</i>	Bog White or Long-leaf or Lance-leaf Violet
718	<i>Viola primulifolia</i>	Swamp White or Primrose-lea(f)(ved) Violet
719	<i>Viola septemloba</i>	Southern Coast Violet
720	<i>Viola sororia</i>	Woolly or Hooded or Thicket Blue Violet;Florida V.
721	<i>Ampelopsis arborea</i>	Pepper-vine
722	<i>Parthenocissus quinquefolia</i>	Virginia Creeper; Woodbine
723	<i>Vitis aestivalis</i>	Summer Grape
724	<i>Vitis rotundifolia</i> var. <i>munsoniana</i>	Southern Fox or Muscadine Grape; Muscadine
725	<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	
726	<i>Vittaria lineata</i>	Appalachian Shoestring Fern
727	<i>Xyris ambigua</i>	Coastal-plain Yellow-eyed Grass
728	<i>Xyris brevifolia</i>	Short-leaf Yellow-eyed Grass
729	<i>Xyris caroliniana</i>	Carolina Yellow-eyed Grass
730	<i>Xyris difformis</i> var. <i>floridana</i>	Florida Bog Yellow-eyed Grass
731	<i>Xyris elliottii</i>	Elliott's Yellow-eyed Grass
732	<i>Xyris fimbriata</i>	Fringed Yellow-eyed Grass
733	<i>Xyris flabelliformis</i>	Savannah Yellow-eyed Grass
734	<i>Xyris jupicai</i>	Common or Richard's Yellow-eyed Grass
735	<i>Xyris platylepis</i>	Tall Yellow-eyed Grass
736	<i>Xyris smalliana</i>	Small's Yellow-eyed Grass

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INVERTEBRATES

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species			Status	
	Order	Genus Species	Common	Fed	State
1	Coleoptera	<i>Dytiscus spp.</i>	Large Diving Beetle		
2		<i>Cicindela Lepida</i>	Dainty Tiger Beetle		
3		<i>Odontotaenius disjunctus</i>	Horned Passalus		
4			Soldier Beetle		
5	Hemiptera	<i>Lethocerus americanus</i>	Giant Water Bug		
6		<i>Notonecta undulata</i>	Backswimmer		
7	Lepidoptera	<i>Agraulis vanillae</i>	Gulf Fritillary		
8		<i>Papilio polyxenes asteruis</i>	Eastern Black Swallowtail		
9		<i>P. glaucus</i>	Eastern Tiger Swallowtail		
10		<i>P. cresphontes</i>	Giant Swallowtail		
11		<i>Heliconius charitonius</i>	Zebra Butterfly		
12		<i>Danaus gilippus berenize</i>	Queen		
13	Hymenoptera	<i>Ichneumonidae (Scambus spp.?)</i>	Ichneumid wasps		
14		<i>Xylocopa virginica</i>	Black bee		
15		<i>Dasymutilla occidentalis</i>	Cowkiller		
16		<i>Bombus spp.</i>	Bumblebee		
17		<i>Camponotus pennsylvanicus</i>	Carpenter ant		
18			Large headed ant		
19	Diptera	<i>Exoprosopa spp.</i>	Progressive beefly		
20		<i>Stratiomys spp.</i>	(Aquatic larva)		
21	Orthoptera	<i>Gryllotalpa hexadactyla</i>	Mole Cricket		
22		<i>Romalea microptera</i>	Southeaster Lubber		
23		<i>Tetrigidae</i>	Pygmy Grasshoppers		
24		<i>Acrididae</i>	Short-horned Grasshoppers		
25	Ephemeroptera	<i>Callibaetis spp.</i>	Mayflies		
26	Trichoptera		Caddisflies		
27	Odonata (Zygoptera)	<i>Nehalennia integricollis</i>	<larva and adult>		
28		<i>Ischnura hastata</i>	<larva and adult>		
29		<i>Calopteryx maculata</i>	<larva and adult>		
30		<i>Argia fumipennis</i>	<adult>		
31		<i>Lestes vigilax</i>	<larva and adult>		
32	Odonata (Anisoptera)	<i>Erythemis simplicicollis</i>	<adult>		
33		<i>Pachydiplax longipennis</i>	<adult>		
34		<i>Celithemis amanda</i>	<adult>		
35		<i>C. eponina</i>	<adult>		
36		<i>Tramea carolina</i>	<adult>		
37		<i>Erythrodiplax connata minuscala</i>	<adult>		
38		<i>Perithemis tenera</i>	<adult>		
39		<i>Epitheca cynosura</i>	<larva and adult>		
40		<i>Anax longipes</i>	<larva and adult>		

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41		<i>Nasiaeschna pentacantha</i>	<adult>		
42		<i>Didymops floridensis</i>	<adult>		
43		<i>Gomphus minutus</i>	<adult>		
44		<i>Hagenius brevistylus</i>	<adult>		
45	Araneae	<i>Peucetia viridans</i>	Green Lynx Spider		
46		<i>Phidippus audax</i>	Daring Jumping Spider		
47		<i>P. spp.</i>	Red Jumping Spider		
48		<i>Nephila clavipes</i>	Golden Silk Spider		
49		<i>Argiope aurantia</i>	Black and Yellow Argiope		
50		<i>Dolomedes triton</i>	Six-spotted Fishing Spider		
51		<i>Lycosa rabida</i>	Rabid Wolf Spider		
52		<i>Tetragnatha elongata</i>	Elongate Long-jawed Orb Weaver		
53		<i>Lycosa spp.</i>	Scrub Wolf Spider		
54	Corbiculidae	<i>Corbicula manilensis</i>	Asian Clam		
55	Unionidae	<i>Elliptio buckleyi</i>			
56	Palaemonidae	<i>Palaemonetes paludosus</i>	Grass Shrimp		
57	Cambarida	<i>Procambarus spp.</i>	Crayfish		
58	Taltridae	<i>Hyalela axteca</i>	Common Amphipod		
59	Ampulariidae	<i>Pomacea spp.</i>	Apple Snail		

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FISH

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species Names		Status	
	Genus Species	Common	Fed	State
1	<i>Micropterus salmoides</i>	Largemouth Bass		
2	<i>Lepomis spp.</i>	Sunfish		
3	<i>Percina nigrofasciata</i>	Blackbanded Darter		
4	<i>Notropis chalybaeus</i>	Ironcolor Shiner		
5	<i>Gambusia affinis</i>	Mosquitofish		
6	<i>Fundulus chrysotus</i>	Golden Topminnow		

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Birds

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species		Status	
	Genus Species	Common	Fed	State
1	<i>Gavia immer</i>	Common Loon		
2	<i>Podilymbus podiceps</i>	Pied-billed Grebe		
3	<i>Anhinga anhinga</i>	Anhinga		
4	<i>Phalacrocorax auritus</i>	Double-crested Cormorant		
5	<i>Aix sponsa</i>	Wood Duck		
6	<i>Anas acuta</i>	Northern Pintail		
7	<i>A. americana</i>	American Wigeon		
8	<i>A. clypeata</i>	Northern Shoveler		
9	<i>A. crecca</i>	Green-winged Teal		
10	<i>A. discors</i>	Blue-winged Teal		
11	<i>A. fulvigula</i>	Mottled Duck		
12	<i>A. platyrhynchos</i>	Mallard		
13	<i>A. rubripes</i>	Black Duck		
14	<i>A. strepera</i>	Gadwall		
15	<i>Aythya affinis</i>	Lesser Scaup		
16	<i>A. collaris</i>	Ring-necked Duck		
17	<i>A. valisineria</i>	Canvasback		
18	<i>Dendrocygna bicolor</i>	Fulvous Whistling-duck		
19	<i>Mergus serrator</i>	Red-breasted Merganser		
20	<i>Pelecanus erythrorhynchos</i>	White Pelican		
21	<i>P. occidentalis</i>	Brown Pelican		SSC
22	<i>Larus delawarensis</i>	Ring-billed Gull		
23	<i>Sterna antillarum</i>	Least Tern		T
24	<i>S. hirundo</i>	Common Tern		
25	<i>Ardrea herodias</i>	Great Blue Heron		
26	<i>A. herodias</i>	Great White Heron		
27	<i>Botaurus lentiginosus</i>	American Bittern		
28	<i>Bubulcus ibis</i>	Cattle Egret		
29	<i>Butorides striatus</i>	Green Backed Heron		
30	<i>Casmerodius albus</i>	Great Egret		
31	<i>Egretta rufescens</i>	Reddish Egret		SSC
32	<i>E. thula</i>	Snowy Egret		SSC
33	<i>E. careulea</i>	Little Blue Heron		SSC
34	<i>E. tricolor</i>	Tricolored Heron		SSC
35	<i>Ixobrychus exilis</i>	Least Bittern		
36	<i>Nycticorax nycticorax</i>	Blk-crowned Night-heron		
37	<i>N. violaceus</i>	Yel-crowned Night-heron		
38	<i>Mycteria americana</i>	Wood Stork	E	E
39	<i>Grus canadensis</i>	Sandhill Crane		T
40	<i>Aramus guarana</i>	Limpkin		SSC
41	<i>Ajaia ajaja</i>	Roseate Spoonbill		SSC
42	<i>Eodcimus albus</i>	White Ibis		SSC

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43	<i>Plegadis falcinellus</i>	Glossy Ibis		
44	<i>Coturnicops noveboracensis</i>	Yellow Rail		
45	<i>Fulica americana</i>	American Coot		
46	<i>Gallinula chloropus</i>	Common Moorhen		
47	<i>Laterallus jamaicensis</i>	Black Rail		
48	<i>Porphyryla martinica</i>	Purple Gallinule		
49	<i>Porzana carolina</i>	Sora		
50	<i>Rallus elegans</i>	King Rail		
51	<i>R. limicola</i>	Virginia Rail		
52	<i>R. longirostris</i>	Clapper Rail		
53	<i>Charadrius vociferus</i>	Killdeer		
54	<i>Pluvialis squatarola</i>	Black-bellied Plover		
55	<i>Actitis macularia</i>	Spotted Sandpiper		
56	<i>Gallinago gallinago</i>	Common Snipe		
57	<i>Scolopax minor</i>	American Woodcock		
58	<i>Tringa flavipes</i>	Lesser Yellowlegs		
59	<i>T. melamoleuca</i>	Greater Yellowlegs		
60	<i>T. solitaria</i>	Solitary Sandpiper		
61	<i>Meleagris gallopavo</i>	Wild Turkey		
62	<i>Colinus virginianus</i>	Northern Bobwhite Quail		
63	<i>Accipiter cooperii</i>	Cooper's Hawk		
64	<i>A. striatus</i>	Sharp-shinned Hawk		
65	<i>Buteo brachyurus</i>	Short-tailed Hawk		
66	<i>B. jamaicensis</i>	Red-tailed Hawk		
67	<i>B. lineatus</i>	Red-shouldered Hawk		
68	<i>B. platypterus</i>	Broad-winged Hawk		
69	<i>Circus cyaneus</i>	Northern Harrier		
70	<i>Elanoides forficatus</i>	Swallow-tailed Kite		
71	<i>Elanus caeruleus</i>	Black-shouldered Kite		
72	<i>Haliaeetus leucocephalus</i>	Bald Eagle		
73	<i>Rostrhamus sociabilis</i>	Snail Kite	E	E
74	<i>Pandion haliaetus</i>	Osprey		
75	<i>Cathartes aura</i>	Turkey Vulture		
76	<i>Coragyps atratus</i>	Black Vulture		
77	<i>Falco columbarius</i>	Merlin		
78	<i>F. peregrinus</i>	Peregrine Falcon		
79	<i>F. sparverius</i>	American Kestrel		
80	<i>F. sparverius paulus</i>	SE. American Kestrel		
81	<i>Polyborus plancus</i>	Crested Caracara	T	T
82	<i>Asio flammeus</i>	Short-eared Owl		
83	<i>Athene cunicularia</i>	Burrowing Owl		SSC
84	<i>Bubo virginianus</i>	Great Horned Owl		
85	<i>Otus asio</i>	Eastern Screech-owl		
86	<i>Strix varia</i>	Barred Owl		
87	<i>Tyto alba</i>	Barn Owl		
88	<i>Columba livia</i>	Rock Dove		

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89	<i>Columbina passerina</i>	Common Ground Dove		
90	<i>Zenaida asiatica</i>	White-winged Dove		
91	<i>Z. macroura</i>	Mourning Dove		
92	<i>Coccyzus americanus</i>	Yellow-billed Cuckoo		
93	<i>C. erythrophthalmus</i>	Black-billed Cuckoo		
94	<i>C. minor</i>	Mangrove Cuckoo		
95	<i>Crotophaga ani</i>	Smooth-billed Ani		
96	<i>Caprimulgus carolinensis</i>	Chuck-will's-widow		
97	<i>C. vociferus</i>	Whip-poor-will		
98	<i>Chordeiles minor</i>	Common Nighthawk		
99	<i>Ceryle alcyon</i>	Belted Kingfisher		
100	<i>Archilochus colubris</i>	Ruby-throated Hummingbird		
101	<i>Campephilus principalis</i>	Ivory-billed Woodpecker	E	E
102	<i>Colaptes auratus</i>	Common Flicker		
103	<i>Dryocopus pileatus</i>	Pileated Woodpecker		
104	<i>Melanerpes carolinus</i>	Red-bellied Woodpecker		
105	<i>M. erythrocephalus</i>	Red-headed Woodpecker		
106	<i>Picoides borealis</i>	Red-cockaded Woodpecker	E	T
107	<i>P. pubescens</i>	Downy Woodpecker		
108	<i>P. villosus</i>	Hairy Woodpecker		
109	<i>Sphyrapicus varius</i>	Yellow-bellied Sapsucker		
110	<i>Chaetura pelagica</i>	Chimney Swift		
111	<i>Contopus virens</i>	Eastern Wood-pewee		
112	<i>Empidonax minimus</i>	Least Flycatcher		
113	<i>E. virescens</i>	Acadian Flycatcher		
114	<i>Myiarchus crinitus</i>	Great Crested Flycatcher		
115	<i>Sayornis phoebe</i>	Eastern Phoebe		
116	<i>Tyrannus dominicensis</i>	Gray Kingbird		
117	<i>T. forficatus</i>	Scissor-tailed Flycatcher		
118	<i>T. tyrannus</i>	Eastern Kingbird		
119	<i>Anthus spinoletta</i>	Water Pipit		
120	<i>Hirundo pyrrhonota</i>	Cliff Swallow		
121	<i>H. rustica</i>	Barn Swallow		
122	<i>Progne subis</i>	Purple Martin		
123	<i>Riparia riparia</i>	Bank Swallow		
124	<i>Stelgidopteryx serripennis</i>	N. Rough-winged Swallow		
125	<i>Tachycineta bicolor</i>	Tree Swallow		
126	<i>Aphelocoma coerulescens</i>	Scrub Jay	T	T
127	<i>Corvus brachyrhynchos</i>	American Crow		
128	<i>C. ossifragus</i>	Fish Crow		
129	<i>Cyanocitta cristata</i>	Blue Jay		
130	<i>Parus bicolor</i>	Tufted Titmouse		
131	<i>P. carolinensis</i>	Carolina Chickadee		
132	<i>Sitta pusilla</i>	Brown-headed Nuthatch		
133	<i>Cistothorus palustris</i>	Marsh Wren		SSC
134	<i>C. platensis</i>	Sedge Wren		
135	<i>Troglodytes aedon</i>	House Wren		

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136	<i>T. ludovicianus</i>	Carolina Wren		
137	<i>Poliioptila caerulea</i>	Blue-gray Gnatcatcher		
138	<i>Regulus calendula</i>	Ruby-crowned Kinglet		
139	<i>Dumetella carolinensis</i>	Gray Catbird		
140	<i>Mimus polyglottos</i>	Northern Mockingbird		
141	<i>Toxostoma rufum</i>	Brown Thrasher		
142	<i>Catharus fuscescens</i>	Veery		
143	<i>C. guttatus</i>	Hermit Thrush		
144	<i>C. minimus</i>	Gray-cheeked Thrush		
145	<i>C. ustulatus</i>	Swainson's Thrush		
146	<i>Sialia sialis</i>	Eastern Bluebird		
147	<i>Turdus migratorius</i>	American Robin		
148	<i>Bombycilla cedrorum</i>	Cedar Waxwing		
149	<i>Lanius ludovicianus</i>	Loggerhead Shrike		
150	<i>Vireo altiloquus</i>	Black-whiskered Vireo		
151	<i>V. flavifrons</i>	Yellow-throated Vireo		
152	<i>V. griseus</i>	White-eyed Vireo		
153	<i>V. olivaceus</i>	Red-eyed Vireo		
154	<i>V. solitarius</i>	Solitary Vireo		
155	<i>Dendroica caerulescens</i>	Blk-throated Blue Warbler		
156	<i>D. coronata</i>	Yellow-rumped Warbler		
157	<i>D. discolor</i>	Prairie Warbler		
158	<i>D. discolor paludicola</i>	Florida Prairie Warbler		
159	<i>D. dominica</i>	Yellow-throated Warbler		
160	<i>D. magnolia</i>	Magnolia Warbler		
161	<i>D. petechia</i>	Yellow Warbler		
162	<i>D. pinus</i>	Pine Warbler		
163	<i>D. plamarum</i>	Palm Warbler		
164	<i>D. striata</i>	Blackpoll Warbler		
165	<i>D. tigrina</i>	Cape May Warbler		
166	<i>D. virens</i>	Blk-throated Green Warbler		
167	<i>Geothlypis trichas</i>	Common Yellowthroat		
168	<i>Helmitheros vermivorus</i>	Worm-eating Warbler		
169	<i>Icteria virens</i>	Yellow-breasted Chat		
170	<i>Limnothlypis swainsonii</i>	Swainson's Warbler		
171	<i>Mniotilta varia</i>	Black-and-white Warbler		
172	<i>Oporonis agilis</i>	Connecticut Warbler		
173	<i>O. formosus</i>	Kentucky Warbler		
174	<i>Parula americana</i>	Northern Parula		
175	<i>Protonotaria citrea</i>	Prothonotary Warbler		
176	<i>Seiurus aurocapillus</i>	Ovenbird		
177	<i>S. motacilla</i>	Louisiana Waterthrush		
178	<i>S. noveboracensis</i>	Northern Waterthrush		
179	<i>Setophaga ruticilla</i>	American Redstart		
180	<i>Vermivora celata</i>	Orange-crowned Warbler		
181	<i>Wilsonia citrina</i>	Hooded Warbler		
182	<i>Agelaius phoeniceus</i>	Redwing Blackbird		

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183	<i>Dolichonyx oryzivorus</i>	Bobolink		
184	<i>Euphagus carolinus</i>	Rusty Blackbird		
185	<i>E. cyanocephalus</i>	Brewer's Blackbird		
186	<i>Icterus galbula</i>	Northern Oriole		
187	<i>I. spurius</i>	Orchard Oriole		
188	<i>Molothrus ater</i>	Brown-headed Cowbird		
189	<i>Quiscalus major</i>	Boat-tailed Grackle		
190	<i>Q. quiscula</i>	Common Grackle		
191	<i>Sturnella neglecta</i>	Eastern Meadowlark		
192	<i>Sturnus vulgaris</i>	European Starling		
193	<i>Piranga olivacea</i>	Scarlet Tanager		
194	<i>P. rubra</i>	Summer Tanager		
195	<i>Aimophila aestivalis</i>	Bachman's Sparrow		
196	<i>Ammodramus caudacutus</i>	Sharp-tailed Sparrow		
197	<i>A. henslowii</i>	Henslow's Sparrow		
198	<i>A. leconteii</i>	Le Conte's Sparrow		
199	<i>A. savannarum</i>	Grasshopper Sparrow	E	E
200	<i>Cardinalis cardinalis</i>	Northern Cardinal		
201	<i>Carduelis tristis</i>	American Goldfinch		
202	<i>Guiraca caerulea</i>	Blue Grosbeak		
203	<i>Melospiza georgiana</i>	Swamp Sparrow		
204	<i>M. melodia</i>	Song Sparrow		
205	<i>Passer domesticus</i>	House Sparrow		
206	<i>Passerculus sandwichensis</i>	Savannah Sparrow		
207	<i>Passerina ciris</i>	Painted Bunting		
208	<i>P. cyanea</i>	Indigo Bunting		
209	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak		
210	<i>Pipilo erythrophthalmus</i>	Rufous-sided Towhee		
211	<i>Pooecetes gramineus</i>	Vesper Sparrow		
212	<i>Spiza americana</i>	Dickcissel		
213	<i>Spizella passerina</i>	Chipping Sparrow		
214	<i>S. pusilla</i>	Field Sparrow		
215	<i>Zonotrichia albicollis</i>	White-throated Sparrow		

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REPTILES

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species Names		Status	
	Genus Species	Common	Fed	State
1	<i>Alligator mississippiensis</i>	American Alligator	T	SSC
2	<i>Chelydra serpentina osceola</i>	Florida Snapping Turtle		
3	<i>Kinosternon baurii</i>	Striped Mud Turtle		E
4	<i>K. subrubrum steindachneri</i>	Florida Mud Turtle		
5	<i>Sternotherus odoratus</i>	Common Musk Turtle		
6	<i>Chrysemys floridana peninsularis</i>	Peninsula Cooter		
7	<i>C. nelsoni</i>	Florida Redbelly Turtle		
8	<i>Deirochelys reticularia chrysea</i>	Florida Chicken Turtle		
9	<i>Terrapene carolina bauri</i>	Florida Box Turtle		
10	<i>Gopherus polyphemus</i>	Gopher Tortoise		T
11	<i>Trionyx ferox</i>	Florida Softshell Turtle		
12	<i>Sphaerodactylus notatus notatus</i>	Florida Reef Gecko		
13	<i>Anolis carolinensis</i>	Green Anole		
14	<i>A. sagrei sagrei</i>	Brown Anole		
15	<i>Sceloporus undulatus undulatus</i>	Southern Fence Lizard		
16	<i>S. woodi</i>	Florida Scrub Lizard		
17	<i>Cnemidophorus sexlineatus sexlineatus</i>	Six-lined Racerunner		
18	<i>Eumeces egregius lividus</i>	Bluetailed Mole Skink	T	T
19	<i>E. egregius onocrepis</i>	Peninsula Mole Skink		
20	<i>E. inexpectatus</i>	Southeastern Five-lined Skink		
21	<i>E. laticeps</i>	Broadheaded Skink		
22	<i>Neoseps reynoldsi</i>	Florida Sand Skink	T	T
23	<i>Scincella lateralis</i>	Ground Skink		
24	<i>Ophisaurus attenuatus longicaudus</i>	Eastern Slender Glass Lizard		
25	<i>O. ventralis</i>	Eastern Glass Lizard		
26	<i>Rhineura floridana</i>	Florida Worm Lizard		
27	<i>Cemophora coccinea coccinea</i>	Florida Scarlet		
28	<i>Coluber constrictor paluticola</i>	Everglades Racer		
29	<i>C. constrictor priapus</i>	Southern Black Racer		
30	<i>Diadophis punctatus punctatus</i>	Southern Ringneck Snake		
31	<i>Drymarchon corais couperi</i>	Eastern Indigo Snake	T	T
32	<i>Elaphe guttata guttata</i>	Corn/Red Rat Snake		

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33	<i>E. obsoleta quadrivittata</i>	Yellow Rat/Chicken Snake		
34	<i>E. obsoleta rossalleni</i>	Everglades Rat Snake		
35	<i>Farancia abacura abacura</i>	Eastern Mud Snake		
36	<i>F. erythrogramma seminola</i>	Southern Fla. Rainbow Snake		
37	<i>Heterodon platyrhinos</i>	Eastern Hognose Snake		
38	<i>H. simus</i>	Southern Hognose Snake		
39	<i>Lampropeltis calligaster rhombomaculata</i>	Mole Kingsnake		
40	<i>Lampropeltis getulus</i>	Common Kingsnake		
41	<i>L. triangulum elapsoides</i>	Scarlet Kingsnake		
42	<i>M. flagellum flagellum</i>	Eastern Coachwhip		
43	<i>Natrix cyclopion floridana</i>	Fla. Green Watersnake		
44	<i>N. fasciata pictiventris</i>	Florida Watersnake		
45	<i>N. taxispilota</i>	Brown Watersnake		
46	<i>Opheodrys aestivus</i>	Rough Green Snake		
47	<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake		SSC
48	<i>Seminatrix pygaea pygaea</i>	Swamp Snake		
49	<i>Stilosoma extenuatum</i>	Short-tailed Snake		T
50	<i>Storeria dekayi victa</i>	Florida Brown Snake		
51	<i>Tantilla relicta relicta</i>	Peninsula Crowned Snake		
52	<i>Thamnophis sauritus sackeni</i>	Peninsula Ribbon		
53	<i>T. sirtalis sirtalis</i>	Eastern Garter		
54	<i>Micrurus fulvius fulvius</i>	Eastern Coral Snake		
55	<i>Sistrurus miliarius barbouri</i>	Dusty Pygmy		
56	<i>Agkistrodon contortrix contortrix</i>	Southern Copperhead		
57	<i>A. piscivorus conanti</i>	Florida Cottonmouth		
58	<i>Crotalus adamanteus</i>	Eastern Diamondback		

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AMPHIBIANS

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species Names		Status	
	Genus Species	Common	Fed	State
1	<i>Pseudobranchius striatus axanthus</i>	Narrow-striped Dwarf Siren		
2	<i>P. striatus belli</i>	Everglades Dwarf Siren		
3	<i>Siren intermedia intermedia</i>	Eastern Lesser Siren		
4	<i>S. lacertina</i>	Greater Siren		
5	<i>Amphiuma means</i>	Two-toed Amphiuma		
6	<i>Notophthalmas perstriatus</i>	Striped Newt		
7	<i>N. viridescens louisianensis</i>	Central Newt		
8	<i>Eurycea quadridigitata</i>	Dwarf Salamander		
9	<i>Scaphiopus holbrooki</i>	Eastern Spadefoot		
10	<i>Bufo quercicus</i>	Oak toad		
11	<i>B. terrestris</i>	Southern Toad		
12	<i>Acris gryllus dorsalis</i>	Florida Cricket Frog		
13	<i>Hyla cinerea</i>	Green Treefrog		
14	<i>H. femoralis</i>	Pinewoods Treefrog		
15	<i>H. gratiosa</i>	Barking Treefrog		
16	<i>H. septentrionalis</i>	Cuban Treefrog		
17	<i>H. squirella</i>	Squirrel Treefrog		
18	<i>Limaedus ocularis</i>	Little Grass Frog		
19	<i>Pseudacris nigrata verrucosa</i>	Florida Chorus Frog		
20	<i>Gastrophryne carolinensis carolinensis</i>	Eastern Narrow-mouthed Toad		
21	<i>Rana areolata aesopus</i>	Florida Gopher Frog		SSC
22	<i>R. catesbeiana</i>	Bullfrog		
	<i>R. clamitans</i>	Green Frog		
23	<i>R. grylio</i>	Pig Frog		
24	<i>R. sphenoccephala</i>	Southern Leopard Frog		

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MAMMALS

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species		Status	
	Genus Species	Common	Fed	State
1	<i>Didelphis marsupialis</i>	Opossum		
2	<i>Blarina carolinensis</i>	Short-tailed Shrew		
3	<i>B. carolinensis shermani</i>	Sherman's Short-tailed Shrew		SSC
4	<i>Cryptotis parva</i>	Least Shrew		
5	<i>Scalopus aquaticus</i>	Eastern Mole		
6	<i>Eptesicus fuscus fuscus</i>	Big Brown Bat		
7	<i>Lasiurus cinereus</i>	Hoary Bat		
8	<i>L. intermedius floridanus</i>	Northern Yellow Bat		
9	<i>L. seminolus</i>	Seminole Bat		
10	<i>Myotis austroriparius</i>	Southeastern Brown Bat		
11	<i>Nycticeius humeralis</i>	Evening Bat		
12	<i>Pipistrellus subflavus</i>	Eastern Pipisterl		
13	<i>Plecotus rafinesquei</i>	Eastern Big-eared Bat		
14	<i>Eumops glaucinus floridanus</i>	Florida Mastiff Bat		E
15	<i>Tadarida brasiliensis cynocephala</i>	Brazilian Free-tailed Bat		
16	<i>Ursus americanus floridanus</i>	Florida Black Bear		T
17	<i>Procyon lotor</i>	Raccoon		
18	<i>Lutra canadensis</i>	River Otter		
19	<i>Mephitis mephitis</i>	Striped Skunk		
20	<i>Mustela frenata</i>	Long-tailed Weasel		
21	<i>M. frenata peninsulæ</i>	Florida Weasel		
22	<i>M. vison mink</i>	Southern Florida Mink		
23	<i>Spilogale putorius</i>	Spotted Skunk		
24	<i>Canis latrans</i>	Coyote		
25	<i>Urocyon cinereoargenteus</i>	Gray Fox		
26	<i>Vulpes fulva</i>	Red Fox		
27	<i>Felis concolor caryl</i>	Florida Panther	E	E
28	<i>Lynx rufus</i>	Bobcat		
29	<i>Glaucomys volans</i>	Southern Flying Squirrel		
30	<i>Sciurus carolinensis</i>	Eastern Gray Squirrel		
31	<i>S. niger avicennia</i>	Big Cypress Fox Squirrel		T
32	<i>S. niger shermani</i>	Sherman's Fox Squirrel		SSC
33	<i>Geomys pinetis</i>	Southeastren Pocket Gopher		
34	<i>Podomys floridanus</i>	Florida Mouse		SSC
35	<i>Reithrodontomys humulis</i>	Eastern Harvest Mouse		
36	<i>Peromyscus gossypinus</i>	Cotton Mouse		
37	<i>P. polionotus</i>	Oldfield Mouse		
38	<i>Neotoma floridana</i>	Eastern Woodrat		
39	<i>Oryzomys palustris</i>	Rice Rat		
40	<i>Sigmodon hisipus</i>	Hispid Cotton Rat		
41	<i>Neofiber alleni</i>	Florida Water Rat		

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42	<i>Sylvilagus floridanus</i>	Eastern Cottontail		
43	<i>S. palustris</i>	Marsh Rabbit		
44	<i>Sus scrofa</i>	Feral Hog		
45	<i>Odocoileus virginianus</i>	Whitetail Deer		
46	<i>Dasyus novemcinctus</i>	Armadillo		

Appendix F. Lake Marion Creek Wildlife Management Area Hunting Regulations



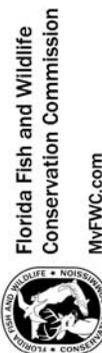
Lake Marion Creek Wildlife Management Area

Regulations Summary and Area Map
July 1, 2009 - June 30, 2010



A cooperative public wildlife and recreational area

South Florida Water
Management District



This brochure is designed to provide the public with information and a summary of regulations pertaining to hunting and other recreational use on the Lake Marion Creek Wildlife Management Area. **Regulations that are new or differ substantially from last year are shown in bold print.** Area users should familiarize themselves with all regulations. For exact wording of the wildlife laws and regulations, see the Florida Fish and Wildlife Conservation Commission's wildlife code, on file with the Secretary of State and state libraries. This brochure, the Florida Hunting Regulations handbook, and quota permit worksheets should provide the information necessary for you to plan your hunting activities. These publications are available from any Commission office, county tax collector and at MyFWC.com.

Persons using wildlife management areas are required to have appropriate licenses, permits and stamps. The following persons are exempt from all license and permit requirements (except for quota permits when listed as "no exemptions", recreational use permits, antlerless deer permits and the Migratory Bird Hunting and Conservation Stamp [federal duck stamp]): Florida residents who are 65 years of age or older; residents who possess a Florida Resident Disabled Person Hunting and Fishing Certificate; residents in the U.S. Armed Forces, not stationed in Florida, while home on leave for 30 days or less, upon submission of orders; and children under 16 years of age. Children under 16 years of age are exempt from the federal duck stamp. Anyone born on or after June 1, 1975 and 16 years of age or older must have passed a Commission-approved hunter-safety course prior to being issued a hunting license, except the Hunter Safety Mentoring exemption allows anyone to purchase a hunting license and hunt under the supervision of a licensed hunter, 21 years of age or older, for one year.

Hunting, trapping and fishing licenses, and management area, archery, muzzleloading gun, wild turkey and state waterfowl permits may be purchased from county tax collectors, license agents, at MyFWC.com/license or by telephone at 1-888-486-8356. A no-cost Migratory Bird Permit is available when purchasing a hunting license. Any waterfowl hunter 16 years of age or older must possess a federal duck stamp; available where hunting licenses are sold, at most post offices or at duckstamp.com. Americans with Disabilities Act accessibility information is available at MyFWC.com/ADA.

QUOTA PERMIT INFORMATION:

Archery - 35, no-cost, quota permits (no exemptions) for each of 2 hunts.
Muzzleloading Gun - 35, no-cost, quota permits (no exemptions).
General Gun - 35, no-cost, quota permits (no exemptions) for each of 2 hunts.
General Gun Hog - 50, no-cost, quota permits (no exemptions) for each of 2 hunts.
Spring Turkey - 15, no-cost, quota permits (no exemptions) for each of 3 hunts.

Permit applications: Hunters must submit electronic applications for quota and special-opportunity permits through the Commission's Total Licensing System (TLS) at a license agent, county tax collector's office or MyFWC.com. Worksheets listing hunts, application periods, deadlines and instructions are available at county tax collector's offices, FWC offices or MyFWC.com. The first quota application period begins June 1 and worksheets will be available about two weeks prior.

Additional hunters: A quota permit holder (host) may bring only one additional hunter. This additional hunter must be a youth under 16 years of age, a youth supervisor (if quota permit holder is a youth), a mentor license holder, mentor license supervisor (if applicable) or guest permit holder. The additional hunter does not receive a separate bag limit. The host must share a bag limit with the guest and the host is responsible for violations that exceed the bag limit. The guest and host must enter and exit the area together and must share a street-legal vehicle while hunting on the area. The guest may only hunt while the host is on the area.

Guest permits: One guest permit may be issued for each archery, muzzleloading gun, general gun, wild hog, spring turkey and mobility impaired quota permit issued through the Commission's TLS. A guest permit is not issued to a youth under 16, a youth supervisor, a mentor license holder or a mentor license supervisor. A person is only eligible for one guest permit per hunt. Guest permits may only be obtained from license agents or county tax collector's offices. Guest permits may be obtained up to and during the last day of the hunt. Refer to the quota hunt worksheets for additional information.

Youth and mentor license holders: A youth hunter (less than 16 years of age) must be supervised by a person at least 18 years of age. A mentor license holder must be supervised by a licensed hunter at least 21 years of age. Unless exempt, only those supervisors with proper licenses and permits may hunt. If the supervisor is hunting during any hunt (not including special-opportunity) for which quota permits are issued, at least one person in the party must be in possession of a quota permit. During a hunt that allows exemptions, a non-exempt supervisor of a youth must have a quota permit to hunt. A non-hunting supervisor is allowed to accompany a youth or mentor license holder during any hunt (including special-opportunity).

Transfer of permits: Quota and guest permits are not transferable. Except for youth under 16 years of age, a positive form of identification is required when using a non-transferable permit. The sale or purchase of any quota permit, guest permit or antlerless deer permit is prohibited.

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GENERAL AREA REGULATIONS:

All general laws and regulations relating to wild animal life or freshwater aquatic life shall apply unless specifically exempted for this area. Hunting or the taking of wildlife or fish on this area shall be allowed only during the open seasons and in accordance with the following regulations:

1. Any person hunting deer or accompanying another person hunting deer shall wear at least 500 square inches of daylight fluorescent-orange material as an outer garment, above the waistline. This is not required during an archery-only season.
2. Taking of spotted fawn, swimming deer or roasted turkey is prohibited. Species legal to take are listed under each season.
3. It is illegal to hunt over bait or place any bait or other food for wildlife on this area.
4. Driving a metal object into any tree, or hunting from a tree into which a metal object has been driven, is prohibited.
5. No person shall cut, damage or remove any natural, man-made or cultural resource without written authorization of the landowner or primary land manager.
6. Taking or attempting to take any game with the aid of live decoys, recorded game calls or sounds, set guns, artificial light, net, trap, snare, drug or poison is prohibited.
7. The wanton and willful waste of wildlife is prohibited.
8. Hunting, fishing or trapping is prohibited on any portion of the area posted as "CLOSED" to those activities.
9. People, dogs, vehicles and other recreational equipment are prohibited in areas posted as "Closed to Public Access" by FWC administrative action.
10. Taking or herding wildlife from any motorized vehicle, aircraft or boat which is under power is prohibited, until power and movement from that power, has ceased.
11. Most game may be hunted from one-half hour before sunrise until one-half hour after sunset (see exceptions for each season).
12. The release of any animal is prohibited, without written authorization of the landowner or primary land manager.
13. The head and evidence of sex may not be removed from the carcass of any deer or turkey on the area.
14. The planting or introduction of any non-native plant is prohibited, without written authorization of the landowner or primary land manager.
15. Wild hog may not be transported alive.
16. It is unlawful for any person to leave any garbage or refuse or in any way litter in the area.
17. It is unlawful to set fire to any forest, grass or woodlands.
18. A Fish and Wildlife Conservation Commission Law Enforcement Officer may search any camp, vehicle or boat, in accordance with law.

PUBLIC ACCESS AND VEHICLES:

1. Open to public access year-round.
2. All persons shall enter and exit the area at a designated entrance.
3. Motor vehicle access is restricted to individuals participating in the hunts. Vehicle access is not allowed during small game season.
4. Vehicles may be operated only on named or numbered roads.
5. Vehicles must be parked in designated parking areas or within 25 feet of a named or numbered road.
6. Parked vehicles may not obstruct a road, gate or firelane.
7. No motor vehicle shall be operated on any part of any wildlife management area that has been designated as closed to vehicular traffic.
8. The use of tracked vehicles, all-terrain vehicles, airboats, horses or **unlicensed and unregistered** motorcycles is prohibited.

HUNTERS AND CHECK STATIONS:

1. Hunting equipment and dogs may be taken onto the WMA after 8 a.m. the day before the opening of a season and shall be removed by 6 p.m. one day after the end of the season. Vehicle access is not allowed the day following the close of the season.
2. Hunters shall enter and exit the area at a designated entrance.
3. Hunters shall check in and out at the check station when entering and exiting the area, and check all game taken, except during the small game season.
4. No deer or turkey shall be dismembered until checked at the check station.
5. Check station hours are 5 a.m. to 9 p.m. during Eastern Daylight Savings Time and 5 a.m. to 8 p.m. during Eastern Standard Time except during the spring turkey season when hours are 4:30 a.m. to 2 p.m.

GUNS:

1. All firearms shall be securely encased and in a vehicle, vessel, camper or tent, during periods when they are not a legal method of take. Persons in possession of a valid concealed Weapon or Firearm License may carry concealed handguns.
2. Target practice is prohibited.
3. Hunting with a gun and light is prohibited.
4. Muzzleloading guns used for taking deer must be .40 caliber or larger, if firing a single bullet, or be 20 gauge or larger if firing two or more balls.
5. Children under the age of 16 may not be in possession of a firearm unless in the presence of a supervising adult.
6. No person shall have a gun under control while under the influence of alcohol or drugs.
7. For hunting non-migratory game, only shotguns, rifles, pistols, longbows (including compound and recurve bows), crossbows (during the general gun, small game and spring turkey seasons or by permit) or falconry may be used.
8. For hunting migratory game, only shotguns, bow and arrow (not crossbows), and falconry may be used. Shotguns shall not be larger than 10 gauge and shall be incapable of holding more than three shells in the magazine and chamber combined.
9. Firearms using rimfire or non-expanding, full metal jacket (military ball) ammunition are prohibited for taking deer.
10. Fully automatic or silencer-equipped firearms, centerfire semi-automatic rifles having a magazine capable of holding more than five rounds, explosive or drug-injecting devices and setguns are prohibited.

DOGS:

1. Hunting deer with dogs is prohibited.
2. Hunting with dogs is prohibited, except bird dogs or retrievers are allowed, and dogs with a shoulder height of 15 inches or less are allowed during the small game season.
3. No person shall allow any dog to pursue or molest any wildlife during any period in which the taking of wildlife by the use of dogs is prohibited.
4. Dogs on leashes may be used for trailing wounded game.
5. For purposes other than hunting, dogs are allowed, but must be kept under physical restraint at all times.

CAMPING:

1. Prohibited during hunting seasons.
2. Allowed during non-hunting periods by persons possessing a special-use license issued by the South Florida Water Management District, 800-250-4250.

BAG AND POSSESSION LIMITS: During quota hunts, host hunters and guests must share all bag and possession limits.

1. Deer -
 - A. Archery season - One antlered and 1 antlerless deer per quota permit.
 - B. Muzzleloading gun and general gun seasons - One antlered deer per quota permit.
2. Wild hog - No size or bag limit.
3. Turkey -
 - A. Archery season - Daily limit 1, season limit 2, possession limit 2.
 - B. Spring turkey season - One per quota permit, season limit 2.
4. Gray squirrel, quail and rabbit - Daily limit 12, possession limit 24 for each game species.
5. Raccoon, opossum, armadillo, beaver, coyote, skunk and nutria - No bag limits.
6. Bobcat and otter - Possession limit 1 unless in possession of a Trapping License.
7. Migratory birds - See Migratory Bird Hunting Regulations pamphlet.

