

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

Land Management Report

2011

Executive Summary: This document summarizes implementation of the District Land Management Plan on fee simple lands held by the Suwannee River Water Management District. Actions taken by the District to achieve the four goals of the DLMP, Resource Protection, Public Use, Communications, and Fiscal Responsibility, are addressed independently in the document.

Management of District lands continues to provide high levels of resource protection and exceptional resource based recreation within tight economic times. Over 1,200 acres of lands were reforested with pine seedlings. Pine harvests occurred on over 1,000 acres with the total value closely equaling regional prices. The total number of acres that were prescribed burn decreased, but the percentage of lands that are within the acceptable return interval increased 4 percentage points. The total acreage of non-native, invasive weeds on District lands decreased by 191 acres. Monitoring rare species and cultural artifacts continued, and the District began a timber inventory process to provide more accurate timber sale revenue forecasts. The District partnered with the U.S. Fish and Wildlife Service to restore native groundcovers on 145 acres.

The total number of public facilities on District lands increased and 91% of the inspected facilities met District standards. The District worked with the Florida Fish and Wildlife Conservation Commission to include an additional 9,200 acres of District lands open for public hunting.

The Governing Board adopted an updated District Land Management Plan; the plan guides management of all fee title lands held by the District. The Land Management Review Team found the District to be in compliance with the plan, and that District lands are being managed for the use for which they were acquired.

The purposes of the Land Management Report are twofold; the first purpose is to document efforts and activities during the previous fiscal year in managing District lands as prescribed within the DLMP. Secondly, it serves to narrate land management efforts for the purpose of generating a score for the Excellence in Land Management reporting process.

Contents

Introduction.....	1
Legislation.....	2
I. RESOURCE PROTECTION.....	4
I.1 Resource Management	4
I.1.1 Mechanical.....	4
I.1.2 Chemical Application	6
I.1.3 Prescribed Fire	8
I.2 Resource Monitoring	9
I.2.1 Groundcover Resource Monitoring	9
I.2.3 Rare Species Monitoring	10
I.2.4 Cultural and Historical Resource Monitoring.....	10
I.3 Notable Projects in Resource Protection	11
I.3.1 Withlacoochee Quail Farms	11
I.3.2 Cuba Bay	11
II. PUBLIC USE	12
II.1 Facility Management.....	12
II.1.1 Facility Construction & Maintenance	12
II.2 Special Use Authorizations	12
II.3 Hunting and Fishing.....	13
II.4 Emergency Closings.....	13
II.5 Notable Accolades.....	14
III. COMMUNICATIONS	15
III.1 District Land Management Plan	15
III.2 Land Management Review Team	15
III.3 Cooperative Ventures.....	16
III.4 Workshop/Training and Working Group Participation.....	17
III.4.1 District Staff Training during the 2011 Fiscal Year.....	17
III.4.2 Special Interest/Working Group Participation	17
IV. FISCAL ACTIVITIES.....	18
IV.1 2011 Fiscal Year Natural Resource Management and Public Recreation Services Budget and Expenditures	18
IV.2 Cooperative Agreements.....	18
IV.3 Grants & Cost-share Agreements	19

SUWANNEE RIVER WATER MANAGEMENT DISTRICT
 LAND MANAGEMENT REPORT
 Fiscal Year 2011 (1 October 2010 – 30 September 2011)

Introduction

The Suwannee River Water Management District’s (hereafter District) jurisdictional boundary covers approximately 7,640 square miles across 14 north-central Florida counties. The predominