

*Land Stewardship
Annual Report 2007*

Land Stewardship Division Annual Report 2007

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Shoestring fern and Spanish Moss on a Live Oak

Introduction

The Land Stewardship Program is responsible for the management of South Florida Water Management District lands including Project Lands, Save Our Rivers and other Conservation Lands, the implementation and administration of mitigation banks and regional offsite mitigation areas, and managing recreation on District lands.

The Project Lands component of the Land Stewardship Program is responsible for managing properties acquired by the District for future Comprehensive Everglades Restoration Plan and other water resource projects until the land is needed for construction.

Major functions of the Conservation Lands component of the Land Stewardship Program include hydrologic/habitat restoration, exotic plant and animal control, prescribed burning, public use, environmental education, and mitigation. In accordance with the Florida Statutes Chapter 373.1395, lands acquired by the District shall be managed to “ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.”

The Lands

Background

The District owns a wide variety of land assets that are a reflection of its many programs, functions, and responsibilities. They all have a relationship to water resources, but otherwise have very different functions.

Over the course of its history, the District has acquired a real interest in 1,340,184 acres of land for conservation or for the development of water resource improvement projects. It is with these lands that the primary responsibilities of the Land Stewardship Program reside.

Although any given tract of land will have a diverse set of physical, legal, and policy attributes that define the Land Stewardship Program's involvement, most of the tracts can be grouped into one of five broad categories:

- Conservation lands that have the District as the lead manager with partners in a supporting role. 208,695
- Conservation lands that have a partner as the lead manager with the District in a supporting role. 956,526
- Project lands with a commercial/agricultural lease. 51,604
- Vacant project lands. 19,163
- Project lands that are under construction or completed. 104,196

The stewardship of each of these broad land categories involves a unique management approach and set of ongoing management activities. Each category presents unique challenges and opportunities for the District and its management partners.

The District also owns land along its canal rights-of-way, land around its structures and facilities, dredge spoil and staging areas adjacent to major canals, and fringing lands and islands inside of the Herbert Hoover Dike at Lake Okeechobee. The Land Stewardship Program's responsibilities with these lands are primarily limited to planning and administering recreation programs.

Conservation Lands: District as Lead Manager 208,695 acres, 22 management areas

District natural lands were acquired to protect and enhance water resources by buffering critical flow-ways from urban development and by maintaining large wetland areas for aquifer recharge and additional storage of surface water. Land Stewardship's primary focus on these lands is to restore and maintain their ecological function so they are able to provide the benefits for which they were acquired.

In order to maintain these lands in their natural state and preserve their ecological function, the Division's land managers take actions to compensate for the loss of natural processes and conditions that may no longer be present due to historic and ongoing alterations to the landscape. These processes and conditions are essential to keeping native plant communities in a healthy and vibrant condition that supports a diversity of plant and animal life and provides the greatest benefit to the water resources of the District. Standard land management practices include:

- Burning the fire dependent plant communities with a fire return interval that mimics a natural fire regime.
- Restoring hydrologic alterations to bring back a more natural hydroperiod.
- Controlling non-native or invasive vegetation through the selective use of herbicide.
- Restoring the physical structure of plant communities through vegetation management.

Some of the District's natural lands are former ranch lands with a mixture of native range and improved pasture. Cattle grazing has been allowed to continue on many of these properties and is used as a land management tool. Additionally, the grazing leases often require that the lessee takes on some the management responsibilities of the site, particularly with internal infrastructure maintenance. The District maintains an active role in resource management, recreation issues, and exotic species control. Another significant role for the District with these properties

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is administrative. Ensuring compliance with the lease terms and conditions, making sure the lessees pay the appropriate property taxes, and making periodic adjustments to the leases represents a significant effort by the Land Stewardship Program. At the end of Fiscal Year 2007, the District maintained 49 leases on natural lands covering 49,866 acres.

Conservation Lands: Partner as Lead Manager 956,526 acres, 25 management areas

The District has been fortunate to have partners willing to serve as the lead manager on many of its natural lands. Entities such as the Florida Fish and Wildlife Conservation Commission, the Florida Park Service, local land preservation programs, and private mitigation bankers have missions that are compatible with the District's and are a valuable management partner.

Land Stewardship's role in the ongoing operations of a site is significantly reduced by having another entity designated as a lead manager, but the program's role does not entirely go away. The legal instruments that grant the lead manager designation (leases, management agreements, Memorandums of Understanding, etc.) define the relationship between the District and its partners. Usually the Land Stewardship Program retains a supporting resource management role as needed. There is also an ongoing commitment to provide the necessary administrative services with the agreements, such as compliance and management reviews, and to provide funding if necessary.

Project Lands: Agricultural Leases 51,604 acres, 36 leases

The District administers agricultural leases or commercial reservations on a large portion of its water resource project lands. The leases are an important source of revenue for the District and keep the properties in productive use and on the tax rolls until it is ready to be turned over to a project development team for construction. The lessee takes on most of the management responsibilities for these lands. However, the Land Stewardship Program devotes significant time and resources towards compliance inspections and the administration and financial management of the leases.

Project Lands: Vacant Lands 19,163 acres

Project lands that are unable to accommodate or recruit an agricultural lessee during the interim period prior to construction are managed by the Land Stewardship Division with a goal towards site security and general maintenance. The Division ensures that the access is secured, environmental hazards are remediated, proper signage is installed, and any necessary law enforcement issues are addressed.

These lands are meant to be kept in a managed and acceptable condition until construction on the property begins. Many of these lands are on the fringe of urban areas and experience illegal uses such as dumping and the operation of off-road vehicles. These lands are physically inspected at least twice a year to monitor their condition and if necessary take corrective actions.

Project Lands: Under Construction or Completed 104,196 acres

Approximately 68% of District Project Lands were either under construction or completed in Fiscal Year 2007; The majority of these properties are stormwater treatment areas and reservoirs.

Stormwater treatment areas are large constructed wetlands designed to remove phosphorus from surrounding agricultural areas before the runoff reaches the Everglades. The treatment areas are divided into several cells, each with varying degrees of water quality treatment to maximize the cleanup. Reservoirs are designed to store large quantities of water during wet periods with the ability to have some sediment and pollutants settle out of suspension, then provide timed releases to address water supply needs late in the year. The Land Stewardship Program provides recreation planning during project development, and administers recreation programs following the completion of the project.

Finances

Goals and Objectives

The Land Stewardship Program is responsible for the management of District lands, including natural lands and project lands, the implementation and administration of mitigation banks and regional offsite mitigation areas, and the management of recreation on District lands and canal rights of way. Many District-owned properties include upland areas that are disturbed and dominated by undesirable non-native plants. Restoring such areas with diverse native understory is challenging, but the rewards for wildlife habitat are great. In order to accomplish its mission of managing and protecting water resources, the District is moving ahead on restoration of critical natural lands across South Florida.

The major goals of the program are to restore the natural lands to their original state and condition, manage them in an environmentally acceptable manner, and provide public recreational opportunities compatible with the resource. Additionally, the Land Stewardship Program includes activities to manage properties acquired by the District for future water resource project uses until needed for construction. The program is implemented by a professional staff of 34 individuals distributed throughout the geographic boundaries of the District.

Program Objectives

- Complete/update management plans for all projects
- Control invasive exotics
- Restore natural fire regime
- Restore native plant communities
- Employ multiple use practices
- Manage interim agricultural uses through reservations, lease agreements, or license agreements
- Open lands for appropriate public use
- Implement two mitigation banks and offsite mitigation

Program Finances

Since its inception in the early 1980s, the Land Stewardship Program has been funded by a variety of sources. The principal source of management funding has been the Water Management Lands Trust Fund, which utilizes a portion of the state's documentary tax revenue to pay for land management activities. The fund reimburses actual expenditures based on quarterly invoices to the Florida Department of Environmental Protection which administers the fund. Appropriate expenditures are identified in the District's annual budget and approved by the District's Governing Board by a resolution to the Florida Department of Environmental Protection. Since 2000, use of these funds has been limited to land management costs, the payment in lieu of taxes program, capital programs, the Surface Water Improvement and Management Program, and the retirement of the District's land acquisition bonds.



Pine flatwoods following a prescribed fire

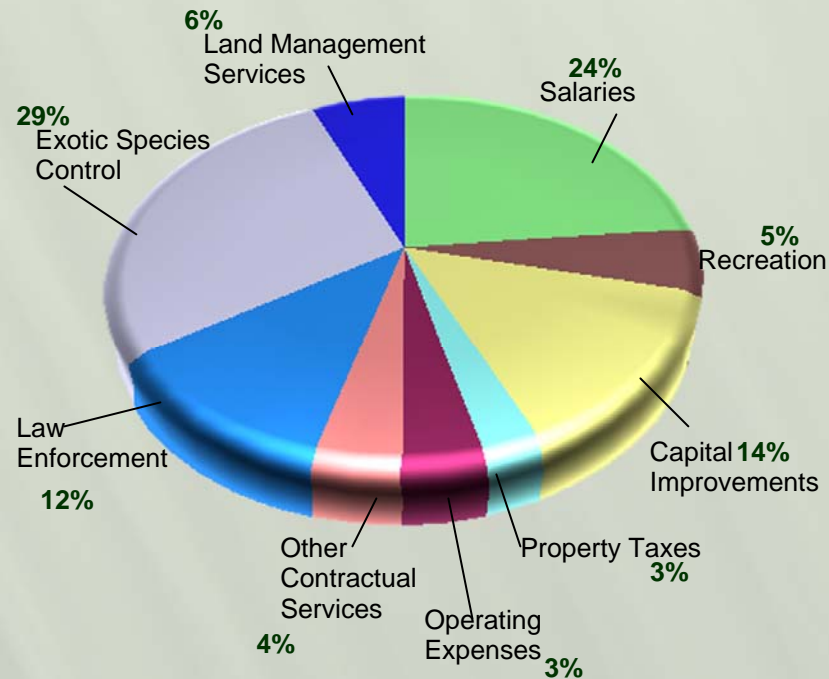
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Other funding sources include offsite mitigation, mitigation bank revenue, lease revenue, grants for wetland restoration and exotic plant control projects, and Save our Everglades Trust Fund and *ad valorem* tax revenue for the Comprehensive Everglades Restoration Plan recreational programs.

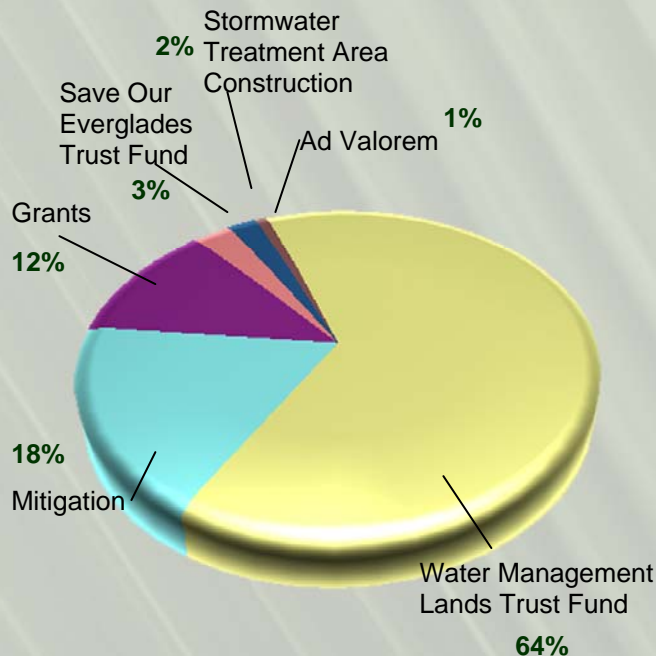
Offsite mitigation funds are collected from Environmental Resource Permits approved by the District's Governing Board. These funds must be spent in strict accordance with the permit requirements for land acquisition, restoration, or general maintenance of the mitigation lands. This form of mitigation allows the District to direct mitigation funds where they most benefit the South Florida ecosystem.

The Land Stewardship Program has obtained several grants to fund specific restoration projects on District lands. Additionally, substantial in-kind services are provided by lessees, state and local governments, as well as numerous recreational groups and individual volunteers.

Land Stewardship Budget by Activity
Total Budget \$10.9 Million



Land Stewardship Budget by Funding Source
Total Budget \$10.9 Million



The Fiscal Year 2007 (October 1, 2006 through September 30, 2007) budget for the Land Stewardship Program was \$10.9 Million. This included personnel costs, contractual expenses for land management activities such as exotic control, cleanup, security, capital improvements, and general administrative costs.

Revenue generated from agricultural leases, sale of products, mitigation banks, and other alternative sources for the year was in excess of \$5.4 million. This was in addition to the \$2,130,870 (calculated at an average cost of \$21 per acre) in management costs avoided due to the 85 leases and agreements in place for the 101,470 acres under a commercial lease; and \$3,031,518 avoided from conservation lands managed by a partner (144,358 acres excluding the Water Conservation Areas). By maintaining the leased properties on the local tax rolls, lessees paid nearly \$1.9 million in property taxes. Management activities for the Land Stewardship Program in Fiscal Year 2008 are anticipated to occur on 527,933 acres of land at an estimated total cost of \$11.5 million.

Recreation

The District manages its lands and provides for a variety of outdoor recreational activities. All lands are available for public use, except in instances where there is no legal public access or where contract or lease restrictions prohibit public use. The vast majority of properties are managed as natural areas, with limited roads and vehicular access other than roadside parking. Common recreation opportunities include hiking, primitive camping, wildlife viewing, canoeing, fishing, horseback riding, and hunting.

Cooperative agreements with the Fish and Wildlife Conservation Commission provide for hunting activities on nearly 683,411 acres. Acquisition and management partners from several counties have constructed environmental education centers, boardwalks, and interpretive trails, all at no cost to the District, that are used by thousands of school children and adults annually.

In July 2006, new public use rules were adopted for the various types of land designations within the District. This endeavor required considerable coordination and several public workshops to ensure a balance between public access, nature-based recreation opportunities, project compatibility, and restoration and protection of the natural state and conditions of the land. Public access and recreational use rules have been established for management areas, rights-of-ways, Stormwater Treatment Areas, impoundment areas, and vacant undesignated lands. Following a similar process, in 2007 the District created a five-year recreation management and partnership plan that outlined proposed recreation capital improvements and new partnership programs that will be pursued over the 2007–2011 time frame.