ARCHERY SEASON:

September 26-28 and October 2-4.

Permit, Stamp and License Requirements - Quota permit, hunting license, management area permit, archery permit, wild turkey permit (if hunting wild turkey), migratory bird permit (if hunting migratory birds), and state waterfowl permit and federal duck stamp (if hunting waterfowl).

Legal to Take - Deer with at least one antler having 3 or more points (each point 1-inch or more in length), antlerless deer (which includes does and bucks with antlers less than 5 inches in length, but not spotted fawn), wild hog, turkey of either sex, gray squirrel, quail, rabbit, raccoon, opossum, armadillo, beaver, coyote, skunk, nutria and migratory birds in season.

Lake Marion Creek and Reedy Creek Management Area General Management Plan 2010 – 2015
South Florida Water Management District, Land Stewardship Division

Regulations Unique to Archery Season - In addition to these regulations, all General Area Regulations shall apply.

1. Hunting with bird dogs or retrievers is allowed.
2. Hunting with firearms or crossbows is prohibited, except that centerfire shotguns are allowed for hunting migratory birds when one or more species are legal to take (see Migratory Bird section and the current Migratory Bird Hunting Regulations pamphlet).

MUZZLELOADING GUN SEASON:

October 31 through November 2.

Permit, Stamp and License Requirements - Quota permit, hunting license, management area permit, muzzleloading gun permit and migratory bird permit (if hunting migratory birds).

Legal to Take - Deer with at least one antler having 3 or more points (each point 1-inch or more in length), wild hog, gray squirrel, quail, rabbit, raccoon, opossum, armadillo, beaver, coyote, skunk, nutria and migratory birds in season.

Regulations Unique to Muzzleloading Gun Season - In addition to these regulations, all General Area Regulations shall apply.

1. Hunting with bird dogs or retrievers is allowed.
2. Only muzzleloading guns are allowed for hunting, except that centerfire shotguns are allowed for hunting migratory birds when one or more species are legal to take (see Migratory Bird section and the current Migratory Bird Hunting Regulations pamphlet).

GENERAL GUN SEASON:

November 14-16 and 20-22.

Permit, Stamp and License Requirements - Quota permit, hunting license, management area permit, migratory bird permit (if hunting migratory birds), and state waterfowl permit and federal duck stamp (if hunting waterfowl).

Legal to Take - Deer with at least one antler having 3 or more points (each point 1-inch or more in length), wild hog, gray squirrel, quail, rabbit, raccoon, opossum, armadillo, beaver, coyote, skunk, nutria and migratory birds in season.

Regulations Unique to General Gun Season - In addition to these regulations, all General Area Regulations shall apply. Hunting with bird dogs or retrievers is allowed.

GENERAL GUN HOG SEASON:

December 11-13 and 25-27.

Permit, Stamp and License Requirements - Quota permit, hunting license and management area permit.

Legal to Take - Wild hog.

Regulations Unique to General Gun Hog Season - In addition to these regulations, all General Area Regulations shall apply. Hunting with dogs is prohibited.

SMALL GAME SEASON:

January 1-3 and 8-10.

Permit, Stamp and License Requirements - Hunting license, management area permit, migratory bird permit (if hunting migratory birds), and state waterfowl permit and federal duck stamp (if hunting waterfowl).

Legal to Take - Wild hog, gray squirrel, quail, rabbit, raccoon, opossum, armadillo, beaver, coyote, skunk, nutria, bobcat, otter and migratory birds in season.

Regulations Unique to Small Game Season - In addition to these regulations, all General Area Regulations shall apply.

1. Hunting with bird dogs, retrievers or dogs with a shoulder height of 15 inches or less is allowed.
2. Hunting with centerfire rifles is prohibited.

TRAPPING: Prohibited.

SPRING TURKEY SEASON:

March 20-22, April 2-4 and 16-18.

Permit, Stamp and License Requirements - Quota permit, hunting license, management area permit and wild turkey permit.

Legal to Take - Bearded turkey or gobbler.

Regulations Unique to Spring Turkey Season - In addition to these regulations, all General Area Regulations shall apply.

1. Legal shooting hours are one-half hour before sunrise until 1 p.m.
2. Hunting other animals is prohibited.

MIGRATORY BIRD SEASONS:

Rails, common moorhen, mourning dove, white-winged dove, snipe, duck, geese, coot, woodcock and crows may be hunted during seasons established by the Commission for these species that coincide with the archery, muzzleloading gun, general gun or small game seasons.

Permit, Stamp and License Requirements - Quota permit (if hunting during any quota period), hunting license, management area permit, migratory bird permit, and state waterfowl permit and federal duck stamp (if hunting waterfowl).

Legal to Take - See Migratory Bird Hunting Regulations pamphlet.

Regulations Unique to Migratory Bird Seasons - In addition to these regulations, all General Area Regulations shall apply.

1. Hunting duck, geese and coot with lead shot is prohibited.
2. Centerfire shotguns are allowed for hunting during established area seasons when one or more migratory birds are legal to take.

FISHING:

Allowed year-round.

Permit, Stamp and License Requirements - Fishing license.

Legal to Take - See Florida Freshwater Fishing Regulations Summary.

Regulations Unique to Fishing - All General Area Regulations and General Freshwater Fishing Regulations shall apply. Frogging is prohibited.

GENERAL INFORMATION:

If you have any questions about this material, please call the Fish and Wildlife Conservation Commission at 863-648-3200 (TDD 800-955-8771).

COOPERATION REQUESTED:

If you see law violators or suspicious activities, contact your nearest Commission regional office or call 1-888-404-FWCC. You may qualify for a cash reward from the Wildlife Alert Reward Association.

The U.S. Department of the Interior prohibits discrimination on the basis of race, color, national origin, age, sex or handicap. If you believe that you have been discriminated against in any program, activity or facility as described above, or if you desire further information, please write to: The Office for Human Resources, U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240. The project described in this publication is part of a program funded by federal dollars under the Wildlife Restoration Act. Federal funds pay 20 percent of the cost of the program.

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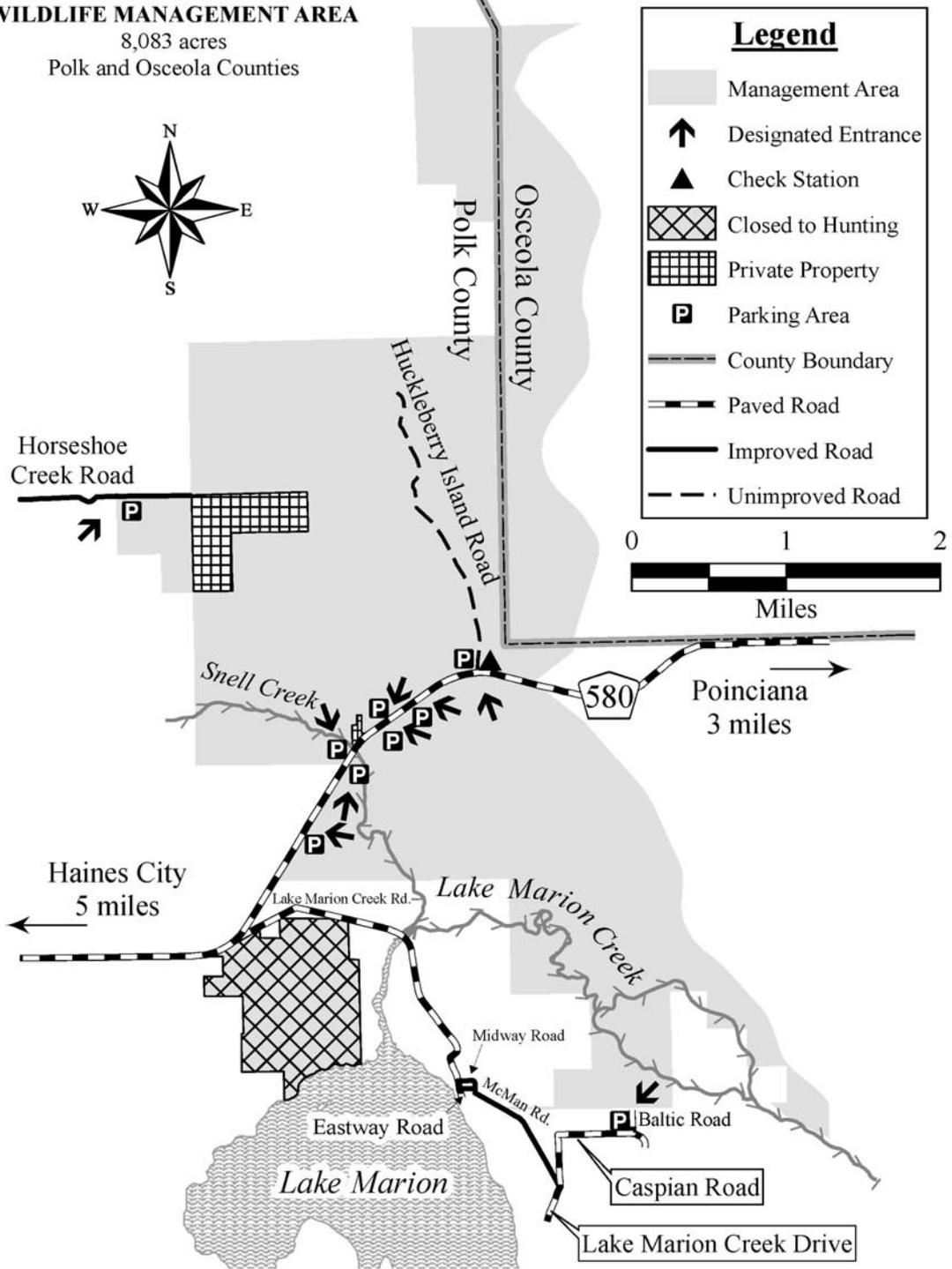
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LAKE MARION CREEK

WILDLIFE MANAGEMENT AREA

8,083 acres
 Polk and Osceola Counties



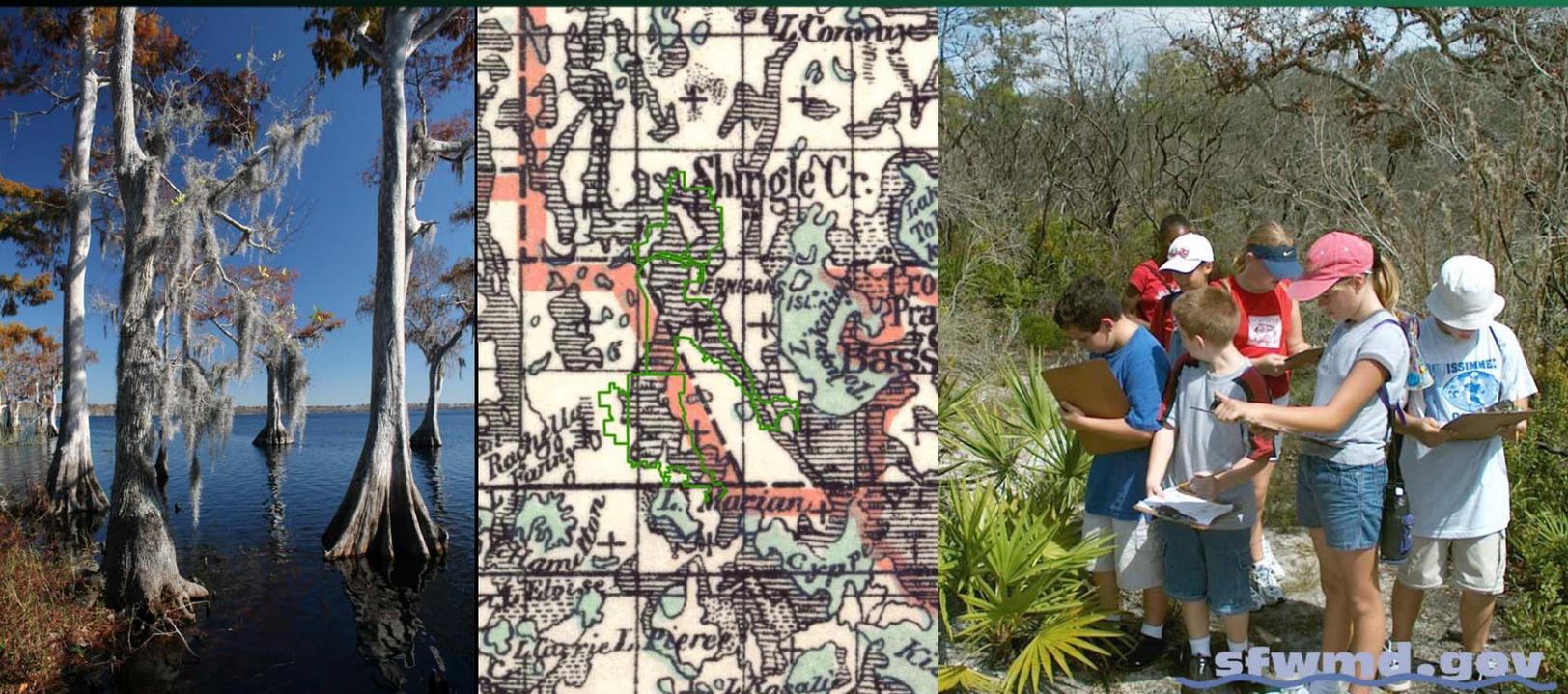
Land Stewardship Division

3301 Gun Club Road MSC 5212

West Palm Beach, Florida 33406



Lake Marion Creek and Reedy Creek
Management Area
Five-Year
General Management Plan
2010-2015
November, 2010



Lake Marion Creek and Reedy Creek Management Areas Five-Year General Management Plan (2010 – 2015)

August 2010

Land Stewardship Department
South Florida Water Management District
3301 Gun Club Road
West Palm Beach, Florida 33416-4680

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1. Executive Summary

The South Florida Water Management District (District) is responsible for the acquisition and management of lands vital to the restoration of the Everglades, the Kissimmee River, the Kissimmee Chain of Lakes and its headwaters. The District began purchasing lands within the Lake Marion Creek Project Area and Upper Reedy Creek Project Area in 1994 through the Save Our Rivers program. The majority of land was acquired from July 1994 to May 1997. This plan addresses management for the 12,915 acres that have been acquired by the District within the project area known as the Lake Marion Creek and Reedy Creek Management Area.

The District has taken a lead role in the acquisition and management of the project, while seeking assistance from other governmental agencies. This General Land Management Plan describes the historical, ecological, and managerial aspects of the area as a means to coordinate effective management programs. This plan is a compilation of assessments, research reports, and an earlier conceptual management plan combined with new information and proposals. The plan guides the District land management personnel toward logical and consistent land management practices. It also informs the public of operational procedures and organizational structures within the District and of management activities and objectives for the Management Area.

NATURAL SETTING

The natural character of the management area is defined by seven distinct soil categories as defined by the Natural Soil Landscape Positions soil classification system: flats soils, flatwood soils, knolls, central ridge and dunes, muck depression soils, sand depression soils, and water. Living on these soils are 17 distinct plant communities that are defined by criteria established by the Florida Natural Areas Inventory.

Wetlands comprise approximately fifty percent of the Lake Marion Creek Management Area, and most are within the 100-year flood plain of Lake Marion Creek, Snell Creek, Horse Creek, and Reedy Creek. Uplands include pine flatwood islands surrounded by forested wetlands, as well as several community types associated with a sand ridge on the southwestern portion of the management area: scrub, seepage slopes, sandhill, and scrubby flatwoods.

RESOURCE MANAGEMENT

Resource management programs for the management areas consist of:

- Prescribed fire to mimic the natural fire frequency in the fire-dependent natural communities.
- Forestry and vegetation management such as shredding or mowing overgrown understories.
- Wildlife management, including surveys, habitat management, and hunting programs.
- Exotic vegetation treatment.

- Monitoring the health of the natural communities and the impact of management practices on them.

RESTORATION PROJECTS

Past logging has removed the pine cover from most of the flatwoods on the property. Additional areas were found to be unnaturally dominated by slash pine as a result of long-term fire suppression. In order to restore longleaf pine to these systems, active reintroduction of longleaf pine will be necessary.

Also, the mid-successional shrub and red maple swamps in the Huckleberry Islands-South Management Unit, east of Lake Marion Creek, would benefit from fire to restore areas to a herbaceous dominated basin marsh.

MONITORING

The District performs vegetative community monitoring. As part of this effort, the District has installed two(2) 360 degree photomonitoring points in the Management Area. Species specific surveys are conducted as necessary, typically with a District contractor. Ongoing monitoring occurs for both vegetative communities and for certain wildlife species such as the Florida scrub jay and the Florida Sand Skink.

A baseline vegetation study was completed by a field botanist from the Fairchild Tropical Gardens in Miami-dade County in 1995-1996. The District re-hired the same botanist 10 years later in 2005 to re-survey the site. Both reports are on file at the District headquarters at West Palm Beach and are also available in an electronic format.

PUBLIC USE

Several recreational activities are provided for and encouraged in the management areas including fishing, hunting, camping, hiking, canoeing, birding, frogging, environmental education, and nature appreciation.

Introduction and Management Plan Purpose

This General Management Plan consolidates relevant information about the Lake Marion Creek and Reedy Creek Management Area (Management Area) including land management goals and objectives, past and present land uses, resource data, restoration and management needs, public use programs, and administrative duties to guide management actions for the period 2010 to 2015. Management activities described in this plan are based on requirements and directives of Florida Statutes and established District policies. District Policy 140-44 requires that general management plans be developed for each designated Save Our Rivers project.

District policy further states that the Land Stewardship Program's mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands. This mission statement and requirements set forth in Florida Statutes provide three primary goals for the Land Stewardship Program:

- Conserve and protect water resources
- Protect and/or restore land to its natural state and condition
- Provide appropriate public use

To accomplish these goals, the Land Stewardship Program performs six major functions:

- Strategic, project, and management planning
- The operation and maintenance of land resources
- Development of public use programs
- Development of restoration projects
- Evaluation of management activities
- Administration of land management contracts and leases

2.1 Management Area Goals and Objectives

The Land Stewardship Program's functions are incorporated in the specific management area goals and objectives for the period of this management plan 2010-2015. These goals are based on the Land Stewardship Program's overall success indicators and are necessary to achieve specific targets outlined in the indicators.

Goal 1: Manage natural communities and modified habitats to protect and enhance water, floral, and faunal resources

Objectives:

- Continue the regular application of fire through a well-planned and documented prescribed burning program. Prescribe burn 1,000-2,000 acres per year.

- Continue an aggressive, integrated exotic plant management program. Treatments will be documented and coordinated with other management activities. The entire project area will be surveyed every year and exotics treated as necessary.
- Continue habitat restoration by using heavy-duty shredding and mowing equipment to open up areas of overgrown wax myrtles. Continue appropriate management activities to enhance natural communities that have been hydrologically altered. Staff will contract mowing of approximately 3,000 acres per year.
- Coordinate with the Fl. Fish and Wildlife Conservation Commission to manage and enhance area wildlife.
- Continue and enhance the monitoring and evaluation of restoration activities on area vegetation and wildlife.
- Provide resource protection through partnership with the Fish and Wildlife Conservation Commission. Review enhanced patrol activities biweekly and review program annually.
- Protect sensitive cultural resources through cooperative law enforcement activities.
- Reduce non-native pest species populations and their associated impacts in the Management Area.
- Minimize ecological impacts associated with feral hogs located within the Management Area.
- Use mitigation programs to preserve, restore, enhance, and manage natural resources within the Management Area.
- Provide annual operational and capital improvement budgets sufficient for staff, equipment, and supply resources which are necessary to attain a level of responsible management as outlined in Management Area General Management Plan.
- Provide the staff necessary to successfully attain management goals and objectives as outlined in general management plans, activity plans, and annual work plans for the Management Area.
- Provide for, and take advantage of, volunteer and alternative work force opportunities within the Management Area.
- Provide the equipment, supplies, and tools necessary to successfully attain management objectives as outlined in the general management plan, activity plans, and annual work plans for the Management Area.
- Provide a long-term planning document that fulfills statutory, lease, and policy requirements and provides a framework for management implementation and public oversight.
- Plan management activities on an annual basis to meet program objectives detailed in the general management plan for the Management Area.
- Track and report progress in attaining management goals monthly, quarterly, and annually.
- Protect the natural and cultural resources within the Management Area through coordination with interested external entities.

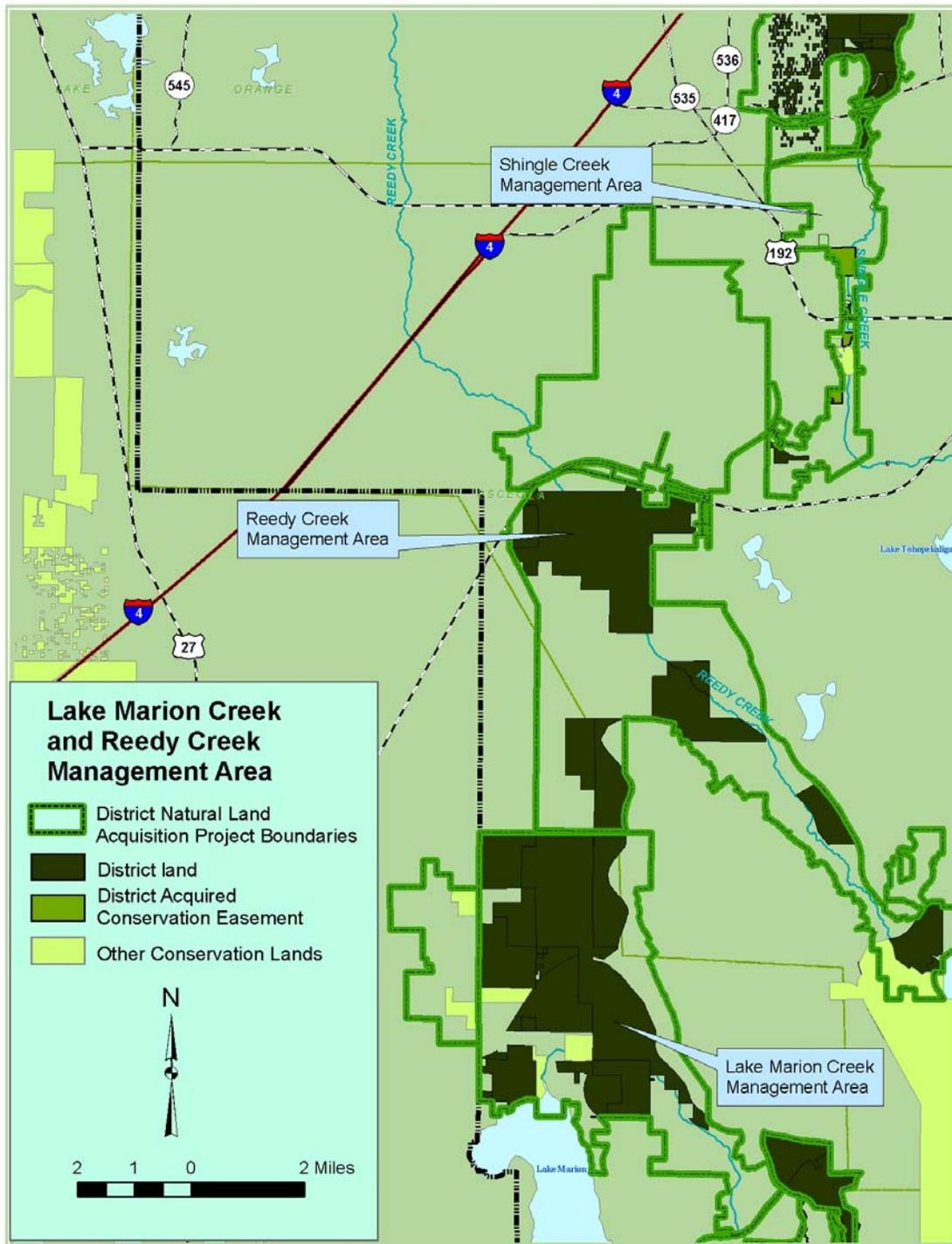
- Improve management efficiency and effectiveness of the Management Area by entering into and/or maintaining long-term cooperative land management agreements with other land management entities.
- Improve management efficiency by cooperating with other management entities in as-needed, non-contractual arrangements.
- Coordinate land management activities in the Management Area with adjacent landowners.

Goal 2: Provide resource-based public use opportunities

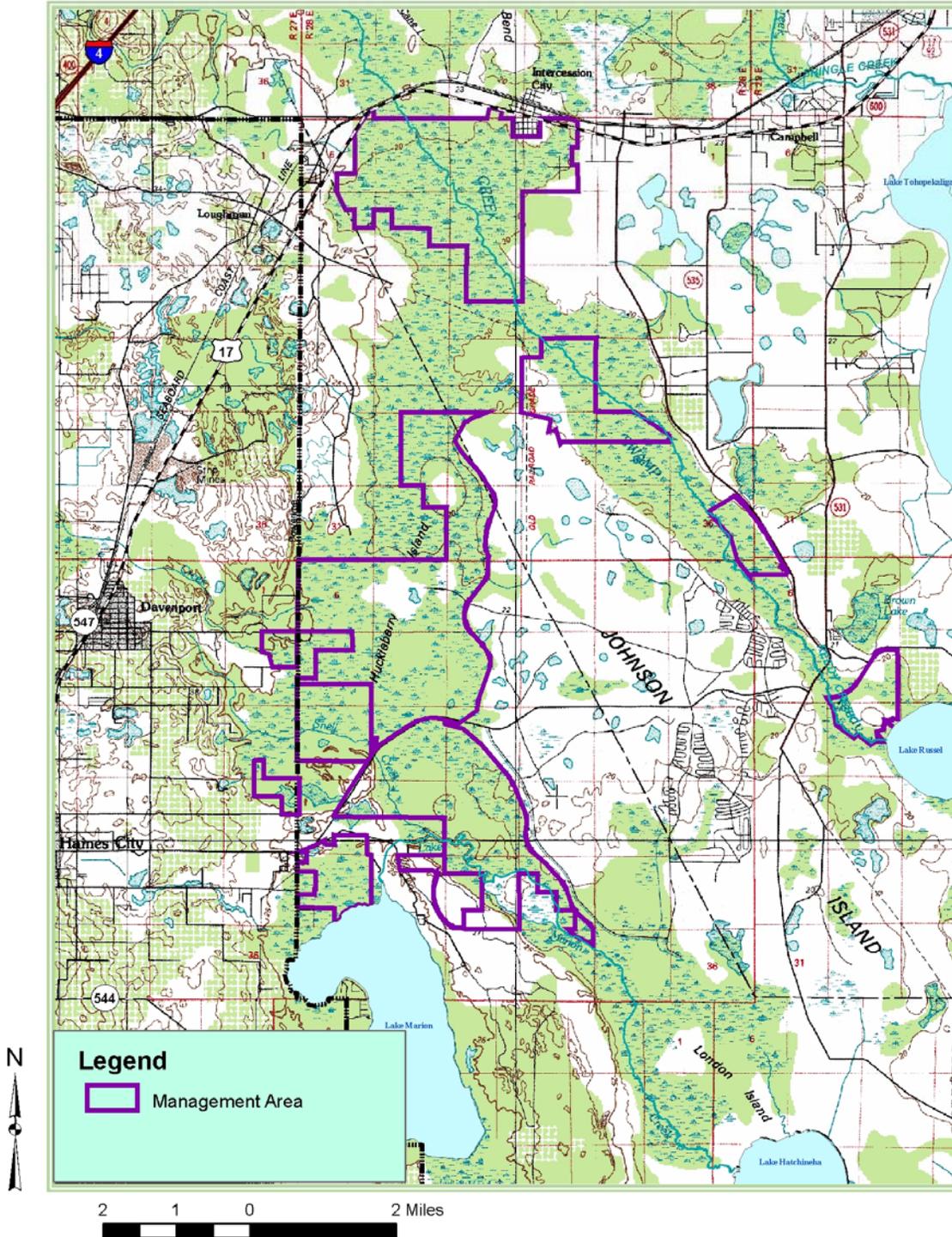
Objectives:

- Continue to provide environmentally compatible uses such as:
 - Fishing
 - Hunting
 - Camping
 - Hiking
 - Boating
 - Nature appreciation
- The public use program in the Management Area shall not require significant facility or infrastructure development (excluding the Lake Russell Environmental Center).
- Control types and levels of public use activities in the Management Area by the issuance of Special Use Licenses.
- Identify potential new access points for increased pedestrian and motorized vehicle access.
- Provide environmental education through maintenance and installation of kiosks at public access points, area brochures, and signage.
- Provide public outreach through the Public Use Guide, attending recreational user club meetings, and acting as a point of contact.
- Maintain existing public-use improvements (roads, signs, entrances, and structures) using a combination of District maintenance, construction contracts, and user group involvement.
- Delineate boundaries of the Management Area.
- Safeguard the public, natural resources, and cultural resources located within the Management Area.
- The public use program in the Management Area shall be low impact, nondestructive to environmental and/or ecological characteristics of the area.

Map 1. Lake Marion Creek and Reedy Creek Management Area and other public lands

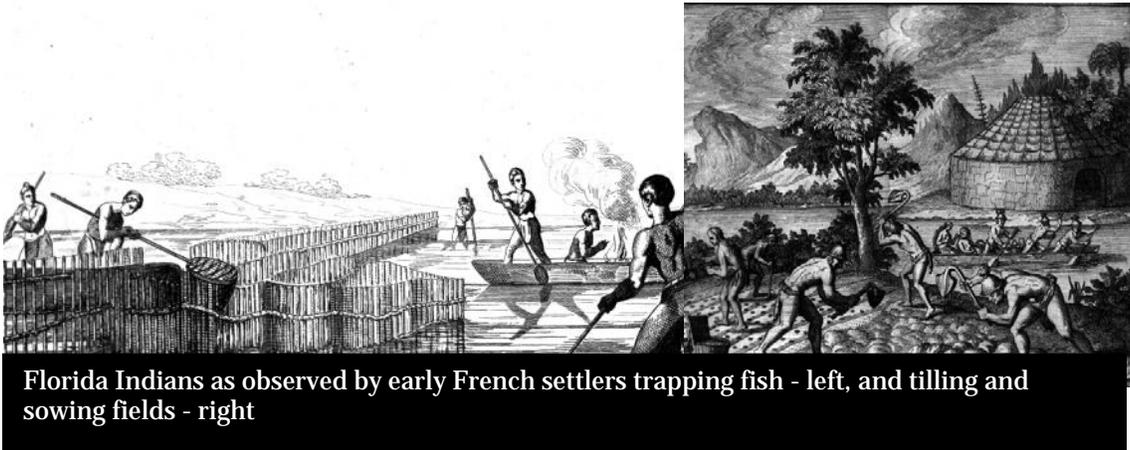


Map 2. Lake Marion and Reedy Creek Management Area, U.S. Geological Survey 1:100,000 Quadrangle Map



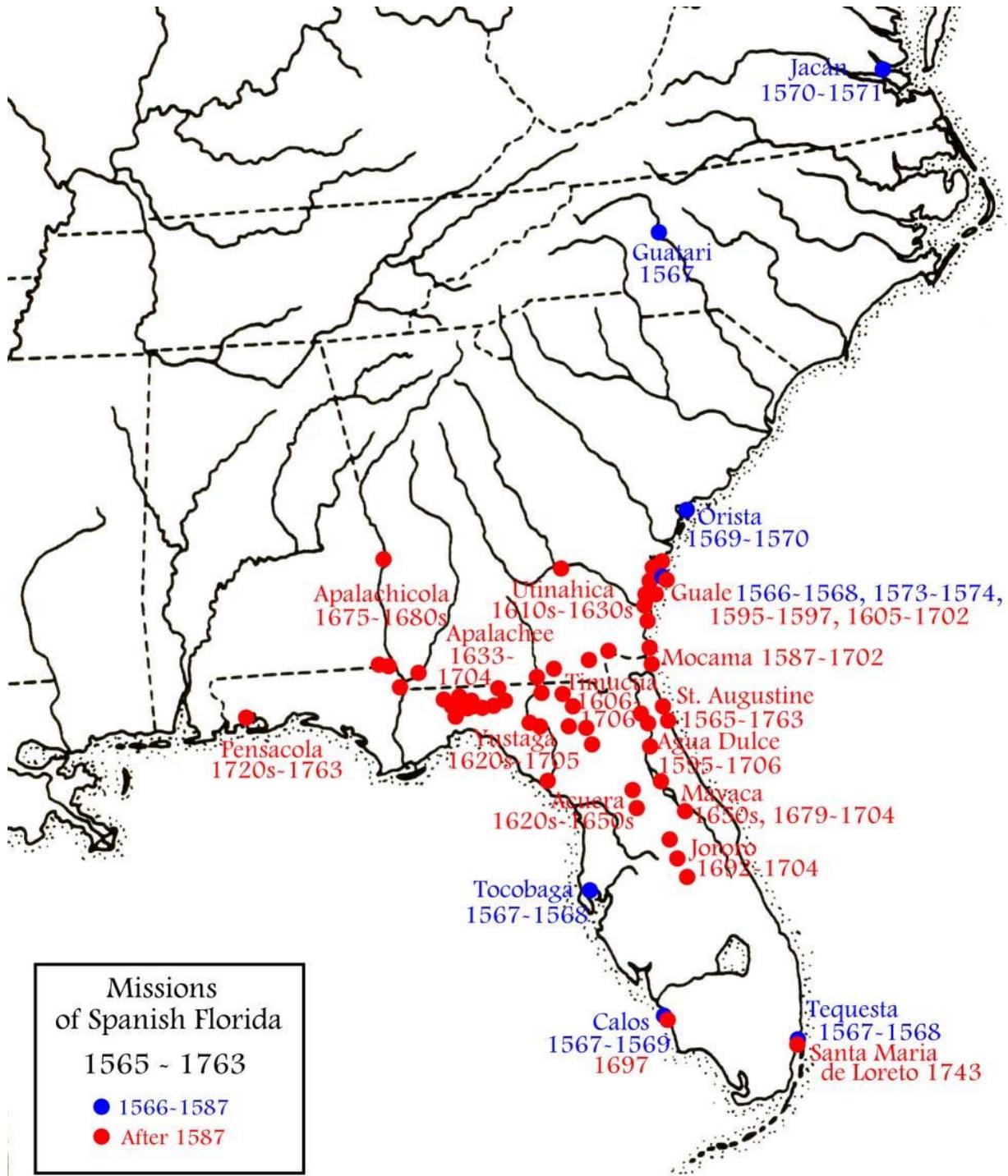
3. Site History

The Management Area has been inhabited by humans for at least 2000 and possibly up to 10,000 years. During the Spanish colonial period the area was regarded as wilderness and was seldom visited, and was not mapped or surveyed during their entire 300 year rule of Florida. The Spaniards apparently had difficulty penetrating the interior south of Orlando. The nearest Franciscan mission was likely the San Joseph de Jororo, occurring near present-day Orlando from 1692 to 1704 (**map 3.**). This frontier outpost had problems with several missionaries being killed by the local population, and was subsequently abandoned. The local population was a powerful tribe called the Jororo with a large cultural center at the present day Brahma Island in Lake Kissimmee. The Spanish were unable to maintain a mission south of San Joseph de Jororo that lasted more than a year.



The Jororo were hunter-gatherers who also tended small plots of maize and a few other vegetables. They were particularly known for raising coontie for its starch and remarkable baking flour. It likely remained a relatively unmolested stronghold for the early Native American culture until the Creek raids in the early to mid 1700s, although the impact of the Creek raids isn't certain in this area since nearly all accounts are from the northern Florida tribes and from the coastal areas. It is clear, though, that the raids were the start of massive declines in the tribes that were endemic to Florida. The Jororo, and most of the surrounding tribes, migrated to St. Augustine for protection and collectively became known as Costas, or Spanish Indians.

Map 3. Spanish Missions in Florida [long-term Spanish missions were not established in southern Florida (UWF-Archaeology Dept.)]



British Period 1763-1783

During the British period beginning in 1763, the region experienced in-migration from the Creek and Yamasee. Many of the surviving members of the coastal tribes evacuated to Cuba with the Spanish when the British took over. In 1765 the Treaty of Picolata (today Palatka) recognized all of the interior of Florida belonging to the Lower Creek Indians (the Seminoles), a territory that would have followed a line from the west bank of the St. John's River following it to its source then south to the edge of the Everglades and along the edge south to Cape Sabal on the southern tip of the Florida Peninsula. The coastal areas were specifically ceded by the Creeks to the British, with British law recognizing that the lands of Florida were the legal possessions of the Creeks.

Second Spanish Period (retrocession) 1783-1821

Throughout the Second Spanish Period the surviving Costas from the interior, and some who moved back from Cuba, worked for Spanish fishing villages. The second Spanish period (1783-1821) was more active in the region. The Spanish Monarchy felt their hold on the territory was tenuous following the departure of the British with unregulated migration from the north, so they began granting generous land grants to encourage settlement and economic development by immigrants who would swear loyalty to Spain. The interior land that had been recognized as being Seminole land by the British, had also been guaranteed to remain with the Seminoles by the Treaty of Pensacola in 1784, and again by the Treaty of Walnut Hills in 1793.

The Seminole Wars

In the years leading up to the Second Seminole War (1835-1842), there was a significant in-migration of Seminole Indians into the area. These were both Seminoles who had been living in Florida for many years as well as new arrivals following the Creek War of 1813-1814 in southern Georgia and Alabama. So when a large military column made its way down the center of the peninsula under the command of General Jessup in 1837, there were many Seminoles living on the pinelands between Reedy Creek and Lake Toho.

The large basin swamp that is the defining feature of the management area was called Ok-hol-wa-kee or "Big Cypress Swamp" by the Seminoles, and Reedy Creek was known as Hatchee-Lustee Creek. A significant skirmish took place near the banks of Reedy Creek on January 27, 1837 between General Jessup's column and the Seminole Warriors under the command of Chief Osuchee, whom the column was pursuing from an earlier skirmish near Lake Apopka. The brief battle in the swamp left 30 soldiers dead and 15 wounded, while the army took two Seminole women and three children prisoner. The army could only confirm a single Seminole warrior killed in the battle.

Following the battle on the Hatchee-Lustee, the military established the frontier outpost, Ft. Davenport, to the northwest of the Intercession City unit of the management area.

Map 4a. 1838 Military Map of the area around the Lake Marion Creek and Reedy Creek Management Area

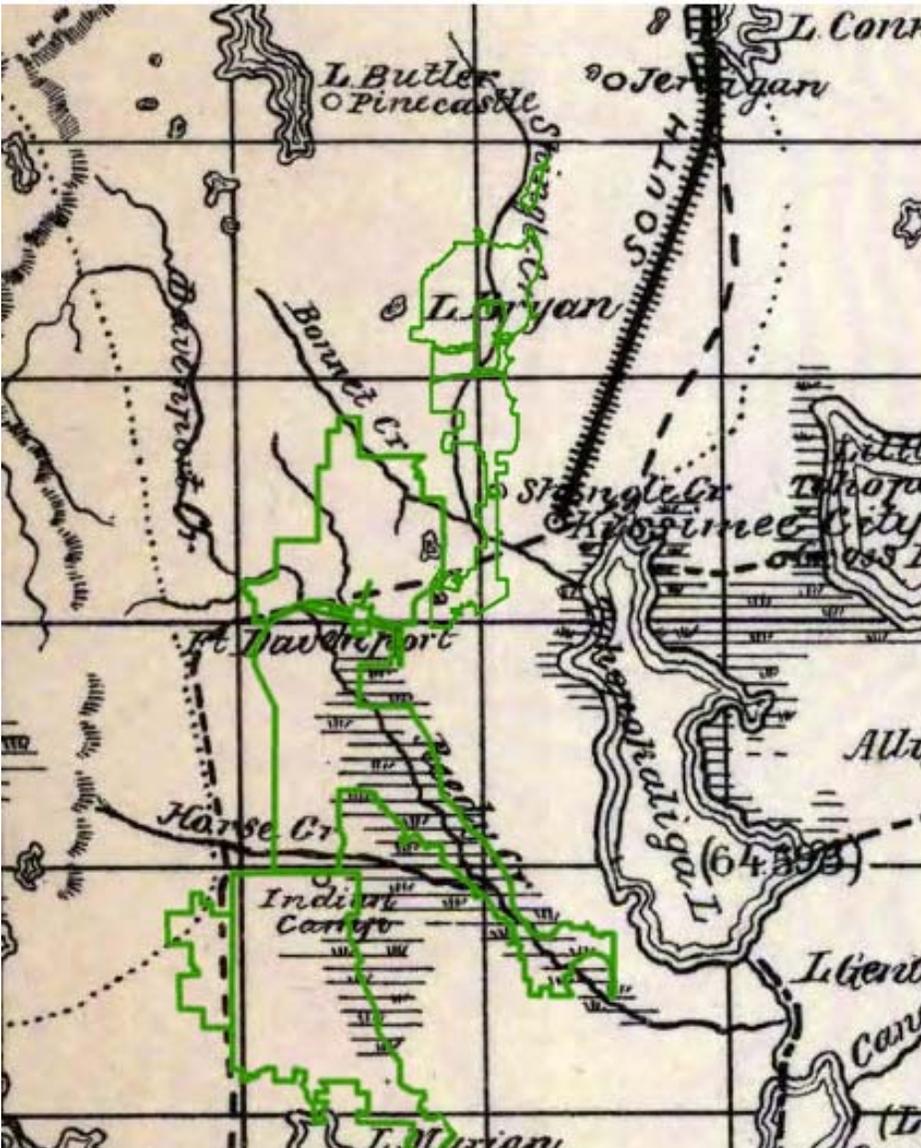


Map 4b. 1839 Military Map of the area around the Lake Marion Creek and Reedy Creek Management Area



1840s-1860s

English speaking settlers began moving in to present day Polk and Osceola Counties during the 1840s and 1850s and were for the most part cattlemen and homesteaders who lived mainly off the land and had their own small vegetable plots. The government would routinely grant 160 acre tracts to single men or heads of households through successive acts of Congress, such as the Armed Occupation Act of 1842. This act granted 160 acres to anyone who submitted a permit to the regional land office to build and live in a house on the parcel and cultivate at least 5 acres of it for at least 5 years. Many settlers were veterans of the Second Seminole War who had familiarized themselves with choice parcels during their routine patrols. These early settlers were few and far between, the Armed Occupation Act of 1842 only authorized 1,250 homesteads for the entire peninsula south of Palatka.



