



**South Florida Water Management District
Land Stewardship Division
Save Our Rivers Program**

**Lake Marion Creek & Reedy Creek
Management Areas
Five-Year
General Management Plan
(2005 – 2010)**

April 2005

Lake Marion Creek & Reedy Creek Management Areas Five-Year General Management Plan (2005 – 2010)

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Land Stewardship Division
South Florida Water Management District
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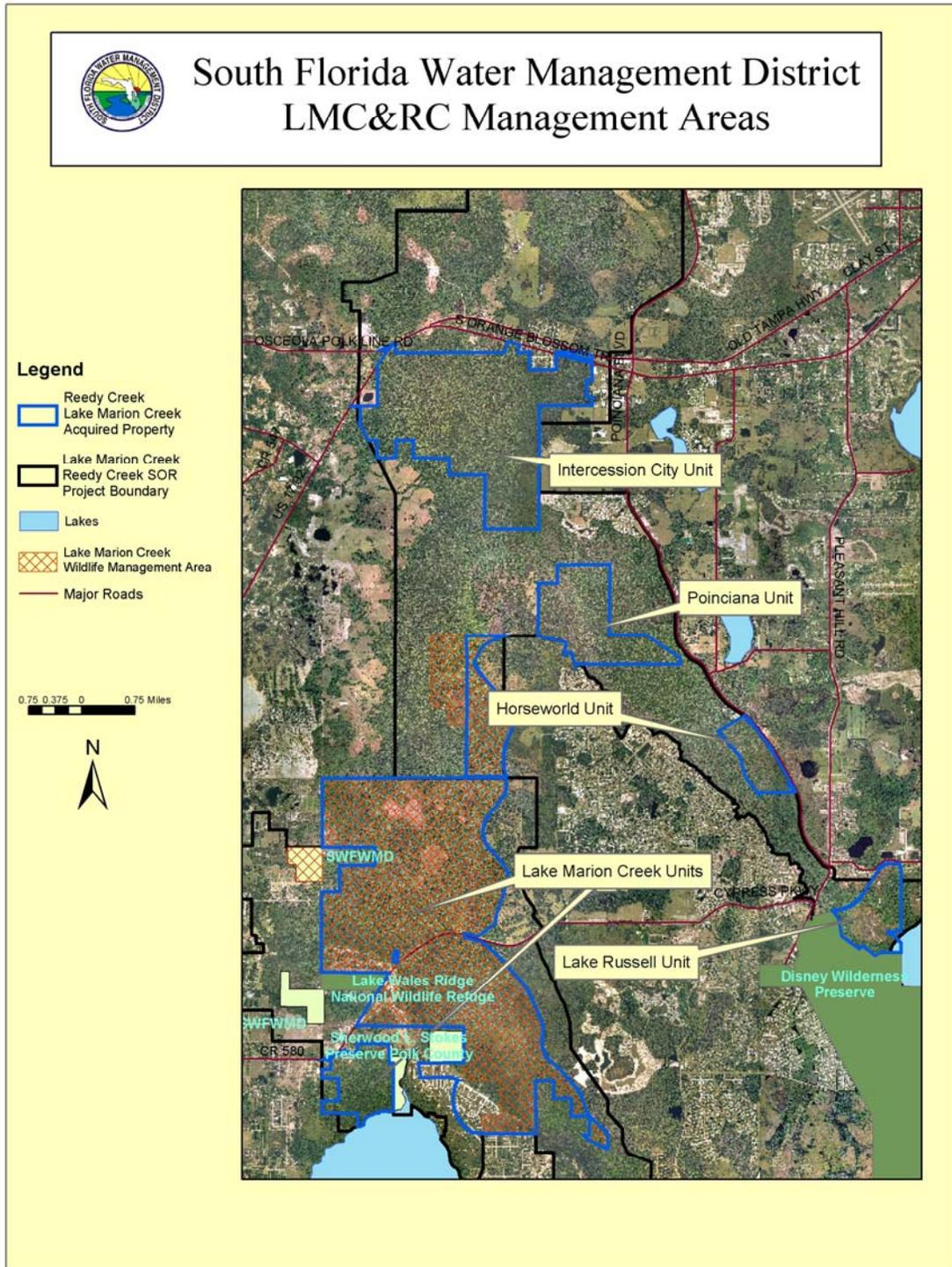
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Map 1: Lake Marion Creek & Reedy Creek Management Area



1. Executive Summary

This document compiles important management information concerning the Lake Marion Creek/Reedy Creek Management Area (Management Area) and was written to comply with District policy 140-21 that requires development of general management plans for each designated Save Our Rivers (SOR) project. This plan lists management goals and objectives, provides historic and current site information, and describes specific management issues and activities relating to natural resources, public use, and project administration for the period 2005 through 2010.

The Lake Marion Creek/Reedy Creek Management Area includes ecologically sensitive wetland and upland areas that harbor a diverse array of plant and animal species including many listed as threatened or endangered. The Management Area is characterized by a rich diversity of habitat types including hardwood swamps, pine flatwoods, cypress swamps, oak hammocks, marshes, ponds, and scrub. Wetlands comprise approximately fifty percent of the Management Area, and most are within the 100-year flood plain. Consequently, the area is of critical importance to the recharge of the Floridian Aquifer because the deep sands of the Lake Wales Ridge allow water to infiltrate into the ground, rather than run off.

The South Florida Water Management District (District) has taken a lead role in the acquisition and management of the Management Area, while seeking assistance from other governmental agencies and non-governmental groups. The District began purchasing lands within the Management Area in 1994 through the SOR program. The majority of land was acquired from July 1994 to May 1997. The Management Area comprises approximately 12,651 acres located in eastern Polk and western Osceola counties.

The management guidelines listed in this plan adhere to founding SOR legislation and District Land Stewardship Program (LSP) policy 140-23 that directs management to conserve and protect water resources, protect or restore the natural state and condition of natural and historic resources, and provide compatible public uses. The South Florida Water Management District (District) cooperatively manages the Management Area with the Florida Fish and Wildlife Conservation Commission (FWC).

Natural resource management on the Management Area includes the maintenance of natural vegetative communities; wildlife management; and the protection of rare, threatened, and endangered species. Prescribed fire, vegetation management, and forest management are used to preserve, protect or enhance natural resources. Current natural resource management activities are focused on exotic plant control, prescribed burning, vegetation management, and environmental restoration on recently purchased mitigation scrub sites. Monitoring endangered, threatened, and other listed species are also priorities, as is the designation of lands within the project area for adding to the existing Type I Wildlife Management Area.

Cultural resource protection and management is an important goal of District stewardship on the Management Area. The Land Stewardship Program has assisted the Florida Department of State, Division of Historical Resources (FDHR) to complete investigations of the Management Area historical sites as required by Chapter 276, Florida Statutes. The

Management Area contains several important Native American habitual sites that are documented in state records and protected through management activities.

Resource protection is accomplished through regular Florida Fish & Wildlife Conservation Commission (FWC) law enforcement patrols, controlled public access, and maintenance of perimeter fencing. Boundary posting and public information signage is used to encourage proper public use.

Historically, outdoor recreational activities such as hiking, boating, hunting, horseback riding, and fishing were common in the area and will continue under the District's management program, commensurate with the environmental sensitivity of the area. As the lead management agency, the District will attempt to create formal and informal cooperative agreements for the management of these natural resource and recreational programs with those agencies and groups who possess an interest and expertise in the area. The District publishes and distributes a *Public Use Guide* for property users that defines rules and regulations, location of facilities, and recreational opportunities.

2. Management Plan Purpose

Florida Statutes 373.59 and 259.101 and District Policy 140-25(6)(b) require General Management Plans be developed for each designated SOR project. The plan fulfills the requirements of the Save Our Rivers legislation and South Florida Water Management District policy.

This general management plan (GMP) is based on present conditions and best management practices suitable for the LSP-managed properties within the Lake Marion Creek/Reedy Creek Management Area and the Upper Reedy Creek Management Area from March 2005 through March 2010. Specifically, this GMP will include the Lake Marion Creek WMA, and the four management units in the Upper Reedy Creek Management Area; Intercession City Unit, Poinciana Unit, Lake Russell Unit, and Reedy Creek Unit (Horseworld). Throughout this GMP the area will be referred to as the Lake Marion Creek/Reedy Creek Management Area (Management Area).

This GMP describes a level of management for the Management Area which the District will strive to achieve. The plan consolidates current site information and general guidelines for management of the area. It also updates and replaces the Lake Marion Creek/Reedy Creek Management Area Five-Year Conceptual Land Management Plan 1999 - 2003 (SFWMD 1999). As such, it serves as a collective information source for management staff, partners, and the general public.

Administrative management of Management Area is primarily coordinated out of the District's Orlando Service Center with assistance from staff in West Palm Beach and other regional offices. Administrative functions consist of funding, planning, reporting, and coordinating with external agencies. As part of these duties, this GMP will be updated and revised every five years and will be implemented through activity plans, annual work plans, and budgets.

District policy 140-23 states that the The Land Stewardship Program mission is to provide natural resource protection and management while allowing compatible multiple uses on designated public lands. This mission statement together with requirements set forth in Florida Statutes 373.139 and 373.1391 provide three primary goals for LSP:

- Conserve and protect water resources
- Protect and restore the land in its natural state and condition
- Provide compatible public use opportunities

To accomplish these goals, the LSP performs five major functions:

- Protect and restore the land to its natural state and condition by controlling nuisance and exotic vegetation and the use of prescribed fire
- Protect listed plant and animal species
- Provide multiple-use opportunities, including grazing and forest management, as compatible with SOR program goals

- Provide opportunities for resource-compatible public use and environmental education
- Ensure compliance with established resource protection rules

2.1 Lake Marion and Reedy Creek Management Area Goals and Objectives

LSP functions are incorporated in specific MANAGEMENT AREA goals and objectives for the period of this management plan:

Goal 1: Manage natural communities and modified habitats to protect and enhance flora and fauna 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.
- Work with the FWC to manage and enhance area wildlife.
- Continue and enhance the monitoring and evaluation of restoration activities on area vegetation and wildlife. Monitor all bald-eagle nests in Management Area annually.
- Provide resource protection through partnership with the FWC. 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 direct public 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.
- Provide environmentally compatible opportunities for private concessions within the Management Area.

3. Introduction and Site History

In 1981, the Florida Legislature established the Save Our Rivers (SOR) 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.

The District manages over 300,000 acres through the Land Stewardship Program. As steward of District natural areas, the LSP provides natural resource protection and management while allowing compatible recreational use. Management and use of land acquired by the District under SOR and Preservation 2000 must satisfy several requirements in Florida Statutes. The most significant of these is set forth in Section 373.59(4) (a) stating that money from the Water Management Lands Trust Fund should be used to acquire lands for water management, water supply, and the conservation and protection of water resources. Once lands are acquired, they are to be managed and maintained in an environmentally acceptable manner and in such a way as to restore and protect their natural state and condition. Districts may make certain capital improvements such as fencing, signs, fire lanes, access roads and trails, and provide minimum public accommodations such as primitive campsites, garbage receptacles, and toilets. In addition, habitat management such as control of exotic species, controlled burning, habitat inventory and restoration, and law enforcement may be conducted. All lands acquired under these provisions are to be used for general recreational purposes, unless such activities are incompatible with the purposes for which the land was acquired. The District is also encouraged to use volunteers and enter agreements with other governmental agencies to provide cost-effective land management.

The South Florida Water Management District's Land Stewardship Program is the primary management entity for Save Our Rivers natural areas in south Florida. The key emphasis in the Land Stewardship Save Our Rivers program revolves around water management, water supply, and the conservation and protection of water resources. Major considerations in the land acquisition process also include manageability of the area, surface and ground water system health, and corridor formation for the critical interaction of wildlife populations.

The District began purchasing lands within the Lake Marion Creek Project Area and Upper Reedy Creek Project Area in 1994 through the SOR program. The majority of land was acquired from July 1994 to May 1997. The Management Area comprises approximately 7,607 acres located in eastern Polk and western Osceola counties.

The Management Area is located in eastern Polk and western Osceola Counties, and includes portions of Snell Creek, Horse Creek, Reedy Creek, and Lake Marion Creek basins. The project includes approximately 2,595 acres within the Southwest Florida Water Management District. Within this area is the 1,324-acre Horse Creek Scrub project, designated for acquisition under the Conservation and Recreation Lands program administered by the Florida Department of Environmental Protection.

The lands within the Management Area include valuable water resources and a diversity of habitats. These habitats support numerous species of fish and wildlife, and are home to several rare and endangered animals and plant species endemic to Florida (South Florida Water Management District 1992; Bridges and Reese 1996).

The LSP developed a burn program to reintroduce regular fire to the property including those portions where fire may have been suppressed. The District has initiated programs for exotic plant control, forest management, vegetation management, upland restoration, and a public use program.

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.

Vegetation and vertebrate species are inventoried and natural communities are mapped by District staff or contracted specialists. Plant and wildlife lists are generated for each Management Area. Rare species lists are made available to land managers for planning purposes, however, information on specific rare species locations are restricted from the general public for the purpose of species protection. Archaeological and historic sites considered significant are subject to inventories by contracted archeologists. Inventory data is on file within the Planning Section of the LSP and non-sensitive data is available for review on the District's computer network server. LSP shares natural areas and species data with the Florida Natural Areas Inventory (FNAI) through a Memorandum of Understanding (MOU).

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 NGVD. 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 area of Lake Marion Creek WMA 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

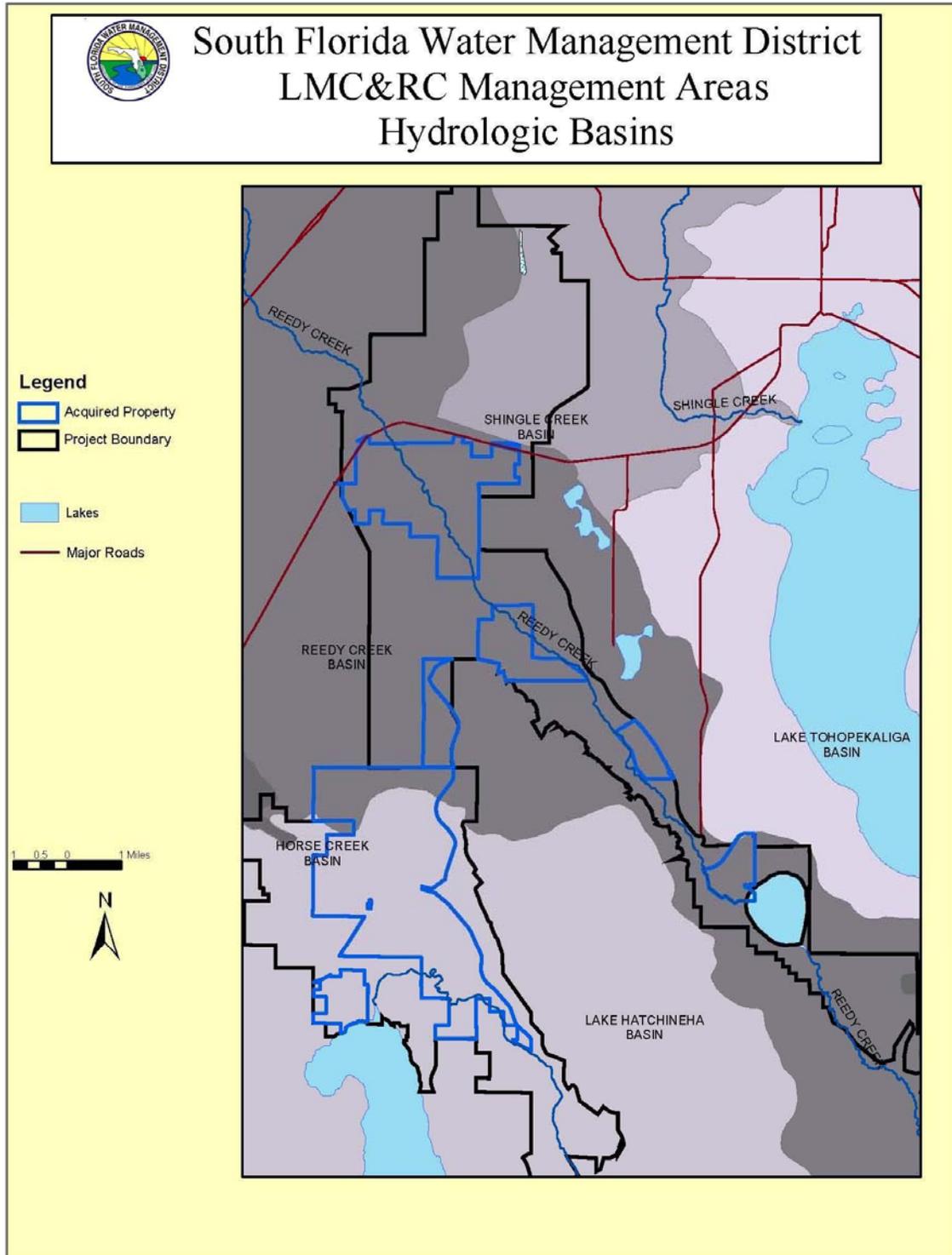
0.5 miles downstream of the Lake Marion Creek Road Bridge. Its water quality is similar to Lake Marion Creek (Polk County 1989). Horse Creek forms in the Lake Wales Ridge approximately 10 miles northwest of Lake Marion. It flows into the Huckleberry Islands Swamp, east of Davenport and then discharges 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 2: Hydrologic Basins of the Lake Marion Creek/Reedy Creek Management Area



4.2 Soils

Soil morphology within the Management Area is primarily a function of topographic variation (relative to hydrology) and vegetation. This relationship between relative topography, hydrology, and soil morphology allows categorization of soils into different positions within the landscape (SFWMD & USDA 1999) (Map 3).

Soils within the Management Area fall into seven distinct categories defined by the Natural Soil Landscape Positions (NSLP) system:

- Flats Soils
- Flatwood Soils
- Knolls
- Central Ridge and Dunes
- Muck Depression Soils
- Sand Depression Soils
- Water

The NSLP contains 909 map units from 16 counties within the SFWMD. This system was developed cooperatively between the District and the Natural Resources Conservation Service. The NSLP grouped South Florida soils into 12 categories based on hydrology, soil morphology, topography, and vegetation. Soil classification descriptions, vegetation associations, soils classification map and data files of NSLP can be accessed on the Internet at: http://www.sfwmd.gov/org/pld/proj/wetcons/nslp/nslp_data.htm.

Detailed soil maps for Osceola and Polk Counties (which contain the Management Area) divide the NSLP soil classifications further into specific categories (USDA 1990; USDA no date). These soil survey books and maps are on file at the District's Orlando Service Center.

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 greenmanii*), 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.

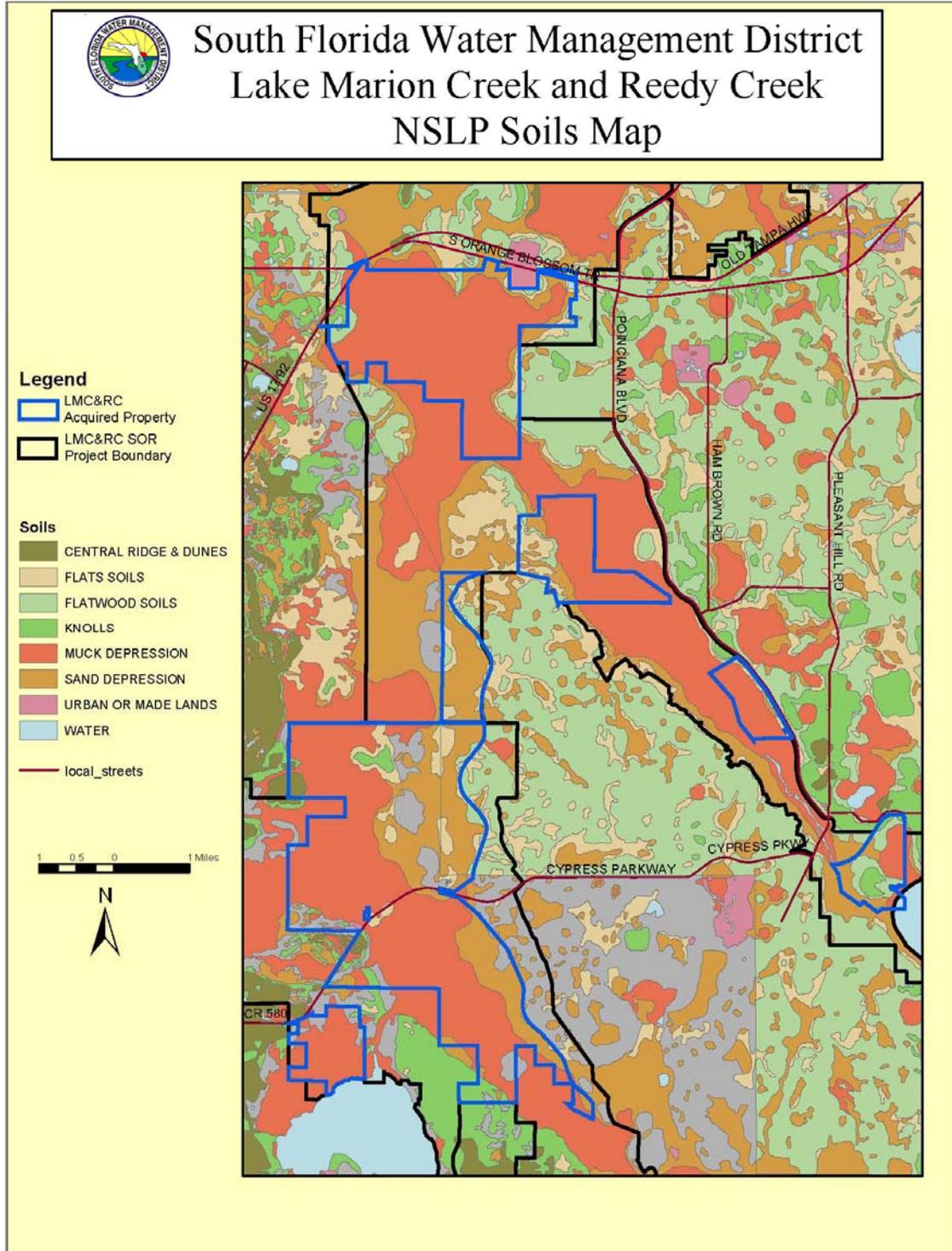
Natural communities often found in this landscape are the freshwater marsh and ponds. Vegetation varies widely within marshes, and may be composed of: flag, sawgrass, arrowhead, and other non-grass herbs marsh, cattail, spike-rush, bulrush, and maidencane marsh.

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.

Map 3: Natural Soils Landscape Positions of the Lake Marion Creek/Reedy Creek



4.3 Natural Communities

The Lake Marion Creek/Reedy Creek Management Area is characterized by a rich diversity of plant species and habitat types including hardwood swamps, pine flatwoods, cypress swamps, oak hammocks, marshes and ponds, and scrub. Large areas within the Lake Marion Creek/Reedy Creek Management Area have been designated as Strategic Habitat Conservation Areas (Cox *et al.* 1994). Strategic Habitat Conservation Areas represent areas important to flora, fauna and natural communities based on known occurrence information and recent land use/land cover maps.

Fifteen natural community types, as classified by the Florida Natural Areas Inventory (FNAI), are present in the MANAGEMENT AREA management units. 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 Maps 4 - 9. A summary of natural community types found in the KCOL 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. Plant inventories have not been completed for Torelli South Unit.

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				

The total acres and a brief description of each natural community type within the MANAGEMENT AREA is described below:

Basin Wetlands

Basin Marsh (115 acres)

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 (FNAI 1990). 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 (5,437 acres)

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 (FNAI 1990). Dominant trees include cypress (*Taxodium sp.*), Swamp black gum (*Nyssa sylvatica var. biflora*), and Florida slash pine (*Pinus elliotii 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 (53 acres)

Depression marsh is characterized as a shallow, usually rounded depression in sand substrate with herbaceous vegetation often in concentric bands (FNAI 1990). 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 (120 acres)

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 (144 acres)

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 (595 acres)

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 and slash pine-gallberry-saw palmetto.

Scrubby Flatwoods (92 acres)

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 (FNAI 1990). 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—a species of special concern) and the Florida scrub jay (*Aphelocoma coerulescens*)—a threatened species (FWC 1997).

Prairie Hammock (58 acres)

Prairie hammock is characterized as a clump of tall cabbage palms and live oaks in the midst of prairie or marsh communities (FNAI 1990). 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 (2,206 acres)

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 (896 acres)

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 (FNAI 1990). Native ground cover species are frequently displaced by non-native Bahia.

Wet Prairie (5 acres)

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 (FNAI 1990).

Xeric Uplands

Scrub (235 acres)

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 (FNAI 1990). 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 (FNAI 1990).

Xeric Hammock (18 acres)

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. (FNAI 1990)

Seepage Wetlands

Seepage Slope (163 acres)

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 (179 acres)

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.

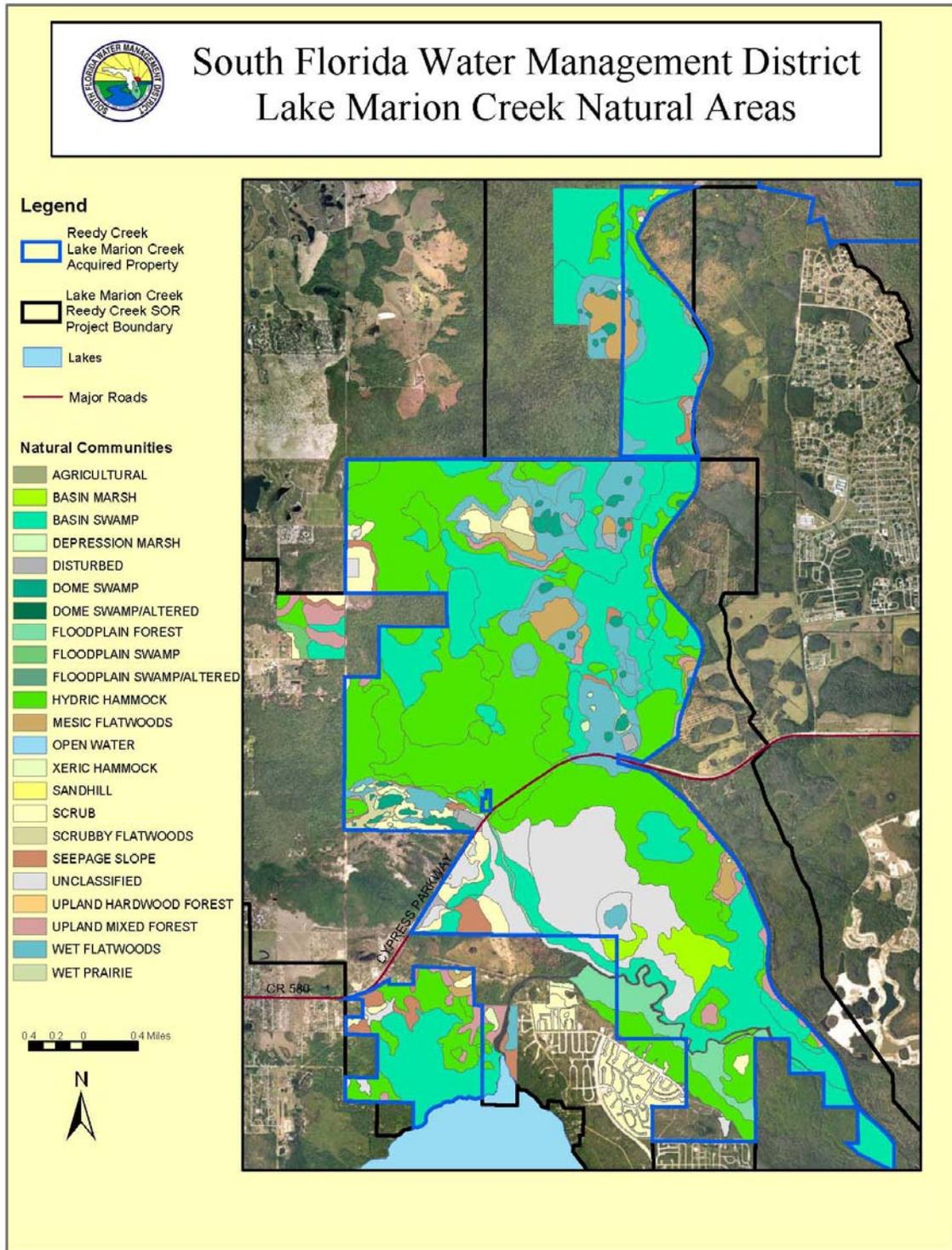
Riverine

Blackwater Stream (53 acres)

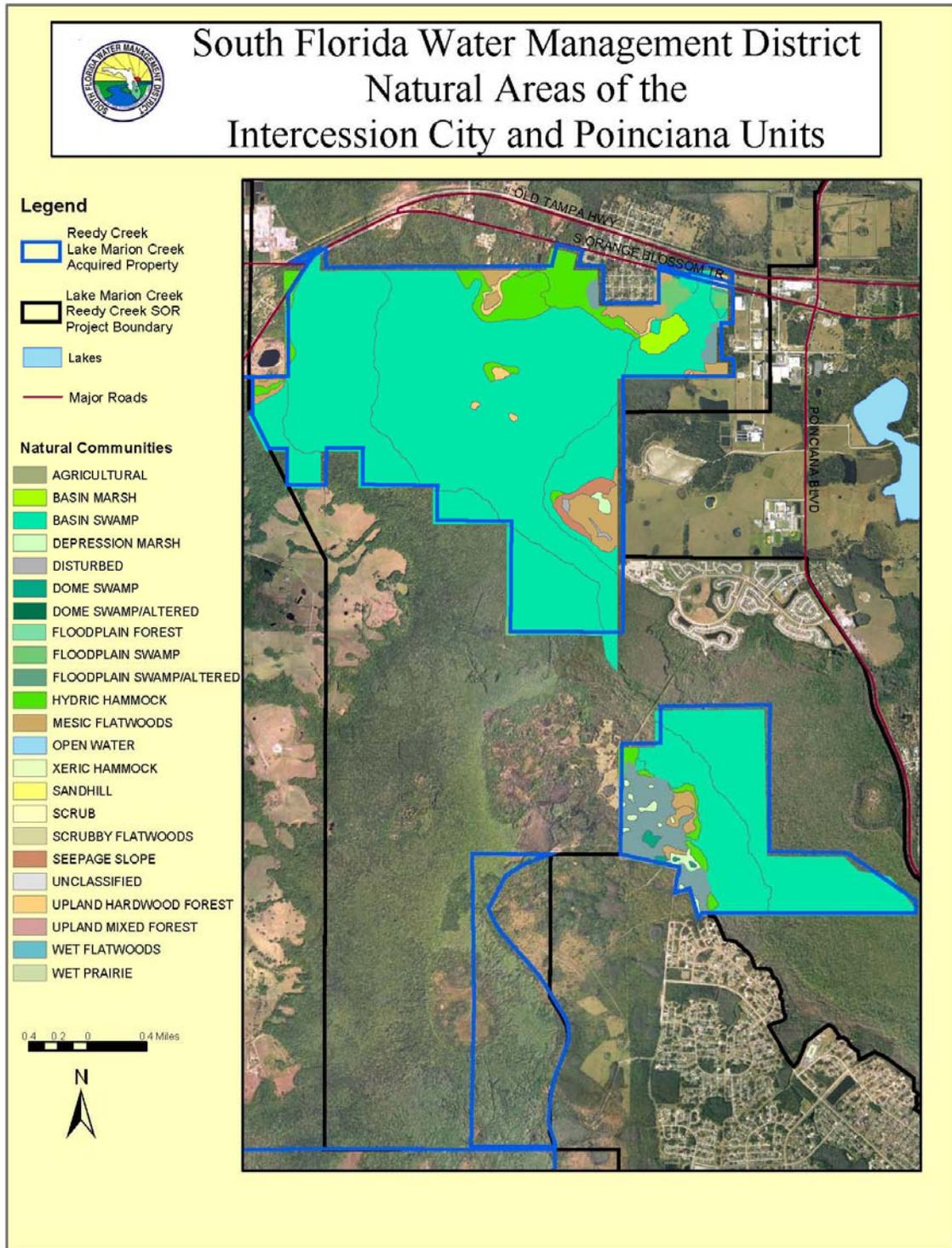
Blackwater streams are characterized as perennial or intermittent seasonal watercourses originating deep in sandy lowlands where extensive wetlands with organic soils function as reservoirs, collecting rainfall and discharging it slowly to the stream. The tea-colored waters are laden with tannins, particulates, 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.

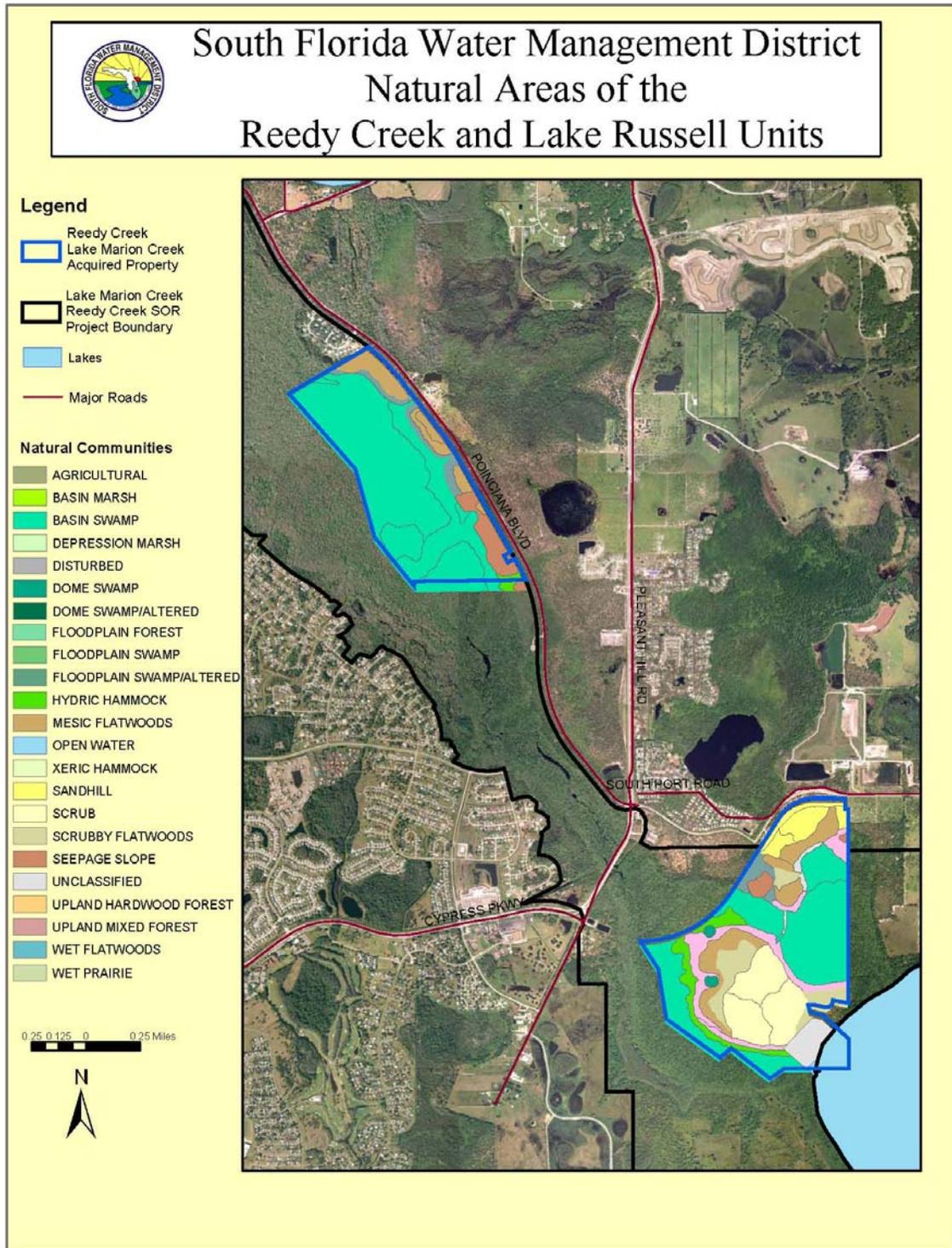
Map 4: Lake Marion Creek Management Area Natural Communities



Map 5: Intercession City and Poincianna Management Units Natural Communities



Map 6: Reedy Creek and Lake Russell Management Units Natural Communities



4.4 Wildlife

Inventories have documented 343 animal species within the Management Area. (Appendices G, H, I and J). 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.

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 archeological data accompanied by appropriate public education opportunities.

As a state agency responsible for management of publicly owned lands, the District is required by law to preserve historical and cultural resources located on District properties. The District's management goal is historic preservation by identification, evaluation, documentation, protection, and stabilization of known historic or prehistoric sites. Under Chapter 267, F.S., each state agency of the executive branch is under obligation to consider the effect of management actions on historical resources. This statute, along with Rule 1A-32 (research permitting process), Rule 1A-46 (archaeological report standards), and Chapter 872, F.S. (protection of gravesites) are the primary laws pertaining to historic sites and archaeological resources. The District complies with these regulations by inter-agency coordination with the FDHR through their project review process (Rule 1A-46, archaeological report standards). LSP maintains a database of all known archeological and historical sites on District properties that is periodically updated through the FDHR Site File. Due to its sensitive nature, site-specific data will not be made available to the general public.

In 1997 the FDHR 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 with the FDHR. However, FDHR 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.

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.

Natural resource management responsibilities of the District are defined by statute and District land stewardship policy. Many properties owned and managed by the District contain natural communities whose structure and function have been altered by previous land uses. The District manages and maintains these lands in an environmentally acceptable manner and, to the extent practicable, restores them to a more natural state and condition. Land managers attempt to accomplish this by using a variety of management techniques.

To manage natural communities at the Management Area, LSP will include the application of vegetation control activities to restore the natural forest structure and composition, the continuation of an aggressive exotic plant control program, the application of a prescribed burn program to appropriate landscapes, and coordination with FWC to implement a wildlife management program.

5.1 Restoration

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

A significant source of additional funding for acquisition and management purposes is off-site mitigation projects and mitigation banking. Pursuant to Chapter 373.4135, F.S., the District is encouraged to develop mitigation banks. Land managers evaluate opportunities to implement mitigation banks in areas where the:

- restoration is complex
- District Mitigation Banking Program's site selection criteria are utilized
- Site features and restoration plan are consistent with the guidelines established in the Joint State and Federal Mitigation Bank Review Team Process for Florida.

LSP, in cooperation with the District Regulation Department, may designate priority enhancement or restoration areas in large, degraded wetland complexes. Potential enhancement/restoration areas include either public or private lands within the Save Our Rivers Land Acquisition and Management Plan (SFWMD 1999), or lands that have resource value and may be added to the plan in the future. Possible enhancement/restoration sites must have the potential to provide sustainable wetland functions after ecological restoration. As part of the GMP for each Management Area, Land Stewardship managers shall identify any significant potential enhancement/restoration areas in their region and develop a conceptual cost estimate to implement the work. This information shall be provided to the mitigation program coordinator who evaluates opportunities for enhancement/restoration. These opportunities may include designation as a mitigation bank, a District-sponsored regional offsite mitigation area, or a priority project.

Mitigation bankers acquire property which has inherent restoration potential. They are then responsible for creating and implementing restoration and management plans for the property. After the mitigation credits for the bank are sold and the planned restoration has achieved its success criteria, the lands may be turned over to the District for perpetual management. Funding for the perpetual management is included with the mitigation bank permit that transferred to the District with the title to the land. The American Equities mitigation bank that falls within the Lake Marion Creek Project Area boundary totals 3,572 acres.

The American Equities' 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). Restoration activities began on-site in the spring of 1997 and are expected to be completed in five to ten years, when the bank may come to the District for long term management.

5.1.2 Monitoring

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

LSP has developed a monitoring program to evaluate success of management actions on SOR properties. Tracking environmental response to prescribed fire, hydrologic restoration, and exotic vegetation control provides valuable information on pre-management condition and progress toward land management objectives. Information obtained by monitoring specific sites assists land managers in making sound ecological choices for each unique parcel.

Ecological monitoring on LSP-managed properties is conducted or coordinated by the LSP monitoring coordinator. Monitoring projects and a database of plant and animal resources that occur on Management Areas are kept on file at District headquarters. Research activities conducted by the LSP produce practical information directly applicable to land management operations on SOR properties. Land managers assess research needs with the assistance of the LSP monitoring coordinator as they become evident during the progress of land management. A data file of all research projects occurring within SOR boundaries is maintained. LSP research studies are subject to peer review and, when appropriate, made available through publication or distribution on the District computer network server.

The Kissimmee River Restoration Project (KRRP) developed a monitoring program for the Lower Kissimmee River that is integrated with river restoration research objectives. Integration of this monitoring program with monitoring efforts for the Management Area is essential for the development of a long-term, coordinated management evaluation program. The Kissimmee River Restoration Evaluation Program (KKREP) is designed to collect, manage, evaluate, and disseminate information related to activities, observations, and measurements associated with restoration of the Kissimmee River/floodplain ecosystem. Program components are designed to track initial and long-term responses to the reconstruction of the ecosystem by evaluating a suite of indicators representing physical, chemical, biological, and functional components of the system. Components evaluated include birds, endangered species, fish, herpetofauna, hydrogeomorphology, hydrology, invertebrates, vegetation, and water quality. The KRRP is also developing a database to store sample data for public use.

Land management activities monitored within the Management Area include prescribed burning, vegetation management, and exotic plant removal.

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 within the Management Area consists of exotic and invasive plant removal, prescribed burning, and forest management. Land managers use prescribed fire, mowing, chopping, chemical application, and tree harvesting as management tools to reduce fuels, promote fire-dependent plants, reduce exotic and nuisance infestations, stimulate herbaceous species growth, and improve habitat for wildlife and rare plant species. Hydrologic enhancement is employed in areas previously drained for agricultural use with many of the same benefits.

5.2.1 Exotic/Invasive Vegetation

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.

LSP targets non-native plant species and those designated as Category I and II on the Florida Exotic Pest Plant Council's (EPPC) biennially updated list. Category I species include alien plants that invade and disrupt Florida native plant communities. This designation is without regard to economic severity or geographic extent of the problem. Category II exotics have the potential to invade and disrupt natural successional processes. They are similar in geographic origin and ecology as Category I species, have a tendency to form large vegetative colonies and/or are sporadic, and persistent in their occurrence.

LSP's invasive exotic plant control measures include combinations of herbicide application, prescribed fire, roller chopping, and mowing. Selection of control measures is dependent upon species type, environmental factors and natural communities impacted. Treatments are coordinated with the LSP Exotic Plant Control Coordinator and performed by regional land managers, the Land Stewardship field crew, lead management agency, or private contractors. The LSP works in cooperation with the District's Vegetation Management Division to coordinate eradication of noxious exotics, and assist with exotic control research efforts whenever possible.

Plant inventories have documented 14 exotic species within the Management Area with those denoted with an "*" not on the EPPC list (see Appendix D 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*)*
- Chinaberry *Melia azedarach*
- Torpedo Grass (*Panicum repens*)
- Sour Paspalum *Paspalum conjugatum**)
- Bahia Grass (*Paspalum notatum*)*
- Water Lettuce (*Pistia stratiotes*)
- Indian Cupscale Grass (*Sacciolepis indica*)*
- Caesar Weed (*Urena lobata*)
- Paragrass (*Urochloa mutica*)

Exotic plant management within the 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.

Management Objective

- Reduce the presence, spread and associated negative effects of exotic and invasive plant species located within the Management Areas.

Management Actions

- Perform mechanical and chemical treatment for known exotic and invasive species that include Lygodium, Brazilian Pepper, air potato, and Chinese tallow within the Management Areas.

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 US Fish and Wildlife Service (USFWS), FWC, or FNAI. A list of these species is annually updated and published by the FWC. The LSP promotes the perpetuation of listed plant species by utilizing best management practices in natural communities to which they are endemic. The establishment of appropriate fire and hydrologic regimes, and the control of invasive plants provide opportunity for rare species to perpetuate or re-establish in former natural ranges. Public Use Rules aid in the protection of native habitat and specifically prohibit the destroying, defacing or removing any natural feature or native plant on SOR lands (40E-7.537, F.A.C.). In this manner, listed plants are given lawful protection and environmental conditions suitable for their continued existence.

Search of the floral species list in Appenidix D identified fourteen floral species as a listed threatened or endangered species within the Lake Marion Creek/Reedy Creek Management Area. A detailed study of the Torelli South, Intercession City, Poinciana, and Reedy Creek management units has not been conducted. Table 3 lists the listed floral species.

Table 3: Listed State 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

Management Objective

- Protect and perpetuate listed plant species within the Management Area.

Management Actions

- Regional land managers and the inventory coordinator shall coordinate with contracted specialists to ensure that all areas within the Lake Marion Creek & Reedy Creek Management Areas have been surveyed for listed plant species.
- Regional land managers, inventory coordinator, monitoring coordinator, and law enforcement officers shall make in-field identification of sites where listed plant species are present.
- Regional land managers shall ensure that listed plant species locations are protected from vandalism or inappropriate management activities.
- Regional land managers shall identify and implement activities that perpetuate listed plant species identified within the Management Area.

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.

Since SOR properties are designated multiple-use, forest management is considered an appropriate future management option. In 1997 the LSP contracted the expertise of Natural Resource Planning Services, Inc. to provide site evaluations and management/harvest recommendations for existing stands. The subsequent SOR Forest Management Plan (David 1998) identified lands currently managed by the LSP that contain sustainable forest resources capable of generating short term revenues to supplement land management costs. Based on the strict set of environmental criteria outlined below, no sites within the Management Area were identified as potential future limited timber harvest sites.

Lands that qualified for forest management met the following environmental criteria:

- The area 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 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 will 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 (i.e. red-cockaded woodpecker) management that requires timber stand improvement.
- The area is located such that harvest or planting will not create an aesthetically unpleasant scene or an impediment to public use.

Management Objective

- Ensure future forestry operations within the Management Area are consistent with District policies, goals, and guidelines.
- Reestablish long leaf pine forest within Lake Marion Creek WMA.

Management Action

- No timber harvests are scheduled.

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.

Cattle grazing is used by the District and other land management agencies as a management tool, particularly for the reduction of fire fuel loads and maintenance of open range. The decision to open an area to grazing is evaluated in light of the negative environmental impacts often accompanying cattle introduction. Cattle are vectors for non-native invasive plants, particularly bladder-pod (*Sesbania sp.*) and tropical soda apple (*Solanum sp.*). Trampling and grazing of sensitive native ground covers select for rhizome-prolific grasses and often result in dominance of non-native, early successional species. By reducing under-story plant densities, grazing eliminates natural fire patterns that would otherwise define historic plant community types. In addition, costs are incurred for exclusion fencing of sensitive environmental areas.

Cattle grazing does not occur in the Management Area because of lands designated as a Wildlife Management Area, the natural community types, and the size of the management units.

5.3 Fire

Policy 140-25(5)(c)(3) Prescribed fire will be a primary management tool on District lands and will be applied within fire-maintained communities at appropriate intervals.

Prescribed fire is one of the primary tools used in land management throughout central and south Florida. The majority of natural communities in this region rely on fire to maintain their vegetative characteristics and biodiversity. Prescribed fire regimes attempt to mimic natural fire patterns that historically reduced fuel loads, inhibited hardwood encroachment, stimulated growth in fire-adapted plants, and recycled nutrients back to the soil. However, unlike a natural wildfire, prescribed fire must be limited to a designated area and performed under defined environmental conditions. In this way, managers reduce the potential for wildfires while restoring natural community structure and function. The LSP recognizes the benefits of fire and has integrated prescribed fire into its land management strategy.

5.3.1 Fire History

Recent fires within parcels owned by the District in the LCMA were both prescribed burns and wildfires. Dates and locations of prescribed fires and wildfires are recorded (Table 4) to ensure that units are burned under recommended ecological rotations (Table 5). Most units have experienced at least one fire since District acquisition. The prescribed fire program will apply fire to unburned units, and maintain natural fire regimes in all units.

Table 4: Fire History for the Lake Marion Creek/Reedy Creek Management Area and Upper Reedy Creek Management Area

Property	Prescribed Fire Date	Fire Management Unit Number	Acres
Lake Marion Creek.			
<i>Huckleberry Islands</i>			
	12/97, 8/01, 7/03	Isle 1 W ½	100
	7/99, 1/02	Isle 1 E ½	100
	7/99, 4/03	Isle 2 W ½	100
	12/97, 8/01, 5/03	Isle 2 E ½	70
	7/99, 11/01, 7/03	Isle 3 W ½	100
	10/98, 8/01, 5/03	Isle 3 E ½	150
	10/98, 8/01, 7/03	Isle 3A	100
	11/99, 4/03	Isle 4 W ½	100
	11/01, 3/04	Isle 4 E ½	100
	8/01, 7/03	South Huck Isle	100
<i>Snell Creek</i>	7/99, 12/01	North ½	100
	7/99, 12/01	South ½	100
<i>Torrelli North</i>			100
	8/98, 2/03, 5/03	East ½	80
	5/03, 3/04	West ½	75
	7/98, 1/03	East Island	50
<i>LMC Road</i>	1/03	Stokes	50
	1/03	Parking Area	50
<i>Torrelli South</i>	12/01, 2/04	Scrub Unit	150
	12/01, 2/04	Island	50
	2/04	DOT Scrub	150
<i>Horsecreek Scrub</i>	2/03	Entrance	50
	2/03, 2/04	Powerline Scrub	100
		Baker Dairy	
<i>Intercession City</i>	10/99, 2/03	North end	80
	2/03	Sub-station	50
	8/01, 3/04	Borrow pit isle	75
	4/03	Quinton Bass	40
<i>Reedy Creek</i>	2/03		75
<i>Poinciana</i>	2/03	Burnley E ½	75
	8/01	Burnley W ½	150

Property	Prescribed Fire Date	Fire Management Unit Number	Acres
Lake Russell	1997	1-1	80
	1997	1-2	18
	1997	1-3	49
	1997	1-4	
	1997, 2001	2-5	20 (50)
	1997, 2001	2-6	11
	2001	4-7	61 (60)
	2001	4-8	17
	1997, 2001	2-9	9
	1997, 2001	4-10	10
	1997, 2001	2-11	53
	2001	3-12	6 (60)
	2001	3-13	8
	1997, 2001	3-14	4
	1997, 2001	3-15	5

5.3.2 Prescribed Fire Planning

A fire management plan is developed for each Management Area. The plans include a description of location and natural community types, fire history, fire management objectives for each natural community type, constraints, and field operation burn prescriptions (a sample prescription is located in Appendix L). The LSP bases all fire activity plans on ecological research and best management practices. Fire frequency schedules for each natural community consider recommendations provided in The Natural Communities of Florida (FNAI 1990). Growing season burns (summer) are encouraged. Natural firebreaks are used to promote historic fire patterns, avoid soil disturbance, and reduce hydrologic flow disruption. Application of fire, with appropriately timed herbicide treatments, is utilized as a tool for control of invasive plants. Prescribed fire planning is critical when dealing with species such as Melaleuca and Japanese Climbing Fern, which can be spread by fire.

Table 5: Natural Community Fire Frequency Summary

COMMUNITY TYPE	FIRE FREQUENCY	DETAILS
Basin Marsh	3 – 5 years	Herbaceous-dominated areas
	3 – 10 years	Willow / button bush-dominated areas
Basin Swamp	~ 2 – 4 years	Around edges of community
	5 – 150 years	In the interior of community
Depression Marsh	3 – 10 years	
Dome Swamp	3 – 5 years	Around edges of community
	100 – 150 years	In the interior of community
Dry Prairie	1 – 4 years	
Hydric Hammock	30 – 100 years	
Mesic Flatwoods	1 – 8 years	
Prairie Hammock	25 – 100 years	
Scrub	10 – 70 years	
Scrubby Flatwoods	5 – 25 years	
Wet Flatwoods	3 – 10 years	
Wet Prairie	2 – 4 years	

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.

Management Objectives

- Reduce hazardous fuel loads near residential areas as well as all roadways.
- Use prescribed fire to restore and maintain the natural state and condition of the plant communities on the Management Area.
- Control the invasion of woody plants (especially wax myrtles), encourage native plant recruitment and diversity utilizing prescribed fire.
- Burn all scrub units at least once and the mesic flatwoods units for a third time by 2007.
- Regional land managers shall cooperate and coordinate with the Division of Forestry, the grazing lessees, The Nature Conservancy, and/or the District fire crew, on all future prescribed fires within the Management Area.

Management Actions

- Regional land manager shall cooperate and coordinate with the Division of Forestry and/or the District fire crew on all future prescribed fires within the Management Area.
- The regional land manager shall determine the appropriate burn frequency for each management unit.

5.3.3 Wildfire Suppression

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

Wildfires ignited by lightning are a common occurrence throughout Florida. It is standard District procedure, and State law, to notify the DOF, local county fire department, and District emergency management personnel when a wildfire occurs on LSP-managed properties.

The DOF regional office that is responsible for Intercession City, Poinciana, and Reedy Creek units (in Osceola County) is located in Orlando. The Osceola County Fire Station responsible for the same area is based out of Kissimmee. The FDOF regional office that is responsible for Lake Marion Creek and Torelli South is located in Lakeland. The Polk County Fire Station responsible for the same area is based out of Bartow. Contact information for the Division of Forestry and the county fire departments is located in Appendix K.

Management Objective

- Safeguard District property, adjoining private property, and the public in and around the Management Area from wildfires.

Management Action

- The Land Stewardship Field Crew and land managers may respond to, or assist in, wildfire suppression on Land Stewardship-managed properties under the direction and/or request of the FDOF and/or local county fire departments.

5.4 Wildlife Management

The District is committed to the protection and conservation of wildlife resources. A prime requisite in managing these public lands is to ensure that the water, fish and wildlife populations, native plant communities and related resources are maintained in an environmentally acceptable manner (SFWMD 1999a). The LSP accomplishes this in several ways:

- performing land management activities that maintain and/or improve native wildlife habitat
- conducting specific management beneficial to protected species
- monitoring wildlife management activities through review of quarterly reports provided by the FWC
- conducting wildlife inventories 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, (U.S. Fish and Wildlife Service. 1998)
- reducing non-native pest species populations where appropriate
- maintaining a master file of confirmed and potential wildlife species
- cooperating with the FWC on wildlife management issues

Due to the sensitive nature of the resources found in the Lake Marion Creek/Reedy Creek Management Area, the District entered into a cooperative agreement with the Florida Fish & Wildlife Conservation Commission to manage the area as a Type I Wildlife Management Area in 1998 (C-9803). The lands that comprise the Lake Marion Creek WMA include one tract of land within the Upper Reedy Creek Management Area. The other units within the URCMA, Intercession City, Poinciana, and Reedy Creek, are not included in the WMA. However, it is the goal of the District to include these units within the WMA within the timeframe of this management plan.

Management Objective

- Maintain and/or improve native wildlife habitat.

Management Action

- Regional land managers shall coordinate and cooperate with FWC and USFWS (for listed species) during the development and implementation of wildlife management programs.
- Add the other units within the URCMA, Intercession City, Poinciana, and Reedy Creek, to the existing Type 1 WMA.

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.

Game density is believed to be relatively high due to the wide array of natural communities within the Reedy Creek and Lake Marion Creek basins. Management activities consist of maintaining, increasing, or decreasing certain wildlife species which inhabit the Lake Marion Creek/Reedy Creek Management Area. The Lake Marion Creek Wildlife Management Area is the only area within the MANAGEMENT AREA in which game management occurs.

The Lake Marion Creek Wildlife Management Area was established with the Florida Fish & Wildlife Conservation Commission in 1998 under a cooperative management agreement C-9803. The Commission is the lead agency for management of game species such as deer or turkey. The South Florida Water Management District provides logistical support to the Commission for game management activities.

The primary targeted game species that are specifically managed include white-tailed deer and wild turkey. These species are prized not only for their inherent natural qualities, but also for the hunting opportunities they provide. Other game populations within the Lake Marion Creek Wildlife Management Area include quail, gray squirrels, raccoons, and rabbits.

Exotic (non-native) wildlife species which are known to inhabit the Management Area include feral hogs (*Sus scrofa*), armadillos (*Dasypus novemcinctus*), and coyotes (*Canis latrans*). Activities to reduce these species occur in several areas throughout Florida and may be necessary in the Lake Marion Creek/Reedy Creek Management Area if habitat destruction becomes evident. Common methods used to reduce these species include trapping and hunting.

All native species of birds, in addition to game birds, are protected by state and federal laws. Except as described in FWC rules, no native bird may be taken or molested. Unprotected birds (considered exotic species) include the English sparrow, European starling, rock dove (pigeon), and muscovy duck. Unprotected mammals known to inhabit the area include the armadillo and coyote.

All persons wishing to hunt on District-owned and/or managed lands within the Management Area should first consult with regional District land managers, FWC wildlife officers, current District Public Use Guide, and current FWC hunting pamphlets to ensure compliance with regulations.

Management Objective

- Protect and perpetuate game species within the Management Area.

Management Actions

- Consult and coordinate with the FWC concerning game management programs.

5.4.2 Exotic/Invasive Species

Exotic/invasive Species management targets species that negatively impact the function of native ecosystems, native species diversity or abundance. In most cases they have been introduced from foreign locations as the result of released pets, cargo stowaways, introduced game animals, or as in the case of feral hogs, naturalized from the time of early Florida exploration. Exotics compete with native species for limited resources due to their high reproductive rate and lack of ecological control factors, such as predation and disease. In some cases, exotic species inadvertently damage natural communities

they frequent, or spread disease to endemic populations. The LSP strives to reduce non-native wildlife populations to appropriate numbers that result in an acceptable level of impact to natural communities.

Management Objective

- Reduce non-native pest species populations and their associated impacts in the Management Area.

Management Actions

- Utilize the selection criteria for those species under consideration for population control.
- Coordinate with FWC for species information, harvest laws, and population control measures.
- Employ control measures that are consistent with state law, cognizant of public safety and appropriately humane.
- Monitor pest species impact by periodic site visits.

The feral hog is a species that interferes with land management operations and is in direct competition with native species for resources. Feeding habits, high fecundity, and habitat adaptability provide an intolerable combination of pressures on most natural communities subject to feral hog populations. Hog disturbance has occurred in most wetland community types and hammocks within the area. Rooting and feeding on underground vegetation poses numerous problems, especially to biologically sensitive areas slow to recover from disturbance. Areas with high populations of hogs frequently have the ground layer vegetation denuded in certain areas, inhibiting prescribed burn efforts. Rooted areas in wetlands are susceptible to exotic plant establishment and are set back to earlier successional stages.

The feral hog is considered the primary pest species within the Management Area. The rooting of the hog causes large areas of natural community degradation. An adjoining hunt club releases hogs for its members to hunt, however these hogs stray onto District property. Beginning in 2004 a contracted hog trapper will begin to attempt to reduce the hog population on the Intercession City, Poinciana, and Reedy Creek management units. Feral hogs are removed in the Lake Marion Creek Wildlife Management Area during regulated hunts.

Management Objective

- Minimize ecological impacts associated with feral pigs located within the Management Area.

Management Actions

- Work with biologists from the FWC, Florida Department of Agriculture, and U.S. Department of Agriculture to determine the best approach to control feral pigs in the Management Area.
- Develop and implement an effective feral pig control program for the Management Area.

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 FNAI-listed species (endangered, threatened, and species of special concern) occurring within the Management Area (Appendix G – J). The distribution of listed species is summarized in Table 6). 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 6: 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 Objective

- Complete specific land management projects beneficial to protected species.

Management Actions

- Regional land managers shall conduct management activities following guidelines for the protection of listed species as determined by the Multi-species Recovery Plan for the Threatened and Endangered Species of South Florida, Volume 1, (USFWS 1999e) and recommendations by the FWC.

Management emphasis concerning rare and/or listed wildlife species within the Lake Marion Creek WMA 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. The District has contracted with the Nature Conservancy (C-73806) to monitor the scrub-jays on the Torelli South unit.

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 from mid-March to mid-May to determine the presence of Florida mouse at five scrub sites at Lake Marion Creek WMA. 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 Florida Fish & Wildlife Conservation Commission from mid-March to mid-May to determine the presence of Florida mouse at five scrub sites at Lake Marion Creek WMA and 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 by FNA1 (contract #3491) in January 2002 (7.4.1). Appendix K lists pertinent statutes, laws, and recommendations for bald eagle management.

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.

5.4.4 Monitoring

The Florida Fish & Wildlife Conservation Commission monitors wildlife within the Lake Marion Creek Wildlife Management Area. Extensive monitoring of Florida black bears and Florida panther is conducted in the floodplain. Wildlife monitoring does not occur in the other management units of the Management Area.

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), F.S.S., states wherever practical, lands acquired by the District's SOR Program shall be open to the general public for recreational uses. Potential compatible uses are outlined in Section 373.1391(1)(b), F.S.S.

The determination of compatible public use 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 resulting from endangered species, other sensitive natural resources, archaeological resources, or land management practices
- public health, safety and welfare
- environmental education program opportunities

A preliminary determination of allowable recreational activities will be set forth in the GMP for each Management Area. Carrying capacity, intensity of use, and required support facilities and services will be detailed in the activity plan, when available. Future changes

that may be necessary based on operational experience will be included in annual work plans and five-year updates to GMPs (and activity plans, if available).

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 7 summarizes current recreational opportunities in the Management Area. Other related outdoor purposes shall be encouraged when such use does not interfere with protection and management of the natural resources. Special consideration will be given to the provision of outdoor recreational opportunities for persons who are physically challenged. The public use program in the Management Area shall be low impact – non-destructive to environmental characteristics of the area and be passive in nature – not requiring significant facility or infrastructure development. The appropriateness of public use activities may change with time and/or for any given area based on the criteria outlined above.

Table 7: 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.

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. The Public Use Guide will be adopted by the Governing Board at a public meeting advertised in accordance with Chapter 120, Florida Statutes.

Law enforcement patrols in the Management Area are required to deter criminal activity, safeguard the public, and protect natural and cultural resources. The Management Area lends itself to contractual and in-kind law enforcement patrols. Major problems in the area include illegal entry (foot and motorized vehicle), poaching, dumping, trespassing on adjacent properties, and gate/fence/sign destruction. The LSP Resource Protection Coordinator oversees the contract (C-10162) with FWC for scheduled patrolling of District properties. The current contract expiration date is March 2024. Patrol times, locations, and type may be changed to address enforcement needs as they arise.

Contractual law enforcement patrols are performed by FWC. In-kind law enforcement patrols, patrols performed as part of the officers' normal patrol routines, are also conducted by officers of FWC and the Osceola and Polk County Sheriff's Offices. Regional offices for dispatching Wildlife Officers are located in the Commission's Lakeland Office (for Polk County: Lake Marion Creek WMA and Torelli South) and Ocala Office (Osceola County: Intercession City, Poinciana, and Reedy Creek). Contact information for the Commission and the Osceola and Polk County Sheriff's Offices is located in Appendix K.

The Osceola and Polk County Sheriff's Offices are the primary local law enforcement agencies covering the Management Area. Meetings with Sheriff's Office representatives have been made, but follow-ups will be necessary to them keep them updated on District rules and programs.

Resource protection is also greatly enhanced by the presence and maintenance of continuous, posted boundary fencing that unambiguously delineates SOR property perimeters. 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). Many of the perimeter boundaries are fenced; however, some areas need major repairs, new fence, or minor repairs, and all need perpetual annual maintenance. In perimeter boundary areas that abut public waterways and private lands, where vegetation may obscure posting or fences, the District also mows the boundary one to two times per year.

Management Objective

- Safeguard the public, natural resources, and cultural resources located within the Management Area.

Management Actions

- Coordinate enhanced law enforcement patrols by FWC Wildlife Officers (under contract C-10162).
- Review law enforcement reports and respond to problems or requests for management assistance in a timely manner.

6.2 Environmental Education

Educational programs may be developed for select Management Areas by cooperators interested in promoting increased visitor awareness of and appreciation for natural and cultural resources. The LSP encourages educational partnerships through memorandums of understanding, leases, 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).

Public outreach and government affairs programs for LSP in Management Area are coordinated and implemented by two Government and Public Affairs Representatives based out of the Orlando Service Center. The staff serves as the primary contacts for media relations, government representative communications, and classroom presentations.

LSD staff will continue to provide environmental education, public outreach, and government liaison in association with the Management Area and coordinate with the District's Government and Public Affairs Representatives to develop and implement outreach and liaison activities.

Management Objective

- Provide environmental education, public outreach, and government liaison in association with the Management Area.

Management Actions

- Coordinate and oversee the development and operation of the Lake Russell Environmental Education Facility with the Osceola County School Board.
- Coordinate with the District's Government and Public Affairs Representatives to develop and implement outreach and liaison activities.

7. Administration

LSP personnel administer the management of SOR natural areas from the SFWMD headquarters office in West Palm Beach. Policy decisions, acquisition procedures, contract administration and select issues of program development are coordinated from headquarters.

LSP land managers located in District Regional and Service Centers (Orlando Service Center for the Management Area), administer in-field land management and participate in administrative functions such as funding, planning, reporting and external entity coordination (see Appendix K for contact information).

7.1 Planning and Budgeting

The LSP develops preliminary strategies to guide management activities for each project area. The strategies are defined in General Management Plans (GMP) developed by LSP planning personnel. Activity plans are created only for those management activities that require a detailed technical plan. General and activity plan content is standardized in a logical sequence to insure comprehensive coverage of pertinent issues and information

Policy 140-25(6)(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.

Each GMP is a guideline document that directs the land manager toward land management goals on a specified Management Area. The document defines goals and objectives, identifies and prioritizes major management needs and issues, serves as a management assessment and is expandable to adjust for discussion of future significant management requirements. GMPs are created or coordinated by the LSP planning section. Where joint management occurs, the lead management agency is responsible for management plan creation, with the plan subject to LSP review and District Governing Board approval.

This plan updates the original five year GMP for Lake Marion Creek that was completed in 1999 (Udelhoven 1999) and combined the Lake Marion Creek and London Creek management units. This GMP is for the Lake Marion Creek/Reedy Creek Management Area as well as the Upper Reedy Creek Management Area and excludes London Creek. This combination was done because a tract of land that was included in the development of the Lake Marion Creek Wildlife Management Area is within the Upper Reedy Creek Management Area. The London Creek management unit will be included in the 2009 Kissimmee Chain of Lakes General Management Plan revision.

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

Annual work plans, based on general management and activity plans, are developed each fiscal year. The plans provide technical detail, budget, manpower requirements, and timetables for project implementation. In most instances, these plans are produced by either the LSP land manager, under the general guidance of the supervising land manager; or the lead management agency, with review by the LSP land manager. The plan's life span is often several years, however, its progress is evaluated annually by land managers during annual work plan reviews. Activity plans are available for inspection at the land manager's regional office.

Standardized annual work plans for the Upper Lakes Region (which includes the Management Area) are developed each fiscal year based on general management and activity plans. This work plan will include oversight of activities planned by cooperative managers, and will be submitted to the Supervising Land Manager for inclusion into the District-wide LSP Annual Work Plan.

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 principle source of funding for the SFWMD SOR Program is the Water Management Lands Trust Fund, generated by a state documentary tax stamp. This funding source is augmented in several ways.

- The SFWMD actively pursues revenue generation that is compatible with SOR goals and pursuant to the 1997 revisions of Section 253.034, F.S. This includes use of renewable resources where multi-use designation of the property exists, as is the case with SOR lands.
- The District seeks partnerships for implementation of its land management program, and has been successful in coordinating in-kind services with numerous state and local government entities, such as the FWC, FDOF, FDEP, county governments, private environmental groups, and volunteers.
- Grazing leases are obtained with land purchase or developed after purchase to use renewable resources.
- User groups and volunteers supply no-cost services for developing and maintaining public use facilities and participating in select land management activities.
- LSP seeks funding through mitigation banking and develops plans for use of these funds to restore, preserve, and manage Land Stewardship-managed lands.

The District's fiscal year runs from October 1 through September 30. LSP budget planning

occurs on an annual basis starting in March of the previous fiscal year. Overall budget availability generally determines management activities. Budget distribution among the five land management regions is based on a prioritization of management activities within those regions. Operational funds are distributed to accomplish the management objectives of each Management Area.

Annual budgeting for the Management Area is based on the management framework as presented in this GMP. Annual Work Plans outline activities that require budgeted items.

LSD staff will continue to provide:

- Annual operational and capital improvement budgets sufficient for staff, equipment, and supply resources necessary to attain a level of responsible management as outlined in Management Area GMP.
- Develop and submit annual budget requests based on specific management needs for preservation, evaluation, applied management, human-use activities, and administration.
- Tracking of budget expenditures on a monthly and annual basis to ensure efficient use of budget resources.
- Identification of deficiencies in budget amounts and request appropriate additions to attain levels of responsible management as detailed in the GMP.

7.2 Infrastructure Management

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.

Pedestrian access to District lands for public recreational purposes will be allowed, upon completion, establishment, or implementation of:

- An ecological survey or inventory;
- A recreation assessment;
- A risk assessment;
- A boundary survey and required posting;
- Designation of authorized point(s) of entry;
- Security measures; and
- Governing Board approval.

There are no current plans to develop formal hiking, biking, or horseback riding trails in the Management Area. No specific pedestrian access facilities (i.e. hiking trails) exist or are planned for the Management Area. Pedestrians may walk or hike throughout areas opened for such use. Pedestrian access points are identified in the *Public Use Guide*. The District will continue to provide pedestrian and improved management access to the Management Area as specified by District public use rules.

Motorized access to the Management Area by vehicles is allowed at Lake Marion Creek Wildlife Management Area during regulated hunting seasons. No public vehicular traffic

(automobiles, trucks, swamp buggies, ATVs, 4x4s) is allowed at any location within the Management Area. Parking areas are located at the Lake Marion Creek WMA, Intercession City, and Reedy Creek management units.

7.3 Personnel and Equipment

A select group of District employees plan and manage the functions of the LSP. This group includes professional land managers assigned to regional service centers. Regional land managers have specific geographical responsibilities for comprehensive management in their respective areas, as well as special management expertise (law enforcement, prescribed fire, exotic control) that they share with other managers throughout the agency.

A highly-trained field crew is based at the Dupuis Management Area (Land Stewardship Field Crew), and supports the professional staff by performing diversified land management tasks throughout the District. LSP planning staff executes planning functions and evaluates and monitors LSP management. Student interns are hired on a project-specific, time-limited basis. Interns are recruited through the District's human Resources Division and the Student Conservation Association.