Hiking the Florida Trail



Equestrian use at Hickory Hammock

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Fiscal Year 2007 Recreation Highlights

- Alligator-hunting occurred for the second year at Stormwater Treatment Area-5, and for the first time on Stormwater Treatment Area-1W. A total of 150 permits were issued with an allowable harvest of two alligators per permit.
- A new recreation access area at Allapattah was completed and opened to the public through a partnership with Martin County.
- A new recreation area was designed and constructed at the “Governor’s House” site within the DuPuis Management Area.
- St. Lucie County opened the Gordy Road Recreation Area. This District-owned property is associated with the 10-mile Creek Reservoir and Treatment Area critical project.
- Allapattah was established as a Wildlife Management Area.
- An archery range and an airfield for radio-controlled model aircraft opened at the West Delray Regional Park that is being constructed on the District’s Palm Beach Downs property.
- A new partnership agreement was initiated with Okeechobee County for the management of recreation on the 193-acre Taylor Creek Stormwater Treatment Area.
- A new pedestrian bridge was constructed and installed by volunteers from the Florida Trail Association at Tick Island Slough in KICCO over a three-day work weekend.
- The District completed construction of the Bird Rookery Swamp boardwalk at CREW.
- A recreation stakeholders meeting was held to develop public recreation opportunities at Chandler Slough.
- A working group of stakeholders was established to aid recreation planning within the Kissimmee Chain of Lakes.
- A new partnership was entered into with Polk County for the management of a new boat ramp facility being constructed on Lake Kissimmee.
- The District’s recreation web page was updated to include 360-degree panoramic photos taken at District recreation facilities.



*Three generations of hunters in the
Stormwater Treatment Areas*



Fishing the Kissimmee Chain of Lakes

Environmental Education

Land Stewardship creates environmental education kiosks and displays and builds partnerships with other entities to provide many of its environmental education programs. These partnerships have created a large network of facilities and programs that have increased exposure of the District's mission and programs to students, educators, and the public. This network features the following partnerships:

Shingle Creek

A public access point with a boardwalk and pedestrian bridges was constructed behind Hunter's Creek Middle School in Orange County. The school benefited from providing this public access in off-hours by expanding the opportunities for ecological field studies for its science program in their own backyard.

Reedy Creek/Lake Russell Unit

The Osceola County School Board operates an environmental education center on the Lake Russell unit of the Reedy Creek Management Area. This center provides summer camps and several other ongoing programs for county students.



Kiosk at a Trailhead



Educational Earthday Display at DuPuis

Tibet-Butler Preserve

The Tibet-Butler Preserve is managed by the Orange County Parks and Recreation Department as an environmental education facility. It has a full-time staff and infrastructure that includes a museum facility and classrooms. The center provided dozens of educational programs and several special events in Fiscal Year 2007. These programs included hiking programs, programs designed for Pre-Kindergarten students, and more advanced programs on reptiles, aquatic life, mammals, birds, and insects.

Kissimmee River/Riverwoods

The Florida Center for Environmental Studies operates under a contract with the District to provide Kissimmee River Restoration-based programming from the Riverwoods complex. Programs include public boat and eco-tours, water resource education for teachers, student field studies, service learning, and public outreach.

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Ox-Bow Eco-Center

St. Lucie County operates the Ox-Bow Eco-Center on the North Fork of the St. Lucie River. The eco-center provides a variety of nature-based educational programs for thousands of students and members of the general public. The center also hosts special events several times a year including an Earth Day event that brings out as many as 2,000 visitors.

DuPuis Management Area Visitors' Center

As with Riverwoods, the DuPuis Management Area Visitor Center is operated under a contract with the Florida Center for Environmental Studies. In addition to operating the visitor center during normal operating hours, it provides an array of programs related to natural lands management and Everglades restoration including a nature-based lecture series, service learning, field studies for students, and special events.



Land Stewardship Conference Display

Six Mile Cypress

Lee County manages environmental education programs at the Six Mile Cypress property that has attracted more than 100,000 visitors in a year. Lee County staff at Six Mile Cypress makes dozens of classroom visits throughout the school district and receives thousands of students on-site for educational programs, including all seventh-grade students. The District entered into an agreement with Lee County to cost share the construction of a new environmental education center on the property.

CREW Land and Water Trust

The District maintains a contract with the CREW Land and Water Trust on the CREW Management Area to provide public outreach and education programs. The programs include guided nature walks, star gazing events, a large spring wildflower festival, teacher training, classroom visits, and service learning. During Fiscal Year 2007, CREW Land and Water Trust proposed expanding its education and outreach capacity through a new capital campaign.

Kiosk Installations

The Land Stewardship Division has been increasing its outreach exposure by installing new informative kiosks near public access points and trail heads in most of the District's management areas. In Fiscal Year 2007, a total of four new kiosks were installed, including three at Stormwater Treatment Area-3/4, and one at the Taylor Creek Stormwater Treatment Area.



Girl Scouts working with native plants

Exotics

The District is committed to reducing the proliferation of exotic plant infestations and controlling exotic vegetation where possible. Exotic plant control consists of the proper application of various environmentally acceptable chemical herbicides and mechanical removal performed by staff or private contractors. Cooperators who manage District lands under contract or lease are strongly encouraged to apply a similarly aggressive approach to exotic plant control.

Exotic plant control is the single-largest item in the Land Stewardship Program annual budget. In Fiscal Year 2007 67,501 acres were treated for exotics, which exceeded the annual goal of 32,000 acres. Biologic control of exotics took a step forward in Fiscal Year 2007 with the widespread release of the Lygodium moth in the East Coast region and the tropical soda apple leaf beetles in the Kissimmee and Upper Lakes regions. The tropical soda apple leaf beetle has made an appreciable impact in the

control of tropical soda apple in areas where the beetles have been released with significant mortality of affected plants.

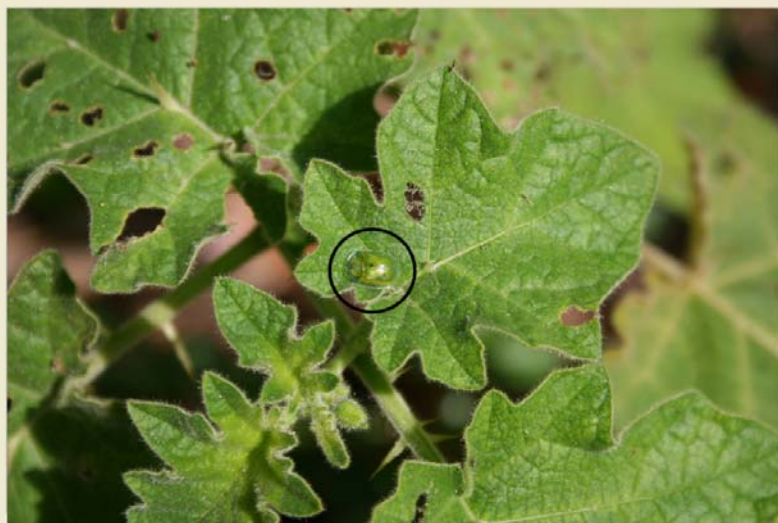
The District also controls the population and minimizes the impact of exotic animals such as hogs through hunting programs and contracted trappers. Burmese pythons are a growing threat to the Everglades; District staff assist Fish and Wildlife Conservation Commission and National Park Service staff to rid the region of this exotic reptile.



A hog trap in a Pine Flatwood



Aerial spraying field staging area



Released Tropical Soda Apple Leaf Beetle

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Treated Melaleuca



Lygodium at PalMar East prior to treatment



Treated Lygodium at PalMar East with cypress trees unharmed

Prescribed Burning

Periodic fire is a natural element of native Florida ecosystems. The District uses prescribed burning to reduce hazardous buildup of vegetative fuel loads, enhance wildlife habitat, and encourage restoration of native plant communities. The District burns its lands to simulate natural fire cycles which benefit native plant communities. Our goal is to conduct at least 50 percent of District prescribed burns during the growing season to mimic the natural occurrence of lightning season fires. Many of the early acquired Save Our Rivers lands have now had a decade and a half of a return to a more natural fire regime. The fire management program is based on ecological research and proven safety standards. It requires trained and experienced staff familiar with the diverse and unique fire management needs of the Florida landscape.

In Fiscal Year 2007, 66,850 acres were burned through the application of prescribed fire, which exceeded the annual goal of 17,000 acres. Of this amount, 55,000 acres occurred as a result of using prescribed fire as a suppression tool to combat wildfires of fuel within the marshes on the western edge of Lake Okeechobee that were dry and exposed due to drought. The drought that made these burns possible prevented burning for the rest of the District from March to mid-June, due to a statewide burn ban.



A prescribed fire in a District pineland



A wildfire burning a District marsh

Fiscal Year 2007 Prescribed Fire Highlights

- The National Prescribed Fire Training Center sent a self-contained fire team to assist District staff with prescribed burning as off-season training for West Coast and Mountain Region firefighters.
- Over 55,000 acres were burned in Lake Okeechobee to burn-out fuels ahead of advancing wildfires. These were the largest burns ever conducted by District staff and will provide significant ecological benefits to the overall lake ecology, as many areas within the marsh had become degraded and overgrown due to a prolonged absence of fire.
- A 4,000-acre burn using aerial ignition was conducted at DuPuis. These larger and more cost-effective burns are possible due to reduced fuel loads on the ground from frequent burning.
- The first prescribed fire in the Kissimmee River floodplain occurred in 2007 with the establishment of new monitoring protocols developed in cooperation with the Kissimmee River Restoration Program.
- Approximately 60,000 acres of wildfire occurred on District lands as a result of wildfires during the 2007 drought. Damage from these fires was minimal due to the active prescribed fire program that has reduced fuel loads across District lands since the Save Our Rivers program began in the mid-1980s.

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*Prescribed fire in Lake Okeechobee following
the aerial ignition of dry fuel behind a wildfire*



One of the massive burn-outs conducted at Lake Okeechobee

Vegetation Management

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

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



Overgrown understory shredding to reduce pine density and increase forage quality and quantity

Fiscal Year 2007 Vegetation Management Highlights

- Several Land Stewardship staff completed training to assess and coordinate the removal of hurricane debris.
- Vegetation management activities occurred on 22,050 acres of District managed lands.
- Drought conditions provided an excellent opportunity for heavy equipment to access the Loxahatchee Mitigation Bank to windrow several hundred acres of Brazilian pepper.
- Mowing occurred within the L-31N Transition Lands and on the C-23/C-24 Project lands that are being managed in the interim as small-game hunting areas.
- 465 acres of overgrown understory and hardwoods were shredded in the Packingham/Buttermilk Slough area of KICCO Management Area.
- Shredding to improve wildlife habitat occurred at KICCO, Kissimmee River Pools C&D, and DuPuis.
- Maintenance mowing and fire-break disking occurred throughout the District.
- Weed-control mowing occurred throughout the Kissimmee Chain of Lakes properties.
- 350 acres of pine timber thinning to minimize the impact of a pine-beetle infestation, and 590 acres of palm thinning to improve wildlife habitat occurred at DuPuis through two revenue-generating contracts.

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A roller-chopper used to remove small hardwoods from herbaceous understories



A Gyro-Trac shredder removing willow from a marsh



A loader aiding a timber thinning project



Shredding this dry prairie will improve habitat conditions for the endangered Florida grasshopper sparrow

Wildlife Management

Wildlife management on District lands is directed toward production of natural species diversity consistent with the biological community types present. The Land Stewardship Program accomplishes this in several ways:

- Performing land management activities that maintain and/or improve native wildlife habitat
- Conducting species specific management activities for the benefit of protected species
- Following management guidelines for listed species protection as determined by the Multi-Species Recovery Plan for the Threatened and Endangered Species of South Florida, Volume 1 (U.S. Fish and Wildlife Service, 1998)
- Reducing non-native pest species populations where appropriate
- Maintaining a master file of potential and confirmed wildlife species
- Cooperating with the Florida Fish and Wildlife Conservation Commission on wildlife management issues
- Using best snag management practices: removing snags only when they pose a safety hazard

Wildlife management through these actions primarily occurs through the application of prescribed fire and the control of exotic species. In addition, the Land Stewardship Division partners with the Fish and Wildlife Conservation Commission on many wildlife management issues. This partnership has resulted in several District-managed lands being established as Wildlife Management Areas, Wildlife and Environmental Areas, Public Use Areas, and Small-Game Hunting Areas. These designations allow the Commission to dedicate biological staff and resources toward the well-being of wildlife on District lands and enforce a stricter set of wildlife protection rules. Since management actions that meet the needs of wildlife also further the District's objectives, the biological staff has significantly enhanced the District's land management efforts

Fiscal Year 2007 Wildlife Management Highlights

- After more than a decade of restoration efforts, the DuPuis Management Area was determined to be an acceptable location for the reestablishment of the federally endangered red-cockaded woodpeckers. Five pair were transferred to artificial nest boxes installed in trees at DuPuis; of these, one pair had a chick that fledged from its new home.
- Allapattah was established as a Wildlife Management Area with a full-time Fish and Wildlife Conservation Commission biologist.
- Small-Game Hunting Areas were established on STA-1, STA-3/4, STA-4, and STA-5; the C-23/24 South Reservoir project in St. Lucie County; and at Rocky Glades in Miami-Dade County
- A new three-year multi-site agreement with the FWC was signed in 2007 that covers most of the lands where hunting programs have been established and administered by the commission and provides funds for wildlife management services.
- Two juvenile bald eagles were relocated by the National Audubon Society to KICCO from the Sanford Airport.
- Worm lizards were discovered for the first time at the Ft. Basinger and River Runt scrub sites along the Kissimmee River.
- Eight nesting platforms for osprey were constructed and installed along the Kissimmee River.
- Wildlife monitoring activities were conducted by Commission biologists for caracaras, quail and turkey, mourning doves, small mammals, scrub jay, red-cockaded woodpeckers, wading birds, burrowing owls, herptiles, white-tail deer, and bald eagles.

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Five pair of endangered red-cockaded woodpeckers were relocated to DuPuis to establish a new red-cockaded population in south Florida



An endangered snail kite and its primary forage, apple snails



Two juvenile bald eagles were relocated to KICCD

Restoration

In addition to routine land management activities, the Land Stewardship Program is involved in restoring altered land to its natural condition. Intensive measures are often required to restore land that has been altered for agriculture, transportation, housing or other intensive purposes. This work may involve reestablishing hydrology, removal of debris and altered soil, treating exotic vegetation and reestablishing native plant species, applying specific burn regimes or other specialized techniques. Experimentation is often required to find a cost-effective way to restore a particular kind of disturbed land. Permits have been obtained for three large hydrologic restoration projects around Lake Kissimmee: Rough Island, Otter Slough, and Gardner-Cobb Marsh. In addition, the Florida Fish and Wildlife Conservation Commission completed four marsh restoration projects in conjunction with Land Stewardship staff on 32 acres of District land on Lake Kissimmee.