Map 5: The Shingle Creek and Lake Marion and Reedy Creek management areas in 1882, with the location of an Indian Camp and Ft. Davenport shown. The present-day management areas are overlaid in green.

Atlantic Ocean and the Gulf of Mexico. The developers anticipated the planned Cross-Florida Barge Canal would pass through their city, so they were intent on making it a central feature of the community. They developed a Spanish-Mission inspired architecture and built a water-plant and several other buildings. They advertised all over the country and arranged tours of their several thousand acres. Alas, the grand city was not to be, the boom-times went bust – as boom-times tend to do – leaving the speculators broke and the buildings empty.



Photos from Interocean City, the 80 room hotel (top left), a boarding house for potential buyers (top right), apartment buildings (bottom left) and a tour bus bringing in visitors from Kissimmee (bottom right).

The buildings and surrounding 5,000 acres were eventually given as a philanthropic gift to a group of orphans, whose caretaker had moved them to Florida without a plan as to what to do with them and was desperate for a place for her 50 children. The caretaker, rented a camp near lake Apopka but eventually found herself with 70 cents in her pocket and 50 children looking to be fed. The orphans had it rough, it was during the depression and they resorted to eating the wild huckleberries growing in the woods and whatever fruits and vegetables would happen to fall off of passing farm trucks. In the 1940's the site became the "Intercession City Bible College", then renamed to "Intercession Institute" in 1949. The school finally closed in 1953.



A cover to advertisement booklet for home sites in Interocean City.

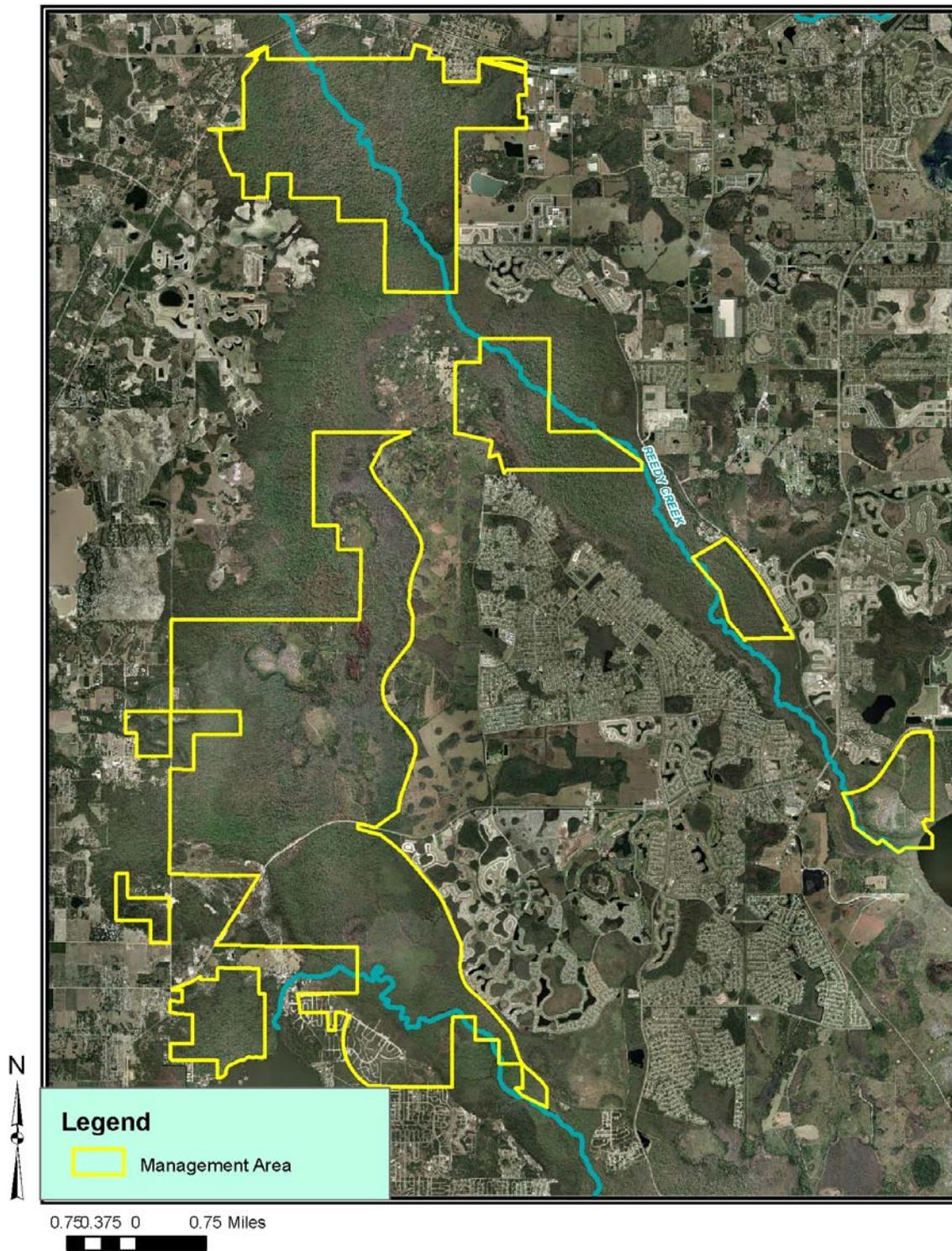


Photo of the Intercesion Institute founded on the former speculative development of Interocean City

In 1981, the Florida Legislature established the Save Our Rivers program for the five water management districts to acquire environmentally sensitive land. The legislation (§373.59 F.S.) produced the Water Management Lands Trust Fund and empowered the water management districts to acquire lands needed to manage, protect, and conserve the state's water resources. Once acquired, the lands should be managed in an environmentally acceptable manner and restored to their natural state. Districts may make certain capital improvements, i.e. fencing, access roads/trails, and provide basic public facilities. In addition, habitat management such as control of exotic species and controlled burning may be conducted. The legislation also requires the districts to develop appropriate public use.

The District began purchasing lands within the Lake Marion Creek Project Area and Upper Reedy Creek Project Area in 1994 through the Save Our Rivers program. The majority of land was acquired from July 1994 to May 1997. The Management Area comprises approximately 12,915 acres located in eastern Polk and western Osceola counties.

Map 7. 2007 aerial photo



4. Resource Inventory

Policy 140-25(3)(e) Inventories of natural and historic resources shall be performed to provide information for effective land management planning, natural community maintenance and ecological restoration.

Floral and faunal species are inventoried, and natural communities are mapped by Land Stewardship personnel, volunteers, or private contractors. The data helps District land managers with resource management planning.

Inventory data is on file within the Planning Section of the Land Stewardship Program. Land Stewardship shares natural areas and species data with the Florida Natural Areas Inventory through a Memorandum of Understanding.

Floral and faunal inventories of the Management Area were included in the environmental assessment initiated shortly after acquisition to determine the presence of listed species and serve as baselines. Additional surveys have been completed with species' lists being updated regularly by volunteers, contractors, and District staff (**Appendix E**). Archeological inventories were conducted by the Department of State, Division of Historical Resources and described in subsequent reports (section 4.5).

4.1 Hydrology

Policy 140-25(1) The basis for the Land Stewardship Program is the protection and management of natural hydrologic resources.

White (1970) divides the state of Florida into three major hydrogeologic divisions. The Management Area lies within the central zone defined by discontinuous highlands in the form of sub-parallel ridges and valleys. The major geomorphic feature that affects area hydrology is the Osceola Plain, a generally broad terrace bounded by the Lake Wales Ridge to the west and the Eastern Valley to the east, both of which are marine scarps. The Osceola Plain has locally little relief and generally has an elevation of 60 to 70 feet National Geodetic Vertical Datum. The Management Area is located in the western edge of the Osceola Plain, with the eastern edge of the Lake Wales Ridge to the west.

For management purposes, the Management Area includes two hydrologic basins: the Reedy Creek and Lake Hatchineha (Map 2). Intercession City Unit, Poinciana Unit, Reedy Creek Unit and the northern portion of the Lake Marion Creek WMA (the area within the Upper Reedy Creek Management Area) lie within the Reedy Creek basin. The remaining portion of Lake Marion Creek Wildlife Management area, including the Torelli South Unit, lie within the Lake Hatchineha basin. The Reedy Creek basin area is approximately 269 square miles and the Lake Hatchineha basin area is approximately 128 square miles.

Wetlands comprise approximately fifty percent of the Lake Marion Creek Management Area, and most are within the 100-year flood plain. The area is of critical importance to the recharge of the Floridan Aquifer because the deep sands of the Lake Wales Ridge allow water to infiltrate, rather than run off. Lake Marion serves as the headwaters for Lake Marion Creek, which combines with Snell and Horse Creeks to provide a constant supply of high quality water to Lake Hatchineha, which in turn discharges to Lake Kissimmee, the Kissimmee River and Lake Okeechobee. All three lakes are priority water bodies under South Florida Water Management District's Surface Water Improvement & Management Plan program (SFWMD 1997).

Three aquifer systems underlay the two management units: the Surficial, Intermediate and Floridan. The water table aquifer is contained within the Surficial Aquifer System (Powell 1991). The Intermediate Aquifer acts as a confining layer for the Floridan Aquifer, which supplies much of the water used in Polk County and is a source of both potable and non-potable water for a substantial portion of south Florida. The highly permeable Lake Wales Ridge has been identified as an area of high recharge, providing from 10 to 20 inches of groundwater recharge per year to the Floridan Aquifer (David 1992). The adjacent Osceola Floridan Aquifer to the east, provides base flows via spring-fed creeks to the headwaters of the Kissimmee River (South Florida Water Management District 1992).

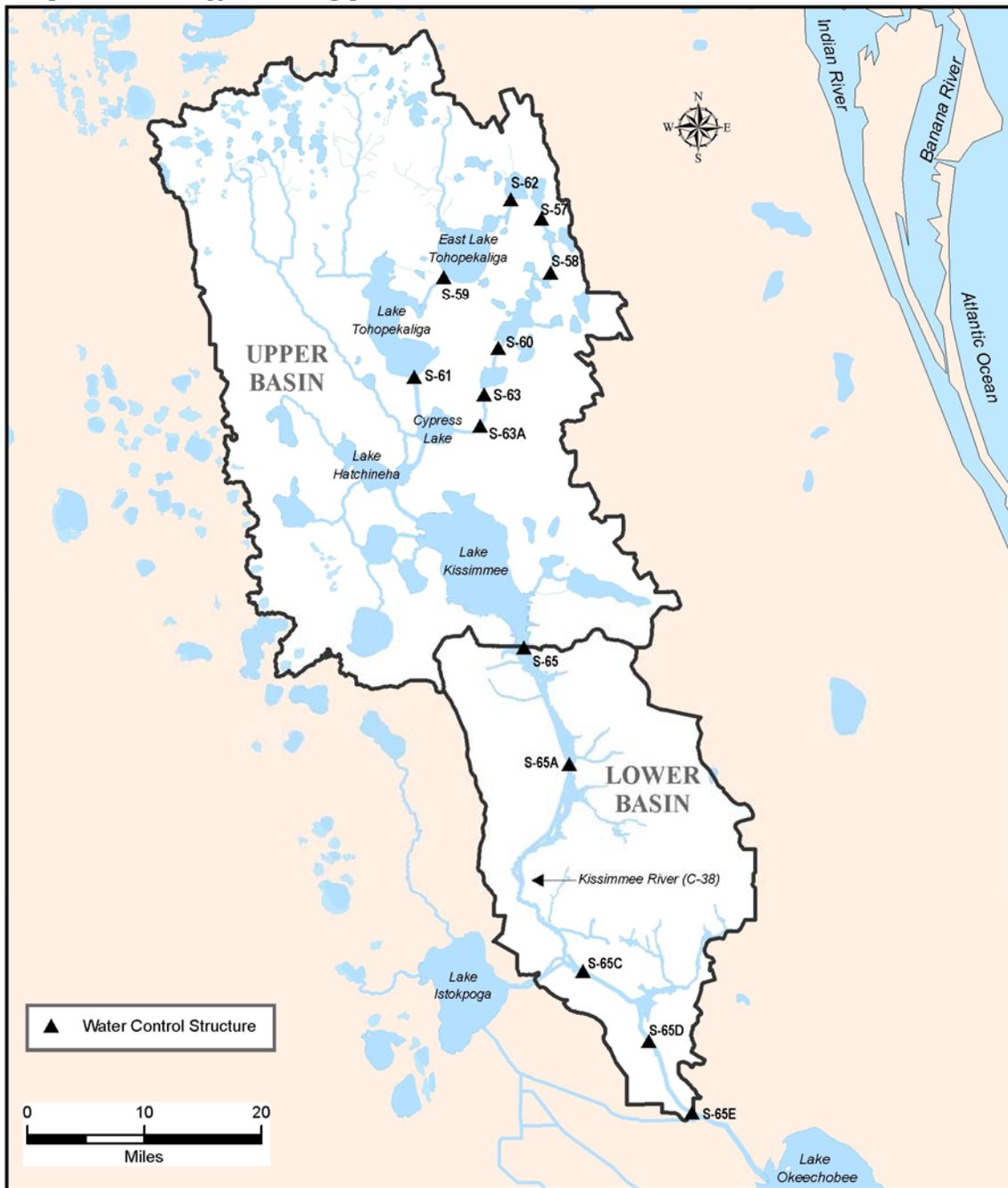
Surface waters within or associated with the Lake Marion Creek Management Area include Lake Marion, Lake Marion Creek, Snell Creek and a portion of Horse Creek. According to Powell (1991), Lake Marion covers 3,456 acres at elevation 67.0 feet (National Geodetic Vertical Datum). It drains an area in excess of 22,500 acres and is fed by springs. It has the fourth best water quality of all public lakes in Polk County. Lake Marion Creek is the primary outlet for Lake Marion. It originates at the north end of the lake and flows north, east, and then southeasterly for about 10 miles to Lake Hatchineha. It has similar water quality to Lake Marion (Polk County 1989). Snell Creek originates approximately 4.5 miles north of Lake Marion, near the edge of the Lake Wales Ridge, and meanders southeasterly for five miles before intersecting Lake Marion Creek about 0.5 miles downstream of the Lake Marion Creek Road Bridge. Its water quality is similar to Lake Marion Creek (Polk County 1989). Horse Creek forms in the Lake Wales Ridge approximately 10 miles northwest of Lake Marion. It flows into the Huckleberry Islands Swamp, east of Davenport and then discharges into Lake Marion Creek via Snell Creek. Its upper reaches are extensively channeled (SFWMD 1992).

Base flow in the creeks results from year round discharges from the Floridan Aquifer and are of critical importance in maintaining high quality flows to the headwaters of the Kissimmee River. During droughts, Floridan Aquifer discharge is usually the only visible flows in the creeks. Stormwater runoff is associated with high discharge events and constitutes that portion of rainfall that does not seep into the ground or evaporate. Base flow measurements by South Florida Water Management District staff on March 6, 1991, for Lake Marion Creek, Snell Creek and Horse Creek are listed in Table 1 below (SFWMD 1992).

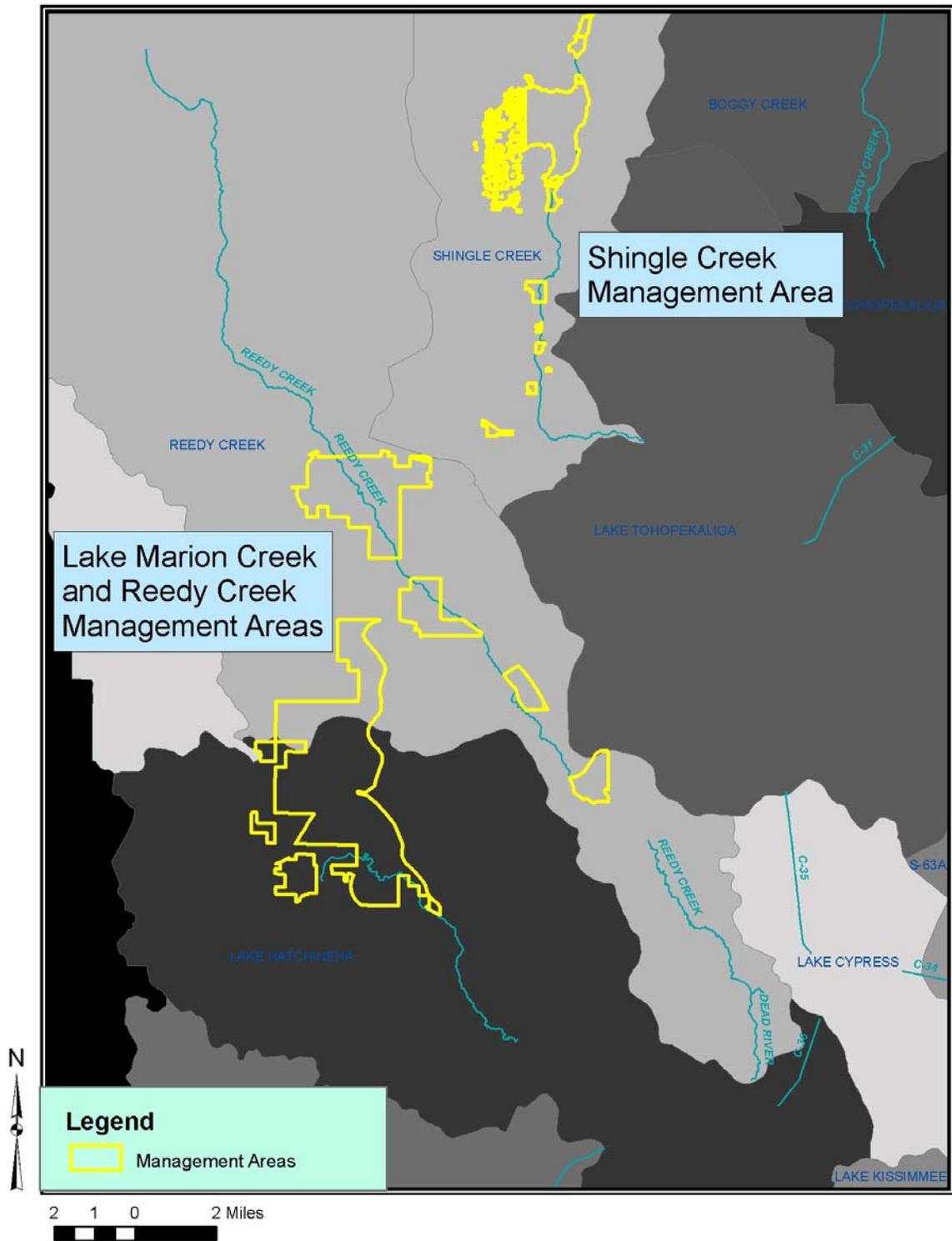
Table 1: Base Flow Measurements

LOCATION	DISCHARGE (cfs)
Horse Creek at Horse Creek Road	7.47
Lake Marion Creek at Lake Marion Creek Rd.	17.87
Snell Creek at County Road 580	15.60
TOTAL	40.94

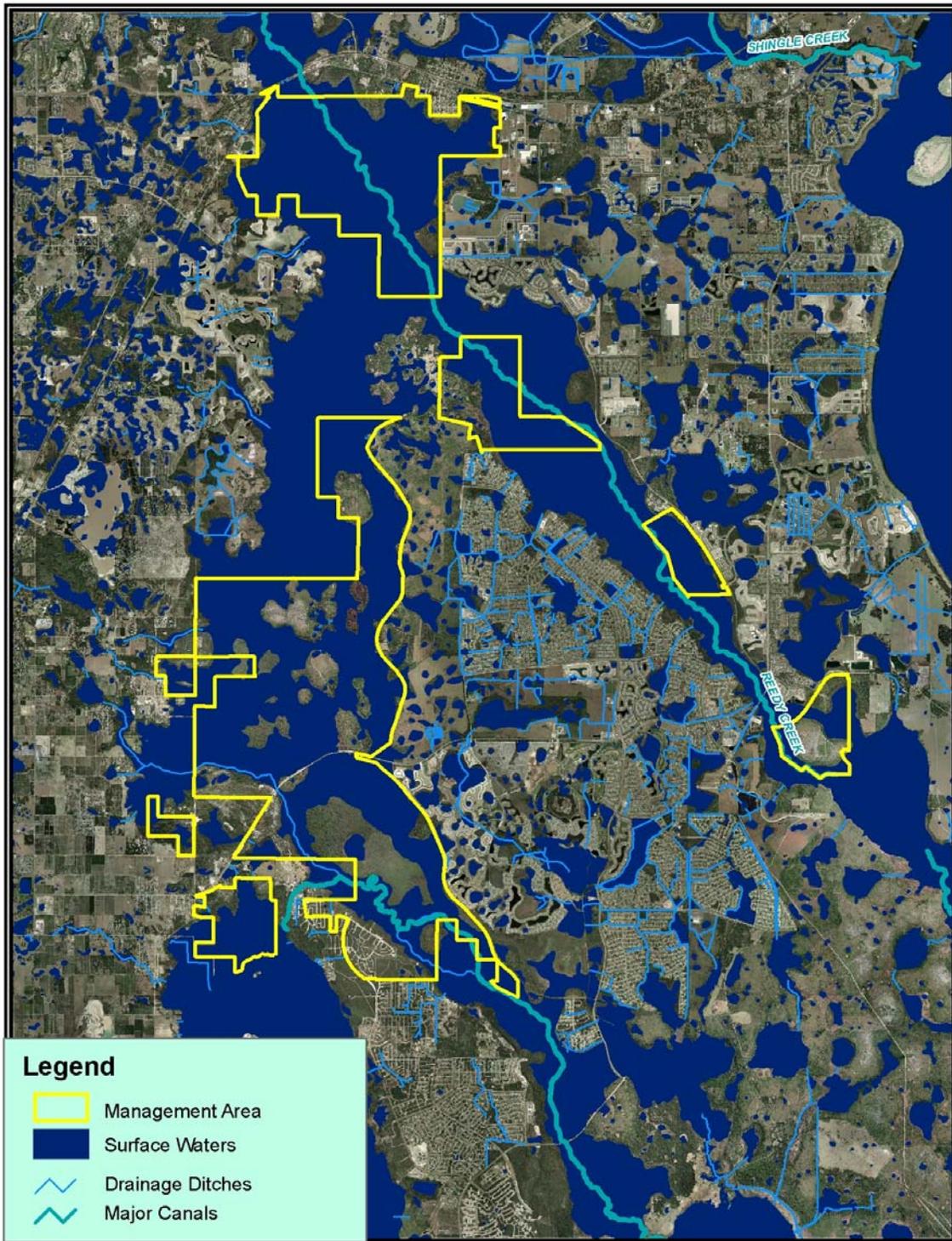
Map 8. The Regional Upper and Lower Kissimmee River Basins



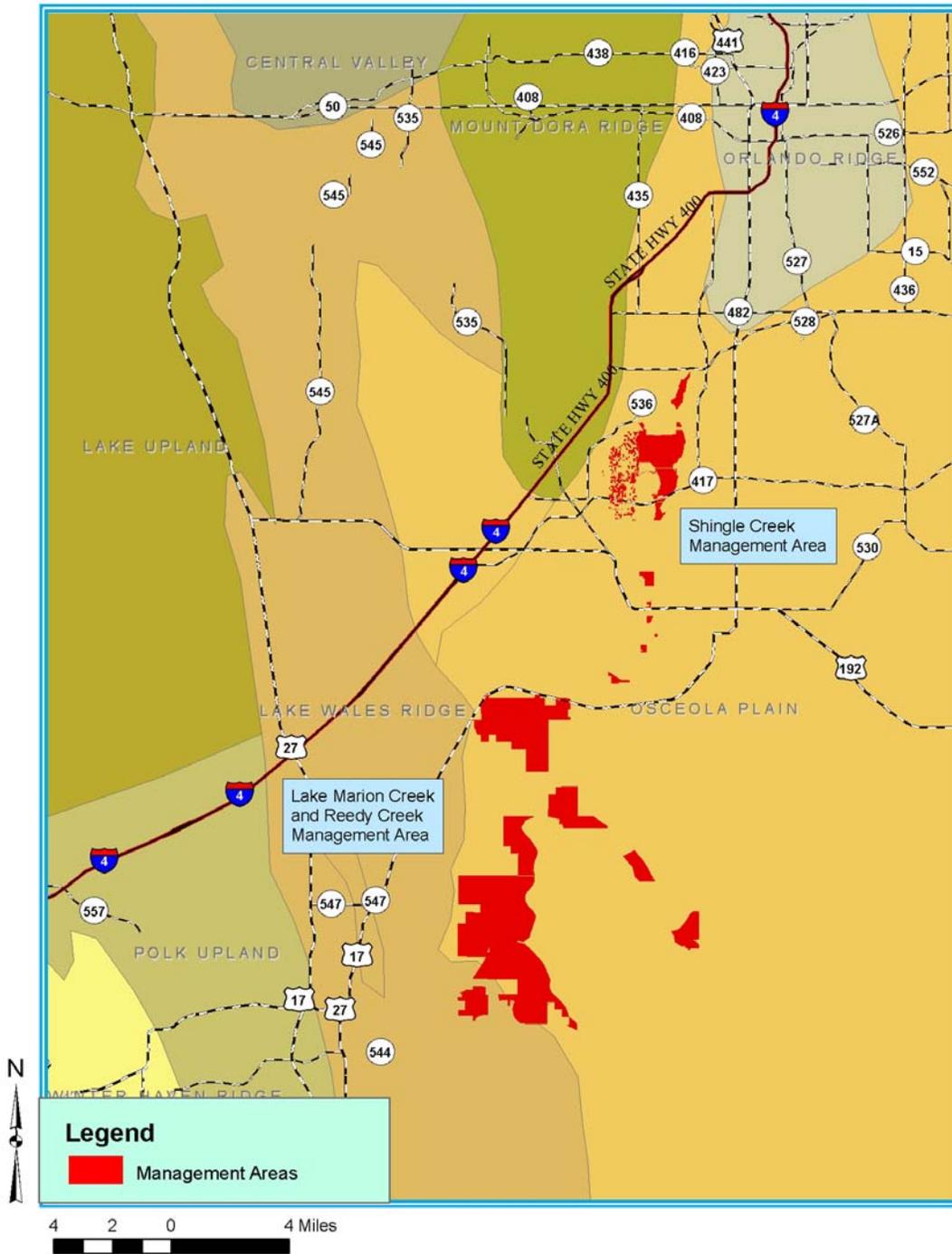
Map 9. Local Hydrologic Basins



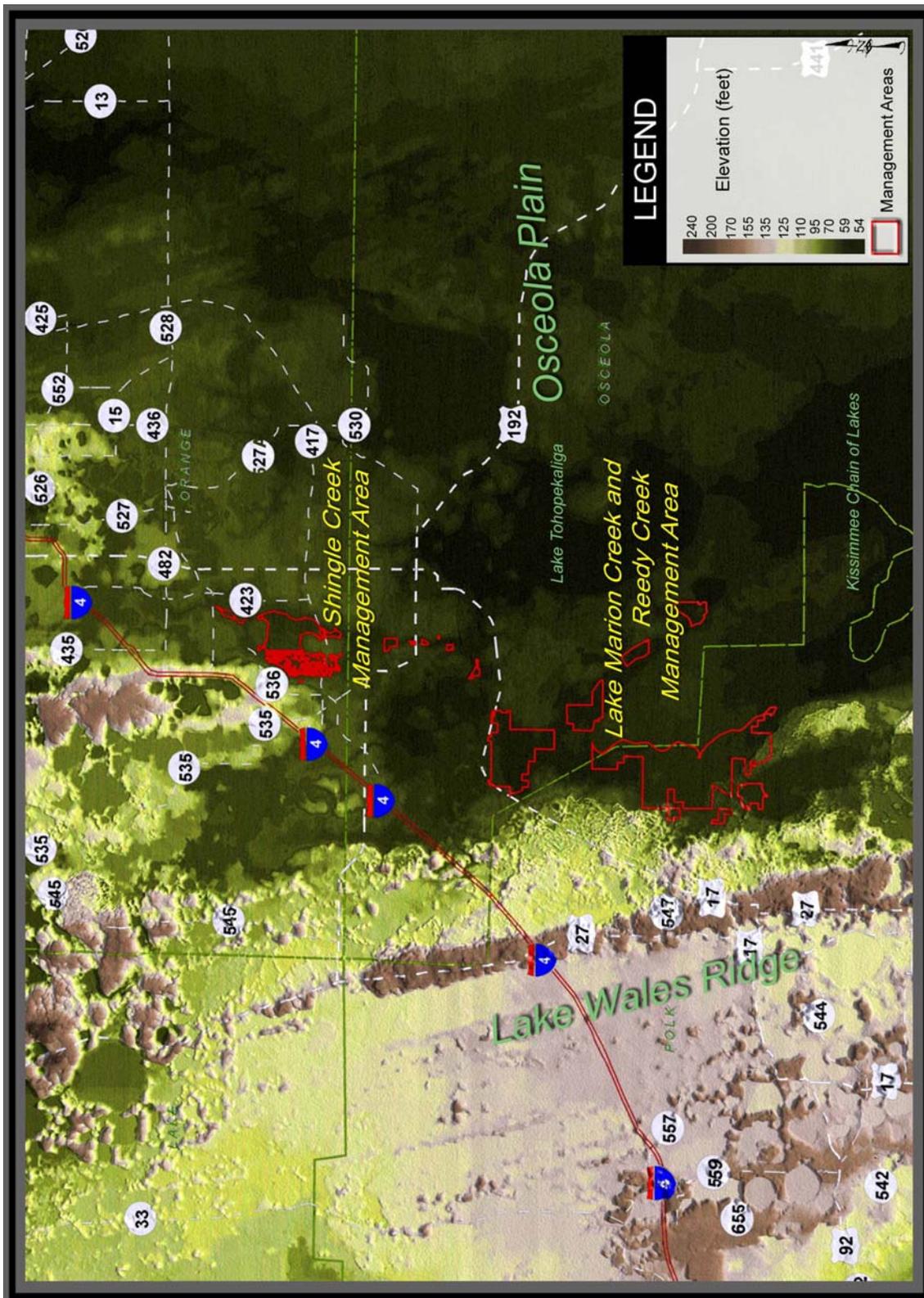
Map 10. Surface Water



Map 11a. Regional Major Geomorphic Features



Map 11b. Regional Topography



4.2 Soils

There are seven distinct soil categories within the Management Area as defined by the Natural Soil Landscape Positions soil classification system: flats soils, flatwood soils, knolls, central ridge and dunes, muck depression soils, sand depression soils, and water. This classification system groups South Florida soils into 12 categories based on hydrology and soil morphology that reflect the local relative topography, hydrology, and vegetation of the area. Classification descriptions are included as **Appendix C**.

Soil Contamination and Excavation Sites

Throughout the acquisition process, District Environmental Assessments have revealed no known areas of soil contamination (i.e. cattle dipping vats, chemical dumping) or excavation within the Management Area.

4.3 Natural Communities

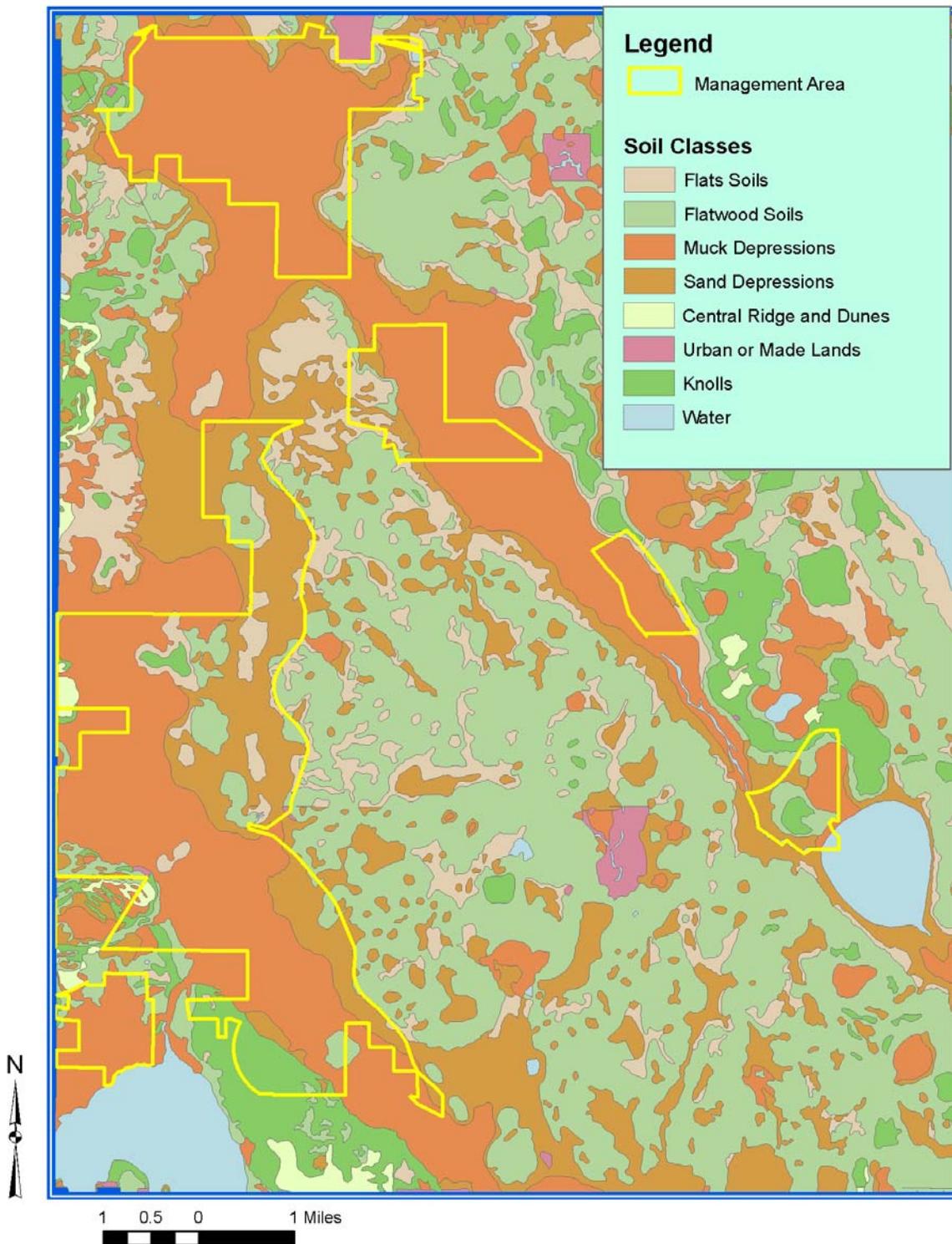
Fifteen natural community types, as classified by the Florida Natural Areas Inventory, are present in the Management Area. Descriptions are included in **Appendix D**. Habitat condition varies widely depending on current management activities and exotic plant infestation. Wetlands are identified for the Management Area in the National Wetlands Inventory Map produced by the U.S. Fish and Wildlife Service. The natural communities for each management unit are shown in **Map 13**. A summary of natural community types found in the Lake Marion Creek and Reedy Creek management units are shown in Table 2. Plant inventories were completed by District staff, contractors, Polk County, and the Audubon Society within the Management Area.

Table 2: Ecological Community Type Summary by Management Unit

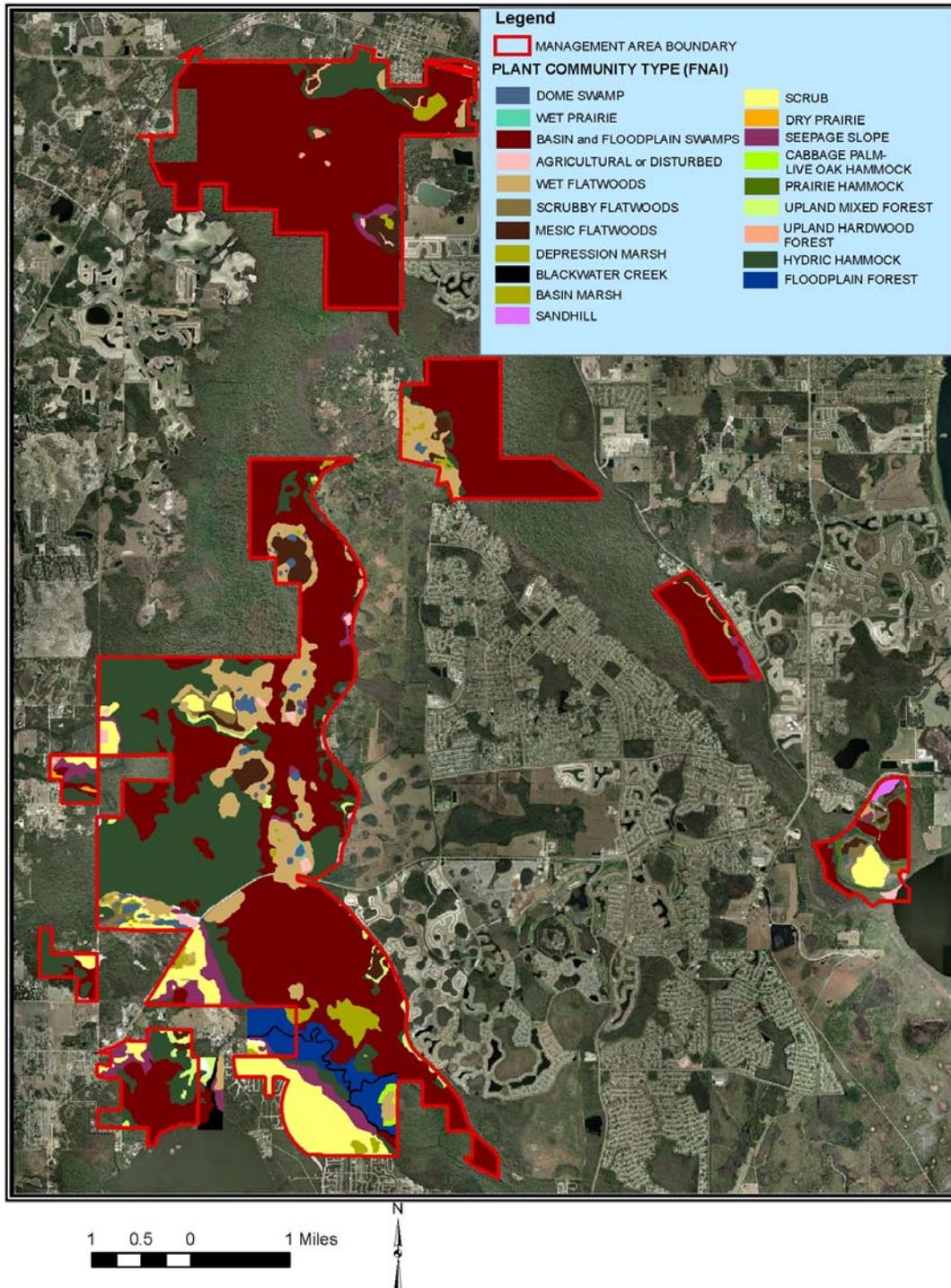
X = documented

FNAI Community Type	Lake Marion Creek WMA	Intercession City Unit	Poinciana Unit	Reedy Creek Unit	Lake Russell Unit
Basin Marsh	X				
Basin Swamp	X	X	X	X	X
Blackwater Stream	X				
Depression Marsh	X		X		
Dome Swamp	X	X	X		X
Floodplain Forest	X				
Hydric Hammock	X	X	X	X	X
Mesic Flatwoods	X	X	X	X	X
Prairie Hammock					X
Sandhill					X
Scrub	X				X
Scrubby Flatwood	X				X
Seepage Slope	X	X			X
Upland Mixed Forest	X	X			
Wet Flatwoods	X	X	X	X	X
Wet Prairie	X				
Xeric Hammock	X				

Map. 12. Soils



Map 13. Natural Communities: Florida Natural Areas Inventory classification



4.4 Wildlife

Inventories have documented 343 animal species within the Management Area. (**Appendix E**). Wildlife species observed utilizing the property include 215 bird, 46 mammal, 58 reptile, and 24 amphibian species. At least 35 species considered rare, endangered, threatened, or of special concern have been noted. Further documentation of mammals, amphibian, reptiles, and fishes are needed at Intercession City Unit, Poinciana Unit, and Reedy Creek Unit. At least 19 species considered rare, endangered, threatened, or of special concern have been noted.