Successful management of the Management Area is dependent upon the efficient and effective distribution of Land Stewardship personnel. Currently, there are two full-time professional land manager positions and a land management technician—based in the Orlando Service Center—who are responsible for management activities within the Management Area and serve as primary contacts (see Appendix K for contact information). District staff located outside of the region is available to assist the regional land managers for project-specific activities. Field crew members, from the District's Kissimmee Field Station, and student interns are available from time to time on a project basis.

Management Objective

- Provide the staff necessary to successfully attain management goals and objectives as outlined in GMPs, activity plans, and annual work plans for the Management Area.

Management Actions

- Strive to maintain current levels of staffing through proper planning, reporting, budgeting, and personnel actions.
- Identify deficiencies in staffing levels and request appropriate staff additions to attain levels of responsible management as detailed in the GMP.

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. Staff will continue to acquire the equipment,

supplies, and tools necessary, as budgets allow, attaining management objectives as outlined in the GMP, activity plans, and annual work plans for the Management Area.

Management Objective

- Provide the equipment, supplies, and tools necessary to successfully attain management objectives as outlined in the GMP, activity plans, and annual work plans for the Management Area.

Management Actions

- Identify deficiencies in equipment and supply levels and request appropriate additions to attain levels of responsible management as detailed in the GMP.
- Maintain (and seek repairs to) all tools, supplies, and equipment to ensure good condition.

7.4 Volunteers and Alternate 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 and enter agreements with other governmental agencies to provide cost-effective land management.

Land management objectives are increasingly met by seeking alternative work force services and exploring innovative ways to supplement existing personnel. 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 acting land manager under the general guidance of the supervising land manager. In addition, alternative work force programs are utilized for projects that require abundant manual labor with minimal technical skills. Agreements for use of work force personnel are arranged through the SFWMD's Human Resources Division or lead land management agency, and coordinated by the regional land manager.

Under the cooperative agreement with the Osceola County School Board, 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.

Management Objective

- Use volunteer and alternative work force opportunities within the Management Area.

Management Actions

- Solicit appropriate volunteer participation in the Management Area.
- Report volunteer efforts in monthly reports.

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

Table 8: Contract Summary for Lake Marion Creek/Reedy Creek Management Area

MANAGEMENT AREA - UNIT	CONTRACT TYPE	CONTRACT ENTITY	CONTRACT NUMBER	IMPLEMENTATION DATES
Total Area Lake Marion Creek MA	Enhanced Law Enforcement Patrol	Florida Fish and Wildlife Conservation Commission	C-10162	1999 - 2024
Lake Marion Creek WMA	Wildlife Management	Florida Fish and Wildlife Conservation Commission	C-9803	1998 - 2018
Intercession City, Poinciana, Reedy Creek Management Units	Hog Trapping			
Total Area Lake Marion Creek MA	Prescribed Fire Support	The Nature Conservancy		
Lake Russell Unit	Environmental Education and Public Use Development	Osceola County School Board	C-7947	1996 - 2021
Lake Marion Creek / Reedy Creek MA within Polk County	Land Acquisition and Reimbursing SFWMD for management	Polk County Commission	C-6346 C-8332	

In addition to the above contracts, the Southwest Florida Water Management District acquired 300 acres of land within the Lake Marion Creek/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 (Contract No. C-9804). Under the agreement, the South Florida Water Management District will actively manage Southwest Florida Water Management District's property in exchange for reimbursement of management costs. This agreement was finalized in July 1998.

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

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. As of October 1998 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.

The USFWS has property that is on the southern boundary of the Lake Marion Creek WMA Snell Creek unit. This 137 acre tract is part of the Lake Wales Ridge National Wildlife Refuge system. District staff has been in discussion with the USFWS to manage this property as part of the Lake Marion Creek WMA.

Private concessions and/or agreements with non-profit organizations may be considered to implement needed services through concession contracts. As of July 2004, there were no current or planned concessions within the Management Area. The District will continue to evaluate proposed concession services and/or facilities on a case-by-case basis.

In certain circumstances, it is expedient to coordinate management activities without the benefit of a contract. These non-contractual agreements are usually the result of a long-standing interest of private individuals or groups in select parcels of Land Stewardship properties, but may also involve government agencies with common land management goals. Where mutual benefit is derived by cooperator participation in land management, defined management tasks may be delegated to them as hand shake deals, without legal documentation. Selection of appropriate management activities and projects for non-

contractual agreement is at the discretion of the regional land manager, with review of the LSP division director and supervising land manager.

7.6 Management Review

GMPs are created following a designated format and provide description of recommended management for each Land Stewardship Management Area. The GMP is updated every five years. Management review teams evaluate management plans and participate in on-site reviews of management practices. Team members consist of the LSP regional land manager, and representatives from FWC, FDEP, Florida Division of Forestry (FDOF), local soil and water conservation districts, local government and private land management interests, and conservation organizations.

Land managers submit regional monthly reports to the LSP office in West Palm Beach. These reports indicate progress toward achieving annual work plan objectives. In addition to reporting those activities conducted by District staff, monthly reports also contain information concerning activities conducted by cooperative managers, lessees, and contract personnel.

LSP quarterly meetings address management problems and unresolved issues of the previous quarter, and plan for future management operations.

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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 (GMP).

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)**

Appendix C

Acronyms

AWP	Annual Work Plan
CWA	Clean Water Act
FCREPA	Florida Committee on Rare and Endangered Plants and Animals
FDHR	Florida Division of Historical Resources
FDOF	Florida Division of Forestry
FDEP	Florida Department of Environmental Protection
FWC	Florida Fish and Wildlife Conservation Commission
FNAI	Florida Natural Areas Inventory
GMP	General Management Plan
GOAA	Greater Orlando Aviation Authority
LSP	Land Stewardship Program (SFWMD)
NGVD	National Geodetic Vertical Datum
NSLP	Natural Soil Landscape Positions
OFW	Outstanding Florida Waters
ONRW	Outstanding Natural Resource Waters
SFWMD	South Florida Water Management District
SOR	Save Our Rivers Program (SFWMD)
TNC	The Nature Conservancy
USFWS	United States Fish and Wildlife Service
WMA	Wildlife Management Area (FWC)

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Appendix D - Floral Species List

Inventoried by: Edwin Bridges and Gary Reese, 1996-1997, 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

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

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54		6	<i>Asclepias tuberosa</i> subsp. <i>rolfsii</i>	Butterfly-weed
55		7	<i>Cynanchum scoparium</i>	Leafless Cynanchum; Leafless Swallow-wort
56		8	<i>Matelea gonocarpus</i>	Angle-Pod; Spiny-Pod
57	Aspidiaceae	1	<i>Dryopteris ludoviciana</i>	Florida or Southern Shield Fern; Southern Wood Fern
58		2	<i>Polystichum acrostichoides</i>	Christmas Fern
59		3	<i>Thelypteris dentata</i>	Downy Shield Fern; Downy Maiden Fern
60		4	<i>Thelypteris hispida</i> var. <i>versicolor</i>	Rough Hairy Maiden Fern
61		5	<i>Thelypteris interrupta</i>	Willdenow's Maiden Fern
62		6	<i>Thelypteris kunthii</i>	Widespread Maiden Fern
63		7	<i>Thelypteris palustris</i> var. <i>pubescens</i>	Eastern Marsh Fern
64	Asteraceae	1	<i>Acmella oppositifolia</i> var. <i>repens</i>	Button of Gold; Creeping Spotflower
65		2	<i>Ageratina jucunda</i>	Hammock Thoroughwort
66		3	<i>Ambrosia artemisiifolia</i>	Common or Annual Ragweed
67		4	<i>Aster caroliniensis</i>	Climbing Aster
68		5	<i>Aster dumosus</i>	Bush Aster
69		6	<i>Aster elliotii</i>	Elliott's Aster
70		7	<i>Aster reticulatus</i>	Pine Barren White-top Aster
71		8	<i>Aster subulatus</i>	Annual Saltmarsh Aster
72		9	<i>Aster tortifolius</i>	White-topped Aster
73		10	<i>Baccharis glomeruliflora</i>	Groundsel Tree; Silverling
74		11	<i>Baccharis halimifolia</i>	Groundsel Tree; Sea or Salt Myrtle; Eastern False-willow
75		12	<i>Balduina angustifolia</i>	Yellow Buttons; Coastal-plain Honeycomb-head
76		13	<i>Bidens alba</i> var. <i>radiata</i>	Common Begger-ticks
77		14	<i>Bidens bipinnata</i>	Spanish Needle(s)
78		15	<i>Bidens mitis</i>	Marsh or Small-fruited Beggar-ticks
79		16	<i>Bigelovia nudata</i> subsp. <i>australis</i>	South Florida Rayless-goldenrod
80		17	<i>Boltonia diffusa</i>	False Aster; Small-head Doll's Daisy; Saltmarsh Boltonia
81		18	<i>Carphephorus corymbosus</i>	Coastal-plain Chaffhead
82		19	<i>Carphephorus odoratissimus</i>	Odorless Vanilla-leaf
83		20	<i>Carphephorus paniculatus</i>	Hairy Chaffhead
84		21	<i>Chrysopsis scabrella</i>	Coastal-plain Golden-aster
85		22	<i>Cirsium horridulum</i>	Yellow or Horrid Thistle
86		23	<i>Cirsium muticum</i>	
87		24	<i>Cirsium nuttallii</i>	Nuttall's Thistle
88		25	<i>Conoclinium coelestinum</i>	Blue Mistflower
89		26	<i>Conyza canadensis</i> var. <i>pusilla</i>	Dwarf Horseweed
90		27	<i>Coreopsis floridana</i>	Florida Tickseed
91		28	<i>Coreopsis leavenworthii</i>	Leavenworth's Tickseed
92		29	<i>Elephantopus</i> species	Elephant's Foot
93		30	<i>Erechtites hieracifolia</i>	Fireweed; American Burn
94		31	<i>Erigeron quercifolius</i>	Southern or Oakleaf Fleabane
95		32	<i>Erigeron vernus</i>	Daisy or Early White-top Fleabane
96		33	<i>Eupatoriadelphus fistulosus</i>	Hollow Joe-pye-weed
97		34	<i>Eupatorium capillifolium</i>	Small Dog-fennel Thorough-wort; Dog Fennel
98		35	<i>Eupatorium compositifolium</i>	Dog Fennel; Yankee Weed
99		36	<i>Eupatorium leptophyllum</i>	Marsh Fennel
100		37	<i>Eupatorium mohrii</i>	Dog-fennel; Pale Boneset; Mohr's Thoroughwort
101		38	<i>Eupatorium recurvans</i>	Coastal Plain Thoroughwort
102		39	<i>Eupatorium rotundifolium</i>	False Horehound; Round-leaf Thorough-wort
103		40	<i>Eupatorium serotinum</i>	Late-flowering Thoroughwort
104		41	<i>Euthamia tenuifolia</i>	Slender Fragrant or Flat-topped Goldenrod
105		42	<i>Garberia heterophylla</i>	Garberia
106		43	<i>Gnaphalium obtusifolium</i>	Sweet Everlasting; Rabbit's Tobacco
107		44	<i>Helenium pinnatifidum</i>	Southeastern Sneezeweed
108		45	<i>Helianthus angustifolius</i>	Swamp Sunflower
109		46	<i>Helianthus floridanus</i>	Florida Sunflower
110		47	<i>Heterotheca subaxillaris</i>	Camphor-weed
111		48	<i>Hieracium megacephalon</i>	Hawk's Beard; Coastal-plain Hawkweed
112		49	<i>Iva microcephala</i>	Piedmont Sumpweed; Piedmont Marsh-elder
113		50	<i>Krigia virginica</i>	Virginia Dwarf-dandelion
114		51	<i>Lactuca floridana</i>	Wild or Woodland Lettuce
115		52	<i>Liatis chapmanii</i>	Chapman's Gayfeather

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116		53	<i>Liatris gracilis</i>	Blazing-star; Slender Gayfeather
117		54	<i>Liatris spicata</i>	Spiked Gayfeather
118		55	<i>Liatris tenuifolia</i> var. <i>quadriflora</i>	Blazing Star; Short-leaf Gayfeather
119		56	<i>Liatris tenuifolia</i> var. <i>tenuifolia</i>	Blazing Star; Short-leaf Gayfeather
120		57	<i>Lygodesmia aphylla</i>	Roserush
121		58	<i>Melanthera nivea</i>	Snow Squarestem; Cat-tongue
122		59	<i>Mikania cordifolia</i>	Florida Keys Hempweed; Florida Key Hempvine
123		60	<i>Mikania scandens</i>	Climbing Hempweed; Climbing Hempvine
124		61	<i>Palafoxia feayi</i>	Feay's Palafox
125		62	<i>Phoebanthus grandiflorus</i>	Florida False Sunflower
126		63	<i>Pityopsis graminifolia</i>	Golden-Aster
127		64	<i>Pityopsis graminifolia</i> var. <i>aequilifolia</i>	Florida Sand Golden-Aster
128		65	<i>Pityopsis graminifolia</i> var. <i>latifolia</i>	Golden-Aster
129		66	<i>Pityopsis graminifolia</i> var. <i>tracyi</i>	Golden Aster; Coastal-plain Silkgrass
130		67	<i>Pluchea foetida</i>	White or Marsh Fleabane; Stinking Camphor-weed
131		68	<i>Pluchea longifolia</i>	Long-leaf Camphor-weed
132		69	<i>Pluchea odorata</i>	Saltmarsh Fleabane; Shrubby Camphorweed
133		70	<i>Pluchea rosea</i>	Godfrey's Fleabane; Rosy Camphor-weed
134		71	<i>Polymnia uvedalia</i>	Bear's-foot; Yellow Leafcup
135		72	<i>Pterocaulon pycnostachyum</i>	Wand or Coastal Blackroot; Rabbit Tobacco
136		73	<i>Pyrrhopappus carolinianus</i>	Carolina False Dandelion
137		74	<i>Senecio glabellus</i>	Butterweed; GoldenorGrass-leafRagwort; Gr. Groundsel
138		75	<i>Solidago fistulosa</i>	Pinebarren Goldenrod
139		76	<i>Solidago leavenworthii</i>	Leavenworth's Goldenrod
140		77	<i>Solidago odora</i> var. <i>chapmanii</i>	Sweet Golden-rod
141		78	<i>Verbesina virginica</i>	Frostweed; White Crownbeard
142		79	<i>Vernonia gigantea</i>	Tall or Giant Ironweed
143		80	<i>Youngia japonica</i>	Oriental Hawksbeard
144	Avicenniaceae	1	<i>Monarda punctata</i>	Horsemint; Spotted Beebalm
145	Begoniaceae	1	<i>Begonia cucullata</i>	Wax Begonia
146	Betulaceae	1	<i>Carpinus caroliniana</i>	American Hornbeam; Bluebeech; Musclewood
147	Bignoniaceae	1	<i>Campsis radicans</i>	Trumpet-vine; Trumpet Creeper
148	Blechnaceae	1	<i>Blechnum serrulatum</i>	Toothed Mid-sorus Fern
149		2	<i>Woodwardia areolata</i>	Netted or Dimorphic Chain Fern
150		3	<i>Woodwardia virginica</i>	Virginia Chain Fern
151	Brassicaceae	1	<i>Cardamine bulbosa</i>	Spring-cress; Bulbous Bitter-cress
152		2	<i>Lepidium virginicum</i>	Poorman's Pepper; Poorman's Pepper-wort
153		3	<i>Nasturtium microphyllum</i>	One-row Water-cress
154	Bromeliaceae	1	<i>Tillandsia bartramii</i>	Wild Pine; Bartram's Air Plant
155		2	<i>Tillandsia fasciculata</i> var. <i>densispica</i>	Wild Pine; Giant Air Plant
156		3	<i>Tillandsia recurvata</i>	Small Ball-Moss
157		4	<i>Tillandsia setacea</i>	Wild Pine; Southern Needleleaf Air Plant
158		5	<i>Tillandsia simulata</i>	Wild Pine; Air Plant
159		6	<i>Tillandsia usneoides</i>	Spanish Moss
160		7	<i>Tillandsia utriculata</i>	Wild Pine; Spreading Air Plant
161	Burmanniaceae	1	<i>Apteria aphylla</i>	Nodding Nixie
162	Cactaceae	1	<i>Opuntia humifusa</i>	Prickly-pear Cactus; Devil's-tongue
163		2	<i>Opuntia pusilla</i>	Cock's-spur Prickly-pear
164	Campanulaceae	1	<i>Lobelia cardinalis</i>	Cardinal Flower
165		2	<i>Lobelia feayana</i>	Bay Lobelia
166		3	<i>Lobelia glandulosa</i>	Glandular or Glade Lobelia
167	Cannaceae	1	<i>Canna flaccida</i>	Golden or Yellow Canna; Bandana-of-the-Everglades
168		2	<i>Canna x generalis</i>	Common Garden or Common Canna
169	Capparaceae	1	<i>Polanisia tenuifolia</i>	
170	Caprifoliaceae	1	<i>Lonicera sempervirens</i>	Coral Honeysuckle
171		2	<i>Sambucus canadensis</i>	Elderberry; American Elder
172		3	<i>Viburnum nudum</i>	Possum Haw Viburnum; Possum Haw
173		4	<i>Viburnum obovatum</i>	Small or Walter Viburnum; Black Haw
174	Caryophyllaceae	1	<i>Drymaria cordata</i>	West Indian Chickweed; West Indian Drymary
175		2	<i>Paronychia americana</i>	American Nailwort
176		3	<i>Paronychia chartacea</i>	Paper-like Nailwort
177		4	<i>Paronychia patula</i>	Pineland Nailwort
178		5	<i>Stipulicida setacea</i> var. <i>lacerata</i>	Pineland Scaly-pink
179	Celastraceae	1	<i>Euonymus americanus</i>	American Strawberry-bush
180	Chenopodiaceae	1	<i>Chenopodium ambrosioides</i>	Mexican Tea; American Wormseed

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181	Chrysobalanaceae	1	Licania michauxii	Gopher Apple; Licania
182	Cistaceae	1	Helianthemum corymbosum	Rockrose; Pine-barren Frostweed
183		2	Helianthemum nashii	Florida Scrub Frostweed
184		3	Lechea cernua	Nodding Pinweed
185		4	Lechea deckertii	Deckert's Pinweed
186		5	Lechea divaricata	Pine or Dry-sand Pinweed
187		6	Lechea mucronata	Hairy Pinweed
188		7	Lechea sessiliflora	Pineland Pinweed
189		8	Lechea torreyi	Piedmont Pinweed
190	Commelinaceae	1	Callisia repens	Basket Plant; Creeping Inchplant
191		2	Commelina erecta	Day-flower
192		3	Cuthbertia ornata	
193		4	Tradescantia hirsutiflora	Spiderwort
194	Convolvulaceae	1	Dichondra carolinensis	Carolina Pony-foot
195		2	Evolvulus sericeus	Creeping Morning-glories; Silky False-morning-glory
196		3	Ipomoea cordatotriloba	Morning-glory; Tievine
197		4	Ipomoea pandurata	Wild Potato Vine; Morning-glory; Man-of-the-earth
198		5	Ipomoea sagittata	Saltmarsh or Glade Morning-glory
199		6	Stylisma abdita	
200	Cornaceae	1	Cornus foemina	Stiff Cornel; Stiff Cornel Dogwood; Swamp Dogwood
201	Cucurbitaceae	1	Melothria pendula	Creeping Cucumber; Guadeloupe-cucumber
202	Cupressaceae	1	Juniperus silicicola	Southern Red Cedar
203	Cyperaceae	1	Bulbostylis barbata	Watergrass
204		2	Bulbostylis ciliatifolia	Capillary Hair-sedge
205		3	Bulbostylis warei	Ware's Hairsedge
206		4	Carex alata	Broadwing Sedge
207		5	Carex atlantica subsp. capillacea	Howe or Prickly Bog Sedge
208		6	Carex bromoides	Brome-like Sedge
209		7	Carex chapmannii	Chapman's Sedge
210		8	Carex comosa	Bottle-brush or Bearded Sedge
211		9	Carex floridana	Southern Black-edge Sedge
212		10	Carex gigantea	Large Sedge
213		11	Carex godfreyi	Godfrey's Sedge
214		12	Carex granularis	Limestone Meadow Sedge
215		13	Carex leptalea	Bristly-stalk Sedge
216		14	Carex longii	Greenish-white Sedge
217		15	Carex lupuliformis	Hop Sedge
218		16	Carex styloflexa	Bent Sedge
219		17	Carex verrucosa	Warty Sedge
220		18	Carex vexans	Confusing or Florida Hammock Sedge
221		19	Cladium jamaicense	Jamaica Sawgrass
222		20	Cyperus compressus	Poorland Flatsedge
223		21	Cyperus croceus	Baldwin Flatsedge
224		22	Cyperus distinctus	Marshland Flatsedge
225		23	Cyperus flavescens	Yellow Flatsedge
226		24	Cyperus haspan	Sheathed Flatsedge
227		25	Cyperus lecontei	Leconte's Flatsedge
228		26	Cyperus nashii	Nash's Flatsedge
229		27	Cyperus odoratus	Rusty Flatsedge
230		28	Cyperus polystachyos	Texas Sedge; Many-spike Flatsedge
231		29	Cyperus pumilus	Low Flatsedge
232		30	Cyperus retrorsus	Retorse or Pine-barren Flatsedge; Galingale
233		31	Cyperus stenolepis	Pale Marsh Cyperus
234		32	Cyperus strigosus	Straw-colored Flatsedge
235		33	Cyperus surinamensis	Tropical Flatsedge
236		34	Cyperus tetragonus	Four-angle Flatsedge
237		35	Eleocharis baldwinii	Roadgrass; Baldwin's Spikerush
238		36	Eleocharis equisetoides	Knotted or Horse-tail Spikerush
239		37	Eleocharis flavescens	Pale Spikerush
240		38	Eleocharis quadrangulata	Square-stem Spikerush
241		39	Eleocharis tuberculosa	Long-tubercle Spikerush
242		40	Eleocharis vivipara	Viviparous Spikerush