Groundcover restoration at Starvation Slough

Fiscal Year 2007 Restoration Highlights

Conversion of Bahia Pasture Land to Native Vegetation

Thousands of acres of Bahia pasture exist on District land. Three pilot projects are under way to test different ways to restore native ground cover in these improved pasture areas: one at Starvation Slough, one at DuPuis Management Area the other at CREW.

Gulfstream Gas Pipeline (Kissimmee River)

This project will remove bahia grass and other nonnative cover and plant with native groundcover seed on 40 acres in a linear strip on six District management units on the Kissimmee River. The native seeding did not take due to the drought and will need to be reseeded in Fiscal Year 2008.

River Runt Scrub Restoration (Kissimmee River)

About ten acres were herbicided and replanted with native groundcover seed. Two 1,000 ft long by 30 ft wide by 20 ft deep ditches were filled to restore the hydrology of this area.



Restored wetlands on District natural lands

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Starvation Slough Groundcover Restoration (Kissimmee River)

The District is attempting to restore the native dry prairie ground cover on what had been improved pasture using sod removal, native seeding, and natural recruitment. All 160 acres were mowed in 2007 and spot-treated with herbicide to remove invasive exotic plant species. Recruitment of desirable native species continues to increase each year.

East Bonita/Southern CREW

District contractors completed follow-up melaleuca treatment on 4 square miles of the project. This area was severely degraded by exotic vegetation after the hydrology was interrupted by an attempt to build a subdivision in wetlands during the early 1960s. An intense wildfire six years ago killed much of the native vegetation in the area. This area was subsequently aerially treated, and ground crews are nearly finished with the follow-up treatment.

East Corkscrew Marsh Ground Cover Restoration

Native recruitment increased dramatically in 2007, four years after the site was initially seeded. Rare ground cover species such as lopsided Indian grass were observed for the first time since the native seeding occurred in the fall of 2003.

DuPuis Ground Cover Restoration

The ground cover restoration plot was in a monitoring phase for natural recruitment of native plant species this year, following two glyphosate treatments in Fiscal Year 2006.

PalMar East

Approximately 900 acres of Brazilian pepper, melaleuca, and Old World climbing fern (*Lygodium*) were treated. A conceptual design and cost estimate was completed for the hydrologic restoration.



Plugging drainage ditches at River Runt



Hydrologic restoration of a littoral marsh

Mitigation

Under Chapter 373, F.S., the District is authorized to participate in and encourage the development of private and public mitigation banks and regional off-site mitigation areas. The State's mitigation banking rule (Chapter 62-342, Florida Administrative Code) encourages each water management district to establish two mitigation banks. The use of mitigation and mitigation banking offers opportunities to generate supplemental revenue for the District's land acquisition, restoration, and management programs.

Mitigation Banks

The District's mitigation bank sites include the Loxahatchee Mitigation Bank in Palm Beach County and the Corkscrew Regional Mitigation Bank in Lee County. The District has developed each bank as a public/private contractual agreement. Private bankers obtain permits, restore the land, reimburse the District for its land acquisition and staff costs, and then provide a revenue stream to the District for future projects. The total revenue collected during Fiscal Year 2007 from the Loxahatchee Mitigation Bank was \$615,000.

Loxahatchee Mitigation Bank

During Fiscal Year 2007 over 1000 acres of exotic vegetation were treated, cleared or shredded providing habitat enhancements. The bank neared completion of its fifth year of monitoring to document success. In June 2007 the fourth revenue disbursement of \$615,000 was provided to the District (\$1,435,000 received to date). In July 2007 the bank received a credit release of 21.4 credits and the District provided its first revenue distribution of \$54,498 to Palm Beach County in exchange for the County's donation of land to the bank.

Corkscrew Regional Mitigation Bank

During Fiscal Year 2007, over 100 acres were planted with native vegetation, 50 acres were treated with prescribed fire and the entire site received a follow-up herbicide treatment to control exotic vegetation. Fifteen acres were excavated to create marsh habitat and 1.5 miles of exterior berm were constructed. The bank completed its first year of monitoring to document success. In June of 2007, the bank received its first credit release, which was 89.42 credits. However, no credits have been sold to date; therefore no revenue has been disbursed to the District.

Regional Mitigation Areas

The District operates two regional mitigation areas, Corkscrew Regional Ecosystem Watershed and Pennsuco, to compensate for permitted wetland impacts. These projects no longer accept cash payments, however existing funds are being used to restore and manage the sites. In FY2007, the District spent nearly \$1.7 million to conduct exotic treatments on 1,678 acres in CREW and 5,466 acres in Pennsuco. The ongoing restoration efforts are proving successful.

Off Site Mitigation

Under Chapter 373.414, F.S. the water management districts may accept the donation of money as mitigation where the donation is "specified in a duly noticed environmental creation, preservation, enhancement, or restoration project, endorsed by the governing board". This form of mitigation allows the District to direct dollars where they most benefit the South Florida ecosystem.



Earthwork at the Corkscrew Regional Mitigation Bank

Land Stewardship Division Annual Report 2007

Shingle Creek - Mitigation funds were provided to the District for impacts associated with the construction of the Western Beltway and Southern Connector. To date the District has used those funds to acquire over 875 acres of wetland habitat in the Shingle Creek project. During Fiscal Year 2007, over \$127,150 was expended on land acquisition associated costs and nearly \$50,000 on restoration and associated costs. The District is currently working with Osceola County and the City of Kissimmee to amend the interlocal agreement to provide additional funds for land acquisition and also to enter into a cooperative agreement for the management of lands in Shingle Creek.

Cells 17 & 18 – As the responsible entity, the District will perform the mitigation requirements associated with the construction of a Department of Transportation rest and recreation facility at I-75 and the Miami Canal that include the purchase, enhancement, and maintenance of 358.2 acres of melaleuca impacted wetlands located in the Broward County East Coast Buffer. For this effort, the District was provided \$389,363 (\$1,087/acre) in restoration funds and \$227,457 (\$635/acre=\$18/acre/year) in long-term management funds. The district is in the process of implementing the multi-year exotic plant control treatments that began in 2001. During Fiscal Year 2007, over \$44,000 was expended on the treatment of exotics.



Brazilian pepper removal at the Loxahatchee Mitigation Bank



Successful control of Melaleuca in Pennsaco after multiple treatment efforts across several years

Monitoring

The primary purpose of the Land Stewardship monitoring program is to evaluate and document the effects of land management activities. Fire is the most important tool used. Regularly conducting prescribed burns maintain a desirable structure in the forests and marshes by preventing shrubs and trees from becoming too dense thereby reducing plant diversity. Monitoring vegetative response to fire helps burn managers understand the relationships between variables such as weather, fuel accumulation, season, water levels, and how it affects the vegetation.

In addition to gathering data on prescribed burning, Land Stewardship staff monitors the condition and structure of habitats to detect gradual desirable or undesirable changes. Such changes are often related to burning but can also be caused by other factors such as changes in hydrology. Monitoring for habitat changes is efficiently done by repeatedly taking panoramic photos at fixed locations. The high-resolution digital photos show general size, density, and diversity of vegetation. Locations are permanently marked with iron pipes and GPS coordinates are recorded to ensure they can be accurately relocated over extended periods of time.



Location information is taken while installing photopoints

Restoration projects are more complex and uncertain in outcome than regular land management. Hence, more intensive monitoring is appropriate. Panoramic photos are effective in documenting restoration, by showing step-by-step progress of the project and long-term changes in plant communities. Scientific methods for measuring vegetation are used to document initial conditions that require restoration and achievement of desired changes.

Wildlife monitoring on District lands is normally performed by FWC staff. Deer, hogs, and other game are counted and variously measured and inspected as they are removed by hunters. Quail and general breeding bird populations are estimated by listening surveys. Eagles and wading birds are counted from airplanes.



A density board is a tool used for vegetation monitoring in the panoramic photopoints

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Panoramic photo series showing an area infested with Downy Rose Myrtle (top) and the same area after treatment (bottom)



A panoramic photo series (2004 - 2007) showing vegetation changes following a prescribed fire

Infrastructure Management

The Land Stewardship Division not only has a wide variety of lands to manage, but also a wide variety of infrastructure on those lands, each with a unique set of management needs. District Policy 140-25(3)(k) states that “Infrastructure support shall be developed and maintained to provide safe access for responsible management and public use on District lands.” The infrastructure on District lands includes the following:

- roads
- parking areas
- officer housing
- historic structures
- recreation facilities
- gates
- fences
- field offices
- maintenance staging areas
- water-related structures

In addition, the division often receives acquired lands with pre-existing structures that are incompatible with the purpose for which the land was acquired. Dealing effectively with this type of infrastructure has led to the development of an active demolition and environmental cleanup program



A house being demolished on District land

Fiscal Year 2007 Infrastructure Management Highlights

- Demolition of a barn at Allapattah
- Demolition of old trailers at Cypress Creek
- Demolition of an old building at DuPuis
- Demolition of old trailers and an old Federal Aviation Administration building in the East Coast Buffer
- Demolition of a house and metal building at Site 1
- Demolition of a derelict structure along the Kissimmee River
- Demolition of a house at Grape Hammock,
- Demolition of a house in the 8 ½-Square-Mile Area in Miami-Dade County
- Demolition of and a house at Palm Beach Downs
- Installation of a new roof on the Pearce-Lockett Estate garage
- Installation of new fencing at Trail Ridge, No-Name Slough, KICCO, Putnam Groves, the Kissimmee Chain of Lakes, Chandler Slough, and Paradise Run
- Renovation of MacArthur Road leading to the new Hickory Hammock equestrian campground
- Identification and preparation of temporary storm debris storage sites for use on District lands



A newly installed boundary fence

Land Stewardship Division Annual Report 2007



The field office at Allapattah



Culvert installation and stabilization



An abandoned bus on District Land



A new roof being installed on District property



District staff grading an access road

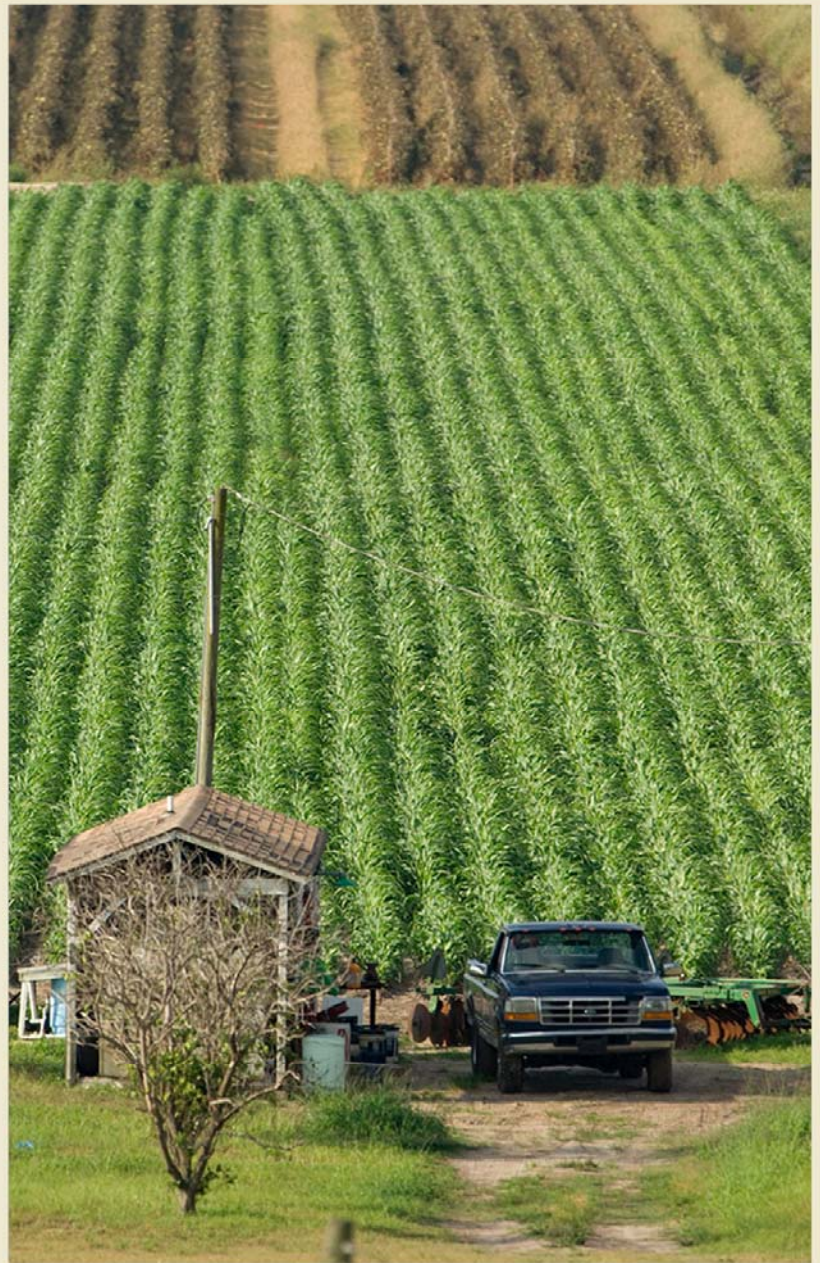
Commercial Leases

The District administers agricultural leases or commercial reservations on 101,470 acres. Historical uses of properties, such as grazing, sod, vegetable, and sugar cane farming, and nurseries and tree farms, are allowed to continue through the use of reservations, leases or similar agreements, when appropriate. The revenue producing lease program provides many benefits, such as:

- on-site management and security for District-owned lands at a minimal cost to the District,
- minimizing District expenses by increasing revenue from non-governmental sources to off-set District management, maintenance and resource protection costs,
- minimizing impacts to the local agricultural economy by keeping viable agricultural lands in active production for as long as possible, and
- minimizing fiscal impacts to the local government by keeping lands on the tax roll until they are actually needed for construction.