4.5 Cultural Resources

Policy 140-25(3)(j) Archaeological and historic resources are protected by site identification and inter-agency coordination with the Florida Division of Historical Resources. Land Stewardship planning shall include an analysis of archaeological data accompanied by appropriate public education opportunities.

The District plans to promote research of the site to safeguard its integrity, primarily through prohibiting ground disturbing activities. Management activities planned for this area are exotic plant control, vegetation management, and prescribed burning. Staff from Florida Division of Historical Resources may revisit these sites to conduct additional investigations.

In 1997 the Florida Division of Historical Resources conducted a search of the Florida Master Site File for archaeological and historical sites known to exist in the Lake Marion Creek/Reedy Creek Management Area. Eleven such sites existed. In 2003 another site was located and placed on file. However, the Florida Division of Historical Resources personnel emphasized that because the Lake Marion Creek area has not been completely surveyed, it may contain unrecorded archaeological sites or historical structures. The listing of these archaeological sites does not indicate whether any of the sites are significant. Further research will consequently be required to determine if there are sensitive historical and/or cultural resources, which need protection within the Management Area.

In 2009, the District assembled a cross-departmental team to review the District's responsibilities towards cultural resources and to make recommendations to enhance existing policies and procedures. These enhanced procedures included:

- Improving training for District staff members.
- Improving communication with contractors working on public lands.
- Raising awareness about cultural resources with a public education campaign, including a press release, fliers posted on public land, use of social media such as Twitter and Web site information.
- Developing Standard Operating Procedures and workflows for unanticipated cultural resource finds on District land.

5. Natural Resource Management

Policy 140-23 The Land Stewardship Program mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands.

Resource management includes all applied programs wherein activities manipulate, modify, and control natural features within the Management Area. All lands that were acquired through the Save Our Rivers program are managed and maintained in an environmentally acceptable manner and, to the extent practicable, restored and protected in their natural state and condition. Management responsibilities are defined by statute, and directed by best management practices. Standard Operating Procedures have been developed for primary management activities. Goals and objectives for the Management Area clarify resource management guidelines necessary to fulfill the District's land stewardship responsibilities. Site specific objectives are developed to both provide the management activities that the site and its resources need, as well as to contribute to the cumulative programmatic success of the Land Stewardship Program, measured by its success indicators as reported annually in the South Florida Environmental Report (available online at sfwmd.gov and using the search tool for SFER).

Land Stewardship resource management activities include the the application of vegetation control activities to restore natural forest structure and composition, the continuation of an aggressive exotic plant control program, and the application of a prescribed burn program for fire dependent plant communities.

5.1 Restoration Projects

Policy 140-25(1) The basis for the Land Stewardship Program is the protection and management of natural hydrologic resources.

Policy 140-25(1)(c) Where feasible, an attempt shall be made to restore a more natural hydroperiod on tracts where the drainage patterns have been altered.

The District's Preliminary Environmental Assessment in 1991 determined that the floodplain of Lake Marion Creek was in a relatively natural state, requiring little, if any, immediate restoration measures. It identified limited restoration opportunities in areas such as the scrub communities, where logging and land clearing operations had removed much of the overstory (SFWMD 1992).

Past logging has removed the pine cover from most of the flatwoods on the property. Additional areas were found to be unnaturally dominated by slash pine as a result of long-term fire suppression. In order to restore longleaf pine to these systems, active reintroduction of longleaf pine would be essential. Areas should be selected where experimental seeding of longleaf pine could be attempted. If the seeding were to be effective, shrub competition would also need to be controlled, which may be difficult in

the long-unburned sites. Bridges and Reese (1996) thought it may be necessary to resort to direct planting of longleaf pine seedlings, and monitoring of their success, in order to obtain sufficient numbers of longleaf pine for self-perpetuation.

In particular, a high priority management prescription for the Snell Creek Management Unit scrub would be the planting of scattered longleaf pine. In 1996 this tree was found in densities lower than what would be expected for a natural area (Bridges and Reese 1996). Also, the mid-successional shrub and red maple swamps in the Huckleberry Islands-South Management Unit, east of Lake Marion Creek, would benefit from fire to restore areas to a herbaceous dominated basin marsh. This condition was present at the sites as recently as the 1950s, based on interpretation of historical aerial photographs (Bridges and Reese 1996).

5.1.1 Mitigation

The American Equities mitigation bank falls within the Lake Marion Creek Project Area boundary, on privately owned land, and totals 3,572 acres. Mitigation bankers acquire property which has inherent restoration potential. They are then responsible for creating and implementing restoration and management plans for the property. This privately owned and operated Bank submitted a permit request to the South Florida Water Management District in January 1997 and was approved by the Governing Board in February 1997 (File No. 492924779).

5.1.2 Monitoring

Policy 140-25(3)(f)(2) Monitoring shall be conducted to identify landscape changes resulting from management activities.

Tracking environmental response to management and restoration activities provides valuable information on progress toward restoration objectives. Information obtained by monitoring specific sites assists land managers in making sound ecological choices for each unique parcel. The FL. Fish & Wildlife Conservation Commission monitors wildlife within the Lake Marion Creek Wildlife Management Area.

Monitoring has also focused on documenting vegetative changes following the Acquisition of the property by the District and the implementation of a regular prescribed fire program. Baseline inventories have been established, and two permanent photo monitoring stations were installed that will enable panoramic photos to be taken to document changes over time. The baseline vegetation study was completed by a field botanist from the Fairchild Tropical Gardens in Miami-dade County in 1995-1996. The District re-hired the same botanist 10 years later in 2005 to re-survey the site. Both reports are on file at the District headquarters at West Palm Beach and are also available in an electronic format.

5.2 Vegetation Management

Policy 140-25(2)(d) Where practicable, an attempt shall be made to restore and maintain desirable vegetation to promote habitat diversity in areas where invasive exotic vegetation, grazing practices, or improved land uses have substantially altered the historic landscape.

Policy 140-25(3)(l) Mechanical equipment may be used in conjunction with prescribed burning and other management tools to control vegetation and restore habitat structure.

Vegetation management is a program component where the composition and/or structure of a vegetative community is physically altered to meet a management objective. The techniques used in vegetation management include mowing, disking, shredding, roller-chopping, timber thinning, and planting. These techniques are applied to one or more management objectives that may include:

- Restoring a degraded vegetative community
- Improving an area's suitability as wildlife habitat
- Exotic species control or weed management
- Fuel management in relation to prescribed burning or minimizing wildfires
- Clearing for maintenance or project management purposes

Vegetation control and maintenance is completed by District staff or through contracts. The Management Area contains a few areas that may benefit from mechanical vegetation management, particularly in the overgrown portions of the historic pine islands in the Huckleberry Island Unit.

5.2.1 Exotic/Invasive Plants

Policy 140-25(2)(c) Management practices will strive to identify existing infestations and implement appropriate control or eradication measures.

Policy 140-25(3)(b) Exotic plant control in all management areas shall strive to attain a level of success where periodic maintenance eliminates the infestation or reduces the coverage of exotic plants.

South Florida's subtropical climate provides an excellent growth environment for the rapid spread of exotic plants that can cause extensive alterations to natural ecosystems. Environmental changes caused by extensive hydroperiod alterations have been an important factor in exotic plant invasion. Exotic plant invasion can result in partial or total displacement of native plants, loss of wildlife habitat, and the degradation of public use areas.

Land Stewardship targets Category I and II non-native plant species as identified in the Florida Exotic Pest Plant Council's biennially updated list of *Florida's Most Invasive Species* (<http://www.fleppc.org/>). Category I species include non-native plants that invade and disrupt Florida native plant communities. Category II plants have the potential to invade and disrupt natural successional processes. Both Category I and II exotics are considered invasive and a threat to the function and ecological stability of Florida's natural communities.

Invasive and exotic plant control measures include a combination of herbicide application, biological control, prescribed fire, roller chopping, mowing, cattle grazing and physical removal. Selection of control measures is dependent upon species type, environmental factors, and natural communities impacted. Private contractors conduct exotic plant control activities in cooperation with the District's Vegetation Management Division.

Exotic plant control is conducted primarily by a contracted crew of applicators, hired by the Vegetation Management Division. District field technicians also provide supplemental support especially on small or sporadically distributed infestations. Generally, treatments are scheduled so that each unit is covered bi-annually; however schedules are adjusted based on current conditions. The District treats and surveys the infested areas several times a year to control established infestations and locate new ones. Areas of treatment are scheduled based on groundwater conditions, time since last treatment, virulence of infestation, public use, in accordance with other management operations. All treatments follow herbicide best management practices and use the best available science. Treatment dates, locations, and herbicide are noted and recorded in a GIS database. Additional procedures are being developed to provide more specific plant locations and herbicide use data so that treatment efficacy may be better estimated.

Plant inventories have documented 14 exotic species within the Management Area with those denoted with an "*" not on the Exotic Pest Plant Council list (see **Appendix E** for a complete plant list):

- Alligator Weed (*Alternanthera philoxeroides*)
- Sour Orange (*Citrus aurantium*)*
- Water Hyacinth (*Eichhornia crassipes*)
- Hydrilla (*Hydrilla verticillata*)
- Cogon Grass (*Imperata brasiliensis*)
- Pineland Elder (*Iva microcephala*)*
- Primrose Willow (*Ludwigia peruviana*)
- Old World Climbing Fern (*Lygodium microphyllum*)
- Japanese Climbing Fern (*Lygodium japonicum*)
- Chinaberry (*Melia azedarach*)
- Torpedo Grass (*Panicum repens*)
- Sour Paspalum (*Paspalum conjugatum*)*

- Bahia Grass (*Paspalum notatum*)*
- Vasey Grass (*Paspalum urvillei*)*
- Watter Lettuce (*Pistia stratiotes*)
- Indian Cupscale Grass (*Sacciolepis indica*)*
- Tropical Soda Apple (*Solanum viarum*)
- Giant Smutgrass (*Sporobolus indicus* var. *pyramidalis*)
- Small Smutgrass (*Sporobolus indicus*)
- Chinese tallow (*Triadica sebifera*)
- Caesar Weed (*Urena lobata*)
- Paragrass (*Urochloa mutica*)

Exotic plant management within the Management Area consists of follow up treatments to maintain minimum population levels or further reduce populations of exotic and nuisance native plants. The follow-up treatments may be conducted on an annual basis by District contractors, on an as-needed basis by grazing lessees, or directly by District staff.

5.2.2 Rare, Threatened and Endangered Species

Policy 140-25(2)(b) Particular emphasis shall be placed on the identification, protection and management of rare, threatened and endangered species.

Listed species are those plants and animals considered rare within a specific geographic area by the U.S. Fish and Wildlife Service, the Florida Fish and Wildlife Conservation Commission, Florida Natural Areas Inventory, or the Florida Department of Agriculture and Consumer Services. The plant list of the Management Area (**Appendix E**) contains several listed species (reproduced in **Table 3**).

Table 3: Listed Floral Species

(LE) - Listed Endangered (LT) - Listed Threatened

Common Name	Scientific Name	State Listing
Chapman's sedge	<i>Carex chapmannii</i>	LE
Scrub mint	<i>Dicerandra frutescens</i>	LE
Scrub buckwheat	<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	LE
Star ainse	<i>Illicium parviflorum</i>	LE
Pine pinweed	<i>Lechea divaricata</i>	LE
Celestial lily	<i>Nemastylis floridana</i>	LE
Britton's beargrass	<i>Nolina brittoniana</i>	LT
Paper-like nailwort	<i>Paronychia chartacea</i>	LE
Plume polypody	<i>Pecluma plumula</i>	LE
Swamp plume polypody	<i>Pecluma ptilodon</i> var. <i>caespitosa</i>	LE
Lewton's polygala	<i>Polygala lewtonii</i>	LE
Scrub plum	<i>Prunus geniculata</i>	LE

Giant orchid	<i>Pteroglossaspis ecristata</i>	LT
Florida willow	<i>Salix floridana</i>	LE

Land Stewardship establishes appropriate fire and hydrologic regimes, and controls invasive exotics in natural communities with the intent of perpetuating listed plant species. District Public Use Rules aid in the protection of native habitat and specifically prohibit destroying, defacing, or removing any natural feature or native plant on District lands. In this manner, listed plants are given lawful protection and environmental conditions suitable for their growth and reproduction.

Several listed bromeliad species occurring in the Management Area may be threatened by the exotic Mexican weevil (*Metamasius callizona*) that have caused destruction of native bromeliads in other south Florida locations. Two species of once abundant bromeliads, *Tillandsia utriculata* and *Tillandsia fasciculata*, have been placed on the state's list of endangered plant species as a direct result of this weevil. Land Stewardship staff will conduct periodic surveillance of areas of potential infestations to assess management needs.

5.2.3 Forest Resources

Policy 140-25(3)(h) Sustainable use of forest resources shall be conducted where these activities adhere to a series of environmental criteria (see 1999 Forest Management Plan) that meet Land Stewardship Program goals. Timber contractors will be required to meet silvicultural Best Management Practices (BMP) developed for Florida forests.

Policy 140-25(5)(b)(3) Timber sales will be conducted to improve forest health or to support specific forest management goals.

District policy designates its properties as multiple-use resources, which include timber harvesting. However, such activity must be compatible with Land Stewardship goals and objectives and meet strict environmental criteria:

- The area planned for silvicultural rotation is currently in an “improved” or disturbed state (i.e. bahia pasture, existing pine plantation)
- The site to be planted is not scheduled for future hydrologic restoration, or the site to be harvested is scheduled for hydrologic restoration and existing timber will be lost as a result of flooding
- The area does not contain any valuable resources (e.g. endangered species) that may be harmed by changes in land use
- Forest operations would not require major road construction or improvement for accessing and processing timber, particularly within or across wetlands or other sensitive plant communities
- The area to be managed currently requires maintenance (i.e., burning, mowing)

- District costs would be reduced as a result of inclusion in the forest management plan
- The area contains timber that requires salvage following fire and/or insect or disease damage, and could be subject to a sanitation harvest with minimal environmental impact
- The area provides special needs for endangered species (e.g., red-cockaded woodpecker) management that requires timber stand improvement
- Harvest or planting will not create an aesthetically unpleasant scene or an impediment to public use
- Timber harvests will return forests to a more natural structure and improve forest health

There are currently no sites within the Management Area that meet District criteria for timber harvest, although it is a goal for the Land Stewardship Program to re-establish the longleaf pine forest to its historic extent on the site, potentially offering future harvest opportunities.

5.2.4 Range Resources

Policy 140-25(3)i Range management and grazing will be considered on improved or native ranges when the introduction of cattle will not conflict with other natural resource management and public use goals.

The District neither plans nor anticipates any grazing or agricultural activities for the Management Area.

5.3 Fire

Policy 140-25(3)(c) Prescribed fire will be a primary management tool on District lands and will be applied within fire-maintained communities at appropriate intervals.

The majority of natural communities on District lands rely on frequent fire to maintain their vegetative characteristics and biodiversity. Wildfires no longer occur with historical frequency or extent, and this has altered natural community structure and function. Prescribed fire attempts to mimic the benefits of natural wildfires that historically reduced fuel loads, recycled soil nutrients, and maintained natural communities by inhibiting hardwood encroachment and stimulating fire-adapted plant growth and reproduction. The Land Stewardship Program recognizes the benefits of fire and has integrated prescribed fire planning and application into its land management strategy.

5.3.1 Fire History

The District began its prescribed fire planning for the Management Area in 1999, following acquisition of enough parcels to make logistically feasible burn units. Fire data (prescribed and wild) is maintained in GIS to produce historical burn maps of the property.

5.3.2 Prescribed Fire Planning

A fire management plan is developed for each Management Area. Each plan includes a description of location and natural community types, fire history, fire management objectives and constraints, and a burn prescription. The Land Stewardship Program bases all fire management plans on ecological research and professional experience. Fire frequency schedules for each natural community consider recommendations provided in *The Natural Communities of Florida* (Florida Natural Areas Inventory, 1990). To mimic historic fire conditions, Land Stewardship emphasizes growing or lightning season burns (March-June) where practical. Natural firebreaks are utilized where possible to promote historic fire patterns, avoid soil disturbance, and reduce hydrologic flow disruption created by fire lines. Listed species life requirements are elements of prescribed fire planning. Application of fire, with appropriately timed herbicide treatments, are used as a tool for control of invasive and nuisance plants.

Burns are executed using proven methods as defined by the Prescribed Burning Act of 1990, Section 590.026, Florida Statutes. This legislation and associated administrative rules outline accepted forestry burn practices and are administered through the Division of Forestry. Land Stewardship has a three person prescribed fire crew in the Upper Lakes Land Management Region and utilizes other cooperating agency staff—especially the Division of Forestry and the Florida Fish and Wildlife Conservation Commission to conduct burns. All Land Stewardship staff on the fire crew have completed the state certified burn course to ensure safety and proper technique.

Prescribed fire is applied within the Management Area at appropriate fire intervals for each natural community. The District concentrates on applying fire to each area of the property, in order to reduce accumulated fuel loads, improve habitat, and provide a safer basis for future burns of increased frequency and lower intensity. Planning will emphasize yearly burn acreage to attain a 3 year rotation for flatwoods. Typically burns are conducted by ground crews.

Lake Marion Creek Management Unit

Fuel reduction and ecological restoration are primary objectives on this unit. Fire exclusion appeared to be the cause of heavy fuel buildup in many of the plant communities. Most of the upland communities are fire adapted. Prescribed fire reduces liability risks, fire suppression costs, and damage to fire sensitive areas. Prescribed burning will also benefit the plants and animals living in these fire dependent communities.

Prescribed fire can also be used to restore and maintain the natural condition of the plant communities on this unit. Each plant community has its unique natural fire regime, restoration goal, and management needs. Much of the upland areas of the property are scrub and pine flatwoods and require fire. The gopher tortoise is one species that would benefit from prescribed fire. Many rare animals are commensal with gopher tortoises and their burrows (i.e., sand skink (*Neoseps reynoldsi*) and gopher frog (*Rana capito*)).

Reedy Creek Management Units

Fuel reduction and ecological burning (mimicking natural fire cycles) are the primary objectives on this unit. The upland areas of this unit contains mostly fire adapted plant communities that burn readily and build up heavy fuels, causing dangerous wildfires. Regular fuel reduction through prescribed burning reduces liability risks, fire suppression costs, and damage to fire sensitive areas. Prescribed burning will also benefit the plants and animals living in these fire dependent communities. Prescribed burning has been conducted by the District since 1999 (Table 4). Wildfire suppression actions will attempt to avoid hydrologic changes and minimize disturbance of natural areas. Existing access roads will serve as control lines during prescribed fires and wildfires.

Lake Russell Management Unit

Fuel reduction and ecological restoration are primary objectives on Lake Russell. Fire exclusion appeared to be the cause of heavy fuel buildup in many of the plant communities. Most of the upland communities are fire adapted. Regular fuel reduction through prescribed burning is important due to the close proximity of this property to residential developments and a major roadway. Prescribed fire reduces liability risks, fire suppression costs, and damage to fire sensitive areas. Prescribed burning will also benefit the plants and animals living in these fire dependent communities.

Prescribed fire can also be used to restore and maintain the natural condition of the plant communities on Lake Russell. Each plant community has its unique natural fire regime, restoration goal, and management needs. Much of the interior of the property is scrub and pine flatwoods, and requires fire.

Prescribed Fire and Carbon Sequestration

Carbon is stored on District lands in vegetation and organic soils. Each year, the amount of carbon increases as young forests grow and marshes steadily fix carbon into peat. This is also known as carbon sequestration. It is important to manage the District's land resources in a manner to maximize the amount of carbon that is sequestered, while minimizing carbon dioxide and other greenhouse gas emissions. Prescribed fire is a tool that if used under the right conditions and with the right frequency can increase the rate at which a fire-dependent natural community can grow and store carbon. A typical prescribed fire more than replaces the greenhouse gases released by the fire in the understory. There is a subsequent spike in primary

productivity caused by a release of nutrients and exposure of more surface area to sunlight, as well as a post-burn swelling of both above and below ground carbon stores.

Some prescribed fire guidelines for maximizing carbon storage that the District follows include:

- A return interval of 3 to 5 years
- Late winter burns are best for storing carbon
- A proper mop-up phase of the prescribed fire to extinguish smoldering stumps is important to reduce unnecessary carbon and nitrous oxide releases, flaming combustion releases much less carbon than smoldering combustion
- Avoid muck fires and conditions that lead to muck fires as they release large quantities of carbon and nitrous oxide
- Keep fuel density low to avoid the possibility of massive carbon releases in wildfire

5.3.3 Wildfire Suppression

Policy 140-25(3)(d) The Division of Forestry will be notified of all wildfires on District lands. Land Stewardship will provide initial suppression when commensurate personnel and equipment are available.

Wildfires ignited by lightning are a common occurrence throughout Florida, and the Management Area receives numerous lightning strikes as indicated by past wildfires. It is District policy, and state law, that the Division of Forestry is notified when a wildfire occurs on Land Stewardship-managed properties. The Land Stewardship staff assigned to the area will respond to and, if appropriate, begin suppression of area wildfires when detected. The Division of Forestry will be called immediately and a fire assessment is made.

If District manpower is available and other conditions are favorable, a permit will be requested from the Division of Forestry to incorporate the wildfire into a controlled burn. Although infrequent, allowing these wildfires to burn will help achieve burn objectives and will prevent counterproductive and unnecessary suppression efforts. It is recognized that the best wildfire mitigation for the Management Area is to maintain the area with frequent prescribed fires promoting a healthy open forest of light fire fuel loads.

5.4 Wildlife Management

A primary objective in the stewardship of the Management Area is to maintain healthy fish and wildlife populations. Wildlife management in the Management Area is directed toward production of native species diversity consistent with the biological community types present. Land Stewardship accomplishes this in several ways:

- Performing land management activities that maintain and/or improve native wildlife habitat

- Conducting specific management beneficial to protected species
- Conducting wildlife inventories through the Fish and Wildlife Conservation Commission where management operations may negatively impact listed species
- Following management guidelines for listed species protection as determined by the *Multi-species Recovery Plan for the Threatened and Endangered Species of South Florida, Volume 1*, (U.S. Fish and Wildlife Service. 1998)
- Reducing non-native wildlife species populations where appropriate
- Maintaining a master file of confirmed and potential wildlife species
- Cooperating with the and Wildlife Conservation Commission on wildlife management issues, including wildlife inventories and evaluating management actions.

Management occurs through the actions mentioned above, primarily through regular prescribed fire and the control of exotic species. Additionally, the District conducts various plant and animal inventories through volunteers, staff, and private contractors to evaluate the health and dynamics of Management Area's natural communities.

5.4.1 Game Management

Policy 140-25(4)(b)(4) Florida Fish and Wildlife Conservation Commission regulations shall govern hunting in areas opened for such use.

The Management Area supports a number of game species. The three most common are white-tailed deer, feral hog, and wild turkey. Small game includes quail, dove, rabbit, snipe, and gray squirrel. The Lake Marion Creek portion of the Management Area has been established as a Wildlife Management Area by the Florida Fish and Wildlife Conservation Commission. The Commission administers several hunting seasons in the fall, small game and hog hunts in late winter, and spring turkey hunts. Management activities directed towards game management include establishing bag limits for game species, regulating hunting pressure, mowing openings for wildlife, burning, chopping and shredding vegetation, and occasionally planting food plots. The hunting program is detailed in **Appendix F**.

5.4.2 Exotic/Invasive Fauna

Invasive exotic animal species are those non-native species that are harmful to native wildlife, that negatively impact native vegetation or seriously interfere with management objectives. The Land Stewardship's goal for wildlife pest management is to reduce populations to attain an acceptable level of impact to natural plant and animal communities. The District's land manager uses personal knowledge of the problem and consultation with the Commission to define the acceptable level of impact. When population control measures are warranted, land managers consult with the Commission to determine an appropriate control technique that is humane and cognizant of public safety. The effects of pest population control efforts are monitored by periodic site evaluations.

The feral hog is a pest species within the Management Area. Disturbance caused by this species negatively impacts natural communities and interferes with land management operations. Although valued by some members of the public as a game animal, wild hogs are an exotic species and the hogs’ high fecundity, adaptability, rooting behavior, omnivorous diet, and ability to quickly colonize areas raises serious environmental concerns. Their disruption of soil and vegetation alters natural communities and can be especially damaging in sensitive habitats that are slow to recover. Hog disturbance has occurred within most of the Management Area including wetland communities. Land management objectives are affected when rooting disturbance disrupts prescribed burns by preventing the spread of fire. Areas of disturbed soil are also more susceptible to exotic plant invasion. Soil rooting can create perilous conditions on hiking trails, and hog foraging can have a detrimental impact on small animal populations, ground-nesting birds, and infrastructure.

Control methods are determined in cooperation with the Fish and Wildlife Conservation Commission, when necessary, and in conjunction with a District trapping contract.

5.4.3 Rare, Threatened and Endangered Species

Policy 140-25(2)(b) Particular emphasis shall be placed on the identification, protection and management of rare, threatened and endangered species.

Wildlife inventories have documented federally, state, and Florida Natural Areas Inventory-listed species (endangered, threatened, and species of special concern) occurring within the Management Area (**Appendix E**). The distribution of listed species is summarized in Table 4). Impacts to these species from planned land management and recreational activities are of special concern. Activities that might jeopardize the well being of these species may be altered or cancelled. District land management activities including prescribed burning, hydrologic restoration, exotic vegetation eradication, understory control, and selective forest thinning improve natural environmental characteristics that benefit listed species as well as a variety of other indigenous wildlife.

Table 4: Number of Documented Listed Species for Management Area

Species	Endangered		Threatened		Species Of Special Concern	FNAI Listed
	Fed	State	Fed	State		
Birds	5	3	3	6	10	19
Mammals	1	2		2	3	5
Amphibians					1	1
Reptiles		1	4	4	2	7

Management emphasis concerning rare and/or listed wildlife species within the Lake Marion Creek Wildlife Management Area has been centered on scrub jays, gopher tortoise, Florida mouse, and sand skinks.

Florida Scrub-Jay

A Florida Scrub-Jay survey was completed for the Torelli South unit in 2003 by Glatting, Jackson, Kercher, Anglin, Rinehart Incorporated for the District and the report submitted in February 2004. The report estimated a total of 25 scrub-jay territories and a total count of 73 birds.

Management Objective

- Protect nesting and foraging Florida scrub-jays and habitat

Management Action

- Implement management practices that are beneficial to scrub-jays
- Propose management practices that are beneficial to scrub-jays
- Avoid implementing management practices that adversely affect scrub-jays
- Propose management strategies that avoid adversely affecting scrub-jays.

Florida Mouse

A small mammal trapping survey was conducted by Quest Ecology for the Florida Fish & Wildlife Conservation Commission in 2005 from mid-March to mid-May to determine the presence of Florida mouse at five scrub sites at Lake Marion Creek Wildlife Management Area. A total of 200 traps were set for the five sites. There were eighteen captures during the trapping period, sixteen were Florida mouse, two cotton mice, and four Florida mouse recaptures. The traps were placed at or near the entrance to gopher tortoise burrows.

Management Objective

- Implement management practices that are beneficial to Florida mouse
- Propose management practices that are beneficial to Florida mouse
- Avoid implementing management practices that adversely affect Florida mouse
- Propose management strategies that avoid adversely affecting Florida mouse

Management Action

- Implement management practices that are beneficial to Florida mouse
- Propose management practices that are beneficial to Florida mouse
- Avoid implementing management practices that adversely affect Florida mouse
- Propose management strategies that avoid adversely affecting Florida mouse

Florida Sand Skink

The District contracted with Glatting Jackson Kercher Anglin Lopez Rinehart, Inc. to perform a sand skink survey on the Torelli South unit in the spring of 2004 with the report submitted to the District in July 2004. A total of 607 coverboards were placed for the presence of sand skinks. Sand skink swim trails were found under a total of 107 coverboards. Sand skink activity appeared to be primarily concentrated on the edges of field roads that have large amounts of open sand and low scattered vegetation that provides suitable habitat. Evidence of sand skink presence was noted at the Horse Creek scrub site during the Small Mammal Trapping Survey conducted in 2003.

Management Objective

- Implement management practices that are beneficial to Florida sand skink
- Propose management practices that are beneficial to Florida sand skink
- Avoid implementing management practices that adversely affect Florida sand skink
- Propose management strategies that avoid adversely affecting Florida sand skink

Management Action

- Implement management practices that are beneficial to Florida sand skink
- Propose management practices that are beneficial to Florida sand skink
- Avoid implementing management practices that adversely affect Florida sand skink
- Propose management strategies that avoid adversely affecting Florida sand skink

Gopher Tortoise

A small mammal trapping survey was conducted by Quest Ecology for the Fl. Florida Fish & Wildlife Conservation Commission in 2005 from mid-March to mid-May to determine the presence of Florida mouse at five scrub sites at the Lake Marion Creek Wildlife Management Area, and to locate, measure, and assess gopher tortoise burrow activity. The study did not study the population or habitat of the gopher tortoise only the location of the burrows and whether the burrows are active, inactive, or abandoned. In the five scrub sites where the survey was conducted, one hundred burrows were located. Of the one hundred burrows; thirty-seven were active, thirty-two were inactive, and thirty-one were abandoned. Burrows are dug just wide enough so the tortoise can turn around. The average width of the burrows was 25.7 cm.

Management Objective

- Implement management practices that are beneficial to the gopher tortoise
- Propose management practices that are beneficial to the gopher tortoise
- Avoid implementing management practices that adversely affect the gopher tortoise
- Propose management strategies that avoid adversely affecting the gopher tortoise
- Conduct a population survey of the gopher tortoise for the Management Area

Management Action

- Implement management practices that are beneficial to the gopher tortoise
- Propose management practices that are beneficial to the gopher tortoise
- Avoid implementing management practices that adversely affect the gopher tortoise
- Propose management strategies that avoid adversely affecting the gopher tortoise

Bald Eagle

An indepth eagle survey of the SOR Upper Lakes Management Area was completed in January 2002 (7.4.1).

Management Objective

- Protect nesting, roosting, and foraging bald eagles located within the Management Area.

Management Actions

- Implement management practices that are beneficial for bald eagles.
- Propose management practices that are beneficial for bald eagles.
- Avoid implementing management practices that adversely affect bald eagles.
- Propose management strategies that avoid adversely affecting bald eagles.
- Coordinate and/or contract the identification of bald eagle roosting and feeding sites and seasonal usage patterns within all management units.

6. Public Use

Policy 140-23 The Land Stewardship Program mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands.

Section 373.1391(1)(a), Florida Statutes states that wherever practical, lands acquired by the Land Stewardship Program shall be open to the general public for recreational uses. The District encourages public use of management areas for appropriate natural resource-based activities. All District lands are available for public use, except in rare instances where there is no legal public access or where lease restrictions or construction activities prohibit public entry.

The determination of compatible public uses will be based on the following criteria:

- Consistency with the reason the lands were acquired
- Restrictions and/or prohibitions imposed by easements, leases, reservations, adjacent land ownership, and other conditions of the purchase agreement
- Infrastructure and support facility requirements, such as fences, gates, signage, entry design, stabilized off-road parking, trails, campsites, maintenance, and other operational and budgetary impacts
- Opportunities for persons with disabilities

- Limitations on use resulting from endangered species, other sensitive natural resources, archeological resources, or land management practices
- Public health, safety and welfare
- Environmental education program opportunities

Public use activities that are appropriate for the Management Area include, but are not limited to, fishing, hunting, camping, hiking, canoeing, birding, frogging, environmental education, and nature appreciation. Table 5 summarizes current recreational opportunities in the Management Area. User information concerning recreational activities is located at the District’s regional service centers and West Palm Beach offices, and at each entrance to the Management Area. Information may also be obtained at: www.sfwmd.gov and selecting Recreation.

The District is exploring the creation of a canoe launch on Lake Marion Creek. While canoeing is allowed on the creek, there is no canoe launch or take-out platform along the Management Area. Proper facilities would enhance creek access and provide a better opportunity to enjoy the creek system.

Table 5: Recreational Opportunities* Lake Marion Creek/Reedy Creek Management Area

Management Unit	Fishing	Hunting	Hiking	Camping	Canoeing	Nature Study	Frogging
Lake Marion Creek	X	X	X	S	X	X	X
Torelli South			X			X	
Intercession City			X			X	
Poinciana			X			X	
Reedy Creek	X		X		X	X	X
Lake Russell			X	S		X	

*Before participating in any type of public use activity on District owned and/or managed lands, consult with the regional land manager of the current *Public Use Guide* concerning area regulations.

“X” indicates an activity that is regulated by statewide laws and regulations and District rules.

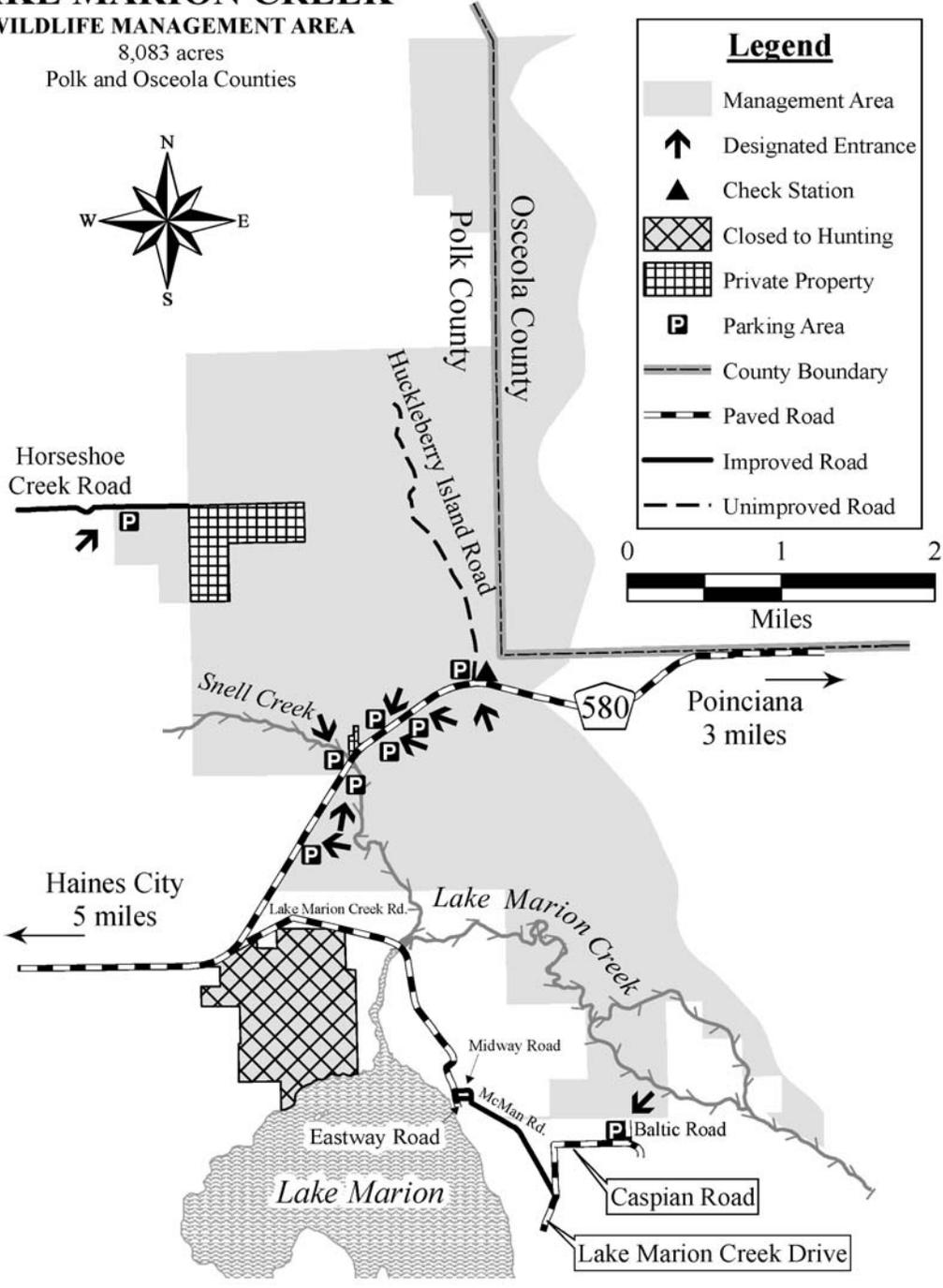
“S” indicates an activity that requires a District Special Use License.

Map 14. Lake Marion Creek Wildlife Management Area

LAKE MARION CREEK

WILDLIFE MANAGEMENT AREA

8,083 acres
 Polk and Osceola Counties



6.1 Resource Protection

Policy 140-25(1)(d) Public use shall not result in detrimental impacts to water resources. When a public use activity produces detrimental effects on water resources, it shall be discontinued until an evaluation determines that such use is compatible.

Policy 140-25(3)(g) Resource protection shall be provided by professional law enforcement services through funded and unfunded contractual agreements to safeguard the public and protect natural and cultural resources on District-managed natural areas.

Policy 140-25(4)(b)(1) Public use regulations are set forth in 40E-7.511, Florida Administrative Code, to implement Section 373.1391(1)(b), Florida Statutes. Accordingly, the District shall publish and make available to the public a "Public Use Guide" for designated land management areas.

Regulations that govern activities within the Management Area are in the District's 40E-7 rule and the Commission's regulations. The 40E-7 rules are available online and at agency headquarters in West Palm Beach. Allowed activities include hiking, fishing, boating, canoeing, camping, hunting, equestrian use, biking, and nature study. The Florida Fish and Wildlife Conservation Commission is responsible for enforcing laws, rules, and regulations applicable to the Management Area, along with the local county sheriffs' offices.

Management of public activities on District lands requires a commitment to resource protection while simultaneously promoting all appropriate public uses. The Land Stewardship Program emphasizes the enforcement of pertinent rules and regulations to protect natural resources and also provide a safe recreational opportunity. The resource protection program integrates contractual law enforcement to protect the natural resources and District assets. As part of the District's enhanced patrol contract with the Commission, law enforcement officers conduct regular patrols throughout the year, increasing their presence during hunting seasons and at other times when public use is high. Law enforcement surveillance protects natural and cultural resources, deters illegal activity, and safeguards the public. Patrols are conducted with 4-wheel drive vehicles, all terrain vehicles, aircraft, and on foot. The District's resource protection coordinator and the regional land manager review biweekly reports and meet with officers to structure patrols based on resource needs.

Resource protection is also greatly enhanced by the presence and maintenance of continual, posted boundary signs that delineate property boundaries. All exterior boundaries within the Management Area are posted. However, reposting of boundaries must be done at least semi-annually (once immediately prior to the hunting season in August or September). Much of the perimeter boundary is fenced. In perimeter boundary areas that abut public waterways and private lands, or where vegetation may obscure posting or fences, the District also mows the boundary one to two times per year.

6.2 Environmental Education

Educational programs are developed and implemented on select management areas by cooperators interested in promoting increased visitor awareness and appreciation of natural areas and cultural resources. A central theme to these programs is the vital role of water management in maintaining resource viability and productivity. The Land Stewardship Program encourages educational partnerships through memorandums of understanding, lease, and contract agreements.

The District entered into a cooperative agreement (Contract #C-7947) in 1996 with the Osceola County School Board for the development and management of environmental education and public use programs at the Lake Russell Unit through 2021. The contract authorizes the School Board to create and operate an educational facility on the management unit, in conjunction with the School Board's existing Reedy Creek Environmental Education Facility. The School Board subsequently submitted (and received approval for) a development and implementation plan to the District, which is filed at the District's Orlando Service Center. The School Board teaches environmental education programs to grade school, middle school, and high school students out of two mobile education classrooms. Two administrative buildings, a storage area, and an interpretive trail had also been established under the agreement. The public is allowed access to the facility and the Management Unit (during programs and/or weekends) when School Board staff is present. The School Board began development of an extended-day educational program that enables them to teach techniques to environmental trainers during two to three day programs (participants will stay overnight in four travel trailers).