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243		41	<i>Fimbristylis autumnalis</i>	Slender Fimbry
244		42	<i>Fimbristylis dichotoma</i>	Tall or Annual or Woolly Fimbry
245		43	<i>Fimbristylis puberula</i>	Vahl's Hairy Fimbry
246		44	<i>Fuirena breviseta</i>	Saltmarsh Umbrella-sedge
247		45	<i>Fuirena pumila</i>	Dwarf Umbrella-sedge
248		46	<i>Fuirena scirpoidea</i>	Southern Umbrella-sedge
249		47	<i>Kyllinga odorata</i>	Fragrant Flatsedge
250		48	<i>Kyllinga pumila</i>	Thin-leaf Flatsedge
251		49	<i>Lipocarpa maculata</i>	American Lipocarpa
252		50	<i>Rhynchospora caduca</i>	Falling Beakrush; Falling Beaksedge
253		51	<i>Rhynchospora careyana</i>	Horned Beakrush
254		52	<i>Rhynchospora cephalantha</i>	Clustered Beakrush; Bunched Beaksedge
255		53	<i>Rhynchospora ciliaris</i>	Ciliate or Fringed Beakrush
256		54	<i>Rhynchospora colorata</i>	Starbrush White-topped Sedge; Star Rush
257		55	<i>Rhynchospora corniculata</i>	Horned-rush; Short-bristle Horned Beak(rush)(sedge)
258		56	<i>Rhynchospora decurrens</i>	Decurrent or Swamp-forest Beak(rush)(sedge)
259		57	<i>Rhynchospora divergens</i>	Spreading Beakrush; Spreading Beaksedge
260		58	<i>Rhynchospora fascicularis</i>	Fasciculate Beakrush; Fasciculate Beaksedge
261		59	<i>Rhynchospora fernaldii</i>	Fernald's Beakrush; Fernald's Beaksedge
262		60	<i>Rhynchospora intermedia</i>	Pinebarren Beakrush; Pinebarren Beaksedge
263		61	<i>Rhynchospora inundata</i>	Narrow-fruited Horned Beak(rush)(sedge)
264		62	<i>Rhynchospora megalocarpa</i>	Sandy-field Beaksedge
265		63	<i>Rhynchospora microcarpa</i>	Southern Beakrush; Southern Beaksedge
266		64	<i>Rhynchospora microcephala</i>	Capitate Beakrush
267		65	<i>Rhynchospora miliacea</i>	Millet Beakrush; Millet Beaksedge
268		66	<i>Rhynchospora mixta</i>	Mingled Beakrush; Mingled Beaksedge
269		67	<i>Rhynchospora nitens</i>	Short-beak Baldrush
270		68	<i>Rhynchospora odorata</i>	Fragrant Beakrush; Fragrant Beaksedge
271		69	<i>Rhynchospora plumosa</i>	Plumed Beakrush; Plumed Beaksedge
272		70	<i>Rhynchospora rariflora</i>	Few-flower Beakrush; Few-flower Beakrush
273		71	<i>Scirpus cubensis</i>	Cuban Bulrush
274		72	<i>Scirpus cyperinus</i>	Woolgrass; Cotton-grass Bulrush
275		73	<i>Scirpus lineatus</i>	Pendulous or Drooping Bulrush
276		74	<i>Scirpus tabernaemontani</i>	Soft-stem(med) Bulrush
277		75	<i>Scleria oligantha</i>	Little-head Nutrush
278		76	<i>Scleria pauciflora</i>	Few-flower Nutrush
279		77	<i>Scleria reticularis</i>	Netted or Torrey's Nutrush
280		78	<i>Scleria triglomerata</i>	Tall Nutgrass; Whip Nutrush
281	Cyrtaceae	1	<i>Cyrtia parviflora</i>	Swamp Titi
282	Davalliaceae	1	<i>Nephrolepis exaltata</i>	Boston Fern; Boston Swordfern
283	Droseraceae	1	<i>Drosera brevifolia</i>	Dwarf Sundew
284		2	<i>Drosera capillaris</i>	Pink Sundew
285	Ebenaceae	1	<i>Diospyros virginiana</i>	Common Persimmon
286	Empetraceae	1	<i>Ceratiola ericoides</i>	Florida Rosemary
287	Ericaceae	1	<i>Agarista populifolia</i>	
288		2	<i>Befaria racemosa</i>	Tarflower
289		3	<i>Gaylussacia dumosa</i>	Dwarf Huckleberry
290		4	<i>Gaylussacia nana</i>	Dangleberry; Creeping Huckleberry
291		5	<i>Leucothoe axillaris</i>	Coastal Dog-Hobble
292		6	<i>Lyonia ferruginea</i>	Rusty Lyonia; Rusty Staggerbush
293		7	<i>Lyonia fruticosa</i>	Coastal-plain Staggerbush
294		8	<i>Lyonia ligustrina</i> var. <i>foliosiflora</i>	Maleberry; He-huckleberry
295		9	<i>Lyonia lucida</i>	Fetterbush; Shinyleaf
296		10	<i>Monotropa uniflora</i>	One-flower Indian-pipe
297		11	<i>Rhododendron viscosum</i>	Swamp Honeysuckle; Northern Swamp Azelea
298		12	<i>Vaccinium corymbosum</i>	Highbush or Fuscous Blueberry
299		13	<i>Vaccinium darrowii</i>	Darrow's or Glaucous Blueberry
300		14	<i>Vaccinium elliotii</i>	
301		15	<i>Vaccinium myrsinites</i>	Shiny Blueberry
302		16	<i>Vaccinium stamineum</i>	Deerberry; Blueberry
303	Eriocaulaceae	1	<i>Elephantopus carolinianus</i>	Carolina Elephant's-foot
304		2	<i>Elephantopus elatus</i>	Florida or Tall Elephant's-foot
305		3	<i>Eriocaulon decangulare</i>	Ten-angle Pipewort
306		4	<i>Lachnocaulon anceps</i>	White-head Bog-buttons
307		5	<i>Lachnocaulon beyrichianum</i>	Southern Bog-button

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308		6	<i>Lachnocaulon engleri</i>	Engler's Bogbutton
309		7	<i>Syngonanthus flavidulus</i>	Bantam-buttons; Yellow Hatpins
310	Eryngium	1	<i>Ptilimnium capillaceum</i>	Hair-like Mock Bishop's-weed
311	Euphorbiaceae	1	<i>Acalypha gracilens</i>	Three-seeded Mercury
312		2	<i>Cnidoscolus stimulosus</i>	Tread Softly; Stinging or Spurge Nettle; Finger-rot
313		3	<i>Croton argyranthemus</i>	Silver Croton
314		4	<i>Crotonopsis linearis</i>	Narrow-leaf Rushfoil
315		5	<i>Phyllanthus caroliniensis</i> subsp. <i>caroliniensis</i>	Carolina Leaf-flower
316		6	<i>Stillingia sylvatica</i> ssp. <i>sylvatica</i>	Queen's Delight
317		7	<i>Tragia urens</i>	Noseburn
318	Fabaceae	1	<i>Aeschynomene americana</i>	American Joint-vetch; Shyleaf
319		2	<i>Alysicarpus ovalifolius</i>	False Moneywort
320		3	<i>Amorpha herbacea</i>	Lead Plant; Cluster-spike Indigo-bush
321		4	<i>Apios americana</i>	Groundnut; American Potato-bean
322		5	<i>Chamaecrista fasciculata</i>	Partridge Pea
323		6	<i>Chamaecrista nictitans</i> var. <i>aspera</i>	Wild Sensitive Plant; Sensitive Partridge-pea
324		7	<i>Chamaecrista nictitans</i> var. <i>nictitans</i>	Sensitive Partridge-pea
325		8	<i>Chapmannia floridana</i>	Florida Alicia
326		9	<i>Crotalaria lanceolata</i>	Lance-leaf Rattlebox
327		10	<i>Crotalaria pallida</i> var. <i>obovata</i>	Smooth Rattlebox
328		11	<i>Crotalaria rotundifolia</i>	Rabbit-bells; Prostrate Rattle-box
329		12	<i>Dalea feayi</i>	Feay's Prairie-clover
330		13	<i>Dalea pinnata</i> var. <i>adenopoda</i>	Florida Summer-farewell
331		14	<i>Desmodium paniculatum</i>	Marrow-leaf or Panicked Tick-trefoil
332		15	<i>Desmodium triflorum</i>	Three-flower Tick-trefoil
333		16	<i>Desmodium viridiflorum</i>	Wide-leaved Tick-trefoil
334		17	<i>Erythrina herbacea</i>	Coral Bean
335		18	<i>Galactia elliotii</i>	Elliott's Milk-pea
336		19	<i>Galactia mollis</i>	
337		20	<i>Galactia regularis</i>	Eastern or Florida Milk-pea
338		21	<i>Galactia volubilis</i>	Downy Milk-pea
339		22	<i>Indigofera caroliniana</i>	Carolina Indigo
340		23	<i>Indigofera hirsuta</i>	Rough Hairy Indigo
341		24	<i>Lespedeza hirta</i> var. <i>hirta</i>	Hairy Bush-clover
342		25	<i>Lupinus diffusus</i>	Sky-blue or Oak-ridge Lupine
343		26	<i>Macroptilium lathyroides</i>	Wild Bush-bean
344		27	<i>Rhynchosia cinerea</i>	Snout-Pea
345		28	<i>Schrankia microphylla</i> var. <i>floridana</i>	Bashful Sensitive Briar
346		29	<i>Sesbania vesicaria</i>	Bladderpod; Bag-pod Rattle-bush; Bag-pod River Hemp
347		30	<i>Tephrosia chrysophylla</i>	Scurf Hoary-pea
348		31	<i>Tephrosia florida</i>	Florida Hoary-pea
349		32	<i>Tephrosia hispidula</i>	Spreading Hoary-pea
350		33	<i>Tephrosia spicata</i>	Spiked Hoary-pea
351		34	<i>Vicia acutifolia</i>	Four-leaf Vetch
352	Fagaceae	1	<i>Quercus chapmanii</i>	Chapman's Oak
353		2	<i>Quercus geminata</i>	Sand or Scrub Live Oak
354		3	<i>Quercus hemispherica</i>	Upland Laurel Oak
355		4	<i>Quercus incana</i>	Bluejack or Gray Oak
356		5	<i>Quercus inopina</i>	Scrub Oak
357		6	<i>Quercus laevis</i>	Turkey Oak
358		7	<i>Quercus laurifolia</i>	Laurel Oak; Diamond (-leaf) Oak
359		8	<i>Quercus minima</i>	Dwarf Live Oak
360		9	<i>Quercus myrtifolia</i>	Myrtle Oak
361		10	<i>Quercus nigra</i>	Water Oak
362		11	<i>Quercus pumila</i>	Runn(ing)(er) Oak
363		12	<i>Quercus virginiana</i>	Virginia Live Oak
364	Gentianaceae	1	<i>Sabatia brevifolia</i>	White Sabatia; Short-leaf Rose-gentian
365		2	<i>Sabatia calycina</i>	Coast(al) Rose-gentian
366		3	<i>Sabatia difformis</i>	Lance-leaf Rose-gentian
367		4	<i>Sabatia grandiflora</i>	Large-flower Rose-gentian
368	Geraniaceae	1	<i>Geranium carolinianum</i>	Carolina Cranesbill

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369	Haemodoraceae	1	Lachnanthes caroliniana	Bloodroot; Carolina Redroot
370	Haloragaceae	1	Proserpinaca palustris	
371		2	Proserpinaca pectinata	Comb-leaf Mermaid-weed
372	Hamamelidaceae	1	Liquidambar styraciflua	Sweetgum
373	Hydrophyllaceae	1	Hydrolea corymbosa	Sky-flower; Corymb False-fiddleleaf
374	Hydrocharitaceae	1	Hydrilla verticillata	Hydrilla; Waterthyme
375		2	Limnobium spongia	Frog's-bit; American Spongeplant
376		3	Vallisneria americana	Tape-grass; American Eel-grass; Wild-celery
377	Hypericaceae	1	Hypericum cf. limosum	Coastal-plain St. John's-wort
378		2	Hypericum cistifolium	Round-pod St. John's-wort
379		3	Hypericum crux-andreae	St. Peter's-wort; Saint Andrew's-cross; St. John's Wort
380		4	Hypericum fasciculatum	Sandweed or Swampy or Peel-bark St. John's-wort
381		5	Hypericum hypericoides	St. Andrew's Cross; Edison's St. John's-wort
382		6	Hypericum mutilum	Dwarf or Slender St. John's-wort
383		7	Hypericum myrtifolium	Myrtle-leaf St. John's-wort
384		8	Hypericum reductum	Atlantic St. John's-wort
385		9	Hypericum tetrapetalum	Four-petal St. John's-wort; St. Andrew's Cross
386		10	Triadenum virginicum	Virginia Marsh St. John's-wort
387	Hypoxidaceae	1	Hypoxis curtissii	Yellow or Swamp Stargrass; Clubpod Goldstar
388		2	Hypoxis juncea	Fringed Yellow or Common Stargrass
389	Illiciaceae	1	Illicium parviflorum	Star Anise; Ocala Anise-tree
390	Iridaceae	1	Iris hexagona var. savannarum	Prairie or Dixie Iris
391		2	Nemastylis floridana	Fall-flowering Ixia; F-flw. Pleatleaf
392		3	Sisyrinchium atlanticum	Pointed or Sandplain or Michaux's Blue-eyed-grass
393		4	Sisyrinchium xerophyllum	White Sand or Jeweled Blue-eyed Grass
394	Isoetaceae	1	Isoetes flaccida	Florida or Southern Quillwort
395	Juglandaceae	1	Carya aquatica	Water Hickory
396		2	Carya floridana	Scrub Hickory
397		3	Carya glabra	Pignut Hickory
398	Juncaceae	1	Juncus coriaceus	Leathery Rush
399		2	Juncus dichotomus	Two-parted or Forked Rush
400		3	Juncus effusus subsp. solutus	Soft or Lamp Rush
401		4	Juncus elliotii	Bog Rush
402		5	Juncus marginatus var. biflorus	Shore or Grass-leaf Rush
403		6	Juncus megacephalus	Large-headed or Big-headed Rush
404		7	Juncus polycephalus	Many-headed Rush
405		8	Juncus repens	Lesser Creeping Rush
406		9	Juncus scirpoides	Needle-pod Rush
407	Lamiaceae	1	Dicerandra frutescens	
408		2	Hyptis alata	Musky Mint; Cluster Bushmint
409		3	Hyptis mutabilis	Tropical Bushmint
410		4	Lycopus rubellus	Taper-leaf Water Hoarhound
411		5	Piloblephis rigida	Wild Pennyroyal
412		6	Salvia lyrata	Lyre-leaved Sage
413		7	Scutellaria arenicola	Florida Scrub Skullcap
414		8	Scutellaria integrifolia	Skullcap
415		9	Teucrium canadense	American Germander; Wood-sage
416		10	Trichostema dichotomum	Blue-curls
417		11	Trichostema suffruticosum	Shrubby Blue-curls
418	Lauraceae	1	Lindera benzoin	Spicebush
419		2	Persea borbonia var. borbonia	Red Bay
420		3	Persea borbonia var. humilis	Silkbay; Scrub Bay
421		4	Persea palustris	Swamp Bay; Swamp Red-bay
422	Lentibulariaceae	1	Pinguicula lutea	Yellow Butterwort
423		2	Pinguicula pumila	Small Butterwort
424		3	Utricularia inflata	Floating or Swollen Bladderwort
425		4	Utricularia purpurea	Eastern Purple Bladderwort
426		5	Utricularia subulata	Zigzag Bladderwort
427	Liliaceae	1	Aletris lutea	Yellow Colic-root
428		2	Lilium catesbaei	Catesby's or Pine or Southern Red Lily
429		3	Melanthium virginicum	Virginia Bunchflower
430	Loganiaceae	1	Gelsemium sempervirens	Yellow Jessamine; Evening Trumpet-
431		2	Mitreola petiolata	Miterwort; Lax Hornpod
432		3	Mitreola sessilifolia	Miterwort; Swamp Hornpod
433		4	Polyprenum procumbens	Rustweed; Juniper-leaf

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434	Loranthaceae	1	Phoradendron leucarpum	Oak Mistletoe
435	Lythraceae	1	Cuphea carthagenensis	Columbia Waxweed
436		2	Lythrum alatum var. lanceolatum	Wing(ed)(-angle) Loosestrife
437		3	Rotala ramosior	Lowland Toothcup
438	Magnoliaceae	1	Magnolia grandiflora	Southern or Large-flower Magnolia
439		2	Magnolia virginiana	Sweet Bay; Sweetbay Magnolia
440	Malvaceae	1	Hibiscus coccineus	Scarlet Rosemallow
441		2	Hibiscus grandiflorus	Swamp Hibiscus; Swamp Rose-mallow
442		3	Kosteletzkya virginica	Virginia Saltmarsh Mallow; Virginia Fen-rose
443		4	Pavonia spinifex	Yellow Hibiscus; Barb-fruit Swamp-mallow
444		5	Urena lobata	Caesar-weed
445	Marantaceae	1	Thalia geniculata	Fire or Alligator Flag
446	Melastomataceae	1	Rhexia cubensis	West Indi(an)(es) Meadow-beauty
447		2	Rhexia mariana	Pale or Maryland Meadow-beauty
448		3	Rhexia nashii	Nash's Meadow-beauty
449		4	Rhexia nuttallii	Nuttall's Meadow-beauty
450		5	Rhexia petiolata	Ciliate Meadow-beauty
451	Meliaceae	1	Melia azedarach	Chinaberry; Chineseberry
452	Moraceae	1	Broussonetia papyrifera	Paper-Mulberry
453		2	Morus rubra	Red Mulberry
454	Myricaceae	1	Myrica cerifera	Wax Myrtle; Southern Bayberry
455	Myrsinaceae	1	Ardisia escallonioides	Island Marlberry
456		2	Myrsine floridana	Guiana Rapanea; Guiana Myrsine; Guiana Colicwood
457	Nymphaeaceae	1	Nelumbo lutea	Lotus Lily; American Lotus; Water Chestnut
458		2	Nuphar lutea subsp. advena	Spatter-dock; Yellow Pond-lily
459		3	Nymphaea odorata	White or Fragrant Waterlily; Alligator Bonnet
460	Nyssaceae	1	Nyssa sylvatica var. biflora	Swamp Black or Sour Gum; Swamp Tupelo
461	Olacaceae	1	Ximenia americana	Tallowwood; Hog Plum
462	Oleaceae	1	Chionanthus pygmaeus	Pigmy Fringe Tree
463		2	Chionanthus virginicus	White Fringe Tree
464		3	Fraxinus caroliniana	Carolina or Water or Pop Ash
465		4	Fraxinus pennsylvanica	Red or Green Ash
466		5	Osmanthus americanus	Wild Olive; Devil-wood
467		6	Osmanthus megacarpus	Florida Wild Olive
468	Onagraceae	1	Ludwigia alata	Winged Seedbox; Winged Primrose-willow
469		2	Ludwigia arcuata	Piedmont Seedbox; Piedmont Primrose-willow
470		3	Ludwigia curtissii	Curtiss' Seedbox; Curtiss' Primrose-willow
471		4	Ludwigia erecta	Yerba de Jicotea
472		5	Ludwigia leptocarpa	River Seedbox; River Primrose-willow
473		6	Ludwigia linearis	Narrow-leaf Seedbox; Narrow-leaf Primrose-willow
474		7	Ludwigia maritima	Seaside Primrose-willow; Seaside Seedbox
475		8	Ludwigia microcarpa	Small-fruit Seedbox; Small-fruit Primrose-willow
476		9	Ludwigia octovalvis	Mexican Seedbox; Mexican Primrose-willow
477		10	Ludwigia palustris	Swamp Primrose; Marsh Primrose-willow
478		11	Ludwigia peruviana	Peruvian Primrose-willow
479		12	Ludwigia pilosa	Hairy Seedbox; Hairy Primrose-willow
480		13	Ludwigia repens	Water Primrose; Creeping Seedbox
481		14	Ludwigia suffruticosa	Shrubby Seedbox; Shrubby Primrose-willow
482		15	Oenothera laciniata	Cut-leaved Evening Primrose
483	Ophioglossaceae	1	Ophioglossum	Adder's Tongue Fern
484	Orchidaceae	1	Beadlea cranichoides	Tropical forest Ladies'-tresses
485		2	Encyclia tampensis	Tampa Butterfly Orchid
486		3	Epidendrum conopseum	Green-fly Orchid
487		4	Habenaria floribunda	Toothed Habenaria; Tooth-petal False Rein Orchid
488		5	Platanthera flava	Gypsy-spikes; Pale Green Orchid
489		6	Ponthieva racemosa	Hairy Shadow Witch
490		7	Pteroglossaspis ecristata	Wild Coco; Giant Orchid
491		8	Spiranthes odorata	Fragrant Ladies'-tresses
492	Osmundaceae	1	Osmunda cinnamomea	Cinnamon Fern
493		2	Osmunda regalis var. spectabilis	Royal Fern
494	Oxalidaceae	1	Oxalis corniculata	Lady's Sorrel; Creeping or Yellow Wood Sorrel
495	Phytolaccaceae	1	Petiveria alliacea	Garlic Guinea-hen Weed
496		2	Phytolacca americana	Pokeberryweed; Common or American Pokeweed

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497		3	<i>Phytolacca rigida</i>	Florida Pokeweed
498		4	<i>Rivina humilis</i>	Rouge Plant
499	Pinaceae	1	<i>Pinus clausa</i>	Sand Pine
500		2	<i>Pinus elliottii</i>	Slash Pine
501		3	<i>Pinus palustris</i>	Longleaf Pine
502	Piperaceae	1	<i>Peperomia humilis</i>	Terrestrial Peperomia
503	Plantaginaceae	1	<i>Plantago virginica</i>	Southern or Pale-seed Plantain
504	Poaceae	1	<i>Amphicarpum muhlenbergianum</i>	Little Blue Maidencane; Perennial Goobergrass
505		2	<i>Andropogon brachystachyus</i>	Short-spike Bluestem
506		3	<i>Andropogon floridanus</i>	Florida Bluestem
507		4	<i>Andropogon glomeratus</i> var. <i>glaucopsis</i>	Big Chalky Bluestem
508		5	<i>Andropogon glomeratus</i> var. <i>hirsutior</i>	Hairy Bushy Bluestem
509		6	<i>Andropogon glomeratus</i> var. <i>pumilus</i>	Big Bushy Bluestem
510		7	<i>Andropogon gyrans</i> var. <i>gyrans</i>	Elliott's Bluestem
511		8	<i>Andropogon ternarius</i> var. <i>cabanisii</i>	Silver Bluestem
512		9	<i>Andropogon virginicus</i> var. <i>decipiens</i>	Broomsedge
513		10	<i>Andropogon virginicus</i> var. <i>glaucus</i>	Little Chalky Bluestem
514		11	<i>Andropogon virginicus</i> var. <i>virginicus</i>	Broomsedge
515		12	<i>Aristida beyrichiana</i>	Wiregrass; Pineland Threeawn
516		13	<i>Aristida gyrans</i>	Corkscrew Threeawn
517		14	<i>Aristida palustris</i>	Long-leaf Three-awn Grass
518		15	<i>Aristida patula</i>	Tall Threeawn; Tall Wiregrass
519		16	<i>Aristida purpurascens</i> var. <i>purpurascens</i>	Slim-spike Three-awn Grass
520		17	<i>Aristida spiciformis</i>	Bottlebrush or Pinebarren Threeawn
521		18	<i>Axonopus fissifolius</i>	Common or Southern Carpetgrass
522		19	<i>Axonopus furcatus</i>	Big Carpetgrass
523		20	<i>Cenchrus echinatus</i>	Southern Sandspur
524		21	<i>Cenchrus incertus</i>	Coast Sandspur
525		22	<i>Chasmanthium laxum</i>	Spike Chasmanthium; Slender Spikegrass
526		23	<i>Chasmanthium nitidum</i>	Shiny Chasmanthium; Shiny Spikegrass
527		24	<i>Chasmanthium sessiliflorum</i>	Longleaf Chasmanthium; Longleaf Spikegrass
528		25	<i>Dichantherium aciculare</i>	Needle-leaf Witchgrass; Panic Grass
529		26	<i>Dichantherium commutatum</i>	Variable Witchgrass; Panic Grass
530		27	<i>Dichantherium dichotomum</i>	Cypress Witchgrass; Panic Grass
531		28	<i>Dichantherium ensifolium</i> var. <i>breve</i>	Panic Grass
532		29	<i>Dichantherium ensifolium</i> var. <i>ensifolium</i>	Panic Grass
533		30	<i>Dichantherium ensifolium</i> var. <i>unciphylum</i>	Panic Grass
534		31	<i>Dichantherium erectifolium</i>	Erect-leaf Witchgrass
535		32	<i>Dichantherium laxiflorum</i>	Lax-flower Witchgrass; Panic Grass
536		33	<i>Dichantherium leucothrix</i>	Panic Grass
537		34	<i>Dichantherium ovale</i>	Panic Grass; Egg-leaf Witchgrass
538		35	<i>Dichantherium portoricense</i>	Hemlock Witchgrass
539		36	<i>Dichantherium scabriusculum</i>	Woolly Panic Grass
540		37	<i>Dichantherium strigosum</i> var. <i>glabrescens</i>	Panic Grass
541		38	<i>Digitaria ciliaris</i>	Southern Crabgrass
542		39	<i>Echinochloa walteri</i>	Coast(al) Cockspur
543		40	<i>Eleusine indica</i>	India Goosegrass
544		41	<i>Eragrostis atrovirens</i>	Thalia Lovegrass
545		42	<i>Eragrostis elliottii</i>	Elliott('s) Lovegrass
546		43	<i>Eragrostis spectabilis</i>	Purple Lovegrass; Petticoat Climber
547		44	<i>Eragrostis virginica</i>	Coastal or Meadow Lovegrass
548		45	<i>Eustachys glauca</i>	Saltmarsh Fingergrass
549		46	<i>Eustachys petraea</i>	Pinewoods Fingergrass
550		47	<i>Gymnopogon chapmanianus</i>	Chapman's Skeletongrass
551		48	<i>Imperata brasiliensis</i>	Cogongrass; Brazilian Satintail
552		49	<i>Leersia hexandra</i>	Southern or Clubhead Cutgrass
553		50	<i>Leersia virginica</i>	White Grass
554		51	<i>Muhlenbergia capillaris</i> var. <i>filipes</i>	Long-awn Muhly
555		52	<i>Oplismenus setarius</i>	Wood(s)grass; Short-leaf Basketgrass
556		53	<i>Panicum anceps</i>	Beaked Panicum; Beaked Panic Grass
557		54	<i>Panicum hemitomom</i>	Maidencane
558		55	<i>Panicum hians</i>	Gaping Panic Grass
559		56	<i>Panicum longifolium</i>	Panic Grass