The commercial leasing program brings in revenue from a wide variety of uses that includes:

- an equestrian training facility
- cattle grazing on former ranchlands
- horse grazing
- communication towers
- citrus
- row crops
- sugar cane
- aggregate mining
- honey bees



Row crops are a historic use that is usually allowed to continued through a lease until project construction starts

Land Stewardship Division Annual Report 2007



*Beekeeping operations occur
on 10 District properties*

Revenue generated from agricultural leases, sale of products, and other alternative sources for the year was in excess of \$4.8 million. This was in addition to the \$2,130,870 (calculated at an average cost of \$21 per acre) in management costs avoided due to the 100 leases and management agreements in place for the 101,470 acres under contract. By maintaining the leased properties on the local tax rolls, lessees paid nearly \$1.9 million in property taxes.

Generally, a competitive bid process is used to solicit proposals and award contracts, which include the appropriate cancellation clauses to make the land quickly available when needed. In some cases, short-term leases (five years or less) are negotiated as part of the acquisition package. Lessees are typically required to actively manage the property, control exotics, provide security for the property, implement applicable Best Management Practices, keep the property and facilities in good repair and condition, obtain all required permits and approvals for their activities, maintain required insurance coverage, and pay applicable taxes.



A cattle lease on District land

Resource Protection

The Land Stewardship Division is committed to protecting the natural and cultural resources on District land. Primary problems encountered on District lands by law enforcement are:

- illegal entry
- dumping
- poaching
- all-terrain vehicle operation
- cultural resource artifact collecting
- open gates
- cut fences
- vandalism
- District and contractor employees recreating where prohibited
- Burmese pythons

The District is in its eighth year of a contract with the Fish and Wildlife Conservation Commission, Law Enforcement Division, to provide law enforcement patrols on District lands. The District also funds four full-time law enforcement positions within the Commission for officers to patrol District lands exclusively. There are approximately 13,000 hours of patrols performed annually by 85 officers throughout the District.

The Land Stewardship Division role is to coordinate with the Commission on where patrols should occur and the number of patrol hours for each area, advise on issues in each area, coordinate details to target problem areas, and pass on information/issues from the land managers to law enforcement. In addition to working with the Commission, the division works with county law-enforcement agencies to protect resources on District lands.

Law enforcement officers from three different agencies reside on District property in 12 locations to provide an additional law enforcement presence. Officers living on District property have proven to be an effective deterrent to illegal uses. Additional District property that can benefit from an officer living on the property is being identified due to the success of this program.

Fiscal Year 2007 Resource Protection Highlights

- A new agreement with the Fish and Wildlife Conservation Commission was executed that funds enhanced patrols of District properties for another three years.
- A federal judge in Fort Myers fined five hunters \$24,000 for poaching more than 50 ducks, following an undercover sting operation by undercover commission officers.
- Two new trailer pads and utility hookups began to be installed for on-site officer housing on District properties.
- A draft five-year enforcement plan was created and will be finalized in Fiscal Year 2008.



Abandoned vehicles are a common problem on project lands

Land Stewardship Division Annual Report 2007



A wildlife officer on patrol in the Kissimmee Chain of Lakes



Officer Housing on District land

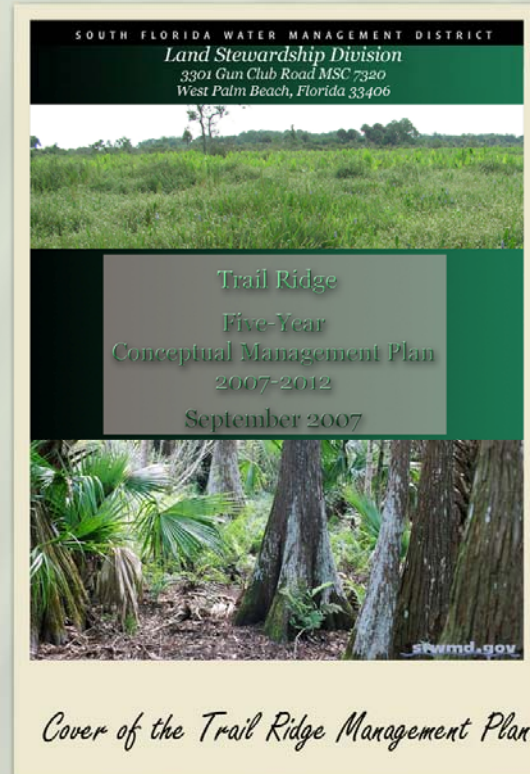
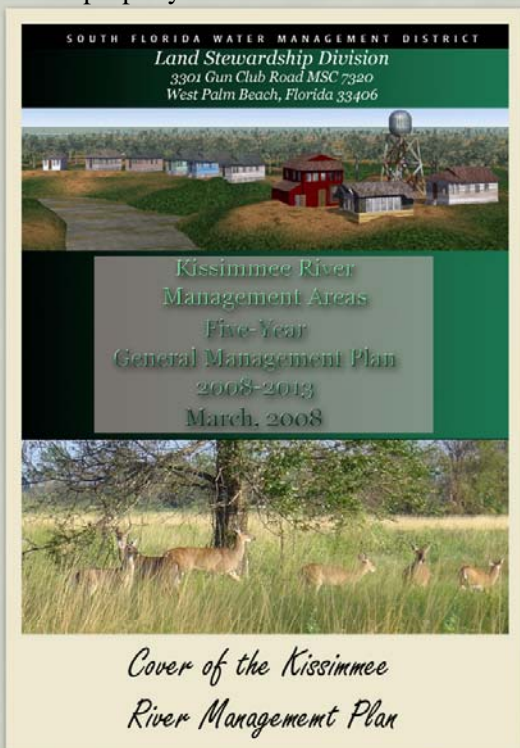


Damage from unauthorized All Terrain Vehicles

Planning

Land management planning is an important first step along the path of effective stewardship of District land resources. Management plans are required by Florida statutes to be written for all District conservation lands over 1,000 acres. These plans are to be reviewed by a multiparty review team and updated every 10 years, although the District is committed to exceed this standard by having management reviews every five years. A management plan review team consists of one member each from these entities:

- South Florida Water Management District
- Private land manager
- Local soil and water conservation district board of supervisors
- Florida Division of Forestry (DOF)
- Florida Fish and Wildlife Conservation Commission
- Florida Department of Environmental Protection
- Conservation organization
- Representative from the county where the property is located



The Land Stewardship Division participates on the management review teams for the conservation lands that are managed by a partner and creates and updates management plans on conservation lands where the District is the lead manager. Management activities are designed for each site based on the Land Stewardship Program mission for conservation lands: “to provide natural resource protection and management while allowing compatible multiple uses on designated public lands.” The Land Stewardship Program has three primary goals for managing the District’s conservation lands: conserve and protect water resources, protect and/or restore land to its natural state and condition, and provide public use.

The general management plans include goals and objectives, past and present land uses, resource data, restoration and management needs, public use programs, compatible multiple uses, monitoring programs, site security, and administrative duties to guide management actions for the five-year period. As such, general management plans serve as a collective information source for District management staff, agency partners, and the general public.

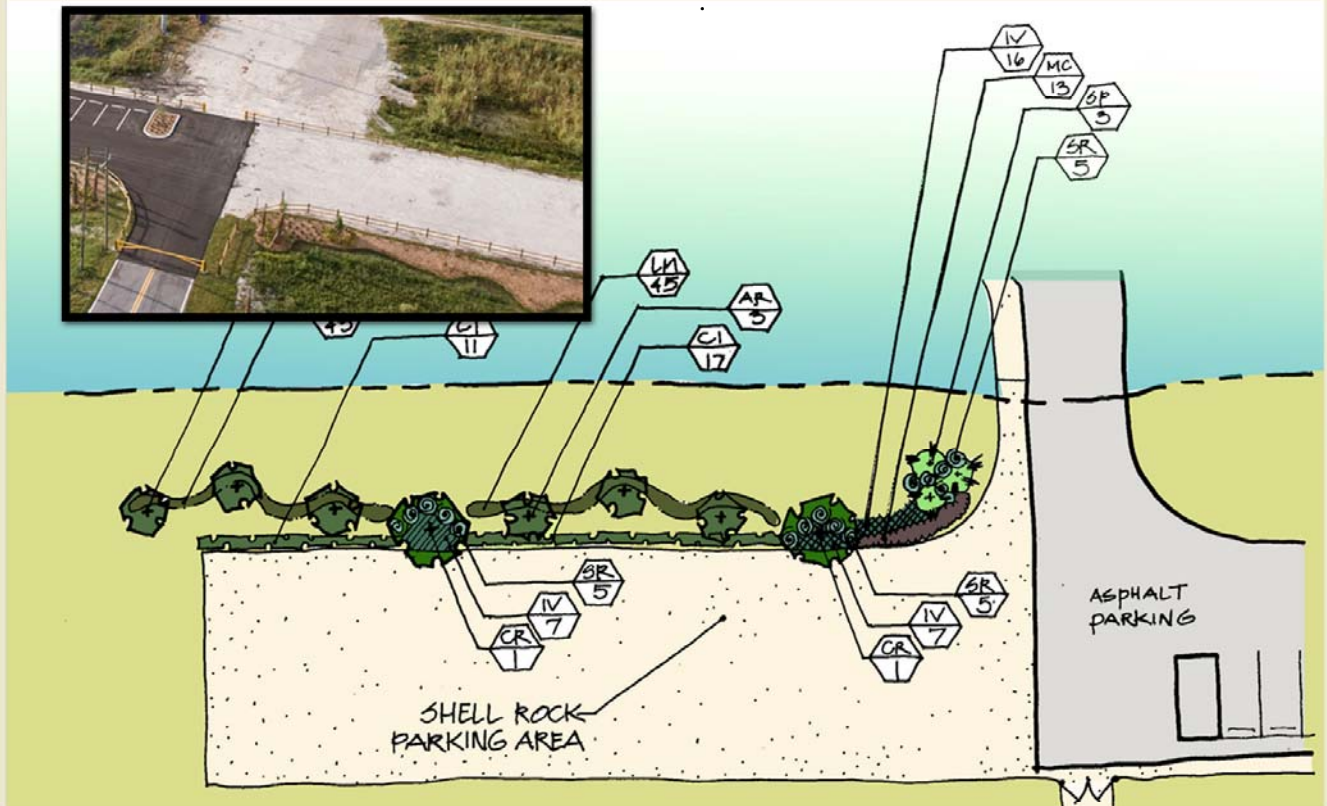
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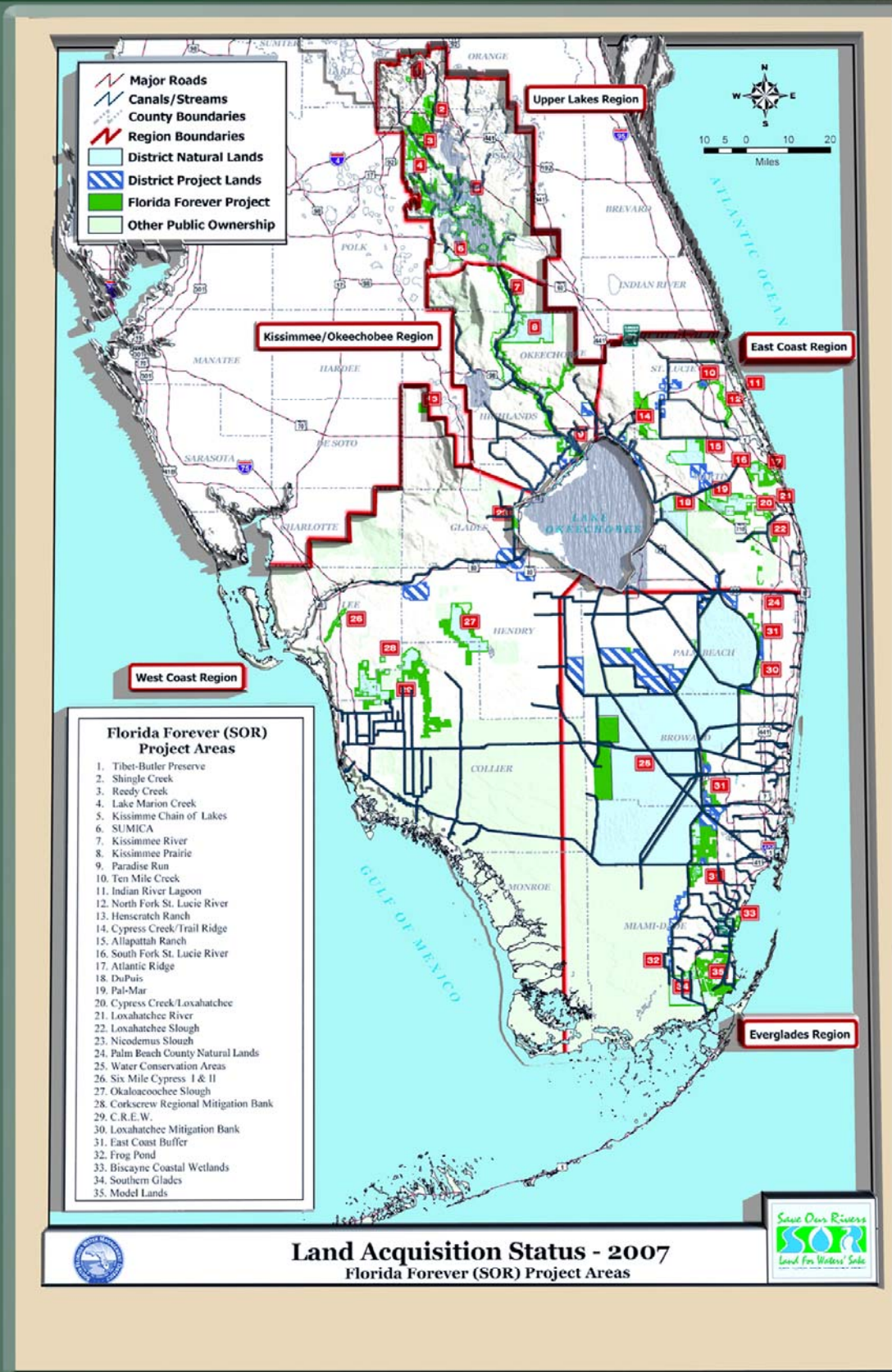
Land Stewardship Staff marking locations of culverts and drainage ditches on PalMar East