7. Administration

Administration of Land Stewardship Program lands is directed through the Land Stewardship Division. Policy decisions, planning and budgeting, procurement of personnel and equipment, contract administration, and issues of program development are administrative tasks coordinated through the Division. Input is provided from the public and regional land managers located at District Service Centers over the 16-county area. Public input into the management of the area is solicited at bi-monthly Water Resource Advisory Committee Recreational Issues Workshops. Regional land stewards handle regular administrative duties from their field locations to assure quick response to local concerns and management issues. Administrative activities for the Management Area are handled through the Orlando Service Center.

7.1 Planning and Budgeting

Planning is a major function of the Land Stewardship Program mission and is critical to maintain proper program focus, direction, and coordination with other agencies. Planning is accomplished by division planning staff in coordination with land stewards. Division level planning develops land acquisition strategy and project evaluation, produces the Land Stewardship Activity Report for the Florida Forever Workplan, and coordinates acquisition planning with other District and outside agency personnel.

Policy 140-25(6)(b) General Management Plan: Provides a description of recommended management and is required for each Land Stewardship Management Area. The GMP follows a designated format and is updated every five years.

General Management Plans are developed that detail strategies to guide management activities on individual project areas. These plans define goals and objectives, identify major management issues, and describe management activities. Each plan is subject to a draft revision period where public comment and professional review is requested prior to plan approval. Each plan is revised on a five-year cycle by planning team staff.

Policy 140-25(6)(d) Annual Work Plan: Summarizes activities corresponding with annual budget development and is prepared by the Operations Section of the Land Stewardship Program.

Annual work plans are developed each fiscal year for budget preparation and to address activities and projects targeted for completion within the upcoming fiscal year on individual properties. The Annual Work Plan includes performance objectives for exotic plant control, vegetation management, prescribed burning, resource protection, public use development, environmental monitoring, and contract administration.

For the Lake Marion Creek and Reedy Creek Management Area, the Annual Work Plan and budget are developed in concert with program-wide operational priorities and the budgetary cycle. Current year annual plans are available at the District headquarters in West Palm Beach.

Policy 140-25(6)(e) Summaries of management activities for each management area will be reported quarterly within the District and annually as part of the Florida Forever Work Plan.

Each month land managers submit regional management reports to document progress toward achieving annual work plan objectives. The monthly reports are kept on file at District headquarters. Land Stewardship semiannual meetings address management problems and plan for future management operations.

Policy 140-25(5) The District will secure dedicated funding sources, personnel and other resources to support program goals and objectives. Project funding needs and sources for cooperative management agreements with government and non-government entities will be identified during acquisition. A cooperative management agreement will designate a lead manager and identify whether District funding is required.

The principal source of funding for the Land Stewardship Program is the Water Management Lands Trust Fund, administered by the Florida Department of Environmental Protection, and more recently by ad valorem revenue. Money for this dedicated fund is generated from the sale of state documentary tax stamps and is used

for property acquisition and management. Additional funding and support have been obtained from grants, mitigation, the harvest of renewable resources, land use leases, in-kind management services from cooperating management partners, or no-cost services from user groups and volunteers.

Budget planning begins in March during the work planning process for the following fiscal year (October-September). Overall funding availability generally determines management activities. Budget distribution among the District's five land management regions is based on a programmatic prioritization of management activities. Operational funds are distributed to most effectively accomplish the management objectives of each management area.

7.2 Infrastructure

Policy 140-25(3)(k) Infrastructure support shall be developed and maintained to provide safe access for responsible management and public use on District lands. Such infrastructure may include access points, roads, trails, signs, utilities, and minimal public facilities.

Current Management Area infrastructure includes eight entrances, perimeter posting and fencing, firelines, hiking trails and roads, a bridge and culvert crossings, picnic tables and fire rings, a hunting check-station, and kiosks; all of which require regular maintenance. Future plans include developing a canoe launch for access to Lake Marion Creek

7.3 Personnel and Equipment

The Land Stewardship Program is separated into five geographic regions, each staffed with professional land managers directed by the supervising land manager. Highly trained land management technicians are based at the DuPuis Management Area, the West Coast Field Office, and at the Orlando, Okeechobee, and Miami Service Centers. The Land Stewardship Division director and additional planning staff are headquartered at the main West Palm Beach office.

Management of the Management Area is the primary responsibility of the Upper Lakes Regional land manager and land management technician. Additional management input and support comes from District planning and field station personnel.

Staff has access to tools, supplies, equipment, four-wheel drive vehicles, vessels, fire suppression trucks, all terrain vehicles, swamp buggies, an airboat, a dump truck, tractors, a road grader, a backhoe, and a large plow. The District's Kissimmee Field Station crew and equipment, as well as leased equipment, are also available to assist in the Management Area on a limited basis.

7.4 Volunteers and Alternative Work Force

Policy 140-25(5)(d)(1) Volunteers, interns and alternative work forces will be used when possible to supplement existing staff and services.

Section 373.1391(3) F.S. encourages the District to use volunteers for land management and other services. The District recognizes the merits of volunteerism and welcomes participation in activities appropriate for public involvement. Selection of appropriate management activities is at the discretion of the land manager and may fall under the general guidance of the supervising land manager. Volunteers have contributed many hours to maintenance and wildlife surveys. All volunteer activities help accomplish management objectives, promote citizen involvement, and allow area staff to focus on other needs.

Land management objectives are also occasionally met by alternative work forces. When available, alternative work forces can be used for projects that demand manual labor and have low technical skill requirements. Under the cooperative agreement with the Osceola County School Board (section 7.5), numerous volunteers donated time and materials toward the development and operation of the environmental education facility at the Lake Russell Unit. These volunteers are recruited and coordinated by the Osceola County School Board. School Board use of volunteers is an essential component of the program and expected to continue throughout the duration of the contract.

7.5 Contractual Management

Policy 140-25(5)(a). The private sector may be solicited to furnish certain management-related facilities and services through the execution of leases and agreements. These leases/agreements will assure mutual benefits to both the District and private parties and be consistent with the program management objectives.

Effective operation and management of District properties requires the services and cooperation of private organizations, other governmental agencies, and volunteers. Contractual management is authorized through a management agreement signed by both the District and contracting entity with the document defining responsibilities of each party.

The District has established and maintains five contractual management agreements to assist with management of the Lake Marion Creek and Reedy Creek Save Our Rivers project:

Contract#C-9804: Southwest Florida Water Management District

The Southwest Florida Water Management District acquired 300 acres of land within the Lake Marion Creek and Reedy Creek Project Area in 1997. Other lands, totaling approximately 2,600 acres, within the Southwest Florida Water Management District are targeted for future acquisition. Because these lands are in close proximity to the

South Florida Water Management District / Southwest Florida Water Management District boundary, and because the South Florida Water Management District has a large Management Area adjacent to the Southwest Florida Water Management District parcels, the districts have agreed to enter into a management agreement for the property. Under the agreement, the South Florida Water Management District manages Southwest Florida Water Management District's property since it lies within the Lake Marion Creek and Reedy Creek Management area.

Contract #4600000961

A cooperative agreement with the Florida Fish and Wildlife Conservation Commission that establishes Lake Marion Creek as a Wildlife Management Area and authorizes the commission to establish rules and regulate public recreation opportunities such as hunting.

Contract#C-10162: Enhanced Patrols

The District contracted with the Florida Fish and wildlife conservation Commission for enhanced law enforcement services (Contract C-10162). These services cover areas throughout the District and include supplemental patrols on the Management Area. The District's resource protection coordinator schedules patrols with input from the Management Area's land manager and the Commission.

Contract#C-7947: Osceola County School Board – 1996-2021

The District has developed a partnership with Osceola County School Board to develop an environmental education center on the Lake Russell Unit. This center provides summer camps and several other ongoing programs for county students.

Contract#C-6346 and C-8332: Polk County

Polk County has entered into formal agreements (contract numbers C-6346, C-8332), with the District to jointly purchase lands within the Lake Marion Creek/Reedy Creek Management Area, which have been identified as sensitive habitat areas. Under the agreement, the County and the District equally share acquisition costs while the District is responsible for land management activities after acquisition. The County will reimburse the District for management costs up to \$9.00 per acre per year, for those parcels jointly acquired. These lands totaled approximately 2,153 acres. Joint acquisition for other parcels is planned, pending negotiations with landowners. The Polk County Natural Resources & Drainage Division located in Bartow is the contact agency for this agreement.

Annual work plans and proposed budgets, for the upcoming South Florida Water Management District fiscal year (October–September), will be submitted to the County in January of each year. Four quarterly reports for the periods October–December, January–March, April–June, and July–September, will be submitted to Polk County at the end of each quarter. In October of each year (after the end of the County fiscal year in September), an invoice for reimbursement of annual management expenses shall be submitted to the County.

7.6 Management Review

Policy 140-22(j) Section 373.591, Florida Statutes, mandates the District to solicit input on current management programs through professional peer reviews.

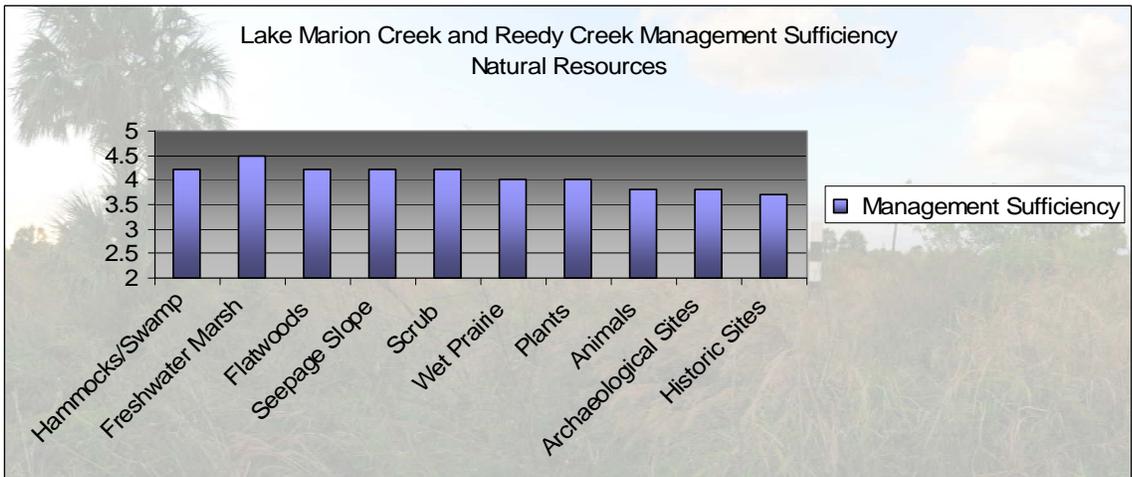
Each District project area has a land management review team comprised of state, county, and private entities that periodically review management activities to assure they are consistent with acquisition intent and program objectives. Management assessments are conducted in light of the goals and objectives defined in the area's general management plan. If the review team determines that management is not in accordance with the management plan, the lead management agency provides a written explanation to the review team.

A management review was conducted in April, 2005. The review team had overall positive comments on the condition of the land and the management of the Lake Marion Creek and Reedy Creek Management Area. The most positive comments focused on the District's consistent use of prescribed fire, aggressive exotic control, and the dedication and performance of the land management staff.

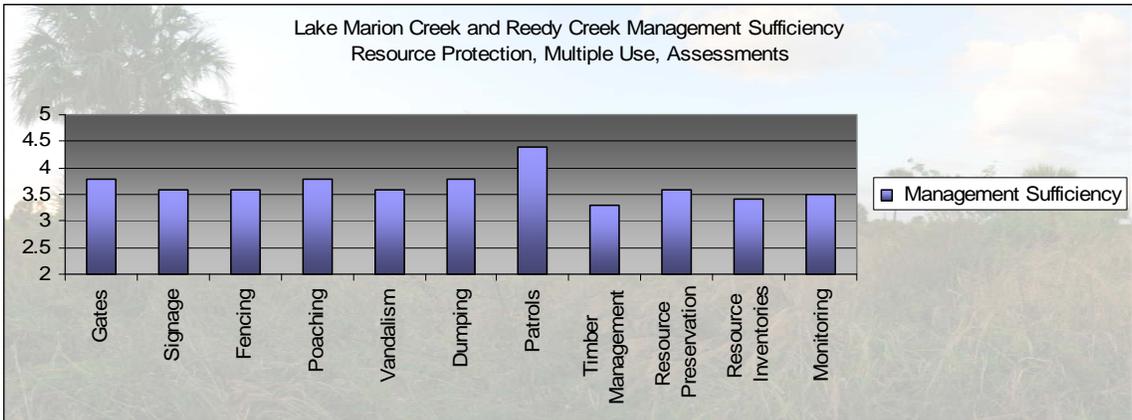
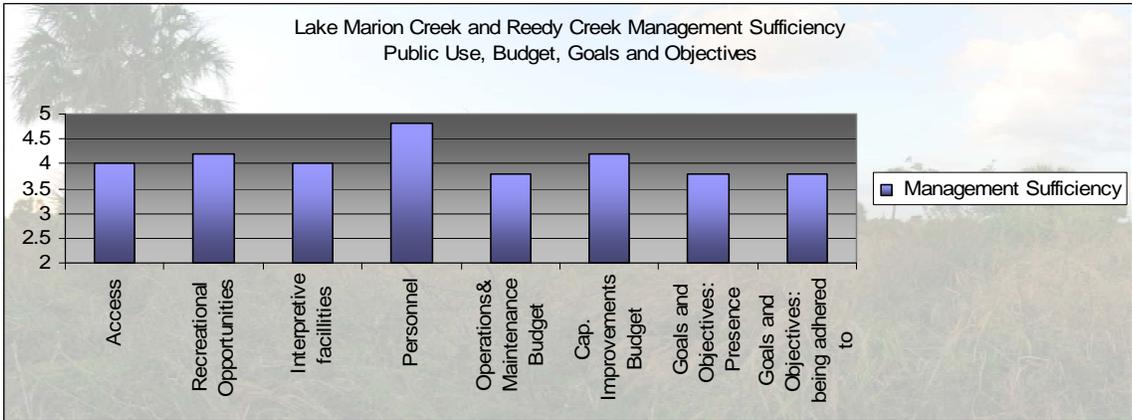
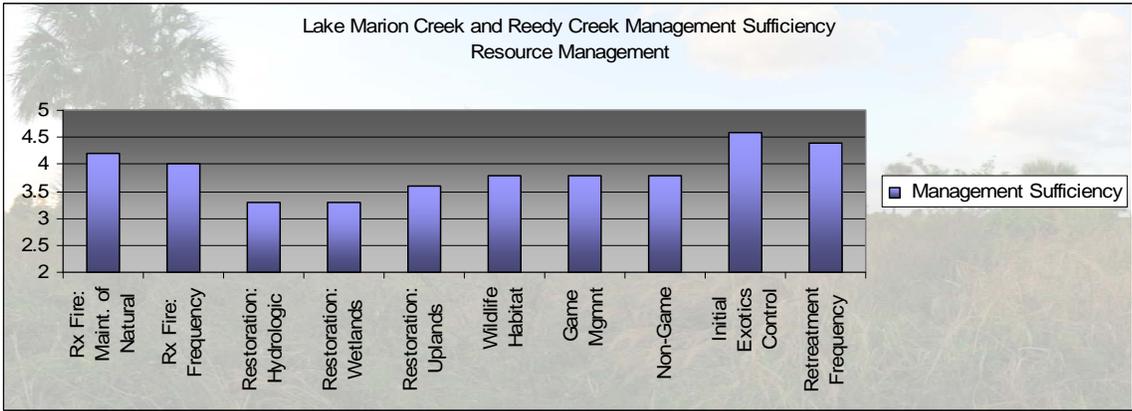
The review did not expressed concern as a group about any management insufficiencies. There were individual comments that some areas could use more fencing, and that some of the mesic flatwoods may benefit from roller-chopping.

The team rated the management sufficiency of the Management Areas on a scale from 1 to 5 on criteria such as: the natural resources, resource management activities, public use, budget, goals and objectives, resource protection, multiple use, and biological assessments and monitoring. The average scores by category are indicated on the graphs below:

2005 Land Management Review Results



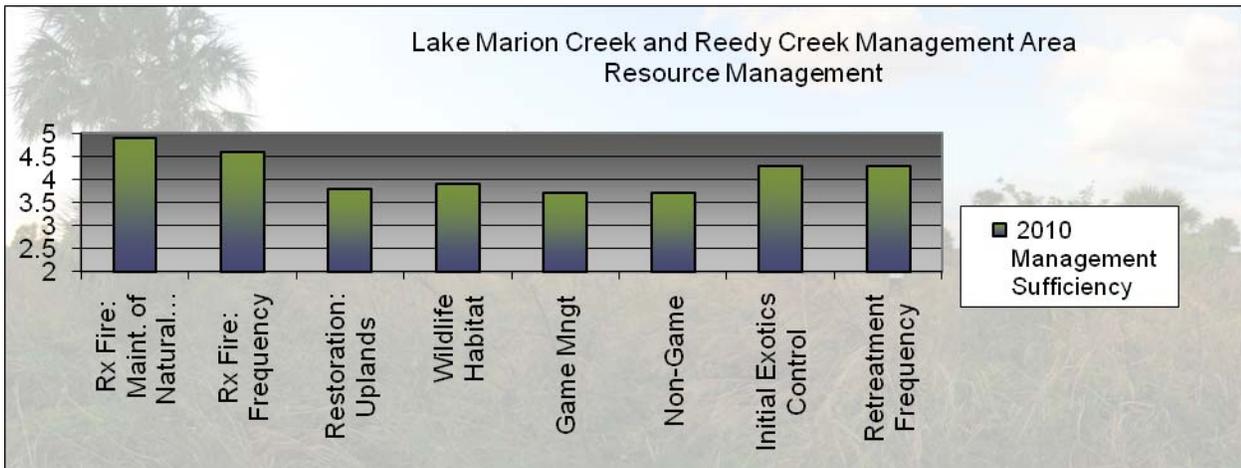
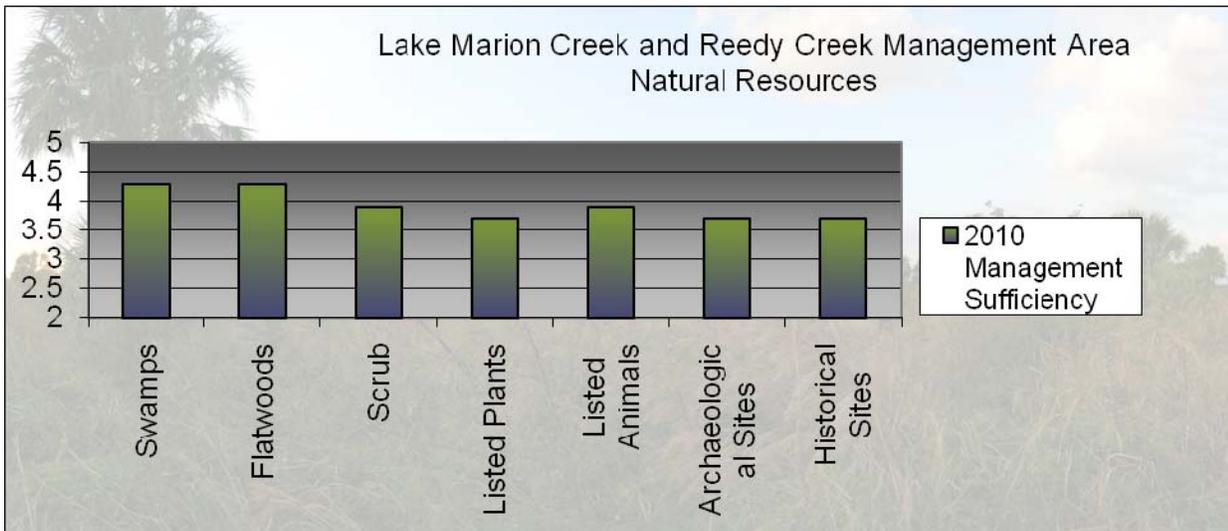
Lake Marion Creek and Reedy Creek Management Area General Management Plan 2005 – 2010
 South Florida Water Management District, Land Stewardship Division

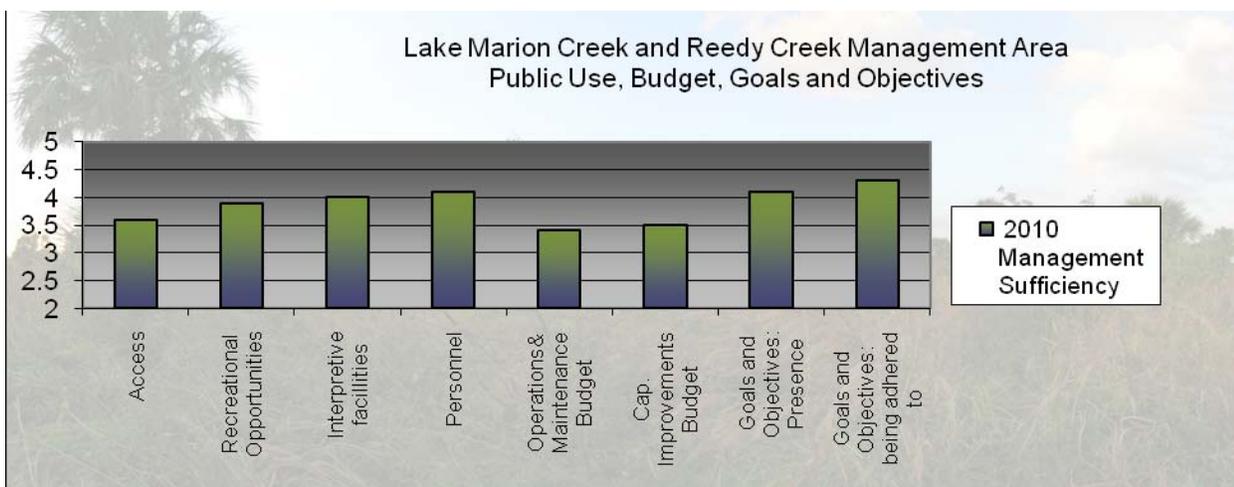
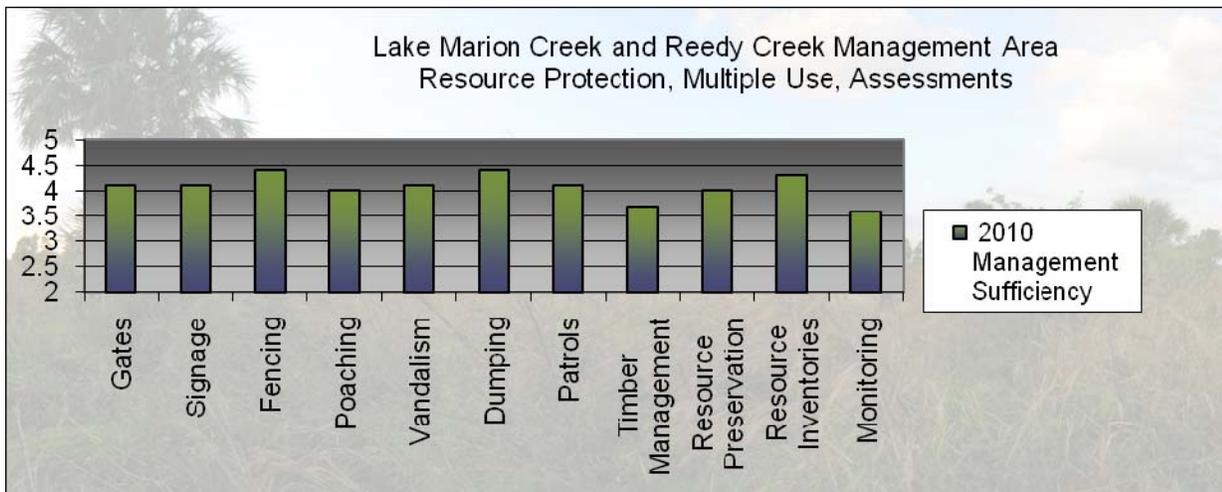


Another management review was conducted in August, 2010 in conjunction with the development of this plan. Again, the review team had overall positive comments on the condition of the land and the management of the Management Area. The most positive comments focused on the use of prescribed fire, clarity of plan objectives and the adherence to them, aggressive exotic control, and the dedication and performance of the land management staff.

A couple comments recommended the development of a monitoring program for Florida sand skinks in the scrub areas. There were two comments suggesting public access improvements: one in general and the other specifically suggesting canoe access to Lake Marion Creek. There were two comments on mechanical vegetation management: one suggesting that we employ shredding in a few areas of mesic flatwoods to enhance restoration, and the other recommending narrowing the width of mowed trails to enhance the hiking experience. Finally, there were three comments on monitoring vegetative communities: one comment suggesting the District do more of it, one commending the District for a monitoring program that exceeds other public land managers, and one recommending a continuance of our existing monitoring program. The average management sufficiency scores for the 2010 review, by category, are indicated on the graphs below:

2010 Land Management Review Results





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Appendix A

Definitions

Adaptive Management – a cyclical process in which inventories document resource presence, management actions are applied, and monitoring and research activities evaluate the effectiveness of those actions; management actions are then revised and applied again.

Archaeological / Historic Resources - any prehistoric or historic district, site, building, object, or property of historic, architectural, or archaeological value relating to the history, government, and/or culture of a historic or pre-historic people.

Best Management Practices - the best available technology or process that is practical and achieves the desired goal or objective.

Cooperating Agencies - two or more agencies working together to operate a specific management area.

Cooperative Management Agreement - an agreement between two or more agencies outlining the respective duties and responsibilities of each agency in the management of a specific tract of land.

Easement - an interest in the land of another that provides the easement holder specified rights without fee-title ownership.

Endemic - native to, and restricted to, a particular geographic region

Enhancement - modification of select physical attributes of a natural community to improve ecosystem function.

Exotic - an organism whose origin is of another continent.

Lease - a legal agreement that defines rights and responsibilities for use of land owned by another party.

Listed Species - species considered at risk (species of special concern, threatened, or endangered) within a specific geographic area by the USFWS and the FWC.

Maintenance - work performed to preserve property conditions on a regular basis.

Management - planned control and manipulation of factors affecting property conditions.

Management Area - a single tract or combination of tracts under one management program.

Management Assessment - a brief summary of the management issues completed when the site is identified for acquisition.

Mitigation Banking - wetland acquisition, creation, restoration, or enhancement undertaken expressly to provide compensation in advance of wetland losses from development activities.

Multiple-Use - the management of renewable resources for a variety of purposes such as recreation, range, timber, wildlife habitat, and water resource development.

Native Species - species considered indigenous to the North American continent prior to European settlement.

Natural Community - a distinct and reoccurring assemblage of plant and animal populations naturally associated with each other and their physical environment.

Prescribed Fire - application of fire to natural communities according to a written prescription; the prescription executed with a defined goal and under specific environmental and physical parameters.

Regional Mitigation Area - Permitted wetland impacts offset through payment for the acquisition, restoration, enhancement, and perpetual management of a Save Our Rivers-identified and duly noticed project.

Reservation - a legal agreement between a property seller and buyer that defines the seller's rights and responsibilities of post-sale property use

Responsible Management - that level of management described in the General Management Plan.

Restoration - re-creation of physical attributes of a natural system with the intent to return original ecological function.

Sustainable Use - to provide continued use of a natural resource without long-term degradation or loss of that resource

Appendix B

Land Stewardship Program Goals and Policies

ARTICLE II. LAND STEWARDSHIP

Sec. 140-21. Scope.

This policy shall apply to all lands managed by the Land Stewardship Program, including property acquired with Save Our Rivers, Preservation 2000 or mitigation funding. Nothing in this policy shall negate any statute, administrative rule, or other policy requirement. This policy may be reviewed and approved by the District Governing Board at five-year intervals or earlier and updated as required. Public comment may be solicited as part of the review process.

(R.M. No. 139)

Sec. 140-22. Purpose.

(a) This policy establishes a commitment to the responsible management of District lands in a manner consistent with legislative directives and the District's mission.

(b) In 1981, the Florida Legislature established the "Save Our Rivers" program (SOR) for the five water management Districts to acquire water resource lands. This legislation (Section 373.59, Florida Statutes) produced the Water Management Lands Trust Fund, empowering the water management Districts to acquire lands needed to protect, manage, and conserve the state's water resources. Preservation 2000 (P2000), enacted by the Legislature in 1990, also added land acquisition funds to the Save Our Rivers program. The 1999 Florida Forever Act consolidated the legislative directives of SOR/P2000 and expanded the funding to take over when P2000 terminates. The 1999 legislation authorized funds to be appropriated for acquisition, management, maintenance and capital improvements, including perimeter fencing, signs, control of invasive exotic species, controlled burning, habitat inventory and restoration, law enforcement, access roads and trails, and minimum public accommodations.

(c) Land acquired by the District's Save Our Rivers program and managed by the Land Stewardship program must satisfy several requirements set forth in Sections 373.139 and 373.1391, Florida Statutes. Section 373.139, Florida Statutes, declares it necessary for the public health and welfare that water and water-related resources be conserved and protected. The acquisition of real property for this objective shall constitute a public purpose for which public funds may be budgeted.

(d) Section 373.1391(1)(a), Florida Statutes, states that lands titled to the water management districts shall be managed and maintained to the extent practicable to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

(e) Section 373.1391(1)(b), Florida Statutes, states, in part, that "Whenever practicable, such lands shall be open to the general public for recreational uses. General public recreational uses shall include, but not be limited to, fishing, hunting, horseback riding, swimming, camping, hiking, canoeing, boating, diving, birding, sailing, jogging, and other related outdoor activities to the maximum extent possible considering the environmental sensitivity and suitability of those lands."

(f) Section 373.1391(1)(d), Florida Statutes, states that the District shall first consider using soil and water conservation Districts to administer agricultural leases.

(g) Section 373.1391(3), Florida Statutes, encourages each District to use volunteers to provide land management and other services.

(h) Section 373.1391(4), Florida Statutes, encourages each District to enter into cooperative land management agreements with state agencies or local governments to provide the coordinated and cost-effective management of lands.

(i) Section 373.1391(5), Florida Statutes, authorizes water resource and supply projects, stormwater management projects, linear facilities, and sustainable agriculture and forestry where it is compatible with the natural resource values and the public interest and is consistent with the project management plan, the proposed use is appropriately located on the property and other lands have been considered, and the titleholder of the property has been properly compensated.

(j) Section 373.591, Florida Statutes, mandates the District to solicit input on current management programs through professional peer reviews.

(R.M. No. 139)

Sec. 140-23. Statements of Policy.

The Land Stewardship Program mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands. The mission statement, together with requirements set forth in the Florida Statutes, provide three primary goals for the District Land Stewardship Program, each of which is linked to sections in this Land Stewardship Policy document:

(1) Conservation and protection of water resources (section 140-25(1)).

(2) Protection and/or restoration of land to its natural state and condition:

a. Restoration and Protection of Natural Communities (section 140-25(2)); and

b. Resource Operations and Maintenance (section 140-25(3)).

(3) Provide public use (section 140-25(4)).

(R.M. No. 139)

Sec. 140-24. Definitions.

For the purpose of this article, the following words and terms shall have the meanings respectively ascribed:

Archaeological/Historic Resources means any prehistoric or historic district site, building, object, or property of historic, architectural, or archaeological value relating to the history, government, and culture of a historic or pre-historic people.

Best Management Practice (BMP) means the best available technology or process that is practical and achieves the desired goal or objective.

Capital Improvement means activities relating to the restoration, public access, recreational uses and necessary services for land and water areas, including the initial removal of invasive plants, and the construction, improvement, enlargement or extension of facilities' signs, fire lines, access roads, and trails. Such activities shall be identified prior to the acquisition of a parcel or the approval of a project.

Cooperating Agencies means two or more agencies working together to operate a specific management area.

Cooperative Management Agreement means an agreement between two or more agencies outlining the respective duties and responsibilities of each agency in the management of a specific tract of land.

Critical Habitat means areas designated for the survival and recovery of state/federally listed rare, threatened, endangered or other sensitive species.

Desirable Vegetation means native plant species that are appropriate for a specific community type and provide benefits to wildlife in the form of food, cover and nesting.

Habitat Diversity means richness and variety of native plant communities within a particular area of the landscape.

Hydroperiod means flooding duration, depth, and timing that influences species composition, ecosystem structure and function.

Interim Land Management means management of non-natural areas that provides revenue without impacting long-term water-development projects.

Invasive/Exotic Vegetation means certain plants that displace native species and adversely affect wildlife habitat, water quality, recreation, and biological diversity.

Lead Manager means the prime managing entity designated for a given tract of land; generally provides the on-site staff.

Management Area means a single tract or combination of tracts under one management program.

Mitigation means, for purposes of this policy, the actual acquisition, restoration, creation, or enhancement of wetlands to compensate for permitted wetland impacts.

Mitigation Banking means wetland acquisition, restoration, creation or enhancement undertaken expressly to provide compensation in advance of wetland losses from development activities.

Multiple-Use means the management of renewable resources for a variety of purposes such as recreation, range, timber, wildlife habitat, and water resource development.

Prescribed Fire means burning of vegetative fuels using controlled application of fire within specified environmental conditions.

Primary Resource Lands means lands having high water resource, fish, wildlife, and recreational values requiring acquisition or protection.

Regional Mitigation Area means, for purposes of this policy, permitted wetland impacts offset through payment for the acquisition, restoration and perpetual management of a Save Our Rivers identified and duly noticed project.

Responsible Management means level of management described in the General Management Plan.

Sustainable Use means to provide continued use of a natural resource without degradation or loss of that resource.

Water Resource Buffer means that portion of a Preservation 2000 or Save Our Rivers project necessary to protect the aquatic environment.

Wildlife Corridor means a connection between natural areas that allows the safe movement of wildlife.

(R.M. No. 139)

Cross references: Definitions and rules of construction, § 100-2.

Sec. 140-25. Responsibilities.

The Land Stewardship Program is responsible for:

(1) Water Resource Protection. The basis for the Land Stewardship Program is the protection and management of natural hydrologic resources. The following policies guide implementation of this objective:

- a. Acquired lands shall be managed to provide water resource-related benefits.
- b. Land uses or activities that significantly or permanently alter or degrade the quality, quantity and/or natural movement of ground or surface water are not allowed unless they are a part of a regional water management system.
- c. Where feasible, an attempt shall be made to restore a more natural hydroperiod on tracts where the drainage patterns have been altered.
- d. Public use shall not result in detrimental impacts to water resources. When a public use activity produces detrimental effects on water resources, it shall be discontinued until an evaluation determines that such use is compatible.
- e. Water resource lands designated as necessary to implement the Central and Southern Florida "Restudy" Project shall, upon acquisition, become the responsibility of the (Interim) Land Management Program, and follow the guidelines set forth under Section 373.1391(5), Florida Statutes.

(2) Restoration and Protection of Natural Communities:

- a. The Land Stewardship Program will encourage the acquisition of large or regionally significant areas that protect important natural resources and provide wildlife corridors.
- b. Particular emphasis shall be placed on the identification, protection and management of rare, threatened and endangered species.
- c. The planting of invasive exotic plant species shall be prohibited in all management areas. Management practices will strive to identify existing infestations and implement appropriate control or eradication measures.
- d. Where practicable, an attempt shall be made to restore and maintain desirable vegetation to promote habitat diversity in areas where invasive exotic vegetation, grazing practices, or improved land uses have substantially altered the historic landscape.

(3) Resource Operations and Maintenance:

- a. Lands acquired for natural and/or hydrologic resource benefits shall be managed to conserve and protect those resources.
 - b. Exotic plant control in all management areas shall strive to attain a level of success where periodic maintenance eliminates the infestation or reduces the coverage of exotic plants.
 - c. Prescribed fire will be a primary management tool on District lands and will be applied within fire-maintained communities at appropriate intervals.
 - d. The Division of Forestry will be notified of all wildfires on District lands. Land Stewardship will provide initial suppression when commensurate personnel and equipment are available.
 - e. Inventories of natural and historic resources shall be performed to provide information for effective land management planning, natural community maintenance and ecological restoration.
 - f. Evaluation and monitoring of management activities shall be conducted to improve program effectiveness and efficiency.
-

1. Research shall evaluate the environmental response of certain management activities to assist staff in making appropriate management decisions.

2. Monitoring shall be conducted to identify landscape changes resulting from management activities.

3. Legislative-mandated management reviews will provide input from professional peers.

g. Resource protection shall be provided by professional law enforcement services through funded and unfunded contractual agreements to safeguard the public and protect natural and cultural resources on District-managed natural areas.

h. Sustainable use of forest resources shall be conducted where these activities adhere to a series of environmental criteria (see 1999 Forest Management Plan) that meet Land Stewardship Program goals. Timber contractors will be required to meet silvicultural Best Management Practices (BMP) developed for Florida forests.

i. Range management (grazing) will be considered on improved or native ranges when the introduction of cattle will not conflict with other natural resource management and public use goals.

j. Archaeological and historic resources are protected by site identification and inter-agency coordination with the Florida Division of Historical Resources. Land stewardship planning shall include an analysis of archeological data accompanied by appropriate public education opportunities.

k. Infrastructure support shall be developed and maintained to provide safe access for responsible management and public use on District lands. Such infrastructure may include access points, roads, trails, signs, utilities, and minimal public facilities.

l. Mechanical equipment may be used in conjunction with prescribed burning and other management tools to control vegetation and restore habitat structure.

m. Agricultural developments previously existing on acquired natural areas may be maintained if management of these developments is consistent with other land stewardship goals.

(4) Public Use and Environmental Education:

a. Public use of management areas that is consistent with other management goals shall be encouraged. Public use that may have detrimental impacts on sensitive environmental resources shall be restricted until an evaluation determines such use is compatible. A public use compatibility assessment will be included in the General Management Plan completed for each management area and will be based on the following criteria:

1. Consistency with the reason the lands were acquired.

2. Restrictions and/or prohibitions imposed by easements, leases, reservations, adjacent land ownership, conditions of the purchase agreement, and any other agreements concerning the property.

3. Infrastructure and support facility requirements, such as fences, gates, signage, entry design, stabilized off-road parking, trails, campsites, maintenance, and other operational and budgetary impacts.

4. Opportunities for persons with disabilities.

5. Limitations resulting from endangered species, other sensitive natural resources, archaeological resources, or land management practices.

6. Public health, safety and welfare.

7. Environmental education program opportunities.

b. Public Use Regulation:

1. Public use regulations are set forth in 40E-7.511, Florida Administrative Code, to implement Section 373.1391(1)(b), Florida Statutes. Accordingly, the District shall publish and make available to the public a "Public Use Guide" for designated land management areas. The Public Use Guide will be adopted by the Governing Board at a public meeting advertised in accordance with Chapter 120, Florida Statutes.

2. Rules and regulations governing the public use of each management area shall be enforced by agencies with appropriate law enforcement jurisdiction.

3. Pursuant to Section 373.609, Florida Statutes, the District shall seek the cooperation of every state and county attorney, sheriff, police officer, and appropriate city and county official in the enforcement of the provisions set forth according to 40E-7.511, Florida Administrative Code.

4. Florida Fish and Wildlife Conservation Commission regulations shall govern hunting in areas opened for such use.

(5) Implementation Strategies. The District will secure dedicated funding sources, personnel and other resources to support program goals and objectives. Project funding needs and sources for cooperative management agreements with government and non-government entities will be identified during acquisition. A cooperative management agreement will designate a lead Manager and identify whether District funding is required.

a. The private sector may be solicited to furnish certain management-related facilities and services through the execution of leases and agreements. These leases/agreements will assure mutual benefits to both the District and private parties and be consistent with the program management objectives.

b. Mitigation:

1. Mitigation Banking: Mitigation banking provides an opportunity to accomplish large-scale restoration that may otherwise go unfunded. Pursuant to Section 373.4135, Florida Statutes, the District is encouraged to develop mitigation banks. Land managers will evaluate opportunities in their regions to implement mitigation banks that are consistent with the guidelines established in the Joint State and Federal Mitigation Bank Review Team Process for Florida.

2. Regional Mitigation Areas: The acquisition, restoration and management of District lands as mitigation shall be consistent with Chapter 2000-133, amending Sections 373.414 and 373.4135, Florida Statutes. This includes the establishment of Memorandums of Agreement (MOA) that include restoration plans, success criteria, and monitoring requirements. The MOAs will be used to implement mitigation using full-cost accounting, public noticing, and approval by the Governing Board for use as a mitigation area. The mitigation shall meet restoration objectives as provided in the General Management Plan.

c. Revenue Generation:

1. Private concessions and/or agreements with non-profit organizations will be considered to implement needed services through concession contracts.

2. Entrance and user fees, permits, licenses and/or advance reservations may be required where considered necessary by the managing agency.

3. Timber sales will be conducted to improve forest health or to support specific forest management goals.

4. Grazing leases will be encouraged on selected rangeland to generate revenue or to provide services that offset program management costs.

d. Volunteers and Interns:

1. Volunteers, interns and alternative work forces will be used when possible to supplement existing staff and services.

2. Any volunteer services must meet the standards and procedures prescribed by the District (Risk Management Manual, Volume 1).