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560		57	<i>Panicum repens</i>	Torpedo Grass
561		58	<i>Panicum rigidulum</i>	Redtop Panicum; Redtop Panic Grass
562		59	<i>Panicum tenerum</i>	Bluejoint or Southeastern Panicum
563		60	<i>Panicum verrucosum</i>	Warty Panicum; Warty Panic Grass
564		61	<i>Panicum virgatum</i>	Switchgrass; Wand-shape Panicum
565		62	<i>Paspalum conjugatum</i>	Sour Paspalum; Sour Crowngrass
566		63	<i>Paspalum floridanum</i>	Florida or Giant Paspalum; Florida Crowngrass
567		64	<i>Paspalum notatum</i> var. <i>saurae</i>	Bahiagrass
568		65	<i>Paspalum praecox</i>	Early Paspalum; Early Crowngrass
569		66	<i>Paspalum setaceum</i>	Thin Paspalum; Slender Crowngrass
570		67	<i>Paspalum urvillei</i>	Vaseygrass
571		68	<i>Phanopyrum gymnocarpon</i>	Savannah Panicum; Savannah Panic Grass
572		69	<i>Pharus lappulaceus</i>	Creeping Leafstalkgrass
573		70	<i>Piptochaetium avenaceum</i>	Blackseed Needle Grass
574		71	<i>Rhynchelytrum repens</i>	Red Natalgrass
575		72	<i>Saccharum giganteum</i>	Sugarcane Plumegrass
576		73	<i>Sacciolepis indica</i>	India Cupscale; Glenwood Grass
577		74	<i>Sacciolepis striata</i>	American Cupscale
578		75	<i>Schizachyrium rhizomatum</i>	Florida Bluestem
579		76	<i>Schizachyrium sanguineum</i>	Crimson False Bluestem
580		77	<i>Schizachyrium stoloniferum</i>	Creeping Bluestem
581		78	<i>Setaria geniculata</i>	Knotroot Foxtail; Knotroot Bristle Grass
582		79	<i>Sorghastrum secundum</i>	Lopsided Indiangrass
583		80	<i>Spartina bakeri</i>	Sand or Bunch Cordgrass
584		81	<i>Stipa avenciooides</i>	Florida Needlegrass
585		82	<i>Tridens flavus</i> var. <i>flavus</i>	Tall Redtop; Purpletop; Purpletop Triends
586		83	<i>Triplasis americana</i>	Perennial Sandgrass
587		84	<i>Tripsacum dactyloides</i>	Eastern Gamagrass; Eastern Mock Grama
588		85	<i>Urochloa mutica</i>	Paragrass
589	Polygalaceae	1	<i>Polygala cruciata</i>	Cross-leaf Milkwort; Drumheads
590		2	<i>Polygala lewtonii</i>	
591		3	<i>Polygala lutea</i>	Wild Batchelor's Button; Orange Milkwort
592		4	<i>Polygala nana</i>	Wild Batchelor's Button; Dwarf Milkwort
593		5	<i>Polygala polygama</i>	Jointweed; Racemed Milkwort
594		6	<i>Polygala rugelii</i>	Yellow Batchelor's Button; Yellow Milkwort
595		7	<i>Polygala setacea</i>	Coastal-plain Milkwort
596	Polygonaceae	1	<i>Eriogonum longifolium</i> var. <i>gnaphalifolium</i>	Scrub Buckwheat
597		2	<i>Eriogonum tomentosum</i>	Wild Buckwheat
598		3	<i>Polygonella gracilis</i>	Wireweed; Tall Jointweed
599		4	<i>Polygonella polygama</i> var. <i>polygama</i>	Jointweed; October-flower
600		5	<i>Polygonella robusta</i>	Sandhill Wireweed; Large-flower Jointweed
601		6	<i>Polygonum densiflorum</i>	Dense-flower Smartweed; Dense-flower Knotweed
602		7	<i>Polygonum hirsutum</i>	Hairy Smartweed
603		8	<i>Polygonum hydropiperoides</i>	Mild or Swamp Water-pepper; Swamp Smartweed
604		9	<i>Polygonum punctatum</i>	Dotted Smartweed
605		10	<i>Rumex hastatulus</i>	Hastate-leaved Dock; Heart-wing Sorrel
606	Polypodiaceae	1	<i>Campyloneurum phyllitidis</i>	Long Strap Fern
607		2	<i>Pecluma plumula</i>	Plumy Polypody
608		3	<i>Pecluma ptilodon</i> var. <i>caespitosa</i>	Comb Polypody
609		4	<i>Phlebodium aureum</i>	Golden Polypody
610		5	<i>Polypodium polypodioides</i> var. <i>michauxianum</i>	Resurrection Fern
611	Pontederiaceae	1	<i>Eichhornia crassipes</i>	Common Water Hyacinth
612		2	<i>Pontederia cordata</i>	Pickerelweed
613	Primulaceae	1	<i>Samolus valerandi</i> subsp. <i>parviflorus</i>	Water or Pineland Pimpernel; Seaside Brookweed
614	Psilotaceae	1	<i>Psilotum nudum</i>	Whisk Fern
615	Pteridaceae	1	<i>Pityrogramma trifoliata</i>	Goldenrod or Split-pinna Fern
616		2	<i>Pteridium aquilinum</i> var. <i>latiusculum</i>	Bracken Fern
617	Ranunculaceae	1	<i>Clematis catesbyana</i>	Virgin's Bower; Satin-curly
618		2	<i>Clematis crispa</i>	Swamp Leather Flower
619	Rhamnaceae	1	<i>Berchemia scandens</i>	Rattan Vine; Alabama Supple-jack
620		2	<i>Rhamnus caroliniana</i>	Carolina Buckthorn
621		3	<i>Sageretia minutiflora</i>	Small-flower Mock Buckthorn; Sagaretia
622	Rosaceae	1	<i>Crataegus lepida</i>	Scrub Hawthorn

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623		2	<i>Prunus caroliniana</i>	Carolina Laurel Cherry
624		3	<i>Prunus geniculata</i>	Scrub Plum
625		4	<i>Prunus serotina</i> var. <i>serotina</i>	Black or Wild Cherry
626		5	<i>Prunus umbellata</i>	Flatwoods or Hog Plum
627		6	<i>Pyrus arbutifolia</i>	Red Chokeberry
628		7	<i>Rubus argutus</i>	Highbush Blueberry; Serrate-leaf Blackberry
629		8	<i>Rubus betulifolius</i>	Blackberry
630		9	<i>Rubus cuneifolius</i>	Sand Blackberry
631		10	<i>Rubus trivialis</i>	Southern Dewberry
632	Rubiaceae	1	<i>Cephalanthus occidentalis</i>	Common Buttonbush
633		2	<i>Chiococca alba</i>	Snowberry; West Indies Milkberry
634		3	<i>Diodia teres</i>	Poor Joe; Rough Button-weed
635		4	<i>Diodia virginiana</i>	Virginia Buttonweed
636		5	<i>Galium aparine</i>	Goose Grass; Spring Cleavers; Catchweed Bedstraw
637		6	<i>Galium hispidulum</i>	Coastal Bedstraw
638		7	<i>Galium pilosum</i>	Hairy Bedstraw
639		8	<i>Galium tinctorium</i>	Stiff Marsh Bedstraw
640		9	<i>Galium uniflorum</i>	One-flower Bedstraw
641		10	<i>Hamelia patens</i>	Firebush; Scarletbush
642		11	<i>Hedyotis procumbens</i>	Innocence; Round-leaf Bluet
643		12	<i>Hedyotis uniflora</i>	Flat-top Bluet; Clustered Bluet
644		13	<i>Mitchella repens</i>	American Partridge Berry; Twinberry
645		14	<i>Psychotria nervosa</i>	Wild Coffee; Seminole Balsamo
646		15	<i>Psychotria sulzneri</i>	Sulzner's Wild Coffee
647		16	<i>Richardia brasiliensis</i>	Tropical Mexican-clover
648		17	<i>Richardia scabra</i>	Rough Mexican-clover
649	Rutaceae	1	<i>Citrus aurantium</i>	Sour Orange
650		2	<i>Zanthoxylum clava-herculis</i>	Hercules'-club; Prickly Ash
651		3	<i>Zanthoxylum fagara</i>	Wild Lime; Lime Prickly-ash
652	Salicaceae	1	<i>Salix caroliniana</i>	Carolina or Coastal Plain Willow
653		2	<i>Salix floridana</i>	Florida Willow
654	Salviniaceae	1	<i>Azolla caroliniana</i>	Carolina Mosquito Fern
655		2	<i>Salvinia minima</i>	Water Sprangles
656	Sapindaceae	1	<i>Sapindus saponaria</i>	Wing-leaf Soapberry; False Dogwood
657	Sapotaceae	1	<i>Bumelia reclinata</i>	Florida Bumelia; Florida Bully
658		2	<i>Bumelia tenax</i>	Tough Bumelia; Tough Buckthorn
659	Saururaceae	1	<i>Saururus cernuus</i>	Lizard's-tail
660	Saxifragaceae	1	<i>Decumaria barbara</i>	Cowitch-vine; Woodvamp
661		2	<i>Itea virginica</i>	Virginia Willow; Virginia Sweetspire
662	Schizaeaceae	1	<i>Lygodium japonicum</i>	Japanese Climbing Fern
663	Scrophulariaceae	1	<i>Agalinis fasciculata</i>	Beach False-foxglove
664		2	<i>Agalinis linifolia</i>	Flax-leaf False-foxglove
665		3	<i>Bacopa caroliniana</i>	Blue Hyssop; Carolina or Blue Water-hyssop
666		4	<i>Bacopa monnieri</i>	Coastal Water-hyssop
667		5	<i>Buchnera americana</i>	American Blueheart(s)
668		6	<i>Gratiola hispida</i>	Rough Hedge-hyssop
669		7	<i>Gratiola pilosa</i>	Shaggy Hedge-hyssop
670		8	<i>Gratiola ramosa</i>	Branching Hedge-hyssop
671		9	<i>Gratiola virginiana</i>	Round-fruit Hedge-hyssop
672		10	<i>Linaria canadensis</i>	Blue or Oldfield Toadflax
673		11	<i>Linaria floridana</i>	Florida Toadflax
674		12	<i>Lindernia anagallidea</i>	False-pimpernel
675		13	<i>Lindernia grandiflora</i>	Savannah False-pimpernel
676		14	<i>Mecardonia acuminata</i>	Purple Mecardonia; Purple Axil-flower
677		15	<i>Micranthemum umbrosum</i>	Shade Mudflower
678		16	<i>Penstemon multiflorus</i>	
679		17	<i>Scoparia dulcis</i>	Sweet Broom; Licorice Weed
680		18	<i>Seymeria pectinata</i>	Piedmont Seymeria
681	Selaginellaceae	1	<i>Selaginella apoda</i>	Meadow Spikemoss
682		2	<i>Selaginella arenicola</i>	Sand Spikemoss
683	Smilacaceae	1	<i>Smilax auriculata</i>	Ear-leaf Greenbrier; Catbrier
684		2	<i>Smilax bona-nox</i>	Saw Greenbrier; Catbrier
685		3	<i>Smilax glauca</i>	WildSarsaparilla; Glauous(-leaf)Greenbrier;Catbrie
686		4	<i>Smilax laurifolia</i>	Catbrier; Bamboo-vine; Laurel(-leaf) Greenbrier

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687		5	<i>Smilax pumila</i>	SarsaparillaVine;Small Greenbrier;Woolly Cat-brier
688		6	<i>Smilax smallii</i>	Jackson Vine; Lance-leaf Greenbrier
689		7	<i>Smilax tamnoides</i>	Catbrier;Bristly/Halberd-leaf Greenbrier;Chinaroot
690		8	<i>Smilax walteri</i>	
691	Solanaceae	1	<i>Capsicum annuum</i> var. <i>glabrisculum</i>	Bird Pepper
692		2	<i>Physalis angulata</i>	Cut-leaf Ground-cherry
693		3	<i>Physalis arenicola</i> var. <i>arenicola</i>	Cypress-head Ground-cherry
694		4	<i>Physalis pubescens</i>	Low Hairy Ground-cherry
695		5	<i>Solanum americanum</i>	American Black or Common Nightshade
696	Sphagaceae	1	<i>Sphagnum</i> spp.	Sphagnum Mosses
697	Styracaceae	1	<i>Styrax americanus</i>	Storax; American Snowbell
698	Taxodiaceae	1	<i>Taxodium ascendens</i>	Pond Cypress
699		2	<i>Taxodium distichum</i>	Bald Cypress
700	Theaceae	1	<i>Gordonia lasianthus</i>	Loblolly Bay
701	Thelypteridaceae	1	<i>Macrothelypteris torresiana</i>	Mariana Maiden Fern
702	Tiliaceae	1	<i>Tilia americana</i>	Basswood
703		2	<i>Tilia caroliniana</i>	Carolina Basswood
704	Turneraceae	1	<i>Piriqueta caroliniana</i>	Piriqueta; Carolina Stripeseed
705	Typhaceae	1	<i>Typha domingensis</i>	Southern Cattail
706		2	<i>Typha latifolia</i>	Common or Broad-leaf Cattail
707	Ulmaceae	1	<i>Celtis laevigata</i>	Hackberry; Sugarberry
708		2	<i>Ulmus americana</i>	American Elm
709	Urticaceae	1	<i>Boehmeria cylindrica</i>	Small-spike False-nettle; Bog Hemp
710		2	<i>Parietaria praetermissa</i>	Pellitory; Clustered Pellitory-of-the-wall
711		3	<i>Pilea pumila</i>	Canada Clearweed
712	Valerianaceae	1	<i>Valeriana scandens</i>	Florida Valerian
713	Verbenaceae	1	<i>Callicarpa americana</i>	Beautybush; American Beauty-berry
714		2	<i>Verbena brasiliensis</i>	Brazilian Vervain
715		3	<i>Verbena scabra</i>	Harsh Verbena; Sandpaper Vervain
716	Violaceae	1	<i>Viola affinis</i>	Leconte's Violet
717		2	<i>Viola lanceolata</i>	Bog White or Long-leaf or Lance-leaf Violet
718		3	<i>Viola primulifolia</i>	Swamp White or Primrose-lea(f)(ved) Violet
719		4	<i>Viola septemloba</i>	Southern Coast Violet
720		5	<i>Viola sororia</i>	Woolly or Hooded or Thicket Blue Violet;Florida V.
721	Vitaceae	1	<i>Ampelopsis arborea</i>	Pepper-vine
722		2	<i>Parthenocissus quinquefolia</i>	Virginia Creeper; Woodbine
723		3	<i>Vitis aestivalis</i>	Summer Grape
724		4	<i>Vitis rotundifolia</i> var. <i>munsoniana</i>	Southern Fox or Muscadine Grape; Muscadine
725		5	<i>Vitis rotundifolia</i> var. <i>rotundifolia</i>	
726	Vittariaceae	1	<i>Vittaria lineata</i>	Appalachian Shoestring Fern
727	Xyridaceae	1	<i>Xyris ambigua</i>	Coastal-plain Yellow-eyed Grass
728		2	<i>Xyris brevifolia</i>	Short-leaf Yellow-eyed Grass
729		3	<i>Xyris caroliniana</i>	Carolina Yellow-eyed Grass
730		4	<i>Xyris difformis</i> var. <i>floridana</i>	Florida Bog Yellow-eyed Grass
731		5	<i>Xyris elliotii</i>	Elliott's Yellow-eyed Grass
732		6	<i>Xyris fimbriata</i>	Fringed Yellow-eyed Grass
733		7	<i>Xyris flabelliformis</i>	Savannah Yellow-eyed Grass
734		8	<i>Xyris jupicai</i>	Common or Richard's Yellow-eyed Grass
735		9	<i>Xyris platylepis</i>	Tall Yellow-eyed Grass
736		10	<i>Xyris smalliana</i>	Small's Yellow-eyed Grass

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**Appendix E: LAKE MARION CREEK/REEDY CREEK MANAGEMENT AREA-
FAUNA SPECIES LIST INVERTEBRATES**

KEY: From 1996 FGFWFC Listing- (E)ndangered, (T)hreatened, (S)pecies of (S)pecial (C)oncern
(Y)ear-round, (W)inter, (M)igrant, (B)reeding
(X) confirmed siting
(L)and (S)tewardship (D)ivision, (U)delhoven, (L)orenz and Birdsall, (P)olk County

Total Count	Species				Status		Presence			
	Common	Order	Genus Species	Common	Fed	State	Possible	Conf	Identified by	
1	Insects	1	Coleoptera	1 <i>Dytiscus spp.</i>	Large Diving Beetle			Y	X	L-1996
2				2 <i>Cicindela Lepida</i>	Dainty Tiger Beetle			Y	X	L-1996
3				3 <i>Odontotaenius disjunctus</i>	Horned Passalus			Y	X	L-1996
4				4	Soldier Beetle			Y	X	L-1996
5		2	Hemiptera	1 <i>Lethocerus americanus</i>	Giant Water Bug			Y	X	L-1996
6				2 <i>Notonecta undulata</i>	Backswimmer			Y	X	L-1996
7		3	Lepidoptera	1 <i>Agraulis vanillae</i>	Gulf Fritillary			Y	X	L-1996
8				2 <i>Papilio polyxenes asteruis</i>	Eastern Black Swallowtail			Y	X	L-1996
9				3 <i>P. glaucus</i>	Eastern Tiger Swallowtail			Y	X	L-1996
10				4 <i>P. cresphontes</i>	Giant Swallowtail			Y	X	L-1996
11				5 <i>Heliconius charitonius</i>	Zebra Butterfly			Y	X	L-1996
12				6 <i>Danaus gilippus berenize</i>	Queen			Y	X	L-1996
13		4	Hymenoptera	1 <i>Ichneumonidae (Scambus spp.?)</i>	Ichneumid wasps			Y	X	L-1996
14				2 <i>Xylocopa virginica</i>	Black bee			Y	X	L-1996
15				3 <i>Dasymutilla occidentalis</i>	Cowkiller			Y	X	L-1996
16				4 <i>Bombus spp.</i>	Bumblebee			Y	X	L-1996
17				5 <i>Camponotus pennsylvanicus</i>	Carpenter ant			Y	X	L-1996
18				6	Large headed ant			Y	X	L-1996
19		5	Diptera	1 <i>Exoprospa spp.</i>	Progressive beefly			Y	X	L-1996
20				2 <i>Stratiomys spp.</i>	(Aquatic larva)			Y	X	L-1996
21		6	Orthoptera	1 <i>Gryllotalpa hexadactyla</i>	Mole Cricket			Y	X	L-1996
22				2 <i>Romalea microptera</i>	Southeaster Lubber			Y	X	L-1996
23				3 <i>Tetrigidae</i>	Pygmy Grasshoppers			Y	X	L-1996
24				4 <i>Acrididae</i>	Short-horned Grasshoppers			Y	X	L-1996
25		7	Ephemeroptera	1 <i>Callibaetis spp.</i>	Mayflies			Y	X	L-1996
26		8	Trichoptera	1	Caddisflies			Y	X	L-1996
27	Damselflies	9	Odonata (Zygoptera)	1 <i>Nehalennia integricollis</i>	<larva and adult>			Y	X	L-1996
28				2 <i>Ischnura hastata</i>	<larva and adult>			Y	X	L-1996
29				3 <i>Calopteryx maculata</i>	<larva and adult>			Y	X	L-1996
30				4 <i>Argia fumipennis</i>	<adult>			Y	X	L-1996
31				5 <i>Lestes vigilax</i>	<larva and adult>			Y	X	L-1996
32	Dragonflies	10	Odonata (Anisoptera)	1 <i>Erythemis simplicicollis</i>	<adult>			Y	X	L-1996
33				2 <i>Pachydiplax longipennis</i>	<adult>			Y	X	L-1996
34				3 <i>Celithemis amanda</i>	<adult>			Y	X	L-1996
35				4 <i>C. eponina</i>	<adult>			Y	X	L-1996
36				5 <i>Tramea carolina</i>	<adult>			Y	X	L-1996
37				6 <i>Erythrodiplax connata minuscula</i>	<adult>			Y	X	L-1996

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38				7	<i>Perithemis tenera</i>	<adult>			Y	X	L-1996
39				8	<i>Epitheca cynosura</i>	<larva and adult>			Y	X	L-1996
40				9	<i>Anax longipes</i>	<larva and adult>			Y	X	L-1996
41				10	<i>Nasiaeschna pentacantha</i>	<adult>			Y	X	L-1996
42				11	<i>Didymops floridensis</i>	<adult>			Y	X	L-1996
43				12	<i>Gomphus minutus</i>	<adult>			Y	X	L-1996
44				13	<i>Hagenius brevistylus</i>	<adult>			Y	X	L-1996
45	Spiders and allies	1	Araneae	1	<i>Peucetia viridans</i>	Green Lynx Spider			Y	X	L-1996
46				2	<i>Phidippus audax</i>	Daring Jumping Spider			Y	X	L-1996
47				3	<i>P. spp.</i>	Red Jumping Spider			Y	X	L-1996
48				4	<i>Nephila clavipes</i>	Golden Silk Spider			Y	X	L-1996
49				5	<i>Argiope aurantia</i>	Black and Yellow Argiope			Y	X	L-1996
50				6	<i>Dolomedes triton</i>	Six-spotted Fishing Spider			Y	X	L-1996
51				7	<i>Lycosa rabida</i>	Rabid Wolf Spider			Y	X	L-1996
52				8	<i>Tetragnatha elongata</i>	Elongate Long-jawed Orb Weaver			Y	X	L-1996
53				9	<i>Lycosa spp.</i>	Scrub Wolf Spider			Y	X	L-1996
54	Clams, Mussels	1	Corbiculidae	1	<i>Corbicula manilensis</i>	Asian Clam			Y	X	L-1996
55		2	Unionidae	1	<i>Elliptio buckleyi</i>				Y	X	L-1996
56	Crayfish, Shrimp	1	Palaemonidae	1	<i>Palaemonetes paludosus</i>	Grass Shrimp			Y	X	L-1996
57		2	Cambarida	1	<i>Procambarus spp.</i>	Crayfish			Y	X	LSD-1993, L-1996
58	Scuds, Sideswimmers	1	Taltridae	1	<i>Hyalela axteca</i>	Common Amphipod			Y	X	L-1996
59	Snails, Limpets	1	Ampulariidae	1	<i>Pomacea spp.</i>	Apple Snail			Y	X	L-1996