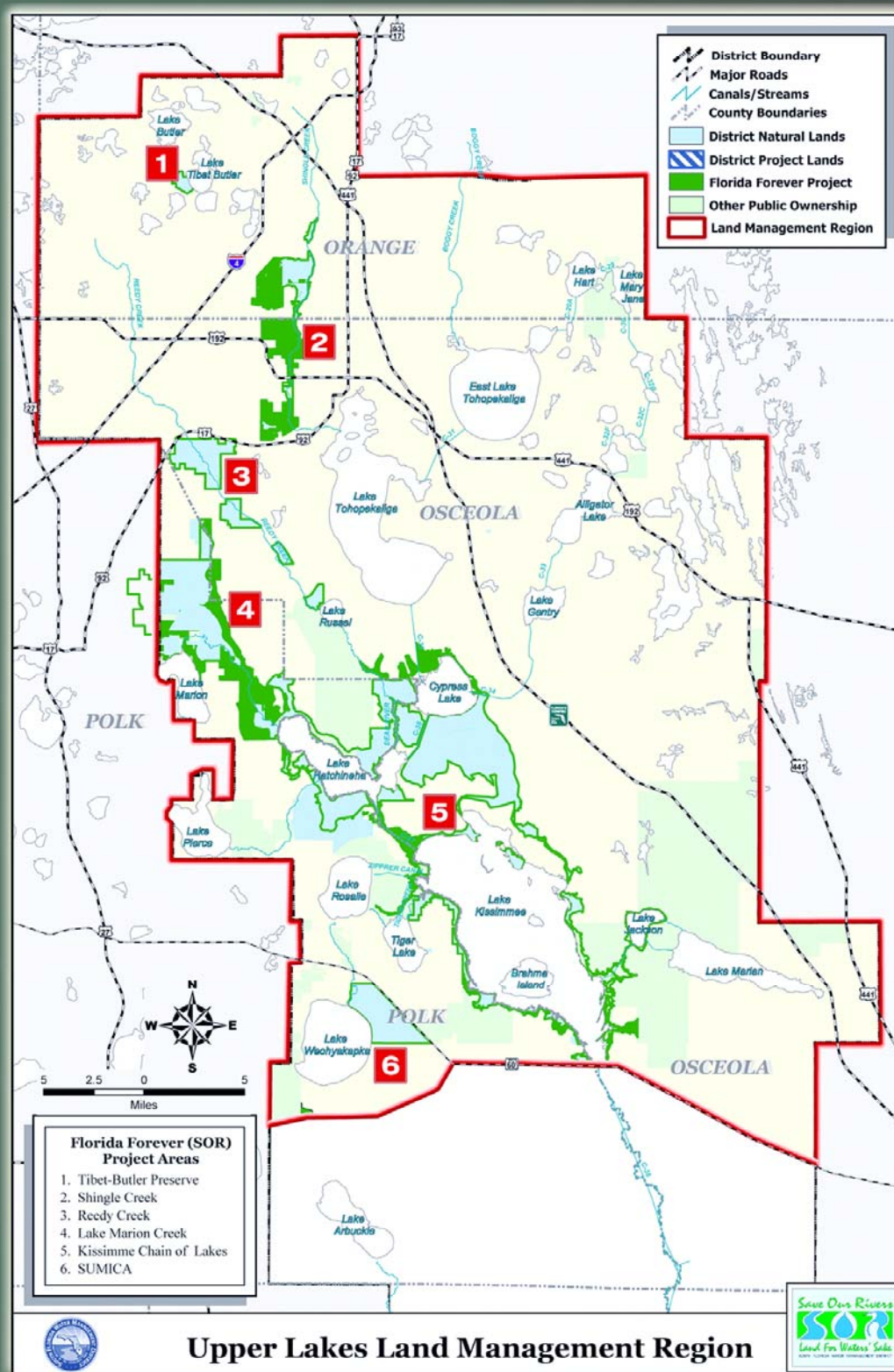
Fiscal Year 2007 Planning Highlights

- A new multi-site management agreement was drafted and approved, enhancing a partnership with the Fish and wildlife Conservation Commission
- Updated General Management plan written for the Kissimmee River Management Areas.
- New Conceptual Management Plan created for the Trail Ridge Property in St. Lucie County.
- Landscape Plans were prepared for Stormwater Treatment Areas 1W and 3/4
- A conceptual restoration plan was prepared for PalMar East.

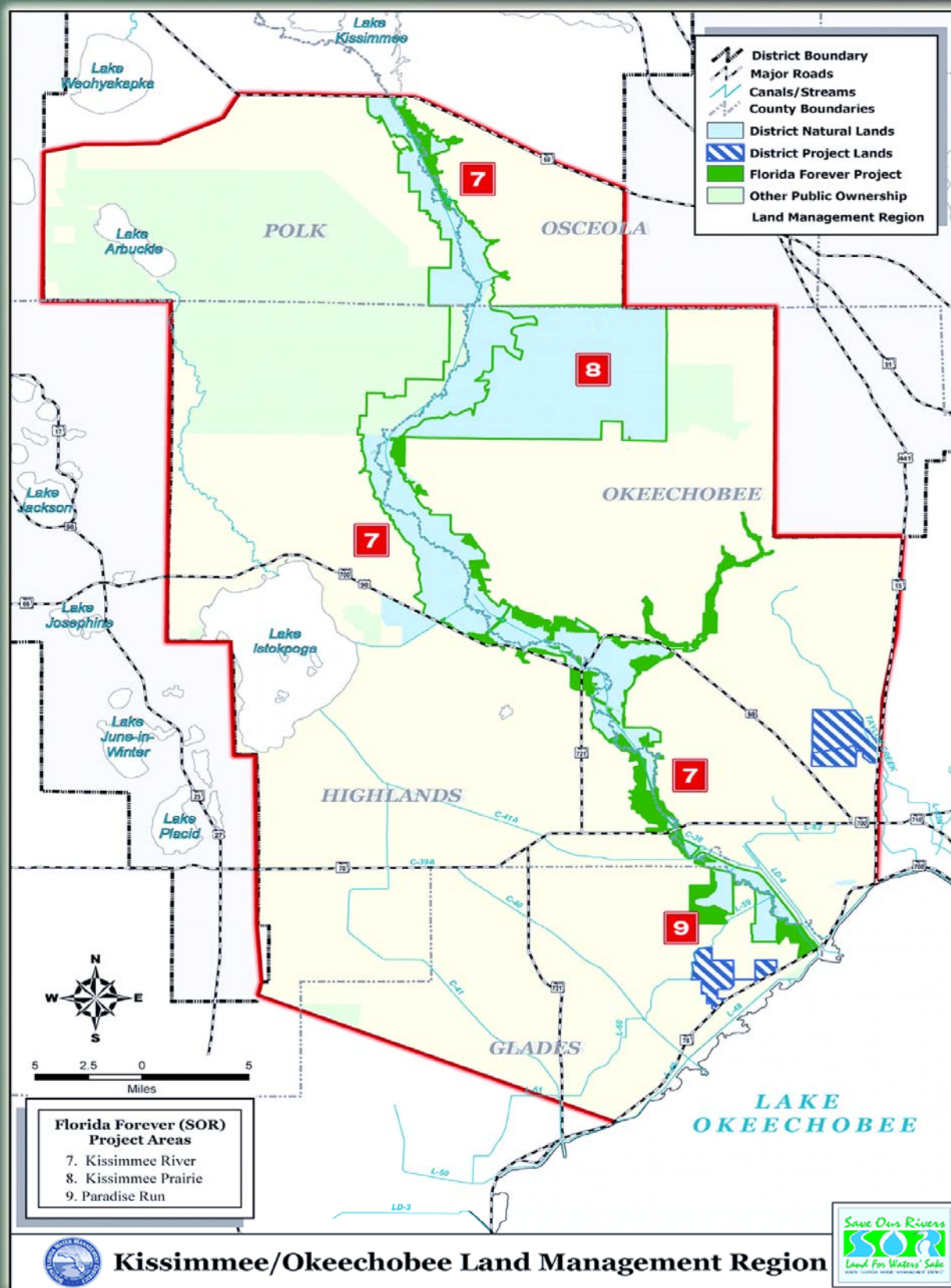


A portion of a landscape plan for a public access area on Stormwater Treatment Area 1W, and nearing completion (inset)