(6) Program Components:

a. Management Assessment: A brief summary of the management issues completed when the site is identified for acquisition.

b. General Management Plan (GMP): Provides a description of recommended management and is required for each Land Stewardship Management Area. The GMP follows a designated format and is updated every five years.

c. Activity Plan (AP): Provides a detailed implementation strategy for specific activities such as prescribed burning, exotic removal and restoration. The plan shall be developed by the lead Manager in consultation with the cooperating agencies for each major tract of land (or group of tracts) to be operated as a single management unit. The AP may be included in the GMP and is updated when necessary.

d. Annual Work Plan (AWP): Summarizes activities corresponding with annual budget development and is prepared by the Operations Section of the Land Stewardship Program.

e. Reporting: Summaries of management activities for each management area will be reported quarterly within the District and annually as part of the Florida Forever Work Plan.

(R.M. No. 139)

Secs. 140-26--140-40. Reserved.

Appendix C. Soil Descriptions

Flats Soils

Flats soils (previously referred to as slough) are poorly drained hydric soils with sandy marine sediments throughout the profile, or more rarely with loamy sand or sandy loam. Some areas within this unit are frequently flooded alluvial areas that have a sandy surface for the majority of the area. Flats are located between the flatwood and depressional landscapes, and are generally regarded as transition areas. The seasonal high water table can range from the soil surface to one foot below the surface for four to ten months annually. In most years, the seasonal high water table begins in June and ends from September to March (typically by February). Some areas may be inundated for less than a few weeks by large storm events. Examples of these soils include Boca, Felda, and Riviera. Wet-dry prairies dominated by grasses are typical to this landscape position.

One of the ecological communities most typical of the flats landscape is the slough. Slough soils are nearly level and very poorly drained with organic surfaces underlain by sand. Representative soils include Hontoon, Sanibel and Okeelanta. Most sloughs serve as drainage ways for water during periods of heavy and prolonged rainfall. Surface water may move over this area for up to a few weeks during the rainy season. Most sloughs are relatively long and narrow and slightly lower in elevation than the surrounding flatwoods and hammocks. Vegetation within the slough may be open expanse of grasses, sedges and rushes with scattered pines and cypress in an area where the surface soil is saturated during the wet season. Grasses are the most common plant found in sloughs. Other plants that characterize this community are pickerelweed, sundew, milkwort (*Polygala sp.*), beak rushes, blue maidencane (*Amphicarpum muhlenbergianum*), and sloughgrass (*Scleria sp.*).

Flatwood Soils

Flatwood soils are poorly drained non-hydric, upland soils with sandy marine sediments throughout the profile. Most of the soil series have a subsurface spodic horizon, some of which may have loamy sand substrates. The seasonal high water table can range from 6 to 18 inches below the soil surface for three to six months annually. Some areas may become inundated for less than a couple of weeks during large storm events. Examples of these soils include Immokalee, Malabar, and Wabasso. The soils affect plant-water relationships and cause differences in plant composition. Natural communities typical of flatwood soils are dry prairie, mesic flatwoods, and scrubby flatwoods. Typical flatwood soil vegetation includes pine trees with an understory of saw palmetto. Other common plants are live oak, shiny blueberry, gallberry, tarflower, wax myrtle, chalky bluestem (*Andropogon virginicus glaucopsis*), and wiregrass.

Knolls

Knoll soils are non-hydric, upland soils with sandy marine sediments throughout the profile. These soils typically have no unique diagnostic horizons within the soil profile and are well to somewhat poorly drained. The seasonal high water table can range from

one and a half to six feet below the soil surface for four to seven months annually. Examples of these soils include Archbold, Canaveral, and Pomello.

One ecological community that is typical to the knolls landscape is sand pine scrub. Natural vegetation may typically be even-aged sand pine trees with a dense under-story of oaks, saw palmetto, and other shrubs. Ground cover under the trees and shrubs is scattered. Large areas of light colored sand are often noticeable. Satellite soils, which have a high water table for part of the year, support scrubby growth. Myrtle oak, Chapman's oak, and sand pine become infrequent and gallberry becomes prominent. Plants that characterize this community are: Chapman's oak, myrtle oak, sand live oak, sand pine, prickly pear (*Opuntia sp.*), and panicum (*Dichanthelium sp.*).

Central Ridge and Dunes

Central Ridge and Dune landscapes are well drained, non-hydric, high upland soils with sandy marine sediment throughout the profile. These soils are typically populated with xeric species. The water table is more than six feet below the soil surface throughout the year. Common soils of this landscape position include Chandler, Palm Beach, Paola, and St. Lucie. One ecological community that is typical of this landscape position is the South Florida Coastal Strand. Another community that may be found on this landscape position is Sand Pine Scrub.

Muck Depression Soils

Muck depression soils are very poorly drained hydric soils that have an organic surface layer underlain by sandy marine sediments. These areas are often depressions adjacent to flats and flatwood landscapes. The seasonal high water table can range from six inches below to two feet above the soil surface for up to 11 months annually. In most years, the seasonal high water table begins in June and ends between December and April (typically in April). Examples of these soils include Gator, Hontoon, and Sanibel. Some areas within this unit are frequently flooded alluvial areas that have muck surface. These frequently flooded map units are known to have surface flooding at least one out of every two years. A few areas may have a thin organic surface layer less than a few inches thick.

Ecological communities often found in this landscape are basin swamp, dome swamp, strand swamp or floodplain swamp. Typically occurring along rivers, lake margins, slough and strands, these communities may be interspersed throughout other communities such as flats and flatwoods. Water is at or above ground level a good portion of the year. Tree species diversity is low in cypress domes, but increases in cypress strands and along stream margins. Plants which characterize this community are: bald cypress (*Taxodium disticum*), pond cypress, coastal plain willow, red maple, buttonbush, wax myrtle, cinnamon fern, royal fern (*Osmunda regalis*), Spanish moss, giant wild pine (*Tillandsia utriculata*), and maidencane. Some of the protected plants that may be found in these communities include the climbing dayflower (*Commelina gigas*), fuzzy wuzzy airplant (*Tillandsia pruinosa*), giant water dropwort (*Oxypolis greenmani*), hidden orchid (*Maxillaris crassifolia*), nodding catopsis (*Catopsis nutans*), and grass of Parnassus (*Parnassia graniflora*).

This soil classification is the largest represented in the Management Area.

Sand Depression Soils

Sand depression soils are very poorly drained hydric soils that typically have sandy marine sediments throughout the profile. A few areas may have mucky sand, loamy sand, or sandy loam surfaces with sandy or loamy subsurfaces. Often, these areas are depressions adjacent to flats and flatwood landscapes. The seasonal high water table can range from one foot below to two feet above the soil surface for seven to ten months annually. In most years, the seasonal high water table begins in June and ends from October to March (typically in March). Some areas within this unit are frequently flooded alluvial areas that have a sandy surface for the majority of the area. Soils commonly associated with this community are nearly level and very poorly drained with organic surfaces underlain by sand. Flooding at least one out of every two years. Examples of Sand Depression soils include Basinger, Boca, Chobee, Felda, and Riviera.

Natural communities often found in this landscape are the freshwater marsh and ponds. Vegetation varies widely within marshes, and may be composed of: flag, sawgrass, arrowhead, and other non-grass herbs marsh, cattail, spike-rush, bulrush, and maidencane marsh.

Water (open)

Water areas are permanently inundated, usually to a depth of two feet or greater. This includes freshwater, saltwater, natural and excavated sites.

One small area within the Intercession City Unit contains this soil classification.

Appendix D. Natural Communities

Basin Wetlands

Basin Marsh

Basin marshes are herbaceous or shrubby wetlands situated in relatively large and irregular shaped basins. Basin marshes are associated with and often grade into Wet Prairie or Lake Communities (Florida Natural Areas Inventory). This community is typified by marsh openings within basin swamps, or extensive marshes occupying large, shallow basin landscape positions (Bridges and Reese 1996). Common species identified are panicum (*Panicum sp.*), cutgrass (*Leersia sp.*), pennywort (*Hydrocotyle sp.*), Spanish needle (*Bidens bipinnata*), soft rush (*Juncus sp.*), arrowhead (*Sagittaria sp.*), elderberry (*Sambucus canadensis*), spikerush (*Eleocharis sp.*), buttonbush (*Cephalanthus occidentalis*), and dog fennel (*Eupatorium compositifolium*).

Basin Swamp

Basin swamp is generally characterized as a relatively large and irregularly shaped basin that is not associated with rivers, but is vegetated with hydrophytic trees and shrubs that can withstand an extended hydroperiod (Florida Natural Areas Inventory). Dominant trees include cypress (*Taxodium sp.*), Swamp black gum (*Nyssa sylvatica var. biflora*), and Florida slash pine (*Pinus elliottii var. densa*). Other typical plants include red maple (*Acer rubrum*), swamp bay (*Persea palustris*), sweetbay (*Magnolia virginiana*), loblolly bay (*Gordonia lasianthus*), fetterbush (*Lyonia lucidi*), wax myrtle (*Myrica cerifera*), and buttonbush.

Depression Marsh

Depression marsh is characterized as a shallow, usually rounded depression in sand substrate with herbaceous vegetation often in concentric bands (Florida Natural Areas Inventory). Typical plants include St. John's wort (*Hypericum sp.*), yellow-eyed grass (*Xyris sp.*), chain fern (*Woodwardia sp.*), primrose willow (*Ludwigia peruviana*), maidencane (*Panicum hemitomum*), wax myrtle, buttonbush, pickerelweed (*Pontederia cordata*), and bladderwort (*Utricularia sp.*).

Dome Swamp

Dome swamps are characterized as shallow, forested, usually circular depressions that generally present a domed profile because smaller trees grow in the shallower waters at the outer edge, while larger trees grow in the deeper water in the interior. Pond cypress (*Taxodium ascendens*) and slash pine (in transition areas) are common trees. Other typical plants include red maple, dahoon holly (*Ilex cassine*), swamp bay, sweetbay, loblolly bay, virginia willow, fetterbush, chain fern (*Woodwardia virginiana*), netted chain fern (*Woodwardia areolata*), poison ivy (*Toxicodendron radicans*), Spanish moss (*Tillandsia usneoides*), wild pine (*Tillandsia sp.*), royal fern (*Osmunda regalis*), cinnamon fern (*Osmunda cinnamomea*), maidencane, wax myrtle, St. John's wort, floating heart (*Nymphoides aquatica*), buttonbush, and alligator flag (*Thalia geniculata*).

Mesic Uplands

Upland Mixed Forest

This community is characterized as well-developed, closed-canopy forests of upland hardwoods on rolling hills. Upland Mixed Forest is found on sandy-clays or clayey sands with substantial organic and often calcareous components. The topography and clayey soils increase surface water runoff, although this is counterbalanced by the moisture retention properties of clays and by the often thick layer of leaf mulch. This community is the climax community for their geographic locations. Southern magnolia, hickory, sweetgum, Florida maple, loblolly pine, and live oak are typical plants found in this community.

Mesic Flatlands

Mesic Flatwoods

Mesic Flatwoods are characterized as an open canopy forest of widely spaced pine trees with little or no understory but a dense ground cover of herbs and shrubs. Mesic flatwoods are found on poorly drained, but rarely if ever inundated soils. They occupy extensive flat inter-drainageway plains in central Florida. Several variations of mesic flatwoods are recognized, the most common in the Management Area being slash pine-gallberry-saw palmetto.

Scrubby Flatwoods

Scrubby flatwoods are characterized as an open canopy forest of widely scattered pine trees with a sparse shrubby understory and numerous areas of barren white sand (Florida Natural Areas Inventory). This community occurs on sites slightly higher in elevation than mesic flatwoods, but lower than scrub. Soils are well drained and dry, even during maximum rainfall events. Unlike scrub, the water table is relatively close to the soil surface. As with typical scrubby flatwoods, Drasdo and Lightsey Units harbor species common to both scrub and mesic flatwoods. Typical species include slash pine, saw palmetto, myrtle oak, sand live oak, fetterbush, goldenrod (*solidago sp.*), and wiregrass. Due to floristic and geographic similarities, some ecologists speculate that this community is merely a form of mesic flatwoods where fire has been excluded. This theory is based on the natural occurrence of hardwood (oak) invasion without sufficient fire frequency patterns. In addition, scrubby flatwoods provide habitat for the gopher tortoise and the Florida scrub jay (*Aphelocoma coerulescens*) – both threatened species.

Prairie Hammock

Prairie hammock is characterized as a clump of tall cabbage palms and live oaks in the midst of prairie or marsh communities (Florida Natural Areas Inventory). Prairie hammocks establish on elevated soils surrounded by lower topography. These islands are generally sandy marl flooding only for a short duration during the highest water levels.

Canopy species include live oak (*Quercus virginiana*) and cabbage palm, with occasional laurel oak (*Quercus laurifolia*) in lower elevations. An abundance of epiphytes, including listed species, are found in mature canopy trees. As in most prairie hammocks, there is a sparse under-story due to over-story shading, but cover is also reduced by cattle grazing and trampling of shrub and ground layer vegetation. Many species common to undisturbed hammocks are sparse or lacking, replaced by disturbance species such as broomweed (*Sida* sp.), tropical soda apple (*Solanum viarum*) and caesarweed (*Urena lobata*). Typical under-story plants of pristine prairie hammocks include wax myrtle, water oak, beautyberry (*Callicarpa americana*), and saw palmetto.

Wet Flatlands

Hydric Hammock

Hydric hammock is characterized as a well-developed hardwood and cabbage palm forest with a variable understory often dominated by palms and ferns. Typical plants include cabbage palm (*Sabal palmetto*), red maple, swamp bay, sweetbay, water oak (*Quercus nigra*), wax myrtle, saw palmetto, poison ivy, dahoon holly, royal fern, pepper vine (*Ampleopsis arborea*), and virginia creeper (*Parthenocissus quinque*).

Wet Flatwoods

Wet flatwoods are characterized as relatively open-canopy forests of scattered pine trees or cabbage palms with either a thick shrubby under-story and very sparse ground cover, or a sparse understory and a dense ground cover of hydrophytic herbs and shrubs, with variations between these extremes (Florida Natural Areas Inventory). Native ground cover species are frequently displaced by non-native Bahia.

Wet Prairie

Wet prairie is characterized as a treeless plain with a sparse to dense ground cover of grasses and herbs, including wiregrass, maidencane, spikerush (*Eleocharis* sp.), and beakrush (*Rhynchospora* sp.). Other typical plants include tickseed (*Bidens* sp.), wax myrtle, St. John's-wort (*Hypericum* sp.), and Panicums (Florida Natural Areas Inventory).

Xeric Uplands

Scrub

Scrub occurs in many forms, but is often characterized as a closed to open canopy forest of sand pines with dense clumps or vast thickets of scrub oaks and other shrubs dominating the understory (Florida Natural Areas Inventory). Typical plants include sand live oak, myrtle oak (*Quercus myrtifolia*), scrub oak (*Quercus inopina*), saw palmetto, fetterbush, and wiregrass. Highest elevations in the Management Area support this community.

Scrub is being lost at an alarming rate throughout the state, as high elevations and fast drainage make this community highly desirable for development. This association

occurs almost exclusively in Florida. State ranking of scrub is “S2,” imperiled in the state because of its rarity and vulnerability (Florida Natural Areas Inventory).

Xeric Hammock

Xeric Hammock is characterized as either a scrubby, dense, low canopy forest with little understories other than palmetto, or a multi-storied forest of tall trees with an open or closed canopy. Several gradations between these extremes exist. Typical plants include live oak (*Quercus virginiana*), sand live oak (*Quercus geminate*), laurel oak (*Quercus laurifolia*), and saw palmetto. (Florida Natural Areas Inventory)

Seepage Wetlands

Seepage Slope

Seepage slopes are wetlands characterized as shrub thickets on or at the base of a slope where moisture is maintained by downslope seepage such that the ground is usually saturated but rarely inundated. They generally occur where water percolating down through the sand hits an impermeable layer, such as clay or rock. Typical plants include pond pine, wax myrtle, wiregrass, bluestem, longleaf pine, and slash pine. Seepage slope soils are acidic, loamy sands with low nutrient availability that are constantly saturated by seepage except during droughts. They are rarely inundated, although small pools and rivulets are common.

Floodplain Wetlands

Floodplain Forest

Floodplain forests are hardwood forests that occur on drier soils at slight elevations within floodplains, such as on levees, ridges and terraces, and are usually flooded for a portion of the growing season. The dominant trees are sweetgum, red maple, silver maple, sweetbay magnolia, and poison ivy.

Soils of floodplain forests are variable mixtures of sand, organics, and alluvials. Hydroperiod is the primary physical feature of floodplain forests, which are inundated by flood waters nearly every year for up to 50% of the growing season. Floodplain forests usually do not have standing water in the dry season.

Riverine

Blackwater Stream

Blackwater streams are characterized as perennial or intermittent seasonal watercourses originating deep in sandy lowlands where extensive wetlands with organic soils function as reservoirs, collecting rainfall and discharging it slowly to the stream. The tea-colored waters are laden with tannins, particulates, and dissolved organic matter and iron translocated by drainage through swamps and marshes. Typical plants include sedges, grasses, smartweed, and golden club.

Blackwater streams have sandy bottoms overlain by organics and frequently underlain by limestone. Limestone outcrops may occur. These streams typically have high, steep banks alternating with floodplain swamps.

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Appendix E - Species List
Flora

Inventoried by: Edwin Bridges and Gary Reese, 1996-1997, and 2005-2006: Fairchild Tropical Gardens
Darla Fousek and Mia VanHorn, 1997, South Florida Water Management District
Rufinao Osario, 1997, Independent Contractor for the South Florida Water Management District

	GENUS SPECIES	COMMON NAME
1	<i>Justicia angusta</i>	Everglades or Pineland Water-willow
2	<i>Ruellia caroliniensis</i> subsp. <i>caroliniensis</i>	Carolina Wild-petunia
3	<i>Acer rubrum</i> var. <i>trilobum</i>	Southern Red Maple
4	<i>Nolina brittoniana</i>	Bear-grass
5	<i>Yucca filamentosa</i>	Adam's Needle
6	<i>Sagittaria graminea</i> var. <i>chapmanii</i>	Grass-leaf Arrowhead; Baygalls
7	<i>Sagittaria graminea</i> var. <i>graminea</i>	Grass-leaf Arrowhead
8	<i>Sagittaria lancifolia</i>	Bull-tongue Arrow-head
9	<i>Sagittaria latifolia</i>	Common or Broad-leaf Arrowhead; Duck Potato; Wapato
10	<i>Alternanthera philoxeroides</i>	Alligator-weed
11	<i>Amaranthus australis</i>	Southern Water Hemp; Giant or Southern Amaranth
12	<i>Froelichia floridana</i>	Cottonweed; Plains Snake-cotton
13	<i>Iresine diffusa</i>	Bloodleaf; Juba's Bush
14	<i>Crinum americanum</i>	String-lily; Southern Swamplily; Seven Sisters
15	<i>Rhus copallina</i>	Winged or Shining or Dwarf Sumac
16	<i>Toxicodendron radicans</i>	Poison Ivy
17	<i>Asimina obovata</i>	Flag or Big-flower Pawpaw
18	<i>Asimina parviflora</i>	Small-flower Pawpaw
19	<i>Asimina reticulata</i>	Reticulate or Netted Pawpaw
20	<i>Centella asiatica</i>	Coinwort; Asian Coinleaf; Spade-leaf
21	<i>Cicuta mexicana</i>	Mexican or Spotted Water-hemlock
22	<i>Cyclosporum leptophyllum</i>	Marsh Parsley
23	<i>Eryngium aquaticum</i>	Corn Snakeroot; Marsh Coyote-thistle
24	<i>Eryngium aromaticum</i>	Fragrant Eryngium; Fragrant Coyote-thistle
25	<i>Eryngium baldwinii</i>	Matted Button Snakeroot; Baldwin's Coyote Thistle
26	<i>Eryngium yuccifolium</i>	Rattlesnake-master; Button Snakeroot
27	<i>Hydrocotyle bonariensis</i>	Coastal Plain Marsh or Water Pennywort
28	<i>Hydrocotyle ranunculoides</i>	
29	<i>Hydrocotyle umbellata</i>	Marsh or Many-flower Pennywort
30	<i>Hydrocotyle verticillata</i>	Whorled Pennywort; Whorled Marsh-pennywort
31	<i>Oxypolis filiformis</i>	Water Dropwort; Water Cowbane
32	<i>Sanicula canadensis</i>	Clustered or Canadian Black-snakeroot
33	<i>Ilex ambigua</i> var. <i>ambigua</i>	Carolina Holly; Sand Holly
34	<i>Ilex cassine</i>	Dahoon Holly; Dahoon
35	<i>Ilex coriacea</i>	Large or Sweet Gallberry
36	<i>Ilex glabra</i>	Inkberry; Gallberry
37	<i>Ilex opaca</i> var. <i>arenicola</i>	Scrub or American Holly
38	<i>Ilex opaca</i> var. <i>opaca</i>	American Holly
39	<i>Arisaema triphyllum</i>	Swamp Jack-in-the-pulpit; Indian Turnip
40	<i>Orontium aquaticum</i>	Golden Club; Neverwet
41	<i>Peltandra virginica</i>	Green Arum; Green Arrow Arum
42	<i>Pistia stratiotes</i>	Water-lettuce
43	<i>Rhaphidophyllum hystrix</i>	Needle Palm
44	<i>Sabal etonia</i>	Scrub Palmetto
45	<i>Sabal minor</i>	Dwarf or Bluestem Palmetto
46	<i>Sabal palmetto</i>	Cabbage Palm
47	<i>Serenoa repens</i>	Saw Palmetto
48	<i>Syagrus romanzoffianum</i>	Queen Palm
49	<i>Asclepias cinerea</i>	
50	<i>Asclepias curtissii</i>	Curtiss' Milkweed
51	<i>Asclepias feayi</i>	Feay's Milkweed
52	<i>Asclepias pedicellata</i>	Savannah Milkweed
53	<i>Asclepias perennis</i>	Aquatic Milkweed

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54	<i>Asclepias tuberosa</i> subsp. <i>rolfsii</i>	Butterfly-weed
55	<i>Cynanchum scoparium</i>	Leafless Cynanchum; Leafless Swallow-wort
56	<i>Matelea gonocarpus</i>	Angle-Pod; Spiny-Pod
57	<i>Dryopteris ludoviciana</i>	Florida or Southern Shield Fern; Southern Wood Fern
58	<i>Polystichum acrostichoides</i>	Christmas Fern
59	<i>Thelypteris dentata</i>	Downy Shield Fern; Downy Maiden Fern
60	<i>Thelypteris hispidula</i> var. <i>versicolor</i>	Rough Hairy Maiden Fern
61	<i>Thelypteris interrupta</i>	Willdenow's Maiden Fern
62	<i>Thelypteris kunthii</i>	Widespread Maiden Fern
63	<i>Thelypteris palustris</i> var. <i>pubescens</i>	Eastern Marsh Fern
64	<i>Acmelea oppositifolia</i> var. <i>repens</i>	Button of Gold; Creeping Spotflower
65	<i>Ageratina jucunda</i>	Hammock Thoroughwort
66	<i>Ambrosia artemisiifolia</i>	Common or Annual Ragweed
67	<i>Aster caroliniensis</i>	Climbing Aster
68	<i>Aster dumosus</i>	Bush Aster
69	<i>Aster eliottii</i>	Elliott's Aster
70	<i>Aster reticulatus</i>	Pine Barren White-top Aster
71	<i>Aster subulatus</i>	Annual Saltmarsh Aster
72	<i>Aster tortifolius</i>	White-topped Aster
73	<i>Baccharis glomeruliflora</i>	Groundsel Tree; Silverling
74	<i>Baccharis halimifolia</i>	Groundsel Tree; Seagrass Myrtle; Eastern False-willow
75	<i>Balduina angustifolia</i>	Yellow Buttons; Coastal-plain Honeycomb-head
76	<i>Bidens alba</i> var. <i>radiata</i>	Common Beggar-ticks
77	<i>Bidens bipinnata</i>	Spanish Needle(s)
78	<i>Bidens mitis</i>	Marsh or Small-fruited Beggar-ticks
79	<i>Bigelovia nudata</i> subsp. <i>australis</i>	South Florida Rayless-goldenrod
80	<i>Boltonia diffusa</i>	False Aster; Small-head Doll's Daisy; Saltmarsh Boltonia
81	<i>Carphephorus corymbosus</i>	Coastal-plain Chaffhead
82	<i>Carphephorus odoratissimus</i>	Odorless Vanilla-leaf
83	<i>Carphephorus paniculatus</i>	Hairy Chaffhead
84	<i>Chrysopsis scabrella</i>	Coastal-plain Golden-aster
85	<i>Cirsium horridulum</i>	Yellow or Horrid Thistle
86	<i>Cirsium muticum</i>	
87	<i>Cirsium nuttallii</i>	Nuttall's Thistle
88	<i>Conoclinium coelestinum</i>	Blue Mistflower
89	<i>Conyza canadensis</i> var. <i>pusilla</i>	Dwarf Horseweed
90	<i>Coreopsis floridana</i>	Florida Tickseed
91	<i>Coreopsis leavenworthii</i>	Leavenworth's Tickseed
92	<i>Elephantopus</i> species	Elephant's Foot
93	<i>Erechtites hieracifolia</i>	Fireweed; American Burn
94	<i>Erigeron quercifolius</i>	Southern or Oakleaf Fleabane
95	<i>Erigeron vernus</i>	Daisy or Early White-top Fleabane
96	<i>Eupatoriadelphus fistulosus</i>	Hollow Joe-pye-weed
97	<i>Eupatorium capillifolium</i>	Small Dog-fennel Thorough-wort; Dog Fennel
98	<i>Eupatorium compositifolium</i>	Dog Fennel; Yankee Weed
99	<i>Eupatorium leptophyllum</i>	Marsh Fennel
100	<i>Eupatorium mohrii</i>	Dog-fennel; Pale Boneset; Mohr's Thoroughwort
101	<i>Eupatorium recurvans</i>	Coastal Plain Thoroughwort
102	<i>Eupatorium rotundifolium</i>	False Horehound; Round-leaf Thorough-wort
103	<i>Eupatorium serotinum</i>	Late-flowering Thoroughwort
104	<i>Euthamia tenuifolia</i>	Slender Fragrant or Flat-topped Goldenrod
105	<i>Garberia heterophylla</i>	Garberia
106	<i>Gnaphalium obtusifolium</i>	Sweet Everlasting; Rabbit's Tobacco
107	<i>Helenium pinnatifidum</i>	Southeastern Sneezeweed
108	<i>Helianthus angustifolius</i>	Swamp Sunflower
109	<i>Helianthus floridanus</i>	Florida Sunflower
110	<i>Heterotheca subaxillaris</i>	Camphor-weed
111	<i>Hieracium megacephalon</i>	Hawk's Beard; Coastal-plain Hawkweed
112	<i>Iva microcephala</i>	Piedmont Sumpweed; Piedmont Marsh-elder
113	<i>Krigia virginica</i>	Virginia Dwarf-dandelion
114	<i>Lactuca floridana</i>	Wild or Woodland Lettuce
115	<i>Liatris chapmanii</i>	Chapman's Gayfeather

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116	<i>Liatris gracilis</i>	Blazing-star; Slender Gayfeather
117	<i>Liatris spicata</i>	Spiked Gayfeather
118	<i>Liatris tenuifolia</i> var. <i>quadriflora</i>	Blazing Star; Short-leaf Gayfeather
119	<i>Liatris tenuifolia</i> var. <i>tenuifolia</i>	Blazing Star; Short-leaf Gayfeather
120	<i>Lygodesmia aphylla</i>	Roserush
121	<i>Melanthera nivea</i>	Snow Squarestem; Cat-tongue
122	<i>Mikania cordifolia</i>	Florida Keys Hempweed; Florida Key Hempvine
123	<i>Mikania scandens</i>	Climbing Hempweed; Climbing Hempvine
124	<i>Palafoxia feayi</i>	Feay's Palafox
125	<i>Phoebanthus grandiflorus</i>	Florida False Sunflower
126	<i>Pityopsis graminifolia</i>	Golden-Aster
127	<i>Pityopsis graminifolia</i> var. <i>aequilifolia</i>	Florida Sand Golden-Aster
128	<i>Pityopsis graminifolia</i> var. <i>latifolia</i>	Golden-Aster
129	<i>Pityopsis graminifolia</i> var. <i>tracyi</i>	Golden Aster; Coastal-plain Silkgrass
130	<i>Pluchea foetida</i>	White or Marsh Fleabane; Stinking Camphor-weed
131	<i>Pluchea longifolia</i>	Long-leaf Camphor-weed
132	<i>Pluchea odorata</i>	Saltmarsh Fleabane; Shrubby Camphorweed
133	<i>Pluchea rosea</i>	Godfrey's Fleabane; Rosy Camphor-weed
134	<i>Polymnia uvedalia</i>	Bear's-foot; Yellow Leafcup
135	<i>Pterocaulon pycnostachyum</i>	Wand or Coastal Blackroot; Rabbit Tobacco
136	<i>Pyrrhopappus carolinianus</i>	Carolina False Dandelion
137	<i>Senecio glabellus</i>	Butterweed; GoldenorGrass-leafRagwort; Gr. Groundsel
138	<i>Solidago fistulosa</i>	Pinebarren Goldenrod
139	<i>Solidago leavenworthii</i>	Leavenworth's Goldenrod
140	<i>Solidago odora</i> var. <i>chapmanii</i>	Sweet Golden-rod
141	<i>Verbesina virginica</i>	Frostweed; White Crownbeard
142	<i>Vernonia gigantea</i>	Tall or Giant Ironweed
143	<i>Youngia japonica</i>	Oriental Hawksbeard
144	<i>Monarda punctata</i>	Horsemint; Spotted Beebalm
145	<i>Begonia cucullata</i>	Wax Begonia
146	<i>Carpinus caroliniana</i>	American Hornbeam; Bluebeech; Musclewood
147	<i>Campsis radicans</i>	Trumpet-vine; Trumpet Creeper
148	<i>Blechnum serrulatum</i>	Toothed Mid-sorus Fern
149	<i>Woodwardia areolata</i>	Netted or Dimorphic Chain Fern
150	<i>Woodwardia virginica</i>	Virginia Chain Fern
151	<i>Cardamine bulbosa</i>	Spring-cress; Bulbous Bitter-cress
152	<i>Lepidium virginicum</i>	Poorman's Pepper; Poorman's Pepper-wort
153	<i>Nasturtium microphyllum</i>	One-row Water-cress
154	<i>Tillandsia bartramii</i>	Wild Pine; Bartram's Air Plant
155	<i>Tillandsia fasciculata</i> var. <i>densispica</i>	Wild Pine; Giant Air Plant
156	<i>Tillandsia recurvata</i>	Small Ball-Moss
157	<i>Tillandsia setacea</i>	Wild Pine; Southern Needleleaf Air Plant
158	<i>Tillandsia simulata</i>	Wild Pine; Air Plant
159	<i>Tillandsia usneoides</i>	Spanish Moss
160	<i>Tillandsia utriculata</i>	Wild Pine; Spreading Air Plant
161	<i>Apteria aphylla</i>	Nodding Nixie
162	<i>Opuntia humifusa</i>	Prickly-pear Cactus; Devil's-tongue
163	<i>Opuntia pusilla</i>	Cock's-spur Prickly-pear
164	<i>Lobelia cardinalis</i>	Cardinal Flower
165	<i>Lobelia feayana</i>	Bay Lobelia
166	<i>Lobelia glandulosa</i>	Glandular or Glade Lobelia
167	<i>Canna flaccida</i>	Golden or Yellow Canna; Bandana-of-the-Everglades
168	<i>Canna x generalis</i>	Common Garden or Common Canna
169	<i>Polanisia tenuifolia</i>	
170	<i>Lonicera sempervirens</i>	Coral Honeysuckle
171	<i>Sambucus canadensis</i>	Elderberry; American Elder
172	<i>Viburnum nudum</i>	Poosum Haw Viburnum; Poosum Haw
173	<i>Viburnum obovatum</i>	Small or Walter Viburnum; Black Haw
174	<i>Drymaria cordata</i>	West Indian Chickweed; West Indian Drymary
175	<i>Paronychia americana</i>	American Nailwort
176	<i>Paronychia chartacea</i>	Paper-like Nailwort
177	<i>Paronychia patula</i>	Pineland Nailwort

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178	<i>Stipulicida setacea</i> var. <i>lacerata</i>	Pineland Scaly-pink
179	<i>Euonymus americanus</i>	American Strawberry-bush
180	<i>Chenopodium ambrosioides</i>	Mexican Tea; American Wormseed
181	<i>Licania michauxii</i>	Gopher Apple; Licania
182	<i>Helianthemum corymbosum</i>	Rockrose; Pine-barren Frostweed
183	<i>Helianthemum nashii</i>	Florida Scrub Frostweed
184	<i>Lechea cernua</i>	Nodding Pinweed
185	<i>Lechea deckertii</i>	Deckert's Pinweed
186	<i>Lechea divaricata</i>	Pine or Dry-sand Pinweed
187	<i>Lechea mucronata</i>	Hairy Pinweed
188	<i>Lechea sessiliflora</i>	Pineland Pinweed
189	<i>Lechea torreyi</i>	Piedmont Pinweed
190	<i>Callisia repens</i>	Basket Plant; Creeping Inchplant
191	<i>Commelina erecta</i>	Day-flower
192	<i>Cuthbertia ornata</i>	
193	<i>Tradescantia hirsutiflora</i>	Spiderwort
194	<i>Dichondra carolinensis</i>	Carolina Pony-foot
195	<i>Evolvulus sericeus</i>	Creeping Morning-glories; Silky False-morning-glory
196	<i>Ipomoea cordatotriloba</i>	Morning-glory; Tievine
197	<i>Ipomoea pandurata</i>	Wild Potato Vine; Morning-glory; Man-of-the-earth
198	<i>Ipomoea sagittata</i>	Saltmarsh or Glade Morning-glory
199	<i>Stylisma abdita</i>	
200	<i>Cornus foemina</i>	Stiff Cornel; Stiff Cornel Dogwood; Swamp Dogwood
201	<i>Melothria pendula</i>	Creeping Cucumber; Guadeloupe-cucumber
202	<i>Juniperus silicicola</i>	Southern Red Cedar
203	<i>Bulbostylis barbata</i>	Watergrass
204	<i>Bulbostylis ciliatifolia</i>	Capillary Hair-sedge
205	<i>Bulbostylis warei</i>	Ware's Hairsedge
206	<i>Carex alata</i>	Broadwing Sedge
207	<i>Carex atlantica</i> subsp. <i>capillacea</i>	Howe or Prickly Bog Sedge
208	<i>Carex bromoides</i>	Brome-like Sedge
209	<i>Carex chapmannii</i>	Chapman's Sedge
210	<i>Carex comosa</i>	Bottle-brush or Bearded Sedge
211	<i>Carex floridana</i>	Southern Black-edge Sedge
212	<i>Carex gigantea</i>	Large Sedge
213	<i>Carex godfreyi</i>	Godfrey's Sedge
214	<i>Carex granularis</i>	Limestone Meadow Sedge
215	<i>Carex leptalea</i>	Bristly-stalk Sedge
216	<i>Carex longii</i>	Greenish-white Sedge
217	<i>Carex lupuliformis</i>	Hop Sedge
218	<i>Carex styloflexa</i>	Bent Sedge
219	<i>Carex verrucosa</i>	Warty Sedge
220	<i>Carex vexans</i>	Confusing or Florida Hammock Sedge
221	<i>Cladium jamaicense</i>	Jamaica Sawgrass
222	<i>Cyperus compressus</i>	Poorland Flatsedge
223	<i>Cyperus croceus</i>	Baldwin Flatsedge
224	<i>Cyperus distinctus</i>	Marshland Flatsedge
225	<i>Cyperus flavescens</i>	Yellow Flatsedge
226	<i>Cyperus haspan</i>	Sheathed Flatsedge
227	<i>Cyperus lecontei</i>	Leconte's Flatsedge
228	<i>Cyperus nashii</i>	Nash's Flatsedge
229	<i>Cyperus odoratus</i>	Rusty Flatsedge
230	<i>Cyperus polystachyos</i>	Texas Sedge; Many-spike Flatsedge
231	<i>Cyperus pumilus</i>	Low Flatsedge
232	<i>Cyperus retrorsus</i>	Retorse or Pine-barren Flatsedge; Galingale
233	<i>Cyperus stenolepis</i>	Pale Marsh Cyperus
234	<i>Cyperus strigosus</i>	Straw-colored Flatsedge
235	<i>Cyperus surinamensis</i>	Tropical Flatsedge
236	<i>Cyperus tetragonus</i>	Four-angle Flatsedge
237	<i>Eleocharis baldwinii</i>	Roadgrass; Baldwin's Spikerush
238	<i>Eleocharis equisetoides</i>	Knotted or Horse-tail Spikerush
239	<i>Eleocharis flavescens</i>	Pale Spikerush
240	<i>Eleocharis quadrangulata</i>	Square-stem Spikerush

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241	<i>Eleocharis tuberculosa</i>	Long-tubercle Spikerush
242	<i>Eleocharis vivipara</i>	Viviparous Spikerush
243	<i>Fimbristylis autumnalis</i>	Slender Fimbry
244	<i>Fimbristylis dichotoma</i>	Tall or Annual or Woolly Fimbry
245	<i>Fimbristylis puberula</i>	Vahl's Hairy Fimbry
246	<i>Fuirena breviseta</i>	Saltmarsh Umbrella-sedge
247	<i>Fuirena pumila</i>	Dwarf Umbrella-sedge
248	<i>Fuirena scirpoidea</i>	Southern Umbrella-sedge
249	<i>Kyllinga odorata</i>	Fragrant Flatsedge
250	<i>Kyllinga pumila</i>	Thin-leaf Flatsedge
251	<i>Lipocarpa maculata</i>	American Lipocarpa
252	<i>Rhynchospora caduca</i>	Falling Beakrush; Falling Beaksedge
253	<i>Rhynchospora careyana</i>	Horned Beakrush
254	<i>Rhynchospora cephalantha</i>	Clustered Beakrush; Bunched Beaksedge
255	<i>Rhynchospora ciliaris</i>	Ciliate or Fringed Beakrush
256	<i>Rhynchospora colorata</i>	Starbrush White-topped Sedge; Star Rush
257	<i>Rhynchospora corniculata</i>	Horned-rush; Short-bristle Horned Beak(rush)(sedge)
258	<i>Rhynchospora decurrens</i>	Decurrent or Swamp-forest Beak(rush)(sedge)
259	<i>Rhynchospora divergens</i>	Spreading Beakrush; Spreading Beaksedge
260	<i>Rhynchospora fascicularis</i>	Fasciculate Beakrush; Fasciculate Beaksedge
261	<i>Rhynchospora fernaldii</i>	Fernald's Beakrush; Fernald's Beaksedge
262	<i>Rhynchospora intermedia</i>	Pinebarren Beakrush; Pinebarren Beaksedge
263	<i>Rhynchospora inundata</i>	Narrow-fruited Horned Beak(rush)(sedge)
264	<i>Rhynchospora megalocarpa</i>	Sandy-field Beaksedge
265	<i>Rhynchospora microcarpa</i>	Southern Beakrush; Southern Beaksedge
266	<i>Rhynchospora microcephala</i>	Capitate Beakrush
267	<i>Rhynchospora miliacea</i>	Millet Beakrush; Millet Beaksedge
268	<i>Rhynchospora mixta</i>	Mingled Beakrush; Mingled Beaksedge
269	<i>Rhynchospora nitens</i>	Short-beak Bulrush
270	<i>Rhynchospora odorata</i>	Fragrant Beakrush; Fragrant Beaksedge
271	<i>Rhynchospora plumosa</i>	Plumed Beakrush; Plumed Beaksedge
272	<i>Rhynchospora rariflora</i>	Few-flower Beakrush; Few-flower Beakrush
273	<i>Scirpus cubensis</i>	Cuban Bulrush
274	<i>Scirpus cyperinus</i>	Woolgrass; Cotton-grass Bulrush
275	<i>Scirpus lineatus</i>	Pendulous or Drooping Bulrush
276	<i>Scirpus tabernaemontani</i>	Soft-stem(med) Bulrush
277	<i>Scleria oligantha</i>	Little-head Nutrush
278	<i>Scleria pauciflora</i>	Few-flower Nutrush
279	<i>Scleria reticularis</i>	Netted or Torrey's Nutrush
280	<i>Scleria triglomerata</i>	Tall Nutgrass; Whip Nutrush
281	<i>Cyrtilla parviflora</i>	Swamp Titi
282	<i>Nephrolepis exaltata</i>	Boston Fern; Boston Swordfern
283	<i>Drosera brevifolia</i>	Dwarf Sundew
284	<i>Drosera capillaris</i>	Pink Sundew
285	<i>Diospyros virginiana</i>	Common Persimmon
286	<i>Ceratiola ericoides</i>	Florida Rosemary
287	<i>Agarista populifolia</i>	
288	<i>Befaria racemosa</i>	Tarflower
289	<i>Gaylussacia dumosa</i>	Dwarf Huckleberry
290	<i>Gaylussacia nana</i>	Dangleberry; Creeping Huckleberry
291	<i>Leucothoe axillaris</i>	Coastal Dog-Hobble
292	<i>Lyonia ferruginea</i>	Rusty Lyonia; Rusty Staggerbush
293	<i>Lyonia fruticosa</i>	Coastal-plain Staggerbush
294	<i>Lyonia ligustrina</i> var. <i>foliosiflora</i>	Maleberry; He-huckleberry
295	<i>Lyonia lucida</i>	Fetterbush; Shinyleaf
296	<i>Monotropa uniflora</i>	One-flower Indian-pipe
297	<i>Rhododendron viscosum</i>	Swamp Honeysuckle; Northern Swamp Azelea
298	<i>Vaccinium corymbosum</i>	Highbush or Fuscous Blueberry
299	<i>Vaccinium darrowii</i>	Darrow's or Glaucous Blueberry
300	<i>Vaccinium elliotii</i>	
301	<i>Vaccinium myrsinites</i>	Shiny Blueberry
302	<i>Vaccinium stamineum</i>	Deerberry; Blueberry
303	<i>Elephantopus carolinianus</i>	Carolina Elephant's-foot