**Appendix F: LAKE MARION CREEK/REEDY CREEK MANAGEMENT AREA-
 FAUNA SPECIES LIST FISH**

KEY: From 1996 FGFWFC Listing- (E)ndangered, (T)hreatened, (S)pecies of (S)pecial (C)oncern
 (Y)ear-round, (W)inter, (M)igrant, (B)reeding
 (X) confirmed siting
 (L)and (S)tewardship (D)ivision, (U)delhoven, (L)orenz and Birdsall, (P)olk County

	Species Names			Status		Presence		Identified by
	Family	Genus Species	Common	Fed	State	Possible	Confirmed	
1		<i>Micropterus salmoides</i>	Largemouth Bass			Y	X	L-1996
2		<i>Lepomis spp.</i>	Sunfish			Y	X	L-1996
3		<i>Percina nigrofasciata</i>	Blackbanded Darter			Y	X	L-1996
4		<i>Notropis chalybaeus</i>	Ironcolor Shiner			Y	X	L-1996
5		<i>Gambusia affinis</i>	Mosquitofish			Y	X	L-1996
6		<i>Fundulus chrysotus</i>	Golden Topminnow			Y	X	L-1996

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**Appendix G: LAKE MARION CREEK/REEDY CREEK MANAGEMENT AREA-
FAUNA SPECIES LIST**

AVIFAUNA

KEY: From 1996 FGFWFC Listing- (E)ndangered, (T)hreatened, (S)pecies of (S)pecial (C)oncern
(Y)ear-round, (W)inter, (M)igrant, (B)reeding
(X) confirmed siting
(L)and (S)tewardship (D)ivision, (U)delhoven, (L)orenz and Birdsall, (P)olk County, (A)dubon (S)ociety

Total Count	Species					Status		Presence		
	Family	Genus	Species	Common		Fed	State	Possible	Confirmed	Identified by
1	1	Gaviidae	1	<i>Gavia immer</i>	Common Loon			Y		LSD-1993
2	2	Podicipedidae	1	<i>Podilymbus podiceps</i>	Pied-billed Grebe			WMB	X	P-1989, LSD-1993
3	3	Anhingidae	1	<i>Anhinga anhinga</i>	Anhinga			YW	X	P-1989, LSD-1993
4	4	Phalacrocoracidae	1	<i>Phalacrocorax auritus</i>	Double-crested Cormorant			Y		LSD-1993
5	5	Anatidae	1	<i>Aix sponsa</i>	Wood Duck			WB	X	P-1989, LSD-1993
6			2	<i>Anas acuta</i>	Northern Pintail			Y		LSD-1993
7			3	<i>A. americana</i>	American Wigeon			YW		LSD-1993
8			4	<i>A. clypeata</i>	Northern Shoveler			Y		LSD-1993
9			5	<i>A. crecca</i>	Green-winged Teal			Y		LSD-1993
10			6	<i>A. discors</i>	Blue-winged Teal			Y		LSD-1993
11			7	<i>A. fulvigula</i>	Mottled Duck			YW		LSD-1993
12			8	<i>A. platyrhynchos</i>	Mallard			M		LSD-1993
13			9	<i>A. rubripes</i>	Black Duck			YW		LSD-1993
14			10	<i>A. strepera</i>	Gadwall			YW		LSD-1993
15			11	<i>Aythya affinis</i>	Lesser Scaup			Y		LSD-1993
16			12	<i>A. collaris</i>	Ring-necked Duck			M		LSD-1993
17			13	<i>A. valisineria</i>	Canvasback			Y		LSD-1993
18			14	<i>Dendrocygna bicolor</i>	Fulvous Whistling-duck			YW		LSD-1993
19			15	<i>Mergus serrator</i>	Red-breasted Merganser			W		LSD-1993
20	6	Pelecanidae	1	<i>Pelecanus erythrorhynchos</i>	White Pelican			Y		LSD-1993
21			2	<i>P. occidentalis</i>	Brown Pelican		SSC	Y		LSD-1993
22	7	Laridae	1	<i>Larus delawarensis</i>	Ring-billed Gull			B		LSD-1993
23			2	<i>Sterna antillarum</i>	Least Tern		T	Y		LSD-1993
24			3	<i>S. hirundo</i>	Common Tern			W		LSD-1993
25	8	Ardeidae	1	<i>Ardrea herodias</i>	Great Blue Heron			M	X	P-1989, LSD-1993
26			2	<i>A. herodias</i>	Great White Heron			Y		LSD-1993
27			3	<i>Botaurus lentiginosus</i>	American Bittern			Y		LSD-1993
28			4	<i>Bubulcus ibis</i>	Cattle Egret			Y	X	P-1989, LSD-1993
29			5	<i>Butorides striatus</i>	Green Backed Heron			Y		LSD-1993
30			6	<i>Casmerodius albus</i>	Great Egret			YM	X	P-1989, LSD-1993
31			7	<i>Egretta rufescens</i>	Reddish Egret		SSC	Y		LSD-1993
32			8	<i>E. thula</i>	Snowy Egret		SSC	MW	X	LSD-1993, L-1996
33			9	<i>E. careulea</i>	Little Blue Heron		SSC	B	X	P-1989, LSD-1993
34			10	<i>E. tricolor</i>	Tricolored Heron		SSC	Y	X	P-1989, LSD-1993
35			11	<i>Ixobrychus exilis</i>	Least Bittern			MW		LSD-1993
36			12	<i>Nycticorax nycticorax</i>	Blk-crowned Night-heron			MW		LSD-1993
37			13	<i>N. violaceus</i>	Yel-crowned Night-heron			W		LSD-1993

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38	9	Ciconiidae	1	<i>Mycteria americana</i>	Wood Stork	E	E	Y		LSD-1993
39	10	Gruidae	1	<i>Grus canadensis</i>	Sandhill Crane		T	YW		LSD-1993
40	11	Aramidae	1	<i>Aramus guarauna</i>	Limpkin		SSC	Y		LSD-1993
41	12	Threskiornithidae	1	<i>Ajaia ajaja</i>	Roseate Spoonbill		SSC	M		LSD-1993
42			2	<i>Eodcimus albus</i>	White Ibis		SSC	BM	X	LSD-1993, AS-1998
43			3	<i>Plegadis falcinellus</i>	Glossy Ibis			Y		LSD-1993
44	13	Rallidae	1	<i>Coturnicops noveboracensis</i>	Yellow Rail			MW		LSD-1993
45			2	<i>Fulica americana</i>	American Coot			Y	X	P-1989, LSD-1993
46			3	<i>Gallinula chloropus</i>	Common Moorhen			Y		LSD-1993
47			4	<i>Laterallus jamaicensis</i>	Black Rail			YW		LSD-1993
48			5	<i>Porphyryla martinica</i>	Purple Gallinule			YB	X	P-1989, LSD-1993
49			6	<i>Porzana carolina</i>	Sora			YWM		LSD-1993
50			7	<i>Rallus elegans</i>	King Rail			Y		LSD-1993
51			8	<i>R. limicola</i>	Virginia Rail			Y		LSD-1993
52			9	<i>R. longirostris</i>	Clapper Rail			Y		LSD-1993
53	14	Charadriidae	1	<i>Charadrius vociferus</i>	Killdeer			Y		LSD-1993
54			2	<i>Pluvialis squatarola</i>	Black-bellied Plover			Y		LSD-1993
55	15	Scolopacidae	1	<i>Actitis macularia</i>	Spotted Sandpiper			Y		LSD-1993
56			2	<i>Gallinago gallinago</i>	Common Snipe			W		LSD-1993
57			3	<i>Scolopax minor</i>	American Woodcock			YW		LSD-1993
58			4	<i>Tringa flavipes</i>	Lesser Yellowlegs			Y		LSD-1993
59			5	<i>T. melamoleuca</i>	Greater Yellowlegs			YW		LSD-1993
60			6	<i>T. solitaria</i>	Solitary Sandpiper			MW		LSD-1993
61	16	Meleagrididae	1	<i>Meleagris gallopavo</i>	Wild Turkey			YB	X	P-1989, LSD-1993, L-1996
62	17	Phasianidae	1	<i>Colinus virginianus</i>	Northern Bobwhite Quail			YB	X	P-1989, LSD-1993
63	18	Accipitridae	1	<i>Accipiter cooperii</i>	Cooper's Hawk			Y		LSD-1993
64			2	<i>A. striatus</i>	Sharp-shinned Hawk			Y	X	LSD-1993, AS-1998
65			3	<i>Buteo brachyurus</i>	Short-tailed Hawk			YWM		LSD-1993
66			4	<i>B. jamaicensis</i>	Red-tailed Hawk			Y	X	LSD-1993
67			5	<i>B. lineatus</i>	Red-shouldered Hawk			YWMB	X	P-1989, LSD-1993, L-1996
68			6	<i>B. platypterus</i>	Broad-winged Hawk			MW		LSD-1993
69			7	<i>Circus cyaneus</i>	Northern Harrier			Y		LSD-1993
70			8	<i>Elanoides forficatus</i>	Swallow-tailed Kite			YW	X	LSD-1993
71			9	<i>Elanus caeruleus</i>	Black-shouldered Kite			YB		LSD-1993
72			10	<i>Haliaeetus leucocephalus</i>	Bald Eagle	T	T	YWB	X	P-1989, LSD-1993
73			11	<i>Rostrhamus sociabilis</i>	Snail Kite	E	E	YWM		LSD-1993
74	19	Pandionidae	1	<i>Pandion haliaetus</i>	Osprey			YWB	X	P-1989, LSD-1993
75	20	Cathartidae	1	<i>Cathartes aura</i>	Turkey Vulture			YWB	X	P-1989, LSD-1993
76			2	<i>Coragyps atratus</i>	Black Vulture			YWM	X	P-1989, LSD-1993
77	21	Falconidae	1	<i>Falco columbarius</i>	Merlin			WM		LSD-1993
78			2	<i>F. peregrinus</i>	Peregrine Falcon			YWM		LSD-1993

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79			3	<i>F. sparverius</i>	American Kestrel			Y		LSD-1993
80			4	<i>F. sparverius paulus</i>	SE. American Kestrel			Y		LSD-1993
81			5	<i>Polyborus plancus</i>	Crested Caracara	T	T	Y		LSD-1993
82	22	Strigidae	1	<i>Asio flammeus</i>	Short-eared Owl			MW		LSD-1993
83			2	<i>Athene cunicularia</i>	Burrowing Owl		SSC	Y		LSD-1993
84			3	<i>Bubo virginianus</i>	Great Horned Owl			Y	X	LSD-1993, L-1996
85			4	<i>Otus asio</i>	Eastern Screech-owl			YMB	X	P-1989, LSD-1993
86			5	<i>Strix varia</i>	Barred Owl			Y		LSD-1993
87	23	Tytoniidae	1	<i>Tyto alba</i>	Barn Owl			YW		LSD-1993
88	24	Columbidae	1	<i>Columba livia</i>	Rock Dove			MB	X	P-1989, LSD-1993
89			2	<i>Columbina passerina</i>	Common Ground Dove			Y		LSD-1993
90			3	<i>Zenaida asiatica</i>	White-winged Dove			YW		LSD-1993
91			4	<i>Z. macroura</i>	Mourning Dove			YMB	X	P-1989, LSD-1993
92	25	Cuculidae	1	<i>Coccyzus americanus</i>	Yellow-billed Cuckoo			YW		LSD-1993
93			2	<i>C. erythrophthalmus</i>	Black-billed Cuckoo			MB		LSD-1993
94			3	<i>C. minor</i>	Mangrove Cuckoo			B		LSD-1993
95			4	<i>Crotophaga ani</i>	Smooth-billed Ani			YM		LSD-1993
96	26	Caprimulgidae	1	<i>Caprimulgus carolinensis</i>	Chuck-will's-widow			YB	X	P-1989, LSD-1993
97			2	<i>C. vociferus</i>	Whip-poor-will			MW		LSD-1993
98			3	<i>Chordeiles minor</i>	Common Nighthawk			Y		LSD-1993
99	27	Alcedinidae	1	<i>Ceryle alcyon</i>	Belted Kingfisher			YWM		LSD-1993
100	28	Trochilidae	1	<i>Archilochus colubris</i>	Ruby-throated Hummingbird			YWM		LSD-1993
101	29	Picidae	1	<i>Campephilus principalis</i>	Ivory-billed Woodpecker	E	E	YWM		LSD-1993
102			2	<i>Colaptes auratus</i>	Common Flicker			YWM		LSD-1993
103			3	<i>Dryocopus pileatus</i>	Pileated Woodpecker			YM	X	LSD-1993, AS-1998
104			4	<i>Melanerpes carolinus</i>	Red-bellied Woodpecker			YWB	X	P-1989, LSD-1993
105			5	<i>M. erythrocephalus</i>	Red-headed Woodpecker			YB	X	P-1989, LSD-1993
106			6	<i>Picoides borealis</i>	Red-cockaded Woodpecker	E	T	YW		LSD-1993
107			7	<i>P. pubescens</i>	Downy Woodpecker			YB	X	P-1989, LSD-1993
108			8	<i>P. villosus</i>	Hairy Woodpecker			Y		LSD-1993
109			9	<i>Sphyrapicus varius</i>	Yellow-bellied Sapsucker			YWM		LSD-1993
110	30	Apodidae	1	<i>Chaetura pelagica</i>	Chimney Swift			Y		LSD-1993
111	31	Tyrannidae	1	<i>Contopus virens</i>	Eastern Wood-pewee			B		LSD-1993
112			2	<i>Empidonax minimus</i>	Least Flycatcher			YM		LSD-1993
113			3	<i>E. virens</i>	Acadian Flycatcher			Y		LSD-1993
114			4	<i>Myiarchus crinitus</i>	Great Crested Flycatcher			YB	X	P-1989, LSD-1993
115			5	<i>Sayornis phoebe</i>	Eastern Phoebe			MW	X	LSD-1993, AS-1998
116			6	<i>Tyrannus dominicensis</i>	Gray Kingbird			Y		LSD-1993
117			7	<i>T. forficatus</i>	Scissor-tailed Flycatcher			Y		LSD-1993
118			8	<i>T. tyrannus</i>	Eastern Kingbird			YB		LSD-1993
119	32	Motacillidae	1	<i>Anthus spinoletta</i>	Water Pipit			YW		LSD-1993
120	33	Hirundinidae	1	<i>Hirundo pyrrhonota</i>	Cliff Swallow			Y		LSD-1993

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121			2	<i>H. rustica</i>	Barn Swallow			YW		LSD-1993
122			3	<i>Progne subis</i>	Purple Martin			WMB	X	P-1989, LSD-1993
123			4	<i>Riparia riparia</i>	Bank Swallow			YW		LSD-1993
124			5	<i>Stelgidopteryx serripennis</i>	N. Rough-winged Swallow			W		LSD-1993
125			6	<i>Tachycineta bicolor</i>	Tree Swallow			Y		LSD-1993
126	34	Corvidae	1	<i>Aphelocoma coerulescens</i>	Scrub Jay	T	T	YMB	X	P-1989, LSD-1993
127			2	<i>Corvus brachyrhynchos</i>	American Crow			Y	X	LSD-1993
128			3	<i>C. ossifragus</i>	Fish Crow			YWB	X	P-1989, LSD-1993
129			4	<i>Cyanocitta cristata</i>	Blue Jay			YB	X	P-1989, LSD-1993
130	35	Paridae	1	<i>Parus bicolor</i>	Tufted Titmouse			YWB	X	P-1989, LSD-1993
131			2	<i>P. carolinensis</i>	Carolina Chickadee			Y		LSD-1993
132	36	Sittidae	1	<i>Sitta pusilla</i>	Brown-headed Nuthatch			Y		LSD-1993
133	37	Troglodytidae	1	<i>Cistothorus palustris</i>	Marsh Wren		SSC	M		LSD-1993
134			2	<i>C. platensis</i>	Sedge Wren			Y		LSD-1993
135			3	<i>Troglodytes aedon</i>	House Wren			YW		LSD-1993
136			4	<i>T. ludovicianus</i>	Carolina Wren			YB	X	P-1989, LSD-1993
137	38	Sylviidae	1	<i>Polioptila caerulea</i>	Blue-gray Gnatcatcher			Y	X	LSD-1993, AS-1998
138			2	<i>Regulus calendula</i>	Ruby-crowned Kinglet			Y		LSD-1993
139	39	Mimidae	1	<i>Dumetella carolinensis</i>	Gray Catbird			YW	X	LSD-1993
140			2	<i>Mimus polyglottos</i>	Northern Mockingbird			YB	X	P-1989, LSD-1993
141			3	<i>Toxostoma rufum</i>	Brown Thrasher			YB	X	P-1989, LSD-1993
142	40	Turdidae	1	<i>Catharus fuscescens</i>	Veery			YW		LSD-1993
143			2	<i>C. guttatus</i>	Hermit Thrush			MW		LSD-1993
144			3	<i>C. minimus</i>	Gray-cheeked Thrush			Y		LSD-1993
145			4	<i>C. ustulatus</i>	Swainson's Thrush			Y		LSD-1993
146			5	<i>Sialia sialis</i>	Eastern Bluebird			YB	X	P-1989, LSD-1993
147			6	<i>Turdus migratorius</i>	American Robin			YW		LSD-1993
148	41	Bombycillidae	1	<i>Bombycilla cedrorum</i>	Cedar Waxwing			Y		LSD-1993
149	42	Laniidae	1	<i>Lanius ludovicianus</i>	Loggerhead Shrike			Y		LSD-1993
150	43	Vireonidae	1	<i>Vireo altiloquus</i>	Black-whiskered Vireo			Y		LSD-1993
151			2	<i>V. flavifrons</i>	Yellow-throated Vireo			YW		LSD-1993
152			3	<i>V. griseus</i>	White-eyed Vireo			YWB	X	P-1989, LSD-1993
153			4	<i>V. olivaceus</i>	Red-eyed Vireo			YWMB	X	P-1989, LSD-1993
154			5	<i>V. solitarius</i>	Solitary Vireo			MW		LSD-1993
155	44	Parulidae	1	<i>Dendroica caerulescens</i>	Blk-throated Blue Warbler			MW		LSD-1993
156			2	<i>D. coronata</i>	Yellow-rumped Warbler			YW		LSD-1993
157			3	<i>D. discolor</i>	Prairie Warbler			YM		LSD-1993
158			4	<i>D. discolor paludicola</i>	Florida Prairie Warbler			YW		LSD-1993
159			5	<i>D. dominica</i>	Yellow-throated Warbler			YW		LSD-1993
160			6	<i>D. magnolia</i>	Magnolia Warbler			M		LSD-1993
161			7	<i>D. petechia</i>	Yellow Warbler			W		LSD-1993
162			8	<i>D. pinus</i>	Pine Warbler			YM	X	LSD-1993, AS-1998
163			9	<i>D. plamarum</i>	Palm Warbler			YW	X	LSD-1993, AS-1998

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164			10	<i>D. striata</i>	Blackpoll Warbler			MB	X	LSD-1993
165			11	<i>D. tigrina</i>	Cape May Warbler			YWM	X	LSD-1993
166			12	<i>D. virens</i>	Blk-throated Green Warbler			YWM		LSD-1993
167			13	<i>Geothlypis trichas</i>	Common Yellowthroat			YB	X	P-1989, LSD-1993
168			14	<i>Helmitheros vermivorus</i>	Worm-eating Warbler			W		LSD-1993
169			15	<i>Icteria virens</i>	Yellow-breasted Chat			W		LSD-1993
170			16	<i>Limnothlypis swainsonii</i>	Swainson's Warbler			Y		LSD-1993
171			17	<i>Mniotilta varia</i>	Black-and-white Warbler			Y		LSD-1993
172			18	<i>Oporonis agilis</i>	Connecticut Warbler			Y		LSD-1993
173			19	<i>O. formosus</i>	Kentucky Warbler			Y		LSD-1993
174			20	<i>Parula americana</i>	Northern Parula			YB	X	P-1989, LSD-1993
175			21	<i>Protonotaria citrea</i>	Prothonotary Warbler			Y		LSD-1993
176			22	<i>Seiurus aurocapillus</i>	Ovenbird			YWM		LSD-1993
177			23	<i>S. motacilla</i>	Louisiana Waterthrush			YWM		LSD-1993
178			24	<i>S. noveboracensis</i>	Northern Waterthrush			Y		LSD-1993
179			25	<i>Setophaga ruticilla</i>	American Redstart			YWM		LSD-1993
180			26	<i>Vermivora celata</i>	Orange-crowned Warbler			YW		LSD-1993
181			27	<i>Wilsonia citrina</i>	Hooded Warbler			Y		LSD-1993
182	45	Icteridae	1	<i>Agelaius phoeniceus</i>	Redwing Blackbird			YWM	X	P-1989, LSD-1993
183			2	<i>Dolichonyx oryzivorus</i>	Bobolink			Y		LSD-1993
184			3	<i>Euphagus carolinus</i>	Rusty Blackbird			MW		LSD-1993
185			4	<i>E. cyanocephalus</i>	Brewer's Blackbird			MW		LSD-1993
186			5	<i>Icterus galbula</i>	Northern Oriole			YW		LSD-1993
187			6	<i>I. spurius</i>	Orchard Oriole			YM		LSD-1993
188			7	<i>Molothrus ater</i>	Brown-headed Cowbird			YW		LSD-1993
189			8	<i>Quiscalus major</i>	Boat-tailed Grackle			YB	X	P-1989, LSD-1993
190			9	<i>Q. quiscula</i>	Common Grackle			YB	X	P-1989, LSD-1993
191			10	<i>Sturnella neglecta</i>	Eastern Meadowlark			YB	X	P-1989, LSD-1993
192	46	Sturnidae	1	<i>Sturnus vulgaris</i>	European Starling			Y		LSD-1993
193	47	Thraupidae	1	<i>Piranga olivacea</i>	Scarlet Tanager			YWM		LSD-1993
194			2	<i>P. rubra</i>	Summer Tanager			Y		LSD-1993
195	48	Fringillidae	1	<i>Aimophila aestivalis</i>	Bachman's Sparrow			YW		LSD-1993
196			2	<i>Ammodramus caudacutus</i>	Sharp-tailed Sparrow			YW		LSD-1993
197			3	<i>A. henslowii</i>	Henslow's Sparrow			Y		LSD-1993
198			4	<i>A. leconteii</i>	Le Conte's Sparrow			Y		LSD-1993
199			5	<i>A. savannarum</i>	Grasshopper Sparrow	E	E	Y		LSD-1993
200			6	<i>Cardinalis cardinalis</i>	Northern Cardinal			XB	X	P-1989, LSD-1993, L-1996
201			7	<i>Carduelis tristis</i>	American Goldfinch			YW		LSD-1993
202			8	<i>Guiraca caerulea</i>	Blue Grosbeak			WMB	X	P-1989, LSD-1993
203			9	<i>Melospiza georgiana</i>	Swamp Sparrow			W		LSD-1993
204			10	<i>M. melodia</i>	Song Sparrow			M		LSD-1993
205			11	<i>Passer domesticus</i>	House Sparrow			Y		LSD-1993
206			12	<i>Passerculus sandwichensis</i>	Savannah Sparrow			MW		LSD-1993