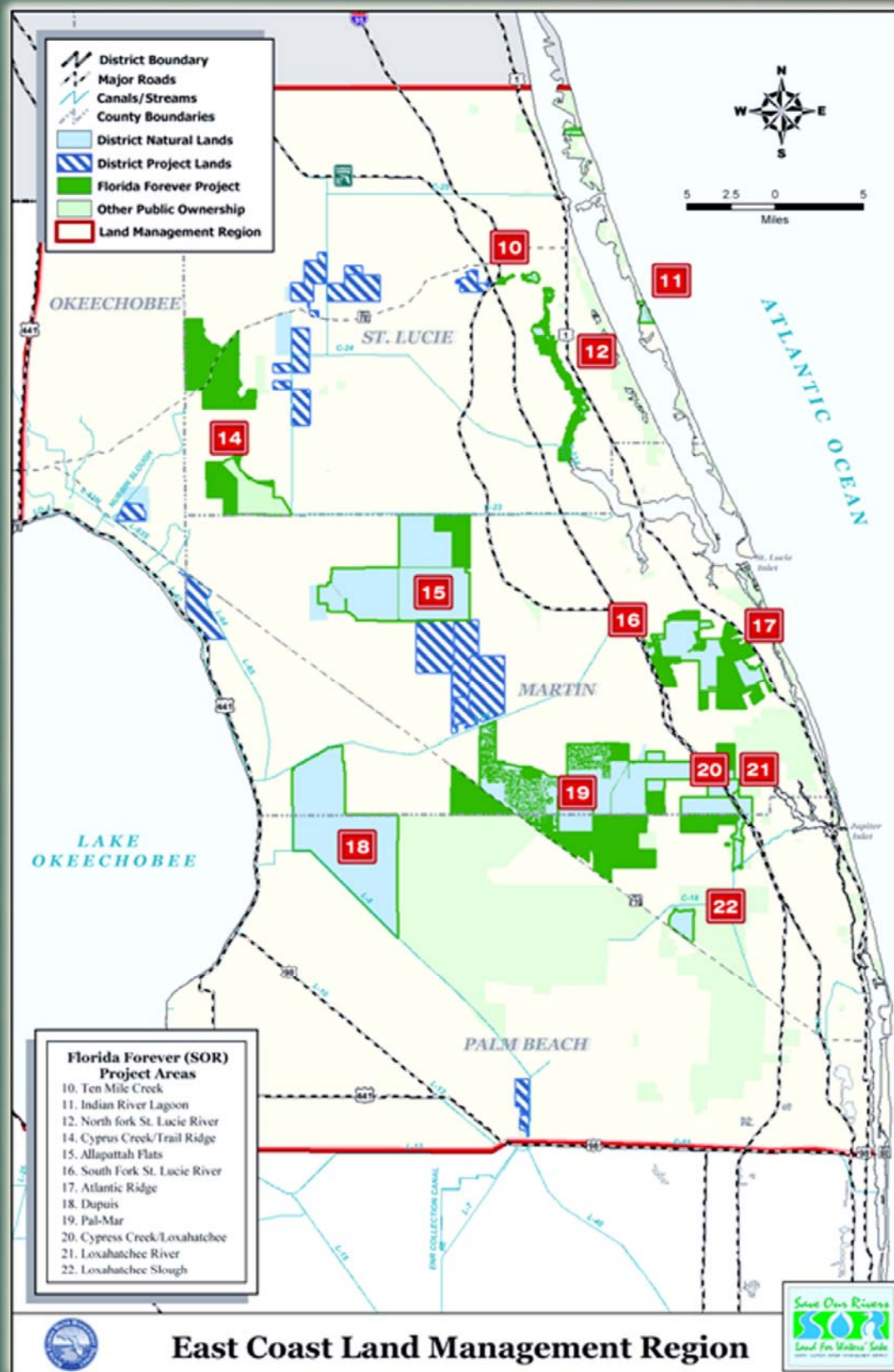




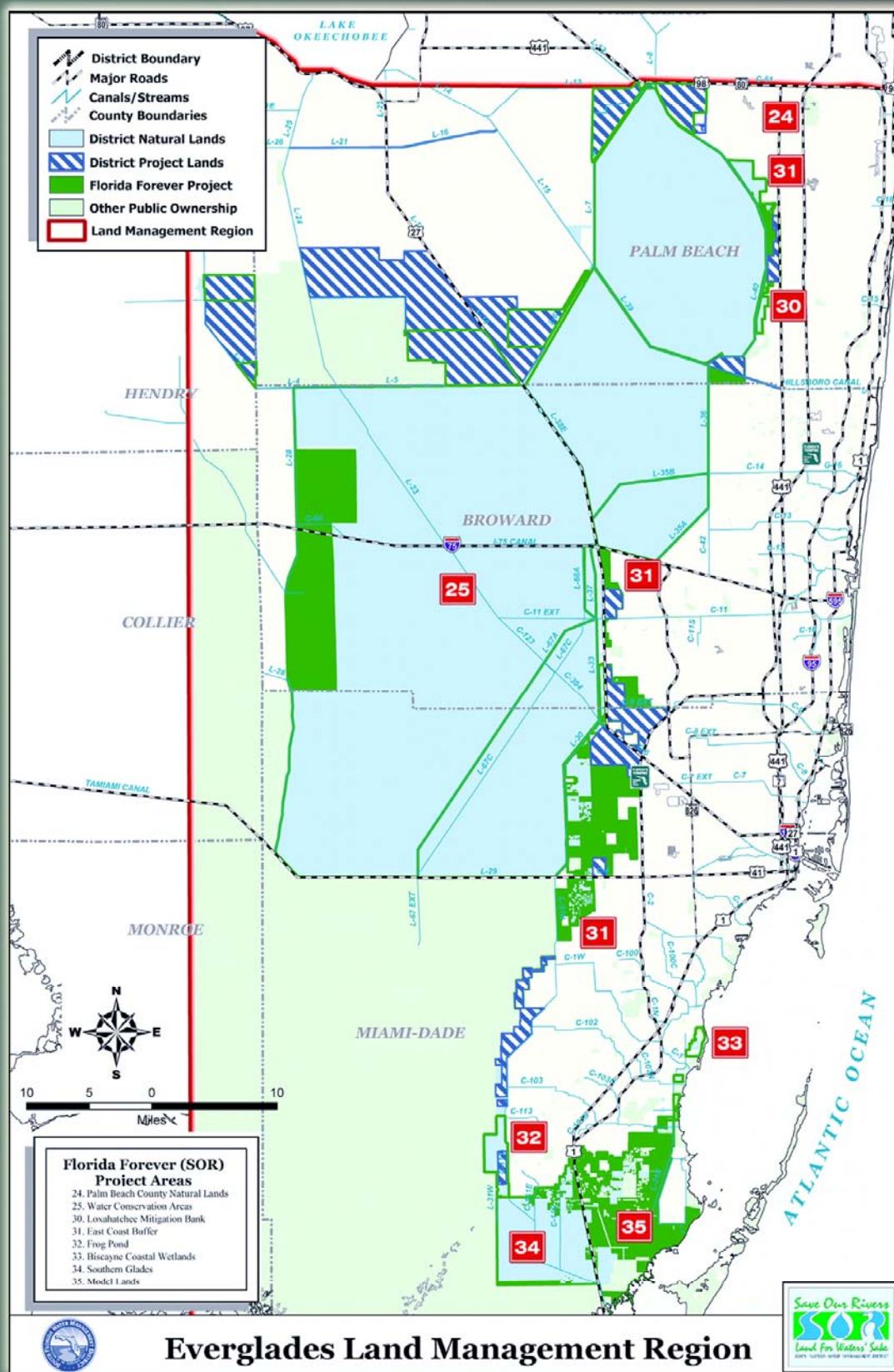
Maps



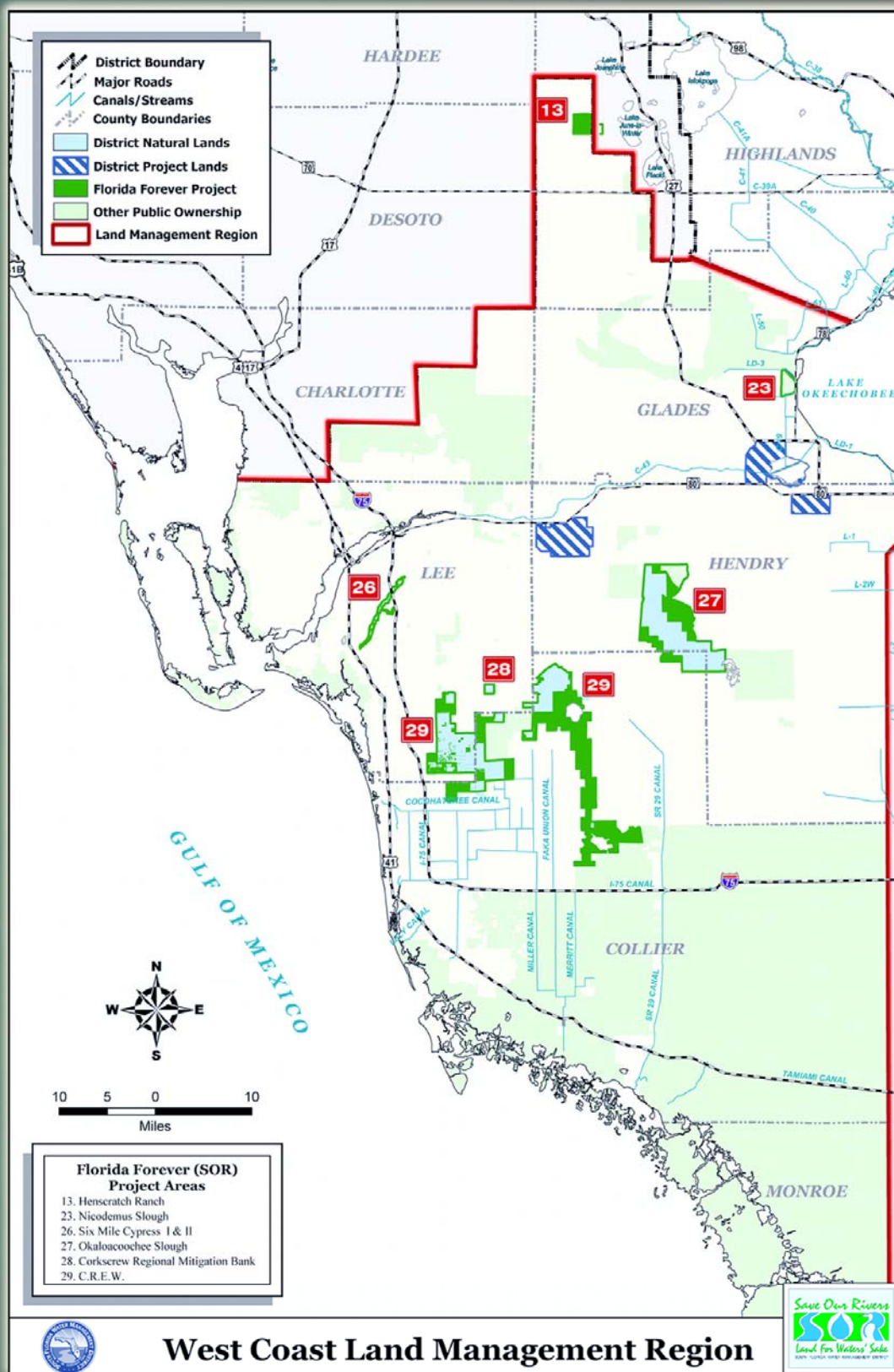
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Maps



Land Stewardship Division Annual Report 2007



Natural Lands

UPPER LAKES LAND MANAGEMENT REGION

Orlando Service Center

Kissimmee Chain of Lakes

(District managed)

County: Osceola/Polk

Project size: 40,727 acres

District ownership: 36,373 acres

Acquisition partners: None

Acquisition of the Kissimmee Chain of Lakes project was designed to provide the capacity to store and flow water up to the 54-foot National Geodetic Vertical Datum 1929 contour line. Public access to most of the land is by boat, and several cattle leases and grazing reservations are within the Kissimmee Chain of Lakes Management Area. Resource management goals for the management area are to maintain and, where possible, restore native plant communities, provide cost-effective resource protection, and provide opportunities for compatible public use. In Fiscal Year 2007, a new agreement was executed with Polk County to cost-share the construction of a new boat ramp park on Lake Kissimmee.

A lease agreement transferred management of 3,000 acres to the Florida Park Service as an addition to Allen David Broussard Catfish Creek Preserve State Park. For exotic plants, approximately 36,750 acres were treated. In addition, 10,000 acres of semi-improved pasture were mowed to reduce nuisance native and exotic plants, and to improve the conditions of the altered wet prairie communities on Gardner-Cobb Marsh, Lightsey Units, Catfish Creek, Rough Island, Johnson Island, and Lake Kissimmee East Shoreline. Approximately 4,830 acres were burned through the application of prescribed fire. For Fiscal Year 2008, three restoration projects will continue to restore approximately 3,000 acres. It is anticipated that 10,000 acres of exotics will be treated and 4,000 acres will be burned.

Lake Marion Creek (District managed)

County: Polk

Project size: 16,938 acres

District ownership: 7,077 acres

Acquisition partners: Polk County, Southwest Florida Water Management District, U.S. Fish and Wildlife Service

Polk County's Lake Marion Creek flows from Lake Marion to Lake Hatchineha. Contained within the project area are scrub, sand hills, pine flatwoods, and riverine swamp forests. The majority of the property is open for year-round hiking; camping is available by Special Use License. Lands in this project have been acquired with the assistance from Polk County, the Southwest Florida Water Management District, and the U.S. Fish and Wildlife Service. Primary stewardship activities include prescribed burns, exotic plant control, resource protection, and public use. The Fish and Wildlife Conservation Commission participates as a cooperative management partner by conducting a hunt program and security patrols. The area is managed as a Type 1 Wildlife Management Area. The management plan was adopted at the December 2005 District Governing Board meeting.

In Fiscal Year 2006, dense pine saplings were thinned on approximately 20 acres of cutthroat grass habitat, preventing encroachment on this endangered species. Exotic treatment of approximately 250 acres of Old World climbing fern (*Lygodium*), Caesar weed (*Urena lobata*), and cogon grass (*Imperata cylindrica*) also occurred; additional vegetative scrub may be acquired in Fiscal Year 2007. Florida scrub jay (*Aphelocoma coerulescens*) and sand skink (*Neoseps reynoldsi*) surveys were completed in 2006 by private contractors. Additional projects completed in Fiscal Year 2006 were the establishment of two new parking areas and finalization of an archaeological inventory.

Land Stewardship Division Annual Report 2007

SUMICA, formerly known as Lake Walk-in-Water (managed by Polk County)

County: Polk

Project size: 4,009 acres

District ownership: 4,009 acres

Acquisition partners: Polk County

Polk County participated as a 50 percent acquisition partner under its Environmental Lands Program, and Polk County is also lead manager. A five-year management plan was prepared by Polk County and approved by the District. SUMICA, formerly known as Lake Walk-in-Water, is named after the historic logging town that existed on the site in the 1920s. Current public uses include hiking, hunting, camping, and horseback riding. There is an elevated walking trail to access the old elevated railroad tram and observation area.

Reedy Creek (District managed)

County: Osceola

Project size: 27,612 acres

District ownership: 5,838 acres

Acquisition partners: None

For management purposes, the project is divided into Upper and Lower Reedy Creek. The Upper Reedy Creek Management Area includes those lands north of Pleasant Hill Road, the Lower Reedy Creek Management Area encompasses approximately seven miles of creek corridor. There are two cattle leases and grazing reservations within the Reedy Creek Management Area. Management goals for both areas are to conserve and protect water resources and supplies, protect and restore the land in its natural state and condition, and provide compatible public use opportunities. The Lake Russell Management Unit in Poinciana is jointly managed by Osceola County Schools as an environmental education facility. A center with classrooms and displays provides interpretation to the scrub, Lake Russell, and the floodplain swamp communities that exist on-site. An interpretive hiking trail describes the unique plant communities and wildlife that exist in the scrub habitat of the site. The FWC has identified the area of Lower Reedy Creek as a "Strategic Habitat Conservation Area," a "Biodiversity Hotspot," and a



An old cypress

"Priority Wetland for Listed Species." These designations make the area a priority for preservation based on known occurrences of rare or listed species.

District staff treated approximately 1,200 acres of exotic vegetation in Fiscal Year 2007. Cooperative management of exotics along Reedy Creek with the Nature Conservancy continues. Old World climbing fern (*Lygodium*), tropical soda apple (*Solanum viarum*), and Chinese tallow (*Sapium sebiferum*) follow-up treatments have been implemented. Approximately 450 acres were burned through the application of prescribed fire. In Fiscal Year 2008, it is anticipated that 100 acres of exotics will be treated and 200 acres will be burned.

Natural Lands

Shingle Creek (managed by the District and Osceola County)

County: Orange/Osceola

Project size: 7,846 acres

District ownership: 2,079 acres

Acquisition partners: City of Kissimmee, Osceola County, Florida Communities Trust

The District has undertaken several successful restoration projects within Shingle Creek Swamp that were funded as mitigation to offset wetland impacts associated with the construction of the Orlando Beltway. The management plan was adopted at the December 2005 District Governing Board meeting. In Fiscal Year 2007, the entire 1,828 acres that are managed by the District were surveyed and spot-treated for exotic vegetation, including Old World climbing fern (*Lygodium*), Para grass (*Urochloa mutica*), Caesar weed (*Urena lobata*), and primrose willow (*Ludwigia peruviana*).

Also in Fiscal Year 2007, the well-publicized expedition headwaters that took participants from Orlando to Okeechobee began aboard kayaks from Shingle Creek. The District is now working with Osceola County to open the Babb, Ruba, Stefee, and St. Clair properties for public recreation. Approximately 200 acres were burned through the application of prescribed fire. In Fiscal Year 2008 it is anticipated that 300 acres of exotics will be treated and 50 acres will be burned.



Equestrian Use at Hickory Hammock



A portion of the restored Kissimmee River

Tibet Butler Preserve

(managed by Orange County)

County: Orange

Project size: 439 acres

District ownership: 439

Acquisition partners: None

The Tibet-Butler Preserve covers 439 acres along the southwest shore of Lake Tibet-Butler in Orange County. This site includes approximately 4,000 feet of shoreline on Lake Tibet. Vegetative communities include bay swamp, pine flatwoods, cypress swamp, and smaller areas of xeric oak and freshwater marsh.

The Orange County Parks and Recreation Department manages Tibet-Butler Preserve as an environmental education facility that is open for public use. A museum with a classroom was constructed in 1994. It has a full-time staff, which conducts programs for thousands of students each year. Land managers also treat exotic vegetation and maintain the system of hiking trails and boardwalks that lead to the many community types on the property. In Fiscal Year 2007, exotic plants were treated on 52 acres.

Land Stewardship Division Annual Report 2007

KESSIMMEE / OKEECHOBEE LAND MANAGEMENT REGION Okeechobee Service Center

Kissimmee Prairie Ecosystem

(managed by the Florida Park Service)

County: Okeechobee

Project size: 38,603 acres

District ownership: 38,284 acres

Acquisition partners: Trustees of the Internal Improvement Trust Fund

Known as the Kissimmee Prairie Preserve State Park, the project is managed by the FDEP, Florida Park Service under lease from the District and state. Recreational uses include hiking, bicycling, camping, horseback riding, and astronomy. A state-approved management plan is in place that addresses prescribed burns, exotic control, and public use. Exotic treatments and prescribed burns are ongoing.

Paradise Run (District managed)

County: Glades

Project size: 3,960 acres

District ownership: 3,308 acres

Acquisition partners: None

Paradise Run lies west of the C-38 canal, between structure S-65E and Lake Okeechobee, and is open for public use, including hunting, under the Fish and Wildlife Conservation Commission's Public Use Area concept. There are also two cattle leases on the property. Along with Pool A of the C-38 canal, the Paradise Run area of the C-38 canal will not be backfilled. However, a plan is being considered in the District's Lake Okeechobee Division to hydrologically restore Paradise Run without backfilling the C-38 canal. Remnant river oxbows are still present, although the surrounding land has been drained and is now improved pasture and spoil. During Fiscal Year 2007, new fencing was installed in Paradise Run.

Kissimmee River

(managed by the District and the Florida Fish and Wildlife Conservation Commission)

County: Osceola/Polk/Highlands/Okeechobee

Project size: 82,064 acres

District ownership: 72,435 acres

Acquisition partners: None

The Kissimmee River is cooperatively managed by the District and the Florida Fish and Wildlife Conservation Commission. The five-year plan for both areas includes prescribed burns, exotic plant control, upland shrub control, wildlife management, and forest management. In Fiscal Year 2007, 1,120 acres were prescribed burned and 2,608 acres were chemically treated for exotic plants. Two juvenile bald eagles were released in KICCO and eight osprey nesting platforms were constructed and installed along the Kissimmee River.

An extensive public use program on the river attracted hundreds of visitors to the area and included hunting, fishing, horseback riding, nature watching, hiking, camping, boating, and education programs through the Riverwoods Field lab. Development of a campground for equestrian use has been completed and the road leading to the campground was improved in Fiscal Year 2007. In Fiscal Year 2008, Chandler Slough will be surveyed, fenced, and opened to the public. It is anticipated that 2,500 acres of exotics will be treated and 4,000 acres will be burned. A new post-burn monitoring program was developed in partnership with the Kissimmee River Restoration Program and resulted in the first prescribed fire of overgrown marsh in the floodplain in the Packingham Slough and Buttermilk Slough area of KICCO. In Fiscal Year 2008, floodplain burning is anticipated to expand to include Rattlesnake Marsh and Boney Marsh.

Natural Lands

EAST COAST LAND MANAGEMENT REGION

West Palm Beach/DuPuis

Allapattah Flats

(managed by the District and the Florida Fish and Wildlife Conservation Commission)

County: Martin

Project size: 23,226 acres

District ownership: 20,945 acres

Acquisition partners: Martin County, Federal Government

With funding assistance from Martin County and the federal government, Allapattah was purchased as part of CERP's Indian River Lagoon – South, Project Implementation Report Recommended Plan. The Allapattah Flats is also known as the Allapattah Complex Natural Water Storage and Treatment Area. It is proposed that the ditches and swales that were excavated to drain and improve the property for cattle grazing will be plugged and filled. Afterward, a low berm will be constructed at strategic locations to protect roadways and water control structures will be replaced to affect greater control of the site's water resources, allowing rehydration of the property's extensive wetland systems. Restoration will be partially funded through the USDA's Wetland Reserve Program. The project is anticipated to provide the benefits of flood attenuation, improved water quality, and reduction of discharge into the C-23 canal and eventually the Indian River Lagoon.

Management activities included continued treatment of exotic vegetation in Fiscal Year 2007 with 3,843 acres treated. Fifty-five acres burned due to wildfires. Wetland restoration activities were continued on Parcel A, and a new trail head was completed and opened to the public. In Fiscal Year 2008, it is anticipated that 900 acres of exotics will be treated and 1,500 acres will be burned.

The Fish and Wildlife Conservation Commission implemented rules establishing the property as a Wildlife Management Area and has posted the property boundaries. A parking area was constructed by Martin County north of County Road 714 to facilitate public use activities including hiking, bicycling, equestrian use, hunting, and fishing.

Atlantic Ridge Ecosystem

(managed by the Florida Park Service)

County: Martin

Project size: 14,975 acres

District ownership: 5,910 acres (247 of which are being managed by Martin County as an addition to Halpatiokee Regional Park)

Acquisition partners: Trustees of the Internal Improvement Trust Fund

Atlantic Ridge is being managed by the Florida Park Service, under a joint management lease from the District and the Board of Trustees of the Internal Improvement Trust Fund, and will be eventually designated as the Atlantic Ridge Preserve State Park. The management plan outlines the goals and objectives for the park. This plan describes hydrologic restoration and staffing needs, plans for exotic control and prescribed burns, and a public use program. It is proposed that initial public facilities will include a trailhead, small shelter, parking area, and restroom. Public access to the property was constructed in Fiscal Year 2007 through a new residential development off Cove Road and will be opened to the public in Fiscal Year 2008. The five-year update to the resource management component of the park's unit management plan was updated in 2007 and an interagency management review team meeting was conducted.



A recreation planning stakeholder meeting

Land Stewardship Division Annual Report 2007

Cypress Creek/Loxahatchee

(managed by District/Palm Beach County)

County: Palm Beach/Martin

Project size: 4,374 acres

District ownership: 3,547 acres

Acquisition partners: Martin/Palm Beach counties

The project is divided between Martin and Palm Beach counties and forms connections with Pal-Mar and District-owned lands in Jonathan Dickinson State Park. Nearly 3,000 acres are high quality natural area, containing a mixture of pine flatwoods, cypress swamps, and freshwater marshes. The area is the headwaters to Cypress Creek, a major tributary to the Northwest Fork of the Loxahatchee River. The remainder of the site has been cleared and used for intensive agriculture for many years. In Fiscal Year 2007, 1,400 acres of Old World climbing fern (*Lygodium*), tropical soda apple (*Solanum viarum*), guava (*Psidium*), pickerelweed (*Pontederia cordata*), downy rose myrtle (*Rhodomyrtus tomentosa*), Australian pine (*Casuarina*), Brazilian pepper (*Schinus terebinthifolius*), and melaleuca (*Melaleuca quinquenervia*) were chemically treated. Restoration plans are under way to enhance the impacted natural areas and convert the agricultural lands to reestablish sheetflow across them as a component of CERP. In Fiscal Year 2008, the 1,400-acre natural area within the site will undergo a follow-up treatment for exotics.

DuPuis Management Area

(managed by the District and the Florida Fish and Wildlife Conservation Commission)

County: Palm Beach/Martin

Project size: 22,025 acres

District ownership: 21,875 acres

Acquisition partners: None

The DuPuis Management Area is cooperatively managed by the District and the Fish and Wildlife Conservation Commission. The DuPuis five-year management plan includes prescribed burns, exotic plant control, upland shrub control, wildlife management, and forest management. In Fiscal Year 2007, approximately 2,225 acres were prescribed burned, 1,352 acres were chemically treated for exotic plants, and 540 acres of overgrown shrub

vegetation were mechanically shredded, roller-chopped, or mowed. A total of 590 acres of over dense stands of cabbage palms and more than 350 acres of pine trees were thinned to improve habitat quality and prevent the spread of pine bark beetles. In a major milestone, red-cockaded woodpeckers (*Picoides borealis*) were reintroduced to the area with 10 birds being released in the fall of 2006. Three pairs established territories and one pair produced a female fledgling. An additional 10 birds will be released in Fiscal Year 2008. In addition, an extensive public use program at DuPuis attracted thousands of visitors to the area and included activities such as hunting, fishing, horseback riding, nature watching, hiking, camping, and education programs through the DuPuis Visitors' Center. Public use was enhanced in 2007 with the construction of a new recreation area at the "Governor's House," and will be enhanced further in 2008 with the construction of a new boardwalk. In Fiscal Year 2008, it is anticipated that 1,500 acres of exotics will be treated and 7,000 acres will be burned.

Halpatiokee Park

(managed by Martin County)

County: Martin

Project size: 347 acres

District ownership: 347 acres

Acquisition partners: None

Halpatiokee is composed of a portion of the Atlantic Ridge Ecosystem Project (247 acres) and a portion of the South Fork of the St. Lucie River Project (100 acres). Martin County manages the natural area in conjunction with Halpatiokee Regional Park staff. The property consists of pine flatwoods that surround a series of lakes that were originally excavated to provide fill for the construction of Interstate 95. The South Fork property is a mixture of river floodplain, pine flatwoods, and scrub. In Fiscal Year 2007, the county treated Old World climbing fern (*Lygodium*), Brazilian pepper (*Schinus terebinthifolius*), ear-leaf acacia (*Acacia auriculiformis*), cogon grass (*Imperata cylindrica*), melaleuca (*Melaleuca quinquenervia*), and downy rose myrtle (*Rhodomyrtus tomentosa*). In addition, Martin County installed a composting restroom at the campground.

Natural Lands

Indian River Lagoon

(managed by St. Lucie County)

County: St. Lucie/Martin

Project size: 653 acres

District ownership: 653 acres

Acquisition partners: St. Lucie County, Trustees of the Internal Improvement Trust Fund, Federal Government

Indian River Lagoon is managed by St. Lucie County under a lease from the District and the FDEP Florida Park Service. The Indian River Lagoon property has been included for participation in the county's nonchemical mosquito control efforts, which has greatly improved water quality, wildlife, and fisheries habitat in the lagoon. Mosquito impoundment berms are accessible to the public and provide excellent opportunities for fishing, crabbing, and bird watching. The Blind Creek property includes ocean beachfront access and a dune crossover. During Fiscal Year 2007, approximately 10 acres of Blind Creek were treated for exotics.

Loxahatchee River

(managed by Palm Beach County and the Florida Park Service)

County: Palm Beach

Project size: 1,998 acres

District ownership: 1,545 acres

Acquisition partners: Palm Beach County

District-owned lands along the river are managed by the Florida Park Service and the Palm Beach County Parks and Recreation Department. The Florida Park Service manages the area north of State Road 706 (Indiantown Road) as part of Jonathan Dickinson State Park, while Palm Beach County manages the lands south of the road as Riverbend County Park. Both land managers have extensively treated exotics. Palm Beach County, in cooperation with the District, is completing hydrologic restoration of its management area in an attempt to restore the Eastern Slough, a historic tributary to the Loxahatchee River. The restoration project will enable water to be delivered to the Loxahatchee River through a more natural flow-way. Palm Beach County opened Riverbend Park for public use in Fiscal Year 2007.

Loxahatchee Slough

(managed by Palm Beach County)

County: Palm Beach

Project size: 13,099 acres

District ownership: 1,823 acres

Acquisition partners: None

Palm Beach County's Department of Environmental Resources Management is currently managing the Sandhill Crane portion of the project—a 1,488 acre tract purchased by the District. The transfer of ownership from the District to Palm Beach County is forthcoming. The county owns more than 10,000 acres in the Loxahatchee Slough Natural Area, which adjoins the Sandhill tract. In Fiscal Year 2006 more than 1,000 acres of exotic vegetation in the Sandhill tract were treated by Palm Beach County.

North Fork St. Lucie River

(managed by St. Lucie County and the Florida Department of Environmental Protection)

County: St. Lucie

Project size: 4,086 acres

District ownership: 482 acres

Acquisition partners: St. Lucie County, Trustees of the Internal Improvement Trust fund

State of Florida, St. Lucie County, and District-owned lands along the North Fork are being managed by St. Lucie County and the Florida Department of Environmental Protection as part of the North Fork Aquatic Preserve. Both agencies are treating exotics and conducting limited prescribed burns, which is extremely difficult due to the surrounding urban development area. In Fiscal Year 2007, 33 acres were retreated for exotics. In addition to the exotic plant treatment, 71 hogs were trapped from the site in 2007.

St. Lucie County has constructed and now operates the Oxbow Eco-Center, which is an environmental education facility along the North Fork of the St. Lucie River in Port St. Lucie. This facility incorporates indoor displays with outdoor programming that uses interpretive trails, towers, and boardwalks. Approximately 26,420 students and visitors participated in classes, workshops, and special events at the facility.

Land Stewardship Division Annual Report 2007

Pal-Mar

(managed by the District, the Florida Fish and Wildlife Conservation Commission and Palm Beach County)

County: Palm Beach/Martin

Project size: 39,325 acres

District ownership: 17,807 acres

Acquisition partners: CARL, Palm Beach County, Martin County, the Florida Communities Trust, and the federal government

State and District-owned lands are under management lease to the Fish and Wildlife Conservation Commission using an approved management plan as the John C. and Mariana Jones/Hungryland Wildlife and Environmental Area. Palm Beach County manages its lands south of Indiantown Road as the Trail Glades Natural Area. The property is open for public use activities, including hiking, primitive camping, hunting, fishing, bicycling, and horseback riding. The Commission is conducting resource inventories and has mapped exotic infestations.

The nine-gems property, or PalMar East, is being managed cooperatively by the District, Martin County, and the Commission. The District is conducting resource management and restoration activities, Martin County is developing the recreation facilities, and the Commission is administering the hunt programs. In Fiscal Year 2008, it is anticipated that 150 acres of exotics will be treated and 640 acres will be burned. Additionally, the District will be completing the engineering and design work associated with restoring the hydrology of the site under a USDA Wetland Reserve Program grant.

Ten-Mile Creek

(managed by the District / St. Lucie County)

County: St. Lucie

Project size: 910 acres

District ownership: 910 acres

Acquisition partners: St. Lucie County, Florida Department of Environmental Protection

The bulk of this site contains a Reservoir and an Stormwater Treatment Area. There is a 43 acre park that opened in the spring of 2007 by St. Lucie County through a lease with the District. The Land

Stewardship Division is coordinating recreation planning for the reservoir and the natural areas outside of the project footprint along the river.

Trail Ridge

(District managed)

County: St. Lucie

Project size: 14,455 acres

District ownership: 1,233 acres

Acquisition partners: None

The Cypress Creek/Trail Ridge Complex is a component of CERP's Indian River Lagoon – South, Project Implementation Report Recommended Plan. It is also known as the Cypress Creek/Trail Ridge Natural Water Storage and Treatment Area. Some of the property identified within the Cypress Creek/Trail Ridge footprint includes the St. Lucie County-owned Bluefield Ranch property and Pinelands. The District acquired 1,233 acres along the eastern edge of the proposed project in late 2005. It is proposed that many of the ditches and swales that were excavated to drain and improve the property for cattle grazing will be plugged and filled to improve the wetland character of the property and minimize flows to the canal system and ultimately the St. Lucie and Indian River Lagoon estuaries.

No restoration activities were completed in Fiscal Year 2007, as authorization and funding for the Indian River Lagoon – South project plan is still pending congressional approval. However, two cattle-grazing leases were executed, as most of the property is improved pasture. Tropical soda apple leaf beetles were released onto the property as a biocontrol agent and are making a significant reduction in the coverage of this invasive exotic plant. In addition, a conceptual management plan was created for the area in Fiscal Year 2007. In Fiscal Year 2008, it is anticipated that 50 acres of exotics will be treated.

Natural Lands

EVERGLADES LAND MANAGEMENT REGION

Miami Service Center and West Palm Beach

Biscayne Coastal Wetlands

(managed by the District)

County: Miami-Dade

Project size: 2,035 acres

District ownership: 496 acres

Acquisition partners: Miami-Dade County

The Biscayne Coastal Wetlands project provides an opportunity to reestablish sheetflow through coastal wetlands and provide a buffer between Biscayne Bay and metropolitan Miami-Dade County through an Acceler8 restoration project. Most of the land within the Biscayne Coastal Wetlands project will be used by the Acceler8 project. During Fiscal Year 2007, the primary management activity was exotic control with 144 acres treated. In Fiscal Year 2008, it is anticipated that 50 acres of exotics will be treated.

East Coast Buffer

(managed by the District)

County: Palm Beach, Broward, Miami-Dade

Project size: 49,896 acres

District ownership: 13,037 acres

Acquisition partners: Broward and Miami-Dade Counties and the Federal Government

The East Coast Buffer project provides a buffer between the developed areas and the Everglades. Initially, the Audubon Society proposed the storage of excess waters currently being discharged to tide. Instead, the excess waters would discharge into a series of storage areas that would then be incorporated into a larger system of regional marshes. This concept, known as the East Coast Buffer, was furthered by the District as a continuous buffer between the Everglades and the urban metropolis in the Lower East Coast. The primary goal is to raise water levels to minimize seepage from the Water Conservation Areas, reestablish natural hydroperiod patterns, and maintain flood protection for urban and agricultural areas. The project integrates the development of deep water reservoirs located along the edge of the east coast urban service area with a series of shallower, connecting wetland marshes. The

later represents the natural lands component of the East Coast Buffer. These properties include the Strazulla Wetlands, the Everglades Buffer Strip, the Bird Drive Recharge area, the Pennsuco wetlands, and a few other parcels that lie outside of the proposed reservoir facilities. During Fiscal Year 2007, the primary management activity was exotic control with 11,846 acres treated. In Fiscal Year 2008, it is anticipated that exotic control treatments will occur on Strazulla, Bird Drive, the Everglades Buffer Strip, and the Pennsuco wetlands.

Loxahatchee Mitigation Bank

(managed by TetraTech FW, Inc.)

County: Palm Beach

Project size: 1,256 acres

District ownership: 1,256 acres

Acquisition partners: Palm Beach County

The Loxahatchee Mitigation Bank site lies adjacent to the Arthur R. Marshall Loxahatchee National Wildlife Refuge. This site provides habitat connectivity that augments existing Everglades wetland systems. Unfortunately, Brazilian pepper and other exotics have degraded the area, adversely impacting native wildlife habitat including a number of threatened and endangered species. The goal of the bank is to restore habitat values and provide enhancement of a degraded Everglades ecosystem through hydroperiod restoration, exotic vegetation removal, revegetation with desired species, and prescribed burns. Through an open and competitive solicitation process, Tetra Tech EC, Inc. (Tetra Tech) was selected to establish the Loxahatchee Mitigation Bank. Permitting and construction have been completed; exotic vegetation removal and native community enhancements are ongoing. As of November 2007, the Loxahatchee Mitigation Bank completed its fifth year of monitoring toward attainment of the success criteria. In May 2007, the fourth revenue disbursement, amounting to \$615,000, was provided by Tetra Tech to the District; the total received to date has been \$1,435,000. During Fiscal Year 2007, the primary management activities were exotic control and the clearing and windrowing of dead Brazilian pepper. Exotic treatments occurred over 1,127 acres.

Land Stewardship Division Annual Report 2007

Model Lands

(managed by the District and Miami-Dade County)

County: Miami-Dade

Project size: 56,378 acres

District ownership: 4,899 acres

Acquisition partners: Miami-Dade County

The Model Lands project will play a vital role in conveying and treating sheetflow from the southern Miami-Dade County area to the downstream estuaries into Biscayne Bay and Biscayne National Park. The project area is a combination of fresh and saltwater wetlands, with portions heavily infested with exotic vegetation. Although more than 15,500 acres are in public ownership, there is no public use program due to lack of legal access and scattered ownership. The major management activities have been treating exotic vegetation and restricting detrimental activities, such as off-road vehicular use, poaching, and dumping. The primary management focus for the District and Miami-Dade County is the treatment of exotic species including coral ardisia (*Ardisia crenata*), Brazilian pepper (*Schinus terebinthifolius*), melaleuca (*Melaleuca quinquenervia*), Australian pine (*Casuarina*), and the increasingly observed patches of Japanese climbing fern (*Lygodium japonicum*). In Fiscal Year 2007, over 162 acres of exotics were treated for the first time. In Fiscal Year 2008, it is anticipated that 250 acres of exotics will be treated.

Southern Glades

(managed by the District, the Florida Fish and Wildlife Conservation Commission, and Miami-Dade County)

County: Miami-Dade

Project size: 36,474 acres

District ownership: 32,536 acres

Acquisition partners: None

Southern Glades is cooperatively managed by the FWC, under a lease agreement as the Southern Glades Wildlife and Environmental Area. It is publicly open to hiking, wildlife viewing, fishing, hunting, airboating, bicycling, and horseback riding. The District performed exotic plant control over 115 acres using aerial and ground crews in FY2007. In FY2008, it is anticipated that 75 acres of exotics will be treated.

Frog Pond natural land portion (District managed)

County: Miami-Dade

Project size: 1,914 acres

District ownership: 1,914 acres

Acquisition partners: Miami-Dade County

The Frog Pond acts as a passive buffer area between the C-111 canal to the East and Everglades National Park. The Frog Pond was acquired as an Save Our Rivers project as there are over 240 acres of pine rockland and a couple tropical hardwood hammocks on the property. Much of the eastern Frog Pond (approximately 3,000 acres) was pine rockland until it was plowed and converted for agricultural production, this area will be converted into a reservoir as part of an Acceler8 project.



A depression pond on a District Management Area

Natural Lands

WEST COAST LAND MANAGEMENT REGION

Ft. Myers Service Center

Corkscrew Regional Mitigation Bank

(managed by Mariner Properties Development, Inc.)

County: Lee

Project size: 633 acres

District ownership: 633 acres

Acquisition partners: None

The Corkscrew Regional Mitigation Bank is located in southern Lee County along Corkscrew Road (State Road 850). It is adjacent to the Imperial Marsh/Stairstep mitigation area, established to offset impacts associated with the Southwest Florida Regional Airport. The goal of the bank is to improve habitat values and restore the historic function of the upland/wetland mosaic through hydroperiod restoration, revegetation, exotic vegetation removal, and prescribed burns. The bank site contributes to corridor building and the green infrastructure within the regional context. Mariner Properties Development, Inc., selected through an open and competitive solicitation process, is establishing the bank. During Fiscal Year 2007, the bank continued herbicide treatment of pasture grass and other exotic plants. Pasture areas continued to be planted with mixed native seed collected from natural areas; good germination of these native seeds was achieved. In Fiscal Year 2008, restoration progress will continue.

CREW

(managed by the District and the Florida Fish and Wildlife Conservation Commission)

County: Lee, Collier

Project size: 65,716 acres

District ownership: 24,439 acres (2,183 additional acres are leased from the Trustees of the Internal Improvement Trust Fund)

Acquisition partners: Lee County, Trustees of the Internal Improvement trust Fund

The District and FWC jointly manage the Corkscrew Regional Ecosystem Watershed (CREW). Property boundaries are posted, and FWC's wildlife officers

patrol the property. The public use and environmental education program is directed by the CREW Land and Water Trust. In FY2007, approximately 5,888 acres were prescribed burned and 2,523 acres of exotics were treated. Restoration work continued on the CREW Management Center (288 acres), East Corkscrew Marsh (80 acres), East Bird Rookery Swamp (70 acres), and Tree Wizard (10 acres) using both mechanical shrub control and exotic plant control techniques. Three miles of earthen berm were graded back into borrow ditches on the 640-acre Gordon Swamp cattle lease area. During FY2007, a 1,400-foot boardwalk into Bird Rookery Swamp was completed, and a parking area was designed to provide future access to ten miles of old logging tram roads that will be used for hiking and biking trails. In FY2008, it is anticipated that 4,000 acres of exotics will be treated and 1,000 acres will be burned.



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Okaloacoochee Slough

(managed by Florida Division of Forestry and the Florida Fish and Wildlife conservation Commission)

County: Hendry, Collier

Project size: 37,218 acres

District ownership: 22,255 acres

Acquisition partners: Trustees of the Internal Improvement Trust Fund and the Florida Fish and Wildlife conservation Commission

The Division of Forestry and the Fish and Wildlife Conservation Commission purchased additional lands in the project that expand the original purchase by the District and the state. The project is managed as Okaloacoochee Slough State Forest with the Division of Forestry as the lead manager. The Commission is responsible for wildlife management, and manages the project as a Type 1 wildlife management area and conducts a public hunt program. An approved management plan is in place.

Six Mile Cypress (managed by Lee County)

County: Lee

Project size: 2,193 acres

District ownership: 842 acres

Acquisition partners: Lee County

The Six Mile Cypress property is jointly owned by Lee County and the District. Since acquisition the property has been managed by Lee County Parks and Recreation. The management plan was updated in 2002. Six Mile Cypress likely has the highest rate of public visitation of any District project. Each year approximately 50,000 Lee County students and visitors use the outdoor classroom facility and boardwalk built and maintained by Lee County. In FY2007, construction began on a new interpretive building to be built on-site.



An island of cabbage palms in a District marsh

Project Lands

Project Lands

Miami and Okeechobee Service Centers and West Palm Beach

Stormwater Treatment Areas (District Managed)

District ownership: 76,030 acres

The Stormwater Treatment Areas are large, constructed wetlands designed to remove phosphorus from surrounding agricultural areas before the runoff reaches the Everglades. The treatment areas are divided into several cells, each with varying degrees of water quality treatment to maximize the cleanup. The Land Stewardship Division provides interim property management until it is ready to be turned over to a project development team, provides recreation planning during project development, and administers the recreation programs following the completion of the project.. Three sites will be completed by spring 2008. In the meantime, the Land Stewardship Program manages organized bird watching trips with Pine Jog and the Audubon Society in Stormwater Treatment Areas 1E and 5, respectively; Florida Fish and Wildlife Conservation Commission manages waterfowl hunts in Stormwater Treatment Areas 1W, 2, 3/4, and 5. During 2007, alligator hunts occurred at Stormwater Treatment Area 1W and 5.

Projects with Land Stewardship for interim management:

- C-23/C-24 STA

Projects in the Development / Recreation Planning phase:

- Everglades Ag. Area Compartments B and C
- Stormwater Treatment Area 1W
- Stormwater Treatment Area 1E
- Stormwater Treatment Area 2
- Stormwater Treatment Area 3/4
- Stormwater Treatment Area 5
- Stormwater Treatment Area 6
- C-44 East STA
- C-44 West STA



Bird watching tour of a Stormwater Treatment Area



Stormwater Treatment Area 2

Land Stewardship Division Annual Report 2007

Reservoirs (District Managed)

District ownership: 98,933 acres

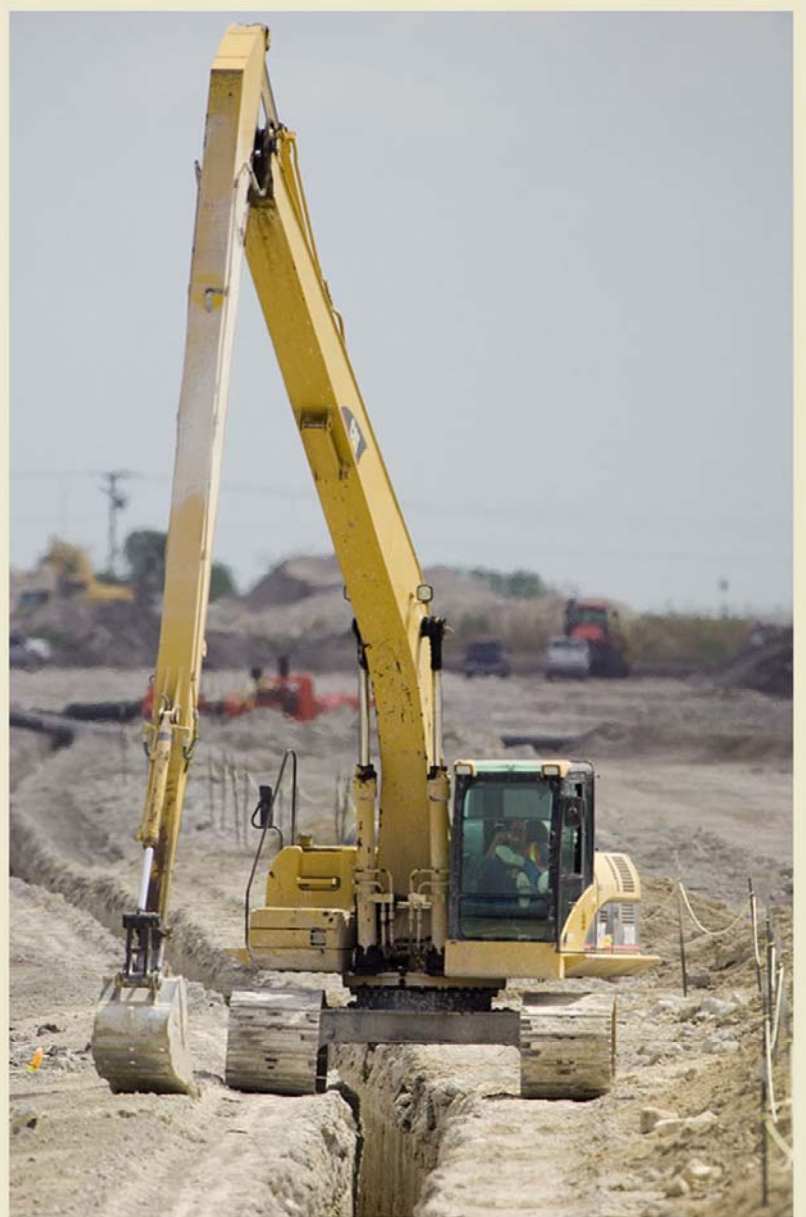
Reservoirs are Comprehensive Everglades Restoration Plan components that are designed to store large quantities of water during wet periods with the ability to have some sediment and pollutants settle out of suspension, and provide timed releases that more closely mimic natural conditions. As with Stormwater Treatment Areas, the Land Stewardship Division provides interim property management until it is ready to be turned over to a project development team, provides recreation planning during project development, and administers the recreation programs following the completion of the project. The following are the project lands that are to be developed and operated as Reservoirs.

Projects with Land Stewardship for interim management:

- Everglades Agricultural Area Storage Reservoirs Phase 2
- North of Lake Okeechobee Storage Reservoir
- Taylor Creek Storage and Treatment Area
- C-43 Storage Reservoir
- North Lake Belt Storage
- Central Lake Belt Storage
- C-23/24 South Reservoir
- C-23/24 North Reservoir
- Palm Beach County Agricultural Reserve Reservoir

Projects in the Development / Recreation Planning phase:

- Acme Basin B Discharge
- Site 1 Impoundment
- C-9 and C-11 Impoundments
- Nubbin Slough Storage and Treatment Area
- EAA Storage Reservoir Phase 1
- C-51 and L-8 Reservoir
- C-44 Reservoir



Construction at the Everglades Agricultural Area Reservoir



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Everglades Restoration Resource Area

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