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304	<i>Elephantopus elatus</i>	Florida or Tall Elephant's-foot
305	<i>Eriocaulon decangulare</i>	Ten-angle Pipewort
306	<i>Lachnocaulon anceps</i>	White-head Bog-buttons
307	<i>Lachnocaulon beyrichianum</i>	Southern Bog-button
308	<i>Lachnocaulon engleri</i>	Engler's Bogbutton
309	<i>Syngonanthus flavidulus</i>	Bantam-buttons; Yellow Hatpins
310	<i>Ptilimnium capillaceum</i>	Hair-like Mock Bishop's-weed
311	<i>Acalypha gracilens</i>	Three-seeded Mercury
312	<i>Cnidocolus stimulosus</i>	Tread Softly; Stinging or Spurge Nettle; Finger-rot
313	<i>Croton argyranthemus</i>	Silver Croton
314	<i>Crotonopsis linearis</i>	Narrow-leaf Rushfoil
315	<i>Phyllanthus caroliniensis</i> subsp. <i>caroliniensis</i>	Carolina Leaf-flower
316	<i>Stillingia sylvatica</i> ssp. <i>sylvatica</i>	Queen's Delight
317	<i>Tragia urens</i>	Noseburn
318	<i>Aeschynomene americana</i>	American Joint-vetch; Shyleaf
319	<i>Alysicarpus ovalifolius</i>	False Moneywort
320	<i>Amorpha herbacea</i>	Lead Plant; Cluster-spike Indigo-bush
321	<i>Apios americana</i>	Groundnut; American Potato-bean
322	<i>Chamaecrista fasciculata</i>	Partridge Pea
323	<i>Chamaecrista nictitans</i> var. <i>aspera</i>	Wild Sensitive Plant; Sensitive Partridge-pea
324	<i>Chamaecrista nictitans</i> var. <i>nictitans</i>	Sensitive Partridge-pea
325	<i>Chapmannia floridana</i>	Florida Alicia
326	<i>Crotalaria lanceolata</i>	Lance-leaf Rattlebox
327	<i>Crotalaria pallida</i> var. <i>obovata</i>	Smooth Rattlebox
328	<i>Crotalaria rotundifolia</i>	Rabbit-bells; Prostrate Rattle-box
329	<i>Dalea feayi</i>	Feay's Prairie-clover
330	<i>Dalea pinnata</i> var. <i>adenopoda</i>	Florida Summer-farewell
331	<i>Desmodium paniculatum</i>	Marrow-leaf or Panicked Tick-trefoil
332	<i>Desmodium triflorum</i>	Three-flower Tick-trefoil
333	<i>Desmodium viridiflorum</i>	Wide-leaved Tick-trefoil
334	<i>Erythrina herbacea</i>	Coral Bean
335	<i>Galactia eliottii</i>	Elliott's Milk-pea
336	<i>Galactia mollis</i>	
337	<i>Galactia regularis</i>	Eastern or Florida Milk-pea
338	<i>Galactia volubilis</i>	Downy Milk-pea
339	<i>Indigofera caroliniana</i>	Carolina Indigo
340	<i>Indigofera hirsuta</i>	Rough Hairy Indigo
341	<i>Lespedeza hirta</i> var. <i>hirta</i>	Hairy Bush-clover
342	<i>Lupinus diffusus</i>	Sky-blue or Oak-ridge Lupine
343	<i>Macroptilium lathyroides</i>	Wild Bush-bean
344	<i>Rhynchosia cinerea</i>	Snout-Pea
345	<i>Schrankia microphylla</i> var. <i>floridana</i>	Bashful Sensitive Briar
346	<i>Sesbania vesicaria</i>	Bladderpod; Bag-pod Rattle-bush; Bag-pod River Hemp
347	<i>Tephrosia chrysophylla</i>	Scurf Hoary-pea
348	<i>Tephrosia florida</i>	Florida Hoary-pea
349	<i>Tephrosia hispidula</i>	Spreading Hoary-pea
350	<i>Tephrosia spicata</i>	Spiked Hoary-pea
351	<i>Vicia acutifolia</i>	Four-leaf Vetch
352	<i>Quercus chapmanii</i>	Chapman's Oak
353	<i>Quercus geminata</i>	Sand or Scrub Live Oak
354	<i>Quercus hemispherica</i>	Upland Laurel Oak
355	<i>Quercus incana</i>	Bluejack or Gray Oak
356	<i>Quercus inopina</i>	Scrub Oak
357	<i>Quercus laevis</i>	Turkey Oak
358	<i>Quercus laurifolia</i>	Laurel Oak; Diamond (-leaf) Oak
359	<i>Quercus minima</i>	Dwarf Live Oak
360	<i>Quercus myrtifolia</i>	Myrtle Oak
361	<i>Quercus nigra</i>	Water Oak
362	<i>Quercus pumila</i>	Runn(ing)(er) Oak
363	<i>Quercus virginiana</i>	Virginia Live Oak
364	<i>Sabatia brevifolia</i>	White Sabatia; Short-leaf Rose-gentian
365	<i>Sabatia calycina</i>	Coast(al) Rose-gentian

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366	<i>Sabatia difformis</i>	Lance-leaf Rose-gentian
367	<i>Sabatia grandiflora</i>	Large-flower Rose-gentian
368	<i>Geranium carolinianum</i>	Carolina Cranesbill
369	<i>Lachnanthes caroliniana</i>	Bloodroot; Carolina Redroot
370	<i>Proserpinaca palustris</i>	
371	<i>Proserpinaca pectinata</i>	Comb-leaf Mermaid-weed
372	<i>Liquidambar styraciflua</i>	Sweetgum
373	<i>Hydrolea corymbosa</i>	Sky-flower; Corymb False-fiddleleaf
374	<i>Hydrilla verticillata</i>	Hydrilla; Waterthyme
375	<i>Limnobium spongia</i>	Frog's-bit; American Spongeplant
376	<i>Vallisneria americana</i>	Tape-grass; American Eel-grass; Wild-celery
377	<i>Hypericum cf. limosum</i>	Coastal-plain St. John's-wort
378	<i>Hypericum cistifolium</i>	Round-pod St. John's-wort
379	<i>Hypericum crux-andreae</i>	St. Peter's-wort; Saint Andrew's-cross; St. John's Wort
380	<i>Hypericum fasciculatum</i>	Sandweed or Swampy or Peel-bark St. John's-wort
381	<i>Hypericum hypericoides</i>	St. Andrew's Cross; Edison's St. John's-wort
382	<i>Hypericum mutilum</i>	Dwarf or Slender St. John's-wort
383	<i>Hypericum myrtifolium</i>	Myrtle-leaf St. John's-wort
384	<i>Hypericum reductum</i>	Atlantic St. John's-wort
385	<i>Hypericum tetrapetalum</i>	Four-petal St. John's-wort; St. Andrew's Cross
386	<i>Triadenum virginicum</i>	Virginia Marsh St. John's-wort
387	<i>Hypoxis curtissii</i>	Yellow or Swamp Stargrass; Clubpod Goldstar
388	<i>Hypoxis juncea</i>	Fringed Yellow or Common Stargrass
389	<i>Illicium parviflorum</i>	Star Anise; Ocala Anise-tree
390	<i>Iris hexagona var. savannarum</i>	Prairie or Dixie Iris
391	<i>Nemastylis floridana</i>	Fall-flowering Ixia; F-flw. Pleatleaf
392	<i>Sisyrinchium atlanticum</i>	Pointed or Sandplain or Michaux's Blue-eyed-grass
393	<i>Sisyrinchium xerophyllum</i>	White Sand or Jeweled Blue-eyed Grass
394	<i>Isoetes flaccida</i>	Florida or Southern Quillwort
395	<i>Carya aquatica</i>	Water Hickory
396	<i>Carya floridana</i>	Scrub Hickory
397	<i>Carya glabra</i>	Pignut Hickory
398	<i>Juncus coriaceous</i>	Leathery Rush
399	<i>Juncus dichotomus</i>	Two-parted or Forked Rush
400	<i>Juncus effusus subsp. solutus</i>	Soft or Lamp Rush
401	<i>Juncus elliotii</i>	Bog Rush
402	<i>Juncus marginatus var. biflorus</i>	Shore or Grass-leaf Rush
403	<i>Juncus megacephalus</i>	Large-headed or Big-headed Rush
404	<i>Juncus polycephalus</i>	Many-headed Rush
405	<i>Juncus repens</i>	Lesser Creeping Rush
406	<i>Juncus scirpoides</i>	Needle-pod Rush
407	<i>Dicerandra frutescens</i>	
408	<i>Hyptis alata</i>	Musky Mint; Cluster Bushmint
409	<i>Hyptis mutabilis</i>	Tropical Bushmint
410	<i>Lycopus rubellus</i>	Taper-leaf Water Hoarhound
411	<i>Piloblephis rigida</i>	Wild Pennyroyal
412	<i>Salvia lyrata</i>	Lyre-leaved Sage
413	<i>Scutellaria arenicola</i>	Florida Scrub Skullcap
414	<i>Scutellaria integrifolia</i>	Skullcap
415	<i>Teucrium canadense</i>	American Germander; Wood-sage
416	<i>Trichostema dichotomum</i>	Blue-curls
417	<i>Trichostema suffruticosum</i>	Shrubby Blue-curls
418	<i>Lindera benzoin</i>	Spicebush
419	<i>Persea borbonia var. borbonia</i>	Red Bay
420	<i>Persea borbonia var. humilis</i>	Silkbay; Scrub Bay
421	<i>Persea palustris</i>	Swamp Bay; Swamp Red-bay
422	<i>Pinguicula lutea</i>	Yellow Butterwort
423	<i>Pinguicula pumila</i>	Small Butterwort
424	<i>Utricularia inflata</i>	Floating or Swollen Bladderwort
425	<i>Utricularia purpurea</i>	Eastern Purple Bladderwort
426	<i>Utricularia subulata</i>	Zigzag Bladderwort
427	<i>Aletris lutea</i>	Yellow Colic-root
428	<i>Lilium catesbaei</i>	Catesby's or Pine or Southern Red Lily

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429	<i>Melanthium virginicum</i>	Virginia Bunchflower
430	<i>Gelsemium sempervirens</i>	Yellow Jessamine; Evening Trumpet-
431	<i>Mitreola petiolata</i>	Miterwort; Lax Hornpod
432	<i>Mitreola sessilifolia</i>	Miterwort; Swamp Hornpod
433	<i>Polypremum procumbens</i>	Rustweed; Juniper-leaf
434	<i>Phoradendron leucarpum</i>	Oak Mistletoe
435	<i>Cuphea carthagenensis</i>	Columbia Waxweed
436	<i>Lythrum alatum</i> var. <i>lanceolatum</i>	Wing(ed)-(-angle) Loosestrife
437	<i>Rotala ramosior</i>	Lowland Toothcup
438	<i>Magnolia grandiflora</i>	Southern or Large-flower Magnolia
439	<i>Magnolia virginiana</i>	Sweet Bay; Sweetbay Magnolia
440	<i>Hibiscus coccineus</i>	Scarlet Rosemallow
441	<i>Hibiscus grandiflorus</i>	Swamp Hibiscus; Swamp Rose-mallow
442	<i>Kosteletzkya virginica</i>	Virginia Saltmarsh Mallow; Virginia Fen-rose
443	<i>Pavonia spinifex</i>	Yellow Hibiscus; Barb-fruit Swamp-mallow
444	<i>Urena lobata</i>	Caesar-weed
445	<i>Thalia geniculata</i>	Fire or Alligator Flag
446	<i>Rhexia cubensis</i>	West Indi(an)(es) Meadow-beauty
447	<i>Rhexia mariana</i>	Pale or Maryland Meadow-beauty
448	<i>Rhexia nashii</i>	Nash's Meadow-beauty
449	<i>Rhexia nuttallii</i>	Nuttall's Meadow-beauty
450	<i>Rhexia petiolata</i>	Ciliate Meadow-beauty
451	<i>Melia azedarach</i>	Chinaberry; Chineseberry
452	<i>Broussonetia papyrifera</i>	Paper-Mulberry
453	<i>Morus rubra</i>	Red Mulberry
454	<i>Myrica cerifera</i>	Wax Myrtle; Southern Bayberry
455	<i>Ardisia escallonioides</i>	Island Marlberry
456	<i>Myrsine floridana</i>	Guiana Rapanea; Guiana Myrsine; Guiana Colicwood
457	<i>Nelumbo lutea</i>	Lotus Lily; American Lotus; Water Chestnut
458	<i>Nuphar lutea</i> subsp. <i>advena</i>	Spatter-dock; Yellow Pond-lily
459	<i>Nymphaea odorata</i>	White or Fragrant Waterlily; Alligator Bonnet
460	<i>Nyssa sylvatica</i> var. <i>biflora</i>	Swamp Black or Sour Gum; Swamp Tupelo
461	<i>Ximenia americana</i>	Tallowwood; Hog Plum
462	<i>Chionanthus pygmaeus</i>	Pigmy Fringe Tree
463	<i>Chionanthus virginicus</i>	White Fringe Tree
464	<i>Fraxinus caroliniana</i>	Carolina or Water or Pop Ash
465	<i>Fraxinus pennsylvanica</i>	Red or Green Ash
466	<i>Osmanthus americanus</i>	Wild Olive; Devil-wood
467	<i>Osmanthus megacarpus</i>	Florida Wild Olive
468	<i>Ludwigia alata</i>	Winged Seedbox; Winged Primrose-willow
469	<i>Ludwigia arcuata</i>	Piedmont Seedbox; Piedmont Primrose-willow
470	<i>Ludwigia curtissii</i>	Curtiss' Seedbox; Curtiss' Primrose-willow
471	<i>Ludwigia erecta</i>	Yerba de Jicotea
472	<i>Ludwigia leptocarpa</i>	River Seedbox; River Primrose-willow
473	<i>Ludwigia linearis</i>	Narrow-leaf Seedbox; Narrow-leaf Primrose-willow
474	<i>Ludwigia maritima</i>	Seaside Primrose-willow; Seaside Seedbox
475	<i>Ludwigia microcarpa</i>	Small-fruit Seedbox; Small-fruit Primrose-willow
476	<i>Ludwigia octovalvis</i>	Mexican Seedbox; Mexican Primrose-willow
477	<i>Ludwigia palustris</i>	Swamp Primrose; Marsh Primrose-willow
478	<i>Ludwigia peruviana</i>	Peruvian Primrose-willow
479	<i>Ludwigia pilosa</i>	Hairy Seedbox; Hairy Primrose-willow
480	<i>Ludwigia repens</i>	Water Primrose; Creeping Seedbox
481	<i>Ludwigia suffruticosa</i>	Shrubby Seedbox; Shrubby Primrose-willow
482	<i>Oenothera laciniata</i>	Cut-leaved Evening Primrose
483	<i>Ophioglossum</i>	Adder's Tonge Fern
484	<i>Beadlea cranichoides</i>	Tropical forest Ladies'-tresses
485	<i>Encyclia tampensis</i>	Tampa Butterfly Orchid
486	<i>Epidendrum conopseum</i>	Green-fly Orchid
487	<i>Habenaria floribunda</i>	Toothed Habenaria; Tooth-petal False Rein Orchid
488	<i>Platanthera flava</i>	Gypsy-spikes; Pale Green Orchid
489	<i>Ponthieva racemosa</i>	Hairy Shadow Witch
490	<i>Pteroglossaspis ecristata</i>	Wild Coco; Giant Orchid
491	<i>Spiranthes odorata</i>	Fragrant Ladies'-tresses

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492	<i>Osmunda cinnamomea</i>	Cinnamon Fern
493	<i>Osmunda regalis</i> var. <i>spectabilis</i>	Royal Fern
494	<i>Oxalis corniculata</i>	Lady's Sorrel; Creeping or Yellow Wood Sorrel
495	<i>Petiveria alliacea</i>	Garlic Guinea-hen Weed
496	<i>Phytolacca americana</i>	Pokeberryweed; Common or American Pokeweed
497	<i>Phytolacca rigida</i>	Florida Pokeweed
498	<i>Rivina humilis</i>	Rouge Plant
499	<i>Pinus clausa</i>	Sand Pine
500	<i>Pinus elliottii</i>	Slash Pine
501	<i>Pinus palustris</i>	Longleaf Pine
502	<i>Peperomia humilis</i>	Terrestrial Peperomia
503	<i>Plantago virginica</i>	Southern or Pale-seed Plantain
504	<i>Amphicarpum muhlenbergianum</i>	Little Blue Maidencane; Perennial Goobergrass
505	<i>Andropogon brachystachyus</i>	Short-spike Bluestem
506	<i>Andropogon floridanus</i>	Florida Bluestem
507	<i>Andropogon glomeratus</i> var. <i>glaucoopsis</i>	Big Chalky Bluestem
508	<i>Andropogon glomeratus</i> var. <i>hirsutior</i>	Hairy Bushy Bluestem
509	<i>Andropogon glomeratus</i> var. <i>pumilus</i>	Big Bushy Bluestem
510	<i>Andropogon gyrans</i> var. <i>gyrans</i>	Elliott's Bluestem
511	<i>Andropogon ternarius</i> var. <i>cabanisii</i>	Silver Bluestem
512	<i>Andropogon virginicus</i> var. <i>decepiens</i>	Broomsedge
513	<i>Andropogon virginicus</i> var. <i>glaucus</i>	Little Chalky Bluestem
514	<i>Andropogon virginicus</i> var. <i>virginicus</i>	Broomsedge
515	<i>Aristida beyrichiana</i>	Wiregrass; Pineland Threeawn
516	<i>Aristida gyrans</i>	Corkscrew Threeawn
517	<i>Aristida palustris</i>	Long-leaf Three-awn Grass
518	<i>Aristida patula</i>	Tall Threeawn; Tall Wiregrass
519	<i>Aristida purpurascens</i> var. <i>purpurascens</i>	Slim-spike Three-awn Grass
520	<i>Aristida spiciformis</i>	Bottlebrush or Pinebarren Threeawn
521	<i>Axonopus fissifolius</i>	Common or Southern Carpetgrass
522	<i>Axonopus furcatus</i>	Big Carpetgrass
523	<i>Cenchrus echinatus</i>	Southern Sandspur
524	<i>Cenchrus incertus</i>	Coast Sandspur
525	<i>Chasmanthium laxum</i>	Spike Chasmanthium; Slender Spikegrass
526	<i>Chasmanthium nitidum</i>	Shiny Chasmanthium; Shiny Spikegrass
527	<i>Chasmanthium sessiliflorum</i>	Longleaf Chasmanthium; Longleaf Spikegrass
528	<i>Dichanthelium aciculare</i>	Needle-leaf Witchgrass; Panic Grass
529	<i>Dichanthelium commutatum</i>	Variable Witchgrass; Panic Grass
530	<i>Dichanthelium dichotomum</i>	Cypress Witchgrass; Panic Grass
531	<i>Dichanthelium ensifolium</i> var. <i>breve</i>	Panic Grass
532	<i>Dichanthelium ensifolium</i> var. <i>ensifolium</i>	Panic Grass
533	<i>Dichanthelium ensifolium</i> var. <i>unciphylum</i>	Panic Grass
534	<i>Dichanthelium erectifolium</i>	Erect-leaf Witchgrass
535	<i>Dichanthelium laxiflorum</i>	Lax-flower Witchgrass; Panic Grass
536	<i>Dichanthelium leucothrix</i>	Panic Grass
537	<i>Dichanthelium ovale</i>	Panic Grass; Egg-leaf Witchgrass
538	<i>Dichanthelium portoricense</i>	Hemlock Witchgrass
539	<i>Dichanthelium scabriusculum</i>	Woolly Panic Grass
540	<i>Dichanthelium strigosum</i> var. <i>glabrescens</i>	Panic Grass
541	<i>Digitaria ciliaris</i>	Southern Crabgrass
542	<i>Echinochloa walteri</i>	Coast(al) Cockspur
543	<i>Eleusine indica</i>	India Goosegrass
544	<i>Eragrostis atrovirens</i>	Thalia Lovegrass
545	<i>Eragrostis elliottii</i>	Elliott('s) Lovegrass
546	<i>Eragrostis spectabilis</i>	Purple Lovegrass; Petticoat Climber
547	<i>Eragrostis virginica</i>	Coastal or Meadow Lovegrass
548	<i>Eustachys glauca</i>	Saltmarsh Fingergrass
549	<i>Eustachys petraea</i>	Pinewoods Fingergrass
550	<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass

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551	<i>Imperata brasiliensis</i>	Cogongrass; Brazilian Satintail
552	<i>Leersia hexandra</i>	Southern or Clubhead Cutgrass
553	<i>Leersia virginica</i>	White Grass
554	<i>Muhlenbergia capillaris</i> var. <i>filipes</i>	Long-awn Muhly
555	<i>Oplismenus setarius</i>	Wood(s)grass; Short-leaf Basketgrass
556	<i>Panicum anceps</i>	Beaked Panicum; Beaked Panic Grass
557	<i>Panicum hemitomon</i>	Maidencane
558	<i>Panicum hians</i>	Gaping Panic Grass
559	<i>Panicum longifolium</i>	Panic Grass
560	<i>Panicum repens</i>	Torpedo Grass
561	<i>Panicum rigidulum</i>	Redtop Panicum; Redtop Panic Grass
562	<i>Panicum tenerum</i>	Bluejoint or Southeastern Panicum
563	<i>Panicum verrucosum</i>	Warty Panicum; Warty Panic Grass
564	<i>Panicum virgatum</i>	Switchgrass; Wand-shape Panicum
565	<i>Paspalum conjugatum</i>	Sour Paspalum; Sour Crowngrass
566	<i>Paspalum floridanum</i>	Florida or Giant Paspalum; Florida Crowngrass
567	<i>Paspalum notatum</i> var. <i>saurae</i>	Bahiagrass
568	<i>Paspalum praecox</i>	Early Paspalum; Early Crowngrass
569	<i>Paspalum setaceum</i>	Thin Paspalum; Slender Crowngrass
570	<i>Paspalum urvillei</i>	Vaseygrass
571	<i>Phanopyrum gymnocarpon</i>	Savannah Panicum; Savannah Panic Grass
572	<i>Pharus lappulaceus</i>	Creeping Leafstalkgrass
573	<i>Piptochaetium avenaceum</i>	Blackseed Needle Grass
574	<i>Rhynchelytrum repens</i>	Red Natalgrass
575	<i>Saccharum giganteum</i>	Sugarcane Plumegrass
576	<i>Sacciolepis indica</i>	India Cupscale; Glenwood Grass
577	<i>Sacciolepis striata</i>	American Cupscale
578	<i>Schizachyrium rhizomatum</i>	Florida Bluestem
579	<i>Schizachyrium sanguineum</i>	Crimson False Bluestem
580	<i>Schizachyrium stoloniferum</i>	Creeping Bluestem
581	<i>Setaria geniculata</i>	Knotroot Foxtail; Knotroot Bristle Grass
582	<i>Sorghastrum secundum</i>	Lopsided Indiangrass
583	<i>Spartina bakeri</i>	Sand or Bunch Cordgrass
584	<i>Stipa avencioides</i>	Florida Needlegrass
585	<i>Tridens flavus</i> var. <i>flavus</i>	Tall Redtop; Purpletop; Purpletop Triends
586	<i>Triplasis americana</i>	Perennial Sandgrass
587	<i>Tripsacum dactyloides</i>	Eastern Gamagrass; Eastern Mock Grama
588	<i>Urochloa mutica</i>	Paragrass
589	<i>Polygala cruciata</i>	Cross-leaf Milkwort; Drumheads
590	<i>Polygala lewtonii</i>	
591	<i>Polygala lutea</i>	Wild Batchelor's Button; Orange Milkwort
592	<i>Polygala nana</i>	Wild Batchelor's Button; Dwarf Milkwort
593	<i>Polygala polygama</i>	Jointweed; Racemed Milkwort
594	<i>Polygala rugelii</i>	Yellow Batchelor's Button; Yellow Milkwort
595	<i>Polygala setacea</i>	Coastal-plain Milkwort
596	<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	Scrub Buckwheat
597	<i>Eriogonum tomentosum</i>	Wild Buckwheat
598	<i>Polygonella gracilis</i>	Wireweed; Tall Jointweed
599	<i>Polygonella polygama</i> var. <i>polygama</i>	Jointweed; October-flower
600	<i>Polygonella robusta</i>	Sandhill Wireweed; Large-flower Jointweed
601	<i>Polygonum densiflorum</i>	Dense-flower Smartweed; Dense-flower Knotweed
602	<i>Polygonum hirsutum</i>	Hairy Smartweed
603	<i>Polygonum hydropiperoides</i>	Mild or Swamp Water-pepper; Swamp Smartweed
604	<i>Polygonum punctatum</i>	Dotted Smartweed
605	<i>Rumex hastatulus</i>	Hastate-leaved Dock; Heart-wing Sorrel
606	<i>Campyloneurum phyllitidis</i>	Long Strap Fern
607	<i>Pecluma plumula</i>	Plumy Polypody
608	<i>Pecluma ptilodon</i> var. <i>caespitosa</i>	Comb Polypody
609	<i>Phlebodium aureum</i>	Golden Polypody
610	<i>Polypodium polypodioides</i> var. <i>michauxianum</i>	Resurrection Fern
611	<i>Eichhornia crassipes</i>	Common Water Hyacinth

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612	<i>Pontederia cordata</i>	Pickernelweed
613	<i>Samolus valerandi</i> subsp. <i>parviflorus</i>	Water or Pineland Pimpernel; Seaside Brookweed
614	<i>Psilotum nudum</i>	Whisk Fern
615	<i>Pityrogramma trifoliata</i>	Goldenrod or Split-pinna Fern
616	<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	Bracken Fern
617	<i>Clematis catesbyana</i>	Virgin's Bower; Satin-curled
618	<i>Clematis crispa</i>	Swamp Leather Flower
619	<i>Berchemia scandens</i>	Rattan Vine; Alabama Supple-jack
620	<i>Rhamnus caroliniana</i>	Carolina Buckthorn
621	<i>Sageretia minutiflora</i>	Small-flower Mock Buckthorn; Sagaretia
622	<i>Crataegus lepida</i>	Scrub Hawthorn
623	<i>Prunus caroliniana</i>	Carolina Laurel Cherry
624	<i>Prunus geniculata</i>	Scrub Plum
625	<i>Prunus serotina</i> var. <i>serotina</i>	Black or Wild Cherry
626	<i>Prunus umbellata</i>	Flatwoods or Hog Plum
627	<i>Pyrus arbutifolia</i>	Red Chokeberry
628	<i>Rubus argutus</i>	Highbush Blueberry; Serrate-leaf Blackberry
629	<i>Rubus betulifolius</i>	Blackberry
630	<i>Rubus cuneifolius</i>	Sand Blackberry
631	<i>Rubus trivialis</i>	Southern Dewberry
632	<i>Cephalanthus occidentalis</i>	Common Buttonbush
633	<i>Chiococca alba</i>	Snowberry; West Indies Milkberry
634	<i>Diodia teres</i>	Poor Joe; Rough Button-weed
635	<i>Diodia virginiana</i>	Virginia Buttonweed
636	<i>Galium aparine</i>	Goose Grass; Spring Cleavers; Catchweed Bedstraw
637	<i>Galium hispidulum</i>	Coastal Bedstraw
638	<i>Galium pilosum</i>	Hairy Bedstraw
639	<i>Galium tinctorium</i>	Stiff Marsh Bedstraw
640	<i>Galium uniflorum</i>	One-flower Bedstraw
641	<i>Hamelia patens</i>	Firebush; Scarletbush
642	<i>Hedyotis procumbens</i>	Innocence; Round-leaf Bluet
643	<i>Hedyotis uniflora</i>	Flat-top Bluet; Clustered Bluet
644	<i>Mitchella repens</i>	American Partridge Berry; Twinberry
645	<i>Psychotria nervosa</i>	Wild Coffee; Seminole Balsamo
646	<i>Psychotria sulzneri</i>	Sulzner's Wild Coffee
647	<i>Richardia brasiliensis</i>	Tropical Mexican-clover
648	<i>Richardia scabra</i>	Rough Mexican-clover
649	<i>Citrus aurantium</i>	Sour Orange
650	<i>Zanthoxylum clava-herculis</i>	Hercules'-club; Prickly Ash
651	<i>Zanthoxylum fagara</i>	Wild Lime; Lime Prickly-ash
652	<i>Salix caroliniana</i>	Carolina or Coastal Plain Willow
653	<i>Salix floridana</i>	Florida Willow
654	<i>Azolla caroliniana</i>	Carolina Mosquito Fern
655	<i>Salvinia minima</i>	Water Sprangles
656	<i>Sapindus saponaria</i>	Wing-leaf Soapberry; False Dogwood
657	<i>Bumelia reclinata</i>	Florida Bumelia; Florida Bully
658	<i>Bumelia tenax</i>	Tough Bumelia; Tough Buckthorn
659	<i>Saururus cernuus</i>	Lizard's-tail
660	<i>Decumaria barbara</i>	Cowitch-vine; Woodvamp
661	<i>Itea virginica</i>	Virginia Willow; Virginia Sweetspire
662	<i>Lygodium japonicum</i>	Japanese Climbing Fern
663	<i>Agalinis fasciculata</i>	Beach False-foxglove
664	<i>Agalinis linifolia</i>	Flax-leaf False-foxglove
665	<i>Bacopa caroliniana</i>	Blue Hyssop; Carolina or Blue Water-hyssop
666	<i>Bacopa monnieri</i>	Coastal Water-hyssop
667	<i>Buchnera americana</i>	American Blueheart(s)
668	<i>Gratiola hispida</i>	Rough Hedge-hyssop
669	<i>Gratiola pilosa</i>	Shaggy Hedge-hyssop
670	<i>Gratiola ramosa</i>	Branching Hedge-hyssop
671	<i>Gratiola virginiana</i>	Round-fruit Hedge-hyssop
672	<i>Linaria canadensis</i>	Blue or Oldfield Toadflax
673	<i>Linaria floridana</i>	Florida Toadflax
674	<i>Lindernia anagallidea</i>	False-pimpernel

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675	<i>Lindernia grandiflora</i>	Savannah False-pimpernel
676	<i>Mecardonia acuminata</i>	Purple Mecardonia; Purple Axil-flower
677	<i>Micranthemum umbrosum</i>	Shade Mudflower
678	<i>Penstemon multiflorus</i>	
679	<i>Scoparia dulcis</i>	Sweet Broom; Licorice Weed
680	<i>Seymeria pectinata</i>	Piedmont Seymeria
681	<i>Selaginella apoda</i>	Meadow Spikemoss
682	<i>Selaginella arenicola</i>	Sand Spikemoss
683	<i>Smilax auriculata</i>	Ear-leaf Greenbrier; Catbrier
684	<i>Smilax bona-nox</i>	Saw Greenbrier; Catbrier
685	<i>Smilax glauca</i>	WildSarsaparilla;Glaucous(-leaf)Greenbrier;Catbrie
686	<i>Smilax laurifolia</i>	Catbrier; Bamboo-vine; Laurel(-leaf) Greenbrier
687	<i>Smilax pumila</i>	SarsaparillaVine;Small Greenbrier;Woolly Cat-brier
688	<i>Smilax smallii</i>	Jackson Vine; Lance-leaf Greenbrier
689	<i>Smilax tamnoides</i>	Catbrier;Bristly/Halberd-leaf Greenbrier;Chinaroot
690	<i>Smilax walteri</i>	
691	<i>Capsicum annuum</i> var. <i>glabrisculum</i>	Bird Pepper
692	<i>Physalis angulata</i>	Cut-leaf Ground-cherry
693	<i>Physalis arenicola</i> var. <i>arenicola</i>	Cypress-head Ground-cherry
694	<i>Physalis pubescens</i>	Low Hairy Ground-cherry
695	<i>Solanum americanum</i>	American Black or Common Nightshade
696	<i>Sphagnum</i> spp.	Sphagnum Mosses
697	<i>Styrax americanus</i>	Storax; American Snowbell
698	<i>Taxodium ascendens</i>	Pond Cypress
699	<i>Taxodium distichum</i>	Bald Cypress
700	<i>Gordonia lasianthus</i>	Loblolly Bay
701	<i>Macrothelypteris torresiana</i>	Mariana Maiden Fern
702	<i>Tilia americana</i>	Basswood
703	<i>Tilia caroliniana</i>	Carolina Basswood
704	<i>Piriqueta caroliniana</i>	Piriqueta; Carolina Stripeseed
705	<i>Typha domingensis</i>	Southern Cattail
706	<i>Typha latifolia</i>	Common or Broad-leaf Cattail
707	<i>Celtis laevigata</i>	Hackberry; Sugarberry
708	<i>Ulmus americana</i>	American Elm
709	<i>Boehmeria cylindrica</i>	Small-spike False-nettle; Bog Hemp
710	<i>Parietaria praetermissa</i>	Pellitory; Clustered Pellitory-of-the-wall
711	<i>Pilea pumila</i>	Canada Clearweed
712	<i>Valeriana scandens</i>	Florida Valerian
713	<i>Callicarpa americana</i>	Beautybush; American Beauty-berry
714	<i>Verbena brasiliensis</i>	Brazilian Vervain
715	<i>Verbena scabra</i>	Harsh Verbena; Sandpaper Vervain
716	<i>Viola affinis</i>	Leconte's Violet
717	<i>Viola lanceolata</i>	Bog White or Long-leaf or Lance-leaf Violet
718	<i>Viola primulifolia</i>	Swamp White or Primrose-lea(f)(ved) Violet
719	<i>Viola septemloba</i>	Southern Coast Violet
720	<i>Viola sororia</i>	Woolly or Hooded or Thicket Blue Violet;Florida V.
721	<i>Ampelopsis arborea</i>	Pepper-vine
722	<i>Parthenocissus quinquefolia</i>	Virginia Creeper; Woodbine
723	<i>Vitis aestivalis</i>	Summer Grape
724	<i>Vitis rotundifolia</i> var. <i>munsoniana</i>	Southern Fox or Muscadine Grape; Muscadine
725	<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	
726	<i>Vittaria lineata</i>	Appalachian Shoestring Fern
727	<i>Xyris ambigua</i>	Coastal-plain Yellow-eyed Grass
728	<i>Xyris brevifolia</i>	Short-leaf Yellow-eyed Grass
729	<i>Xyris caroliniana</i>	Carolina Yellow-eyed Grass
730	<i>Xyris difformis</i> var. <i>floridana</i>	Florida Bog Yellow-eyed Grass
731	<i>Xyris elliottii</i>	Elliott's Yellow-eyed Grass
732	<i>Xyris fimbriata</i>	Fringed Yellow-eyed Grass
733	<i>Xyris flabelliformis</i>	Savannah Yellow-eyed Grass
734	<i>Xyris jupicai</i>	Common or Richard's Yellow-eyed Grass
735	<i>Xyris platylepis</i>	Tall Yellow-eyed Grass
736	<i>Xyris smalliana</i>	Small's Yellow-eyed Grass

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INVERTEBRATES

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species			Status	
	Order	Genus Species	Common	Fed	State
1	Coleoptera	<i>Dytiscus spp.</i>	Large Diving Beetle		
2		<i>Cicindela Lepida</i>	Dainty Tiger Beetle		
3		<i>Odontotaenius disjunctus</i>	Horned Passalus		
4			Soldier Beetle		
5	Hemiptera	<i>Lethocerus americanus</i>	Giant Water Bug		
6		<i>Notonecta undulata</i>	Backswimmer		
7	Lepidoptera	<i>Agraulis vanillae</i>	Gulf Fritillary		
8		<i>Papilio polyxenes asteruis</i>	Eastern Black Swallowtail		
9		<i>P. glaucus</i>	Eastern Tiger Swallowtail		
10		<i>P. cresphontes</i>	Giant Swallowtail		
11		<i>Heliconius charitonius</i>	Zebra Butterfly		
12		<i>Danaus gilippus berenize</i>	Queen		
13	Hymenoptera	<i>Ichneumonidae (Scambus spp.?)</i>	Ichneumid wasps		
14		<i>Xylocopa virginica</i>	Black bee		
15		<i>Dasymutilla occidentalis</i>	Cowkiller		
16		<i>Bombus spp.</i>	Bumblebee		
17		<i>Camponotus pennsylvanicus</i>	Carpenter ant		
18			Large headed ant		
19	Diptera	<i>Exoprosopa spp.</i>	Progressive beefly		
20		<i>Stratiomys spp.</i>	(Aquatic larva)		
21	Orthoptera	<i>Gryllotalpa hexadactyla</i>	Mole Cricket		
22		<i>Romalea microptera</i>	Southeaster Lubber		
23		<i>Tetrigidae</i>	Pygmy Grasshoppers		
24		<i>Acrididae</i>	Short-horned Grasshoppers		
25	Ephemeroptera	<i>Callibaetis spp.</i>	Mayflies		
26	Trichoptera		Caddisflies		
27	Odonata (Zygoptera)	<i>Nehalennia integricollis</i>	<larva and adult>		
28		<i>Ischnura hastata</i>	<larva and adult>		
29		<i>Calopteryx maculata</i>	<larva and adult>		
30		<i>Argia fumipennis</i>	<adult>		
31		<i>Lestes vigilax</i>	<larva and adult>		
32	Odonata (Anisoptera)	<i>Erythemis simplicicollis</i>	<adult>		
33		<i>Pachydiplax longipennis</i>	<adult>		
34		<i>Celithemis amanda</i>	<adult>		
35		<i>C. eponina</i>	<adult>		
36		<i>Tramea carolina</i>	<adult>		
37		<i>Erythrodiplax connata minuscala</i>	<adult>		
38		<i>Perithemis tenera</i>	<adult>		
39		<i>Epitheca cynosura</i>	<larva and adult>		
40		<i>Anax longipes</i>	<larva and adult>		

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41		<i>Nasiaeschna pentacantha</i>	<adult>		
42		<i>Didymops floridensis</i>	<adult>		
43		<i>Gomphus minutus</i>	<adult>		
44		<i>Hagenius brevistylus</i>	<adult>		
45	Araneae	<i>Peuceitia viridans</i>	Green Lynx Spider		
46		<i>Phidippus audax</i>	Daring Jumping Spider		
47		<i>P. spp.</i>	Red Jumping Spider		
48		<i>Nephila clavipes</i>	Golden Silk Spider		
49		<i>Argiope aurantia</i>	Black and Yellow Argiope		
50		<i>Dolomedes triton</i>	Six-spotted Fishing Spider		
51		<i>Lycosa rabida</i>	Rabid Wolf Spider		
52		<i>Tetragnatha elongata</i>	Elongate Long-jawed Orb Weaver		
53		<i>Lycosa spp.</i>	Scrub Wolf Spider		
54	Corbiculidae	<i>Corbicula manilensis</i>	Asian Clam		
55	Unionidae	<i>Elliptio buckleyi</i>			
56	Palaemonidae	<i>Palaemonetes paludosus</i>	Grass Shrimp		
57	Cambarida	<i>Procambarus spp.</i>	Crayfish		
58	Taltridae	<i>Hyalela axteca</i>	Common Amphipod		
59	Ampulariidae	<i>Pomacea spp.</i>	Apple Snail		

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FISH

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species Names		Status	
	Genus Species	Common	Fed	State
1	<i>Micropterus salmoides</i>	Largemouth Bass		
2	<i>Lepomis spp.</i>	Sunfish		
3	<i>Percina nigrofasciata</i>	Blackbanded Darter		
4	<i>Notropis chalybaeus</i>	Ironcolor Shiner		
5	<i>Gambusia affinis</i>	Mosquitofish		
6	<i>Fundulus chrysotus</i>	Golden Topminnow		

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Birds

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species		Status	
	Genus Species	Common	Fed	State
1	<i>Gavia immer</i>	Common Loon		
2	<i>Podilymbus podiceps</i>	Pied-billed Grebe		
3	<i>Anhinga anhinga</i>	Anhinga		
4	<i>Phalacrocorax auritus</i>	Double-crested Cormorant		
5	<i>Aix sponsa</i>	Wood Duck		
6	<i>Anas acuta</i>	Northern Pintail		
7	<i>A. americana</i>	American Wigeon		
8	<i>A. clypeata</i>	Northern Shoveler		
9	<i>A. crecca</i>	Green-winged Teal		
10	<i>A. discors</i>	Blue-winged Teal		
11	<i>A. fulvigula</i>	Mottled Duck		
12	<i>A. platyrhynchos</i>	Mallard		
13	<i>A. rubripes</i>	Black Duck		
14	<i>A. strepera</i>	Gadwall		
15	<i>Aythya affinis</i>	Lesser Scaup		
16	<i>A. collaris</i>	Ring-necked Duck		
17	<i>A. valisineria</i>	Canvasback		
18	<i>Dendrocygna bicolor</i>	Fulvous Whistling-duck		
19	<i>Mergus serrator</i>	Red-breasted Merganser		
20	<i>Pelecanus erythrorhynchos</i>	White Pelican		
21	<i>P. occidentalis</i>	Brown Pelican		SSC
22	<i>Larus delawarensis</i>	Ring-billed Gull		
23	<i>Sterna antillarum</i>	Least Tern		T
24	<i>S. hirundo</i>	Common Tern		
25	<i>Ardrea herodias</i>	Great Blue Heron		
26	<i>A. herodias</i>	Great White Heron		
27	<i>Botaurus lentiginosus</i>	American Bittern		
28	<i>Bubulcus ibis</i>	Cattle Egret		
29	<i>Butorides striatus</i>	Green Backed Heron		
30	<i>Casmerodius albus</i>	Great Egret		
31	<i>Egretta rufescens</i>	Reddish Egret		SSC
32	<i>E. thula</i>	Snowy Egret		SSC
33	<i>E. careulea</i>	Little Blue Heron		SSC
34	<i>E. tricolor</i>	Tricolored Heron		SSC
35	<i>Ixobrychus exilis</i>	Least Bittern		
36	<i>Nycticorax nycticorax</i>	Blk-crowned Night-heron		
37	<i>N. violaceus</i>	Yel-crowned Night-heron		
38	<i>Mycteria americana</i>	Wood Stork	E	E
39	<i>Grus canadensis</i>	Sandhill Crane		T
40	<i>Aramus guarana</i>	Limpkin		SSC
41	<i>Ajaia ajaja</i>	Roseate Spoonbill		SSC
42	<i>Eodcimus albus</i>	White Ibis		SSC

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43	<i>Plegadis falcinellus</i>	Glossy Ibis		
44	<i>Coturnicops noveboracensis</i>	Yellow Rail		
45	<i>Fulica americana</i>	American Coot		
46	<i>Gallinula chloropus</i>	Common Moorhen		
47	<i>Laterallus jamaicensis</i>	Black Rail		
48	<i>Porphyryla martinica</i>	Purple Gallinule		
49	<i>Porzana carolina</i>	Sora		
50	<i>Rallus elegans</i>	King Rail		
51	<i>R. limicola</i>	Virginia Rail		
52	<i>R. longirostris</i>	Clapper Rail		
53	<i>Charadrius vociferus</i>	Killdeer		
54	<i>Pluvialis squatarola</i>	Black-bellied Plover		
55	<i>Actitis macularia</i>	Spotted Sandpiper		
56	<i>Gallinago gallinago</i>	Common Snipe		
57	<i>Scolopax minor</i>	American Woodcock		
58	<i>Tringa flavipes</i>	Lesser Yellowlegs		
59	<i>T. melamoleuca</i>	Greater Yellowlegs		
60	<i>T. solitaria</i>	Solitary Sandpiper		
61	<i>Meleagris gallopavo</i>	Wild Turkey		
62	<i>Colinus virginianus</i>	Northern Bobwhite Quail		
63	<i>Accipiter cooperii</i>	Cooper's Hawk		
64	<i>A. striatus</i>	Sharp-shinned Hawk		
65	<i>Buteo brachyurus</i>	Short-tailed Hawk		
66	<i>B. jamaicensis</i>	Red-tailed Hawk		
67	<i>B. lineatus</i>	Red-shouldered Hawk		
68	<i>B. platypterus</i>	Broad-winged Hawk		
69	<i>Circus cyaneus</i>	Northern Harrier		
70	<i>Elanoides forficatus</i>	Swallow-tailed Kite		
71	<i>Elanus caeruleus</i>	Black-shouldered Kite		
72	<i>Haliaeetus leucocephalus</i>	Bald Eagle		
73	<i>Rostrhamus sociabilis</i>	Snail Kite	E	E
74	<i>Pandion haliaetus</i>	Osprey		
75	<i>Cathartes aura</i>	Turkey Vulture		
76	<i>Coragyps atratus</i>	Black Vulture		
77	<i>Falco columbarius</i>	Merlin		
78	<i>F. peregrinus</i>	Peregrine Falcon		
79	<i>F. sparverius</i>	American Kestrel		
80	<i>F. sparverius paulus</i>	SE. American Kestrel		
81	<i>Polyborus plancus</i>	Crested Caracara	T	T
82	<i>Asio flammeus</i>	Short-eared Owl		
83	<i>Athene cunicularia</i>	Burrowing Owl		SSC
84	<i>Bubo virginianus</i>	Great Horned Owl		
85	<i>Otus asio</i>	Eastern Screech-owl		
86	<i>Strix varia</i>	Barred Owl		
87	<i>Tyto alba</i>	Barn Owl		
88	<i>Columba livia</i>	Rock Dove		

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89	<i>Columbina passerina</i>	Common Ground Dove		
90	<i>Zenaida asiatica</i>	White-winged Dove		
91	<i>Z. macroura</i>	Mourning Dove		
92	<i>Coccyzus americanus</i>	Yellow-billed Cuckoo		
93	<i>C. erythrophthalmus</i>	Black-billed Cuckoo		
94	<i>C. minor</i>	Mangrove Cuckoo		
95	<i>Crotophaga ani</i>	Smooth-billed Ani		
96	<i>Caprimulgus carolinensis</i>	Chuck-will's-widow		
97	<i>C. vociferus</i>	Whip-poor-will		
98	<i>Chordeiles minor</i>	Common Nighthawk		
99	<i>Ceryle alcyon</i>	Belted Kingfisher		
100	<i>Archilochus colubris</i>	Ruby-throated Hummingbird		
101	<i>Campephilus principalis</i>	Ivory-billed Woodpecker	E	E
102	<i>Colaptes auratus</i>	Common Flicker		
103	<i>Dryocopus pileatus</i>	Pileated Woodpecker		
104	<i>Melanerpes carolinus</i>	Red-bellied Woodpecker		
105	<i>M. erythrocephalus</i>	Red-headed Woodpecker		
106	<i>Picoides borealis</i>	Red-cockaded Woodpecker	E	T
107	<i>P. pubescens</i>	Downy Woodpecker		
108	<i>P. villosus</i>	Hairy Woodpecker		
109	<i>Sphyrapicus varius</i>	Yellow-bellied Sapsucker		
110	<i>Chaetura pelagica</i>	Chimney Swift		
111	<i>Contopus virens</i>	Eastern Wood-pewee		
112	<i>Empidonax minimus</i>	Least Flycatcher		
113	<i>E. virescens</i>	Acadian Flycatcher		
114	<i>Myiarchus crinitus</i>	Great Crested Flycatcher		
115	<i>Sayornis phoebe</i>	Eastern Phoebe		
116	<i>Tyrannus dominicensis</i>	Gray Kingbird		
117	<i>T. forficatus</i>	Scissor-tailed Flycatcher		
118	<i>T. tyrannus</i>	Eastern Kingbird		
119	<i>Anthus spinoletta</i>	Water Pipit		
120	<i>Hirundo pyrrhonota</i>	Cliff Swallow		
121	<i>H. rustica</i>	Barn Swallow		
122	<i>Progne subis</i>	Purple Martin		
123	<i>Riparia riparia</i>	Bank Swallow		
124	<i>Stelgidopteryx serripennis</i>	N. Rough-winged Swallow		
125	<i>Tachycineta bicolor</i>	Tree Swallow		
126	<i>Aphelocoma coerulescens</i>	Scrub Jay	T	T
127	<i>Corvus brachyrhynchos</i>	American Crow		
128	<i>C. ossifragus</i>	Fish Crow		
129	<i>Cyanocitta cristata</i>	Blue Jay		
130	<i>Parus bicolor</i>	Tufted Titmouse		
131	<i>P. carolinensis</i>	Carolina Chickadee		
132	<i>Sitta pusilla</i>	Brown-headed Nuthatch		
133	<i>Cistothorus palustris</i>	Marsh Wren		SSC
134	<i>C. platensis</i>	Sedge Wren		
135	<i>Troglodytes aedon</i>	House Wren		

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136	<i>T. ludovicianus</i>	Carolina Wren		
137	<i>Poliophtila caerulea</i>	Blue-gray Gnatcatcher		
138	<i>Regulus calendula</i>	Ruby-crowned Kinglet		
139	<i>Dumetella carolinensis</i>	Gray Catbird		
140	<i>Mimus polyglottos</i>	Northern Mockingbird		
141	<i>Toxostoma rufum</i>	Brown Thrasher		
142	<i>Catharus fuscescens</i>	Veery		
143	<i>C. guttatus</i>	Hermit Thrush		
144	<i>C. minimus</i>	Gray-cheeked Thrush		
145	<i>C. ustulatus</i>	Swainson's Thrush		
146	<i>Sialia sialis</i>	Eastern Bluebird		
147	<i>Turdus migratorius</i>	American Robin		
148	<i>Bombycilla cedrorum</i>	Cedar Waxwing		
149	<i>Lanius ludovicianus</i>	Loggerhead Shrike		
150	<i>Vireo altiloquus</i>	Black-whiskered Vireo		
151	<i>V. flavifrons</i>	Yellow-throated Vireo		
152	<i>V. griseus</i>	White-eyed Vireo		
153	<i>V. olivaceus</i>	Red-eyed Vireo		
154	<i>V. solitarius</i>	Solitary Vireo		
155	<i>Dendroica caerulescens</i>	Blk-throated Blue Warbler		
156	<i>D. coronata</i>	Yellow-rumped Warbler		
157	<i>D. discolor</i>	Prairie Warbler		
158	<i>D. discolor paludicola</i>	Florida Prairie Warbler		
159	<i>D. dominica</i>	Yellow-throated Warbler		
160	<i>D. magnolia</i>	Magnolia Warbler		
161	<i>D. petechia</i>	Yellow Warbler		
162	<i>D. pinus</i>	Pine Warbler		
163	<i>D. plamarum</i>	Palm Warbler		
164	<i>D. striata</i>	Blackpoll Warbler		
165	<i>D. tigrina</i>	Cape May Warbler		
166	<i>D. virens</i>	Blk-throated Green Warbler		
167	<i>Geothlypis trichas</i>	Common Yellowthroat		
168	<i>Helmitheros vermivorus</i>	Worm-eating Warbler		
169	<i>Icteria virens</i>	Yellow-breasted Chat		
170	<i>Limnothlypis swainsonii</i>	Swainson's Warbler		
171	<i>Mniotilta varia</i>	Black-and-white Warbler		
172	<i>Oporonis agilis</i>	Connecticut Warbler		
173	<i>O. formosus</i>	Kentucky Warbler		
174	<i>Parula americana</i>	Northern Parula		
175	<i>Protonotaria citrea</i>	Prothonotary Warbler		
176	<i>Seiurus aurocapillus</i>	Ovenbird		
177	<i>S. motacilla</i>	Louisiana Waterthrush		
178	<i>S. noveboracensis</i>	Northern Waterthrush		
179	<i>Setophaga ruticilla</i>	American Redstart		
180	<i>Vermivora celata</i>	Orange-crowned Warbler		
181	<i>Wilsonia citrina</i>	Hooded Warbler		
182	<i>Agelaius phoeniceus</i>	Redwing Blackbird		

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183	<i>Dolichonyx oryzivorus</i>	Bobolink		
184	<i>Euphagus carolinus</i>	Rusty Blackbird		
185	<i>E. cyanocephalus</i>	Brewer's Blackbird		
186	<i>Icterus galbula</i>	Northern Oriole		
187	<i>I. spurius</i>	Orchard Oriole		
188	<i>Molothrus ater</i>	Brown-headed Cowbird		
189	<i>Quiscalus major</i>	Boat-tailed Grackle		
190	<i>Q. quiscula</i>	Common Grackle		
191	<i>Sturnella neglecta</i>	Eastern Meadowlark		
192	<i>Sturnus vulgaris</i>	European Starling		
193	<i>Piranga olivacea</i>	Scarlet Tanager		
194	<i>P. rubra</i>	Summer Tanager		
195	<i>Aimophila aestivalis</i>	Bachman's Sparrow		
196	<i>Ammodramus caudacutus</i>	Sharp-tailed Sparrow		
197	<i>A. henslowii</i>	Henslow's Sparrow		
198	<i>A. leconteii</i>	Le Conte's Sparrow		
199	<i>A. savannarum</i>	Grasshopper Sparrow	E	E
200	<i>Cardinalis cardinalis</i>	Northern Cardinal		
201	<i>Carduelis tristis</i>	American Goldfinch		
202	<i>Guiraca caerulea</i>	Blue Grosbeak		
203	<i>Melospiza georgiana</i>	Swamp Sparrow		
204	<i>M. melodia</i>	Song Sparrow		
205	<i>Passer domesticus</i>	House Sparrow		
206	<i>Passerculus sandwichensis</i>	Savannah Sparrow		
207	<i>Passerina ciris</i>	Painted Bunting		
208	<i>P. cyanea</i>	Indigo Bunting		
209	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak		
210	<i>Pipilo erythrophthalmus</i>	Rufous-sided Towhee		
211	<i>Pooecetes gramineus</i>	Vesper Sparrow		
212	<i>Spiza americana</i>	Dickcissel		
213	<i>Spizella passerina</i>	Chipping Sparrow		
214	<i>S. pusilla</i>	Field Sparrow		
215	<i>Zonotrichia albicollis</i>	White-throated Sparrow		

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REPTILES

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species Names		Status	
	Genus Species	Common	Fed	State
1	<i>Alligator mississippiensis</i>	American Alligator	T	SSC
2	<i>Chelydra serpentina osceola</i>	Florida Snapping Turtle		
3	<i>Kinosternon baurii</i>	Striped Mud Turtle		E
4	<i>K. subrubrum steindachneri</i>	Florida Mud Turtle		
5	<i>Sternotherus odoratus</i>	Common Musk Turtle		
6	<i>Chrysemys floridana peninsularis</i>	Peninsula Cooter		
7	<i>C. nelsoni</i>	Florida Redbelly Turtle		
8	<i>Deirochelys reticularia chrysea</i>	Florida Chicken Turtle		
9	<i>Terrapene carolina bauri</i>	Florida Box Turtle		
10	<i>Gopherus polyphemus</i>	Gopher Tortoise		T
11	<i>Trionyx ferox</i>	Florida Softshell Turtle		
12	<i>Sphaerodactylus notatus notatus</i>	Florida Reef Gecko		
13	<i>Anolis carolinensis</i>	Green Anole		
14	<i>A. sagrei sagrei</i>	Brown Anole		
15	<i>Sceloporus undulatus undulatus</i>	Southern Fence Lizard		
16	<i>S. woodi</i>	Florida Scrub Lizard		
17	<i>Cnemidophorus sexlineatus sexlineatus</i>	Six-lined Racerunner		
18	<i>Eumeces egregius lividus</i>	Bluetailed Mole Skink	T	T
19	<i>E. egregius onocrepis</i>	Peninsula Mole Skink		
20	<i>E. inexpectatus</i>	Southeastern Five-lined Skink		
21	<i>E. laticeps</i>	Broadheaded Skink		
22	<i>Neoseps reynoldsi</i>	Florida Sand Skink	T	T
23	<i>Scincella lateralis</i>	Ground Skink		
24	<i>Ophisaurus attenuatus longicaudus</i>	Eastern Slender Glass Lizard		
25	<i>O. ventralis</i>	Eastern Glass Lizard		
26	<i>Rhineura floridana</i>	Florida Worm Lizard		
27	<i>Cemophora coccinea coccinea</i>	Florida Scarlet		
28	<i>Coluber constrictor paluticola</i>	Everglades Racer		
29	<i>C. constrictor priapus</i>	Southern Black Racer		
30	<i>Diadophis punctatus punctatus</i>	Southern Ringneck Snake		
31	<i>Drymarchon corais couperi</i>	Eastern Indigo Snake	T	T
32	<i>Elaphe guttata guttata</i>	Corn/Red Rat Snake		

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33	<i>E. obsoleta quadrivittata</i>	Yellow Rat/Chicken Snake		
34	<i>E. obsoleta rossalleni</i>	Everglades Rat Snake		
35	<i>Farancia abacura abacura</i>	Eastern Mud Snake		
36	<i>F. erythrogramma seminola</i>	Southern Fla. Rainbow Snake		
37	<i>Heterodon platyrhinos</i>	Eastern Hognose Snake		
38	<i>H. simus</i>	Southern Hognose Snake		
39	<i>Lampropeltis calligaster rhombomaculata</i>	Mole Kingsnake		
40	<i>Lampropeltis getulus</i>	Common Kingsnake		
41	<i>L. triangulum elapsoides</i>	Scarlet Kingsnake		
42	<i>M. flagellum flagellum</i>	Eastern Coachwhip		
43	<i>Natrix cyclopion floridana</i>	Fla. Green Watersnake		
44	<i>N. fasciata pictiventris</i>	Florida Watersnake		
45	<i>N. taxispilota</i>	Brown Watersnake		
46	<i>Opheodrys aestivus</i>	Rough Green Snake		
47	<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake		SSC
48	<i>Seminatrix pygaea pygaea</i>	Swamp Snake		
49	<i>Stilosoma extenuatum</i>	Short-tailed Snake		T
50	<i>Storeria dekayi victa</i>	Florida Brown Snake		
51	<i>Tantilla relicta relicta</i>	Peninsula Crowned Snake		
52	<i>Thamnophis sauritus sackeni</i>	Peninsula Ribbon		
53	<i>T. sirtalis sirtalis</i>	Eastern Garter		
54	<i>Micrurus fulvius fulvius</i>	Eastern Coral Snake		
55	<i>Sistrurus miliarius barbouri</i>	Dusty Pygmy		
56	<i>Agkistrodon contortrix contortrix</i>	Southern Copperhead		
57	<i>A. piscivorus conanti</i>	Florida Cottonmouth		
58	<i>Crotalus adamanteus</i>	Eastern Diamondback		

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AMPHIBIANS

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species Names		Status	
	Genus Species	Common	Fed	State
1	<i>Pseudobranchius striatus axanthus</i>	Narrow-striped Dwarf Siren		
2	<i>P. striatus belli</i>	Everglades Dwarf Siren		
3	<i>Siren intermedia intermedia</i>	Eastern Lesser Siren		
4	<i>S. lacertina</i>	Greater Siren		
5	<i>Amphiuma means</i>	Two-toed Amphiuma		
6	<i>Notophthalmas perstriatus</i>	Striped Newt		
7	<i>N. viridescens louisianensis</i>	Central Newt		
8	<i>Eurycea quadridigitata</i>	Dwarf Salamander		
9	<i>Scaphiopus holbrooki</i>	Eastern Spadefoot		
10	<i>Bufo quercicus</i>	Oak toad		
11	<i>B. terrestris</i>	Southern Toad		
12	<i>Acris gryllus dorsalis</i>	Florida Cricket Frog		
13	<i>Hyla cinerea</i>	Green Treefrog		
14	<i>H. femoralis</i>	Pinewoods Treefrog		
15	<i>H. gratiosa</i>	Barking Treefrog		
16	<i>H. septentrionalis</i>	Cuban Treefrog		
17	<i>H. squirella</i>	Squirrel Treefrog		
18	<i>Limaedus ocularis</i>	Little Grass Frog		
19	<i>Pseudacris nigrata verrucosa</i>	Florida Chorus Frog		
20	<i>Gastrophryne carolinensis carolinensis</i>	Eastern Narrow-mouthed Toad		
21	<i>Rana areolata aesopus</i>	Florida Gopher Frog		SSC
22	<i>R. catesbeiana</i>	Bullfrog		
	<i>R. clamitans</i>	Green Frog		
23	<i>R. grylio</i>	Pig Frog		
24	<i>R. sphenoccephala</i>	Southern Leopard Frog		

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MAMMALS

KEY: From 2009 FWC Listing- (E)Endangered, (T)Threatened, (SSC)Species of Special Concern

	Species		Status	
	Genus Species	Common	Fed	State
1	<i>Didelphis marsupialis</i>	Opossum		
2	<i>Blarina carolinensis</i>	Short-tailed Shrew		
3	<i>B. carolinensis shermani</i>	Sherman's Short-tailed Shrew		SSC
4	<i>Cryptotis parva</i>	Least Shrew		
5	<i>Scalopus aquaticus</i>	Eastern Mole		
6	<i>Eptesicus fuscus fuscus</i>	Big Brown Bat		
7	<i>Lasiurus cinereus</i>	Hoary Bat		
8	<i>L. intermedius floridanus</i>	Northern Yellow Bat		
9	<i>L. seminolus</i>	Seminole Bat		
10	<i>Myotis austroriparius</i>	Southeastern Brown Bat		
11	<i>Nycticeius humeralis</i>	Evening Bat		
12	<i>Pipistrellus subflavus</i>	Eastern Pipisterl		
13	<i>Plecotus rafinesquei</i>	Eastern Big-eared Bat		
14	<i>Eumops glaucinus floridanus</i>	Florida Mastiff Bat		E
15	<i>Tadarida brasiliensis cynocephala</i>	Brazilian Free-tailed Bat		
16	<i>Ursus americanus floridanus</i>	Florida Black Bear		T
17	<i>Procyon lotor</i>	Raccoon		
18	<i>Lutra canadensis</i>	River Otter		
19	<i>Mephitis mephitis</i>	Striped Skunk		
20	<i>Mustela frenata</i>	Long-tailed Weasel		
21	<i>M. frenata peninsulæ</i>	Florida Weasel		
22	<i>M. vison mink</i>	Southern Florida Mink		
23	<i>Spilogale putorius</i>	Spotted Skunk		
24	<i>Canis latrans</i>	Coyote		
25	<i>Urocyon cinereoargenteus</i>	Gray Fox		
26	<i>Vulpes fulva</i>	Red Fox		
27	<i>Felis concolor caryl</i>	Florida Panther	E	E
28	<i>Lynx rufus</i>	Bobcat		
29	<i>Glaucomys volans</i>	Southern Flying Squirrel		
30	<i>Sciurus carolinensis</i>	Eastern Gray Squirrel		
31	<i>S. niger avicennia</i>	Big Cypress Fox Squirrel		T
32	<i>S. niger shermani</i>	Sherman's Fox Squirrel		SSC
33	<i>Geomys pinetis</i>	Southeastren Pocket Gopher		
34	<i>Podomys floridanus</i>	Florida Mouse		SSC
35	<i>Reithrodontomys humulis</i>	Eastern Harvest Mouse		
36	<i>Peromyscus gossypinus</i>	Cotton Mouse		
37	<i>P. polionotus</i>	Oldfield Mouse		
38	<i>Neotoma floridana</i>	Eastern Woodrat		
39	<i>Oryzomys palustris</i>	Rice Rat		
40	<i>Sigmodon hisipus</i>	Hispid Cotton Rat		
41	<i>Neofiber alleni</i>	Florida Water Rat		

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42	<i>Sylvilagus floridanus</i>	Eastern Cottontail		
43	<i>S. palustris</i>	Marsh Rabbit		
44	<i>Sus scrofa</i>	Feral Hog		
45	<i>Odocoileus virginianus</i>	Whitetail Deer		
46	<i>Dasyus novemcinctus</i>	Armadillo		

Appendix F. Lake Marion Creek Wildlife Management Area Hunting Regulations



Lake Marion Creek

Wildlife Management Area

Regulations Summary and Area Map
July 1, 2009 - June 30, 2010



A cooperative public wildlife and recreational area

South Florida Water
Management District



This brochure is designed to provide the public with information and a summary of regulations pertaining to hunting and other recreational use on the Lake Marion Creek Wildlife Management Area. **Regulations that are new or differ substantially from last year are shown in bold print.** Area users should familiarize themselves with all regulations. For exact wording of the wildlife laws and regulations, see the Florida Fish and Wildlife Conservation Commission's wildlife code, on file with the Secretary of State and state libraries. This brochure, the Florida Hunting Regulations handbook, and quota permit worksheets should provide the information necessary for you to plan your hunting activities. These publications are available from any Commission office, county tax collector and at MyFWC.com.

Persons using wildlife management areas are required to have appropriate licenses, permits and stamps. The following persons are exempt from all license and permit requirements (except for quota permits when listed as "no exemptions", recreational use permits, antlerless deer permits and the Migratory Bird Hunting and Conservation Stamp [federal duck stamp]): Florida residents who are 65 years of age or older; residents who possess a Florida Resident Disabled Person Hunting and Fishing Certificate; residents in the U.S. Armed Forces, not stationed in Florida, while home on leave for 30 days or less, upon submission of orders; and children under 16 years of age. Children under 16 years of age are exempt from the federal duck stamp. Anyone born on or after June 1, 1975 and 16 years of age or older must have passed a Commission-approved hunter-safety course prior to being issued a hunting license, except the Hunter Safety Mentoring exemption allows anyone to purchase a hunting license and hunt under the supervision of a licensed hunter, 21 years of age or older, for one year.

Hunting, trapping and fishing licenses, and management area, archery, muzzleloading gun, wild turkey and state waterfowl permits may be purchased from county tax collectors, license agents, at MyFWC.com/license or by telephone at 1-888-486-8356. A no-cost Migratory Bird Permit is available when purchasing a hunting license. Any waterfowl hunter 16 years of age or older must possess a federal duck stamp; available where hunting licenses are sold, at most post offices or at duckstamp.com. Americans with Disabilities Act accessibility information is available at MyFWC.com/ADA.

QUOTA PERMIT INFORMATION:

Archery - 35, no-cost, quota permits (no exemptions) for each of 2 hunts.
Muzzleloading Gun - 35, no-cost, quota permits (no exemptions).
General Gun - 35, no-cost, quota permits (no exemptions) for each of 2 hunts.
General Gun Hog - 50, no-cost, quota permits (no exemptions) for each of 2 hunts.
Spring Turkey - 15, no-cost, quota permits (no exemptions) for each of 3 hunts.

Permit applications: Hunters must submit electronic applications for quota and special-opportunity permits through the Commission's Total Licensing System (TLS) at a license agent, county tax collector's office or MyFWC.com. Worksheets listing hunts, application periods, deadlines and instructions are available at county tax collector's offices, FWC offices or MyFWC.com. The first quota application period begins June 1 and worksheets will be available about two weeks prior.

Additional hunters: A quota permit holder (host) may bring only one additional hunter. This additional hunter must be a youth under 16 years of age, a youth supervisor (if quota permit holder is a youth), a mentor license holder, mentor license supervisor (if applicable) or guest permit holder. The additional hunter does not receive a separate bag limit. The host must share a bag limit with the guest and the host is responsible for violations that exceed the bag limit. The guest and host must enter and exit the area together and must share a street-legal vehicle while hunting on the area. The guest may only hunt while the host is on the area.

Guest permits: One guest permit may be issued for each archery, muzzleloading gun, general gun, wild hog, spring turkey and mobility impaired quota permit issued through the Commission's TLS. A guest permit is not issued to a youth under 16, a youth supervisor, a mentor license holder or a mentor license supervisor. A person is only eligible for one guest permit per hunt. Guest permits may only be obtained from license agents or county tax collector's offices. Guest permits may be obtained up to and during the last day of the hunt. Refer to the quota hunt worksheets for additional information.

Youth and mentor license holders: A youth hunter (less than 16 years of age) must be supervised by a person at least 18 years of age. A mentor license holder must be supervised by a licensed hunter at least 21 years of age. Unless exempt, only those supervisors with proper licenses and permits may hunt. If the supervisor is hunting during any hunt (not including special-opportunity) for which quota permits are issued, at least one person in the party must be in possession of a quota permit. During a hunt that allows exemptions, a non-exempt supervisor of a youth must have a quota permit to hunt. A non-hunting supervisor is allowed to accompany a youth or mentor license holder during any hunt (including special-opportunity).

Transfer of permits: Quota and guest permits are not transferable. Except for youth under 16 years of age, a positive form of identification is required when using a non-transferable permit. The sale or purchase of any quota permit, guest permit or antlerless deer permit is prohibited.

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GENERAL AREA REGULATIONS:

All general laws and regulations relating to wild animal life or freshwater aquatic life shall apply unless specifically exempted for this area. Hunting or the taking of wildlife or fish on this area shall be allowed only during the open seasons and in accordance with the following regulations:

1. Any person hunting deer or accompanying another person hunting deer shall wear at least 500 square inches of daylight fluorescent-orange material as an outer garment, above the waistline. This is not required during an archery-only season.
2. Taking of spotted fawn, swimming deer or roasted turkey is prohibited. Species legal to take are listed under each season.
3. It is illegal to hunt over bait or place any bait or other food for wildlife on this area.
4. Driving a metal object into any tree, or hunting from a tree into which a metal object has been driven, is prohibited.
5. No person shall cut, damage or remove any natural, man-made or cultural resource without written authorization of the landowner or primary land manager.
6. Taking or attempting to take any game with the aid of live decoys, recorded game calls or sounds, set guns, artificial light, net, trap, snare, drug or poison is prohibited.
7. The wanton and willful waste of wildlife is prohibited.
8. Hunting, fishing or trapping is prohibited on any portion of the area posted as "CLOSED" to those activities.
9. People, dogs, vehicles and other recreational equipment are prohibited in areas posted as "Closed to Public Access" by FWC administrative action.
10. Taking or herding wildlife from any motorized vehicle, aircraft or boat which is under power is prohibited, until power and movement from that power, has ceased.
11. Most game may be hunted from one-half hour before sunrise until one-half hour after sunset (see exceptions for each season).
12. The release of any animal is prohibited, without written authorization of the landowner or primary land manager.
13. The head and evidence of sex may not be removed from the carcass of any deer or turkey on the area.
14. The planting or introduction of any non-native plant is prohibited, without written authorization of the landowner or primary land manager.
15. Wild hog may not be transported alive.
16. It is unlawful for any person to leave any garbage or refuse or in any way litter in the area.
17. It is unlawful to set fire to any forest, grass or woodlands.
18. A Fish and Wildlife Conservation Commission Law Enforcement Officer may search any camp, vehicle or boat, in accordance with law.

PUBLIC ACCESS AND VEHICLES:

1. Open to public access year-round.
2. All persons shall enter and exit the area at a designated entrance.
3. Motor vehicle access is restricted to individuals participating in the hunts. Vehicle access is not allowed during small game season.
4. Vehicles may be operated only on named or numbered roads.
5. Vehicles must be parked in designated parking areas or within 25 feet of a named or numbered road.
6. Parked vehicles may not obstruct a road, gate or firelane.
7. No motor vehicle shall be operated on any part of any wildlife management area that has been designated as closed to vehicular traffic.
8. The use of tracked vehicles, all-terrain vehicles, airboats, horses or **unlicensed and unregistered** motorcycles is prohibited.

HUNTERS AND CHECK STATIONS:

1. Hunting equipment and dogs may be taken onto the WMA after 8 a.m. the day before the opening of a season and shall be removed by 6 p.m. one day after the end of the season. Vehicle access is not allowed the day following the close of the season.
2. Hunters shall enter and exit the area at a designated entrance.
3. Hunters shall check in and out at the check station when entering and exiting the area, and check all game taken, except during the small game season.
4. No deer or turkey shall be dismembered until checked at the check station.
5. Check station hours are 5 a.m. to 9 p.m. during Eastern Daylight Savings Time and 5 a.m. to 8 p.m. during Eastern Standard Time except during the spring turkey season when hours are 4:30 a.m. to 2 p.m.

GUNS:

1. All firearms shall be securely encased and in a vehicle, vessel, camper or tent, during periods when they are not a legal method of take. Persons in possession of a valid concealed Weapon or Firearm License may carry concealed handguns.
2. Target practice is prohibited.
3. Hunting with a gun and light is prohibited.
4. Muzzleloading guns used for taking deer must be .40 caliber or larger, if firing a single bullet, or be 20 gauge or larger if firing two or more balls.
5. Children under the age of 16 may not be in possession of a firearm unless in the presence of a supervising adult.
6. No person shall have a gun under control while under the influence of alcohol or drugs.
7. For hunting non-migratory game, only shotguns, rifles, pistols, longbows (including compound and recurve bows), crossbows (during the general gun, small game and spring turkey seasons or by permit) or falconry may be used.
8. For hunting migratory game, only shotguns, bow and arrow (not crossbows), and falconry may be used. Shotguns shall not be larger than 10 gauge and shall be incapable of holding more than three shells in the magazine and chamber combined.
9. Firearms using rimfire or non-expanding, full metal jacket (military ball) ammunition are prohibited for taking deer.
10. Fully automatic or silencer-equipped firearms, centerfire semi-automatic rifles having a magazine capable of holding more than five rounds, explosive or drug-injecting devices and setguns are prohibited.

DOGS:

1. Hunting deer with dogs is prohibited.
2. Hunting with dogs is prohibited, except bird dogs or retrievers are allowed, and dogs with a shoulder height of 15 inches or less are allowed during the small game season.
3. No person shall allow any dog to pursue or molest any wildlife during any period in which the taking of wildlife by the use of dogs is prohibited.
4. Dogs on leashes may be used for trailing wounded game.
5. For purposes other than hunting, dogs are allowed, but must be kept under physical restraint at all times.

CAMPING:

1. Prohibited during hunting seasons.
2. Allowed during non-hunting periods by persons possessing a special-use license issued by the South Florida Water Management District, 800-250-4250.

BAG AND POSSESSION LIMITS: During quota hunts, host hunters and guests must share all bag and possession limits.

1. Deer -
 - A. Archery season - One antlered and 1 antlerless deer per quota permit.
 - B. Muzzleloading gun and general gun seasons - One antlered deer per quota permit.
2. Wild hog - No size or bag limit.
3. Turkey -
 - A. Archery season - Daily limit 1, season limit 2, possession limit 2.
 - B. Spring turkey season - One per quota permit, season limit 2.
4. Gray squirrel, quail and rabbit - Daily limit 12, possession limit 24 for each game species.
5. Raccoon, opossum, armadillo, beaver, coyote, skunk and nutria - No bag limits.
6. Bobcat and otter - Possession limit 1 unless in possession of a Trapping License.
7. Migratory birds - See Migratory Bird Hunting Regulations pamphlet.

ARCHERY SEASON:

September 26-28 and October 2-4.

Permit, Stamp and License Requirements - Quota permit, hunting license, management area permit, archery permit, wild turkey permit (if hunting wild turkey), migratory bird permit (if hunting migratory birds), and state waterfowl permit and federal duck stamp (if hunting waterfowl).

Legal to Take - Deer with at least one antler having 3 or more points (each point 1-inch or more in length), antlerless deer (which includes does and bucks with antlers less than 5 inches in length, but not spotted fawn), wild hog, turkey of either sex, gray squirrel, quail, rabbit, raccoon, opossum, armadillo, beaver, coyote, skunk, nutria and migratory birds in season.

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Regulations Unique to Archery Season - In addition to these regulations, all General Area Regulations shall apply.

1. Hunting with bird dogs or retrievers is allowed.
2. Hunting with firearms or crossbows is prohibited, except that centerfire shotguns are allowed for hunting migratory birds when one or more species are legal to take (see Migratory Bird section and the current Migratory Bird Hunting Regulations pamphlet).

MUZZLELOADING GUN SEASON:

October 31 through November 2.

Permit, Stamp and License Requirements - Quota permit, hunting license, management area permit, muzzleloading gun permit and migratory bird permit (if hunting migratory birds).

Legal to Take - Deer with at least one antler having 3 or more points (each point 1-inch or more in length), wild hog, gray squirrel, quail, rabbit, raccoon, opossum, armadillo, beaver, coyote, skunk, nutria and migratory birds in season.

Regulations Unique to Muzzleloading Gun Season - In addition to these regulations, all General Area Regulations shall apply.

1. Hunting with bird dogs or retrievers is allowed.
2. Only muzzleloading guns are allowed for hunting, except that centerfire shotguns are allowed for hunting migratory birds when one or more species are legal to take (see Migratory Bird section and the current Migratory Bird Hunting Regulations pamphlet).

GENERAL GUN SEASON:

November 14-16 and 20-22.

Permit, Stamp and License Requirements - Quota permit, hunting license, management area permit, migratory bird permit (if hunting migratory birds), and state waterfowl permit and federal duck stamp (if hunting waterfowl).

Legal to Take - Deer with at least one antler having 3 or more points (each point 1-inch or more in length), wild hog, gray squirrel, quail, rabbit, raccoon, opossum, armadillo, beaver, coyote, skunk, nutria and migratory birds in season.

Regulations Unique to General Gun Season - In addition to these regulations, all General Area Regulations shall apply. Hunting with bird dogs or retrievers is allowed.

GENERAL GUN HOG SEASON:

December 11-13 and 25-27.

Permit, Stamp and License Requirements - Quota permit, hunting license and management area permit.

Legal to Take - Wild hog.

Regulations Unique to General Gun Hog Season - In addition to these regulations, all General Area Regulations shall apply. Hunting with dogs is prohibited.

SMALL GAME SEASON:

January 1-3 and 8-10.

Permit, Stamp and License Requirements - Hunting license, management area permit, migratory bird permit (if hunting migratory birds), and state waterfowl permit and federal duck stamp (if hunting waterfowl).

Legal to Take - Wild hog, gray squirrel, quail, rabbit, raccoon, opossum, armadillo, beaver, coyote, skunk, nutria, bobcat, otter and migratory birds in season.

Regulations Unique to Small Game Season - In addition to these regulations, all General Area Regulations shall apply.

1. Hunting with bird dogs, retrievers or dogs with a shoulder height of 15 inches or less is allowed.
2. Hunting with centerfire rifles is prohibited.

TRAPPING: Prohibited.

SPRING TURKEY SEASON:

March 20-22, April 2-4 and 16-18.

Permit, Stamp and License Requirements - Quota permit, hunting license, management area permit and wild turkey permit.

Legal to Take - Bearded turkey or gobbler.

Regulations Unique to Spring Turkey Season - In addition to these regulations, all General Area Regulations shall apply.

1. Legal shooting hours are one-half hour before sunrise until 1 p.m.
2. Hunting other animals is prohibited.

MIGRATORY BIRD SEASONS:

Rails, common moorhen, mourning dove, white-winged dove, snipe, duck, geese, coot, woodcock and crows may be hunted during seasons established by the Commission for these species that coincide with the archery, muzzleloading gun, general gun or small game seasons.

Permit, Stamp and License Requirements - Quota permit (if hunting during any quota period), hunting license, management area permit, migratory bird permit, and state waterfowl permit and federal duck stamp (if hunting waterfowl).

Legal to Take - See Migratory Bird Hunting Regulations pamphlet.

Regulations Unique to Migratory Bird Seasons - In addition to these regulations, all General Area Regulations shall apply.

1. Hunting duck, geese and coot with lead shot is prohibited.
2. Centerfire shotguns are allowed for hunting during established area seasons when one or more migratory birds are legal to take.

FISHING:

Allowed year-round.

Permit, Stamp and License Requirements - Fishing license.

Legal to Take - See Florida Freshwater Fishing Regulations Summary.

Regulations Unique to Fishing - All General Area Regulations and General Freshwater Fishing Regulations shall apply. Frogging is prohibited.

GENERAL INFORMATION:

If you have any questions about this material, please call the Fish and Wildlife Conservation Commission at 863-648-3200 (TDD 800-955-8771).

COOPERATION REQUESTED:

If you see law violators or suspicious activities, contact your nearest Commission regional office or call 1-888-404-FWCC. You may qualify for a cash reward from the Wildlife Alert Reward Association.

The U.S. Department of the Interior prohibits discrimination on the basis of race, color, national origin, age, sex or handicap. If you believe that you have been discriminated against in any program, activity or facility as described above, or if you desire further information, please write to: The Office for Human Resources, U.S. Fish and Wildlife Service, Department of the Interior, Washington, D.C. 20240. The project described in this publication is part of a program funded by federal dollars under the Wildlife Restoration Act. Federal funds pay 20 percent of the cost of the program.

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8,083 acres
 Polk and Osceola Counties