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207		13	<i>Passerina ciris</i>	Painted Bunting			YWM		LSD-1993
208		14	<i>P. cyanea</i>	Indigo Bunting			YW		LSD-1993
209		15	<i>Pheucticus ludovicianus</i>	Rose-breasted Grosbeak			MW		LSD-1993
210		16	<i>Pipilo erythrophthalmus</i>	Rufous-sided Towhee			YMB	X	P-1989, LSD-1993
211		17	<i>Poocetes gramineus</i>	Vesper Sparrow			M		LSD-1993
212		18	<i>Spiza americana</i>	Dickcissel			Y		LSD-1993
213		19	<i>Spizella passerina</i>	Chipping Sparrow			YW		LSD-1993
214		20	<i>S. pusilla</i>	Field Sparrow			W		LSD-1993
215		21	<i>Zonotrichia albicollis</i>	White-throated Sparrow			W		LSD-1993

**Appendix H: LAKE MARION CREEK/REEDY CREEK MANAGEMENT AREA-
 FAUNA SPECIES LIST
 REPTILES**

KEY: From 1996 FGFWFC Listing- (E)ndangered, (T)hreatened, (S)pecies of (S)pecial (C)oncern
 (Y)ear-round, (W)inter, (M)igrant, (B)reeding
 (X) confirmed siting
 (L)and (S)tewardship (D)ivision, (U)delhoven, (L)orenz and Birdsall, (P)olk County

Total Count	Species Names				Status		Presence		Identified by
	Family	Genus Species	Common	Fed	State	Possible	Confirmed		
1	1 Alligatoridae	1 <i>Alligator mississippiensis</i>	American Alligator	T	SSC	Y	X	LSD-1993, L-1996	
2	2 Chelydridae	1 <i>Chelydra serpentina osceola</i>	Florida Snapping Turtle			Y		LSD-1993	
3	3 Kinosternidae	1 <i>Kinosternon baurii</i>	Striped Mud Turtle		E	Y		LSD-1993	
4		2 <i>K. subrubrum steindachneri</i>	Florida Mud Turtle			Y		LSD-1993	
5		3 <i>Sternotherus odoratus</i>	Common Musk Turtle			Y		LSD-1993	
6	4 Emydidae	1 <i>Chrysemys floridana peninsularis</i>	Peninsula Cooter			Y		LSD-1993	
7		2 <i>C. nelsoni</i>	Florida Redbelly Turtle			Y		LSD-1993	
8		3 <i>Deirochelys reticularia chrysea</i>	Florida Chicken Turtle			Y		LSD-1993	
9		4 <i>Terrapene carolina bauri</i>	Florida Box Turtle			Y		LSD-1993	
10	5 Testudinidae	1 <i>Gopherus polyphemus</i>	Gopher Tortoise		SSC	Y	X	LSD-1993, L-1996	
11	6 Trionychidae	1 <i>Trionyx ferox</i>	Florida Softshell Turtle			Y		LSD-1993	
12	7 Gekkonidae	1 <i>Sphaerodactylus notatus notatus</i>	Florida Reef Gecko			Y		LSD-1993	
13	8 Iguanidae	1 <i>Anolis carolinensis</i>	Green Anole			Y	X	LSD-1993, L-1996	
14		2 <i>A. sagrei sagrei</i>	Brown Anole			Y		LSD-1993	
15		3 <i>Sceloporus undulatus undulatus</i>	Southern Fence Lizard			Y		LSD-1993	
16		4 <i>S. woodi</i>	Florida Scrub Lizard			Y	X	LSD-1993, L-1996	
17	9 Teiidae	1 <i>Cnemidophorus sexlineatus sexlineatus</i>	Six-lined Racerunner			Y	X	LSD-1993, L-1996	
18	10 Scincidae	1 <i>Eumeces egregius lividus</i>	Bluetailed Mole Skink	T	T	Y		LSD-1993	
19		2 <i>E. egregius onocrepis</i>	Peninsula Mole Skink			Y		LSD-1993	
20		3 <i>E. inexpectatus</i>	Southeastern Five-lined Skink			Y	X	LSD-1993, L-1996	
21		4 <i>E. laticeps</i>	Broadheaded Skink			Y		LSD-1993	
22		5 <i>Neoseps reynoldsi</i>	Florida Sand Skink	T	T	Y		LSD-1993	
23		6 <i>Scincella lateralis</i>	Ground Skink			Y		LSD-1993	
24	11 Anguidae	1 <i>Ophisaurus attenuatus longicaudus</i>	Eastern Slender Glass Lizard			Y		LSD-1993	
25		2 <i>O. ventralis</i>	Eastern Glass Lizard			Y		LSD-1993	
26	12 Amphisbaenidae	1 <i>Rhineura floridana</i>	Florida Worm Lizard			Y		LSD-1993	
27	13 Colubridae	1 <i>Cemophora coccinea coccinea</i>	Florida Scarlet			Y		LSD-1993	
28		2 <i>Coluber constrictor paluticola</i>	Everglades Racer			Y		LSD-1993	
29		3 <i>C. constrictor priapus</i>	Southern Black Racer			Y	X	LSD-1993, L-1996	
30		4 <i>Diadophis punctatus punctatus</i>	Southern Ringneck Snake			Y		LSD-1993	
31		5 <i>Drymarchon corais couperi</i>	Eastern Indigo Snake	T	T	Y		LSD-1993	
32		6 <i>Elaphe guttata guttata</i>	Corn/Red Rat Snake			Y		LSD-1993	
33		7 <i>E. obsoleta quadrivittata</i>	Yellow Rat/Chicken Snake			Y	X	LSD-1993, L-1996	
34		8 <i>E. obsoleta rossalleni</i>	Everglades Rat Snake			Y		LSD-1993	
35		9 <i>Farancia abacura abacura</i>	Eastern Mud Snake			Y		LSD-1993	

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36			10	<i>F. erythrogramma seminola</i>	Southern Fla. Rainbow Snake			Y		LSD-1993
37			11	<i>Heterodon platyrhinos</i>	Eastern Hognose Snake			Y		LSD-1993
38			12	<i>H. simus</i>	Southern Hognose Snake			Y		LSD-1993
39			13	<i>Lampropeltis calligaster rhombomaculata</i>	Mole Kingsnake			Y		LSD-1993
40			14	<i>Lampropeltis getulus</i>	Common Kingsnake			Y		LSD-1993
41			15	<i>L. triangulum elapsoides</i>	Scarlet Kingsnake			Y		LSD-1993
42			16	<i>M. flagellum flagellum</i>	Eastern Coachwhip			Y	X	LSD-1993, L-1996
43			17	<i>Natrix cyclopion floridana</i>	Fla. Green Watersnake			Y	X	LSD-1993, L-1996
44			18	<i>N. fasciata pictiventris</i>	Florida Watersnake			Y		LSD-1993
45			19	<i>N. taxispilota</i>	Brown Watersnake			Y		LSD-1993
46			20	<i>Opheodrys aestivus</i>	Rough Green Snake			Y		LSD-1993
47			21	<i>Pituophis melanoleucus mugitus</i>	Florida Pine Snake		SSC	Y		LSD-1993
48			22	<i>Seminatrix pygaea pygaea</i>	Swamp Snake			Y		LSD-1993
49			23	<i>Stilosoma extenuatum</i>	Short-tailed Snake		T	Y		LSD-1993
50			24	<i>Storeria dekayi victa</i>	Florida Brown Snake			Y		LSD-1993
51			25	<i>Tantilla relicta relicta</i>	Peninsula Crowned Snake			Y		LSD-1993
52			26	<i>Thamnophis sauritus sackeni</i>	Peninsula Ribbon			Y		LSD-1993
53			27	<i>T. sirtalis sirtalis</i>	Eastern Garter			Y		LSD-1993
54	14	Elapidae	1	<i>Micrurus fulvius fulvius</i>	Eastern Coral Snake			Y		LSD-1993
55			2	<i>Sistrurus miliarius barbouri</i>	Dusty Pygmy			Y		LSD-1993
56	15	Viperidae	1	<i>Agkistrodon contortrix contortrix</i>	Southern Copperhead			Y		LSD-1993
57			2	<i>A. piscivorus conanti</i>	Florida Cottonmouth			Y	X	LSD-1993, L-1996
58			3	<i>Crotalus adamanteus</i>	Eastern Diamondback			Y		LSD-1993

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**Appendix I: LAKE MARION CREEK/REEDY CREEK MANAGEMENT AREA-
FAUNA SPECIES LIST AMPHIBIANS**

KEY: From 1996 FGFWFC Listing- (E)ndangered, (T)hreatened, (S)pecies of (S)pecial (C)oncern
(Y)ear-round, (W)inter, (M)igrant, (B)reeding
(X) confirmed siting
(L)and (S)tewardship (D)ivision, (U)delhoven, (L)orenz and Birdsall, (P)olk County

Total Count	Species Names			Status		Presence		Identified by
	Family	Genus Species	Common	Fed	State	Possible	Confirmed	
1	1 Sirenidae	1 <i>Pseudobranchius striatus axanthus</i>	Narrow-striped Dwarf Siren			Y		LSD-1993
2		2 <i>P. striatus belli</i>	Everglades Dwarf Siren			Y		LSD-1993
3		3 <i>Siren intermedia intermedia</i>	Eastern Lesser Siren			Y		LSD-1993
4		4 <i>S. lacertina</i>	Greater Siren			Y		LSD-1993
5	2 Amphiumidae	1 <i>Amphiuma means</i>	Two-toed Amphiuma			Y		LSD-1993
6	3 Salamandridae	1 <i>Notophthalmas perstriatus</i>	Striped Newt			Y		LSD-1993
7		2 <i>N. viridescens louisianensis</i>	Central Newt			Y		LSD-1993
8	4 Plethodontidae	1 <i>Eurycea quadridigitata</i>	Dwarf Salamander			Y		LSD-1993
9	5 Pelobatidae	1 <i>Scaphiopus holbrooki</i>	Eastern Spadefoot			Y		LSD-1993
10	6 Bufonidae	1 <i>Bufo quercicus</i>	Oak toad			Y	X	LSD-1993, L-1996
11		2 <i>B. terrestris</i>	Southern Toad			Y	X	LSD-1993, L-1996
12	7 Hylidae	1 <i>Acris gryllus dorsalis</i>	Florida Cricket Frog			Y	X	LSD-1993, L-1996
13		2 <i>Hyla cinerea</i>	Green Treefrog			Y		LSD-1993
14		3 <i>H. femoralis</i>	Pinewoods Treefrog			Y		LSD-1993
15		4 <i>H. gratiosa</i>	Barking Treefrog			Y		LSD-1993
16		5 <i>H. septentrionalis</i>	Cuban Treefrog			Y		LSD-1993
17		6 <i>H. squirella</i>	Squirrel Treefrog			Y		LSD-1993
18		7 <i>Limaedus ocularis</i>	Little Grass Frog			Y		LSD-1993
19		8 <i>Pseudacris nigrita verrucosa</i>	Florida Chorus Frog			Y		LSD-1993
20	8 Microhylidae	1 <i>Gastrophryne carolinensis carolinensis</i>	Eastern Narrow-mouthed Toad			Y		LSD-1993
21	9 Ranidae	1 <i>Rana areolata aesopus</i>	Florida Gopher Frog		SSC	Y		LSD-1993
22		2 <i>R. catesbeiana</i>	Bullfrog			Y		LSD-1993
		3 <i>R. clamitans</i>	Green Frog				X	L- 1996
23		4 <i>R. grylio</i>	Pig Frog			Y		LSD-1993
24		5 <i>R. sphenocephala</i>	Southern Leopard Frog			Y	X	LSD-1993, L-1996

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**Appendix J: LAKE MARION CREEK/REEDY CREEK MANAGEMENT AREA-
FAUNA SPECIES LIST
MAMMALS**

KEY: From 1996 FGFWFC Listing- (E)ndangered, (T)hreatened, (S)pecies of (S)pecial (C)oncern
(Y)ear-round, (W)inter, (M)igrant, (B)reeding (X) confirmed siting
(L)and (S)tewardship (D)ivision, (U)delhoven, (L)orenz and Birdsall, (P)olk County

Total Count	Species					Status		Presence		Identified by		
	Order	Family	Genus Species	Common	Fed	State	Possible	Confirmed				
1	1	Marsupialia	1	Didelphiidae	1	<i>Didelphis marsupialis</i>	Opossum			Y		LSD-1993
2	2	Insectivora	1	Soricidae	1	<i>Blarina carolinensis</i> <i>carolinensis</i>	Short-tailed Shrew			Y		LSD-1993
3			2		2	<i>B. carolinensis shermani</i>	Sherman's Short-tailed Shrew		SSC	Y		LSD-1993
4			3		3	<i>Cryptotis parva</i>	Least Shrew			Y		LSD-1993
5			4	Talpidae	4	<i>Scalopus aquaticus</i>	Eastern Mole			Y		LSD-1993
6	3	Chiroptera	1	Vespertilionidae	1	<i>Eptesicus fuscus fuscus</i>	Big Brown Bat			Y		LSD-1993
7			2		2	<i>Lasiurus cinereus</i>	Hoary Bat			Y		LSD-1993
8			3		3	<i>L. intermedius floridanus</i>	Northern Yellow Bat			Y		LSD-1993
9			4		4	<i>L. seminolus</i>	Seminole Bat			Y		LSD-1993
10			5		5	<i>Myotis austroriparius</i>	Southeastern Brown Bat			Y		LSD-1993
11			6		6	<i>Nycticeius humeralis</i>	Evening Bat			Y		LSD-1993
12			7		7	<i>Pipistrellus subflavus</i>	Eastern Pipistrel			Y		LSD-1993
13			8		8	<i>Plecotus rafinesquei</i>	Eastern Big-eared Bat			Y		LSD-1993
14			9	Molossidae	1	<i>Eumops glaucinus floridanus</i>	Florida Mastiff Bat		E	Y		LSD-1993
15			10		2	<i>Tadarida brasiliensis cynocephala</i>	Brazilian Free-tailed Bat			Y		LSD-1993
16	4	Carnivora	1	Ursidae	1	<i>Ursus americanus floridanus</i>	Florida Black Bear		T	Y		LSD-1993
17			2	Procyonidae	1	<i>Procyon lotor</i>	Raccoon			Y	X	LSD-1993, L-1996
18			3	Mustelidae	1	<i>Lutra canadensis</i>	River Otter			Y		LSD-1993
19			4		2	<i>Mephitis mephitis</i>	Striped Skunk			Y		LSD-1993
20			5		3	<i>Mustela frenata</i>	Long-tailed Weasel			Y		LSD-1993
21			6		4	<i>M. frenata peninsulae</i>	Florida Weasel			Y		LSD-1993
22			7		5	<i>M. vison mink</i>	Southern Florida Mink			Y		LSD-1993
23			8		6	<i>Spilogale putorius</i>	Spotted Skunk			Y		LSD-1993
24			9	Canidae	1	<i>Canis latrans</i>	Coyote			Y		LSD-1993
25			10		2	<i>Urocyon cinereoargenteus</i>	Gray Fox			Y		LSD-1993
26			11		3	<i>Vulpes fulva</i>	Red Fox			Y		LSD-1993
27			12	Felidae	1	<i>Felis concolor caryl</i>	Florida Panther	E	E	Y		LSD-1993
28			13		2	<i>Lynx rufus</i>	Bobcat			Y		LSD-1993
29	5	Rodentia	1	Sciuridae	1	<i>Glaucomys volans</i>	Southern Flying Squirrel			Y		LSD-1993
30			2		2	<i>Sciurus carolinensis</i>	Eastern Gray Squirrel			Y		LSD-1993
31			3		3	<i>S. niger avicennia</i>	Big Cypress Fox Squirrel		T	Y		LSD-1993
32			4		4	<i>S. niger shermani</i>	Sherman's Fox Squirrel		SSC	Y		LSD-1993
33			5	Geomyidae	1	<i>Geomys pinetis</i>	Southeastern Pocket Gopher			Y		LSD-1993
34			6	Cricetidae	1	<i>Podomys floridanus</i>	Florida Mouse		SSC	Y		LSD-1993

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35			7		2	<i>Reithrodontomys humulis</i>	Eastern Harvest Mouse			Y		LSD-1993
36			8		3	<i>Peromyscus gossypinus</i>	Cotton Mouse			Y		LSD-1993
37			9		4	<i>P. polionotus</i>	Oldfield Mouse			Y		LSD-1993
38			10		5	<i>Neotoma floridana</i>	Eastern Woodrat			Y		LSD-1993
39			11		6	<i>Oryzomys palustris</i>	Rice Rat			Y		LSD-1993
40			12		7	<i>Sigmodon hisipus</i>	Hispid Cotton Rat			Y		LSD-1993
41			13		8	<i>Neofiber alleni</i>	Florida Water Rat			Y		LSD-1993
42	6	Lagomorpha	1	Leporidae	1	<i>Sylvilagus floridanus</i>	Eastern Cottontail			Y		LSD-1993
43			2		2	<i>S. palustris</i>	Marsh Rabbit			Y		LSD-1993
44	7	Artiodactyla	1	Suidae	1	<i>Sus scrofa</i>	Feral Hog			Y	X	LSD-1993, L-1996, U-1997
45			2	Cervidae	1	<i>Odocoileus virginianus</i>	Whitetail Deer			Y	X	LSD-1993, U-1997
46	8	Xenarthra	1	Dasypodidae	1	<i>Dasyus novemcinctus</i>	Armadillo			Y		LSD-1993

Appendix K:

Contact List for the Lake Marion Creek & Reedy Creek Management Area

Florida Department of State, Division of Historical Resources
Heather Percy, Florida Master Site File
R.A. Gray Building, 500 South Borough, Tallahassee, FL 32399-0250
Tel: (850) 488-1480; Fax: (850) 488-3353

Florida Division of Forestry, Department of Agriculture
Polk County – District 14 Office
Mark Hebb, District Manager
Gary Zipper, Area Supervisor
5745 S. Florida Avenue, Lakeland, Florida 33813
Tel: (941) 648-3163, Fax: (941) 648-3169

Florida Division of Forestry, Department of Agriculture
Osceola County - District 12 Office
John Koehler, District Manager
Tom Donahoe, Area Supervisor
8431 South Orange Blossom Trail, Orlando, FL 32809
Tel: (407) 856-6512, Fax: (407) 856-6514

Florida Fish and Wildlife Conservation Commission, South Region
Wildlife Management Area proposal contacts and Law Enforcement
1239 S.W. 10th Street, Ocala, Florida 34474-2797
Telephone 1-800-282-8002

Florida Fish and Wildlife Conservation Commission, South Region
Law Enforcement
3900 Drane Field Road, Lakeland, FL 33811
Tel: (941) 648-3200, Fax: (941) 680-5594

Florida Fish and Wildlife Conservation Commission
Office of Environmental Services
Sharon Arnold, Records Technician
620 South Meridian Street, Tallahassee, FL 32399-1600
Tel: (904) 488-6661, Fax: (904) 922-5679

Osceola County Fire Department
17 South Vernon Avenue, Kissimmee, Florida 34741
Non-Emergency: (407) 932-5338
Dispatch Tel: (407) 348-8688
Emergency Telephone: 911

Osceola County Sheriff's Office
400 Simpson Road, Kissimmee, FL 34744-4494
Non-Emergency Telephone: (407) 348-2222
Emergency Telephone: 911

Polk County Fire Services
P.O. Box 1458, Bartow, Florida 33831
Non-Emergency Telephone: (941) 534-0380
Communications Center: (941) 534-0360
Emergency Telephone: 911

Polk County Sheriff's Office
455 N. Broadway Avenue, Bartow, FL 33830-3998
Non-Emergency Telephone: (941) 533-0444
Emergency Telephone: 911

South Florida Water Management District, Dupuis Reserve
David Black, Monitoring Coordinator
23500 S.W. Kanner Highway
Canal Point, Florida 33438
Telephone: (561) 924-5310

South Florida Water Management District, Headquarters
Fred Davis, Department Director
Marjorie Moore, Mitigation Area Program Coordinator
3301 Gun Club Road, West Palm Beach, Florida 33406
Telephone: 1-800-686-2511 Fax: (561) 681-6233

South Florida Water Management District, Orlando Service Center
Upper Lakes Regional Land Manager, Resource Protection Coordinator, LSP
David Birdsall, Upper Lakes Land Manager, LSP
Vincent Matera, Upper Lakes Land Management Technician, LSP
1707 Orlando Central Parkway Suite 200
Orlando, Florida 32809
Telephone: 1-800-250-4250

South Florida Water Management District, Okeechobee Service Center
Jeff Mclemore, Forestry Coordinator
Harold Price, Range Coordinator
205 North Parrot Avenue, Suite 201, Okeechobee, Florida 34972
Telephone: 1-800-250-4200
Fax: (863) 462-5269

Student Conservation Association, Inc.
689 River Road
P.O. Box 550
Charlestown, NH 03603
Telephone: (603) 543-1700
www.sca-inc.org

United States Army Corps of Engineers
Bill Cavitt
6406 U. S. Highway 27
Sebring, Florida 33870
Telephone: (813) 840-0824

United States Fish and Wildlife Service
P.O. Box 2676
Vero Beach, Florida 32961
Telephone (561) 562-3909

Appendix L: Burn Prescription

Authorization No.

Burn Date

FIRE PRESCRIPTION
FIELD OPERATIONS - Land Stewardship Program
Orlando Service Center
South Florida Water Management District
7335 Lake Ellenor Drive, Orlando, Florida 32809
Telephone:(800) 250-4250

SFWMD Parcel: S T R
County:
Burn Unit Number:
Acres to Burn: ac.
Distance to Disk: mile(s)
Burn Unit vegetation:

Overstory Type and Height:

Understory Type and Height:

Fuel Loading: High Medium Low

Date of last fire:

Topography and Soil:

Purpose of Burn:

- Reduce the fuel load.
- Reintroduce fire into the system.
- Burn to manage fire adapted communities.
- Maintain or enhance natural community.

Ignition Plan:

- Backfire downwind side
- Strip head
- Flank

Special Precautions: Clear area of nonessential personnel. Close/lock gate to prevent hikers from accessing the area.

No Burn Situation: Dry, muck soil.

Range of Desired Weather Preferred Actual

Surface Winds (speed and direction): mph N - E - S - W

Transport Winds (speed and direction): mph N - E - S - W Mixing Height:
feet

Min. Relative Humidity: %

Max. Temperature: degrees

Dispersion Index:

Days since Rain:

Fine Fuel Moisture estimate

Type of Fire: Fire Behavior
Strip, Back, Flank, Head
Flame Length: ft.
Desired Fire Intensity: HOT 5 4 3 2 1 COOL

Preferred Month(s) of Burn: season. J F M A M J J A S O N D

Starting Time: am

Appendix L: Burn Prescription (continued)

Smoke Management (See fire plan for more details)

Smoke Screening Passed -

Smoke Sensitive Areas:

Smoke Precautions: Monitor smoke column.

Adjacent landowner Contacts:

Routine Contacts:

SFWMD (Fred Davis, Director, Land Stewardship): 561-687-6636

LSD Field Office: 561-924-5310 (DuPuis Reserve)

SFWMD (Olivia McLean, Emergency Manager): 561-687-6218

DOF District Office (Dundee): (941)421-3702/Lakeland 941)648-3163.

Kissimmee Field Station: (407)847-5067

Florida Power (let dispatch know) 1-800-700-8744

Required Resources: 6 burners (3 operators), 2 pumper units, dozer or tractor with disk or loader, 2 ATVs, smoke signs.

Holding and Contingency:

Mop up: Extinguish all visible and smoldering flames. Check perimeter.

Fire out: When mop up is complete.

Safety Check: PPE for entire crew. All equipment operational and in position.

Immediate Evaluation

Burn objectives met:

Spotover/Escapes:

Smoke Problems:

Public Contacts:

Other observations (Wildlife etc.): _____

Prescription done by

Certified Burn Manager Signature _____

Certification No.

Date of Prescription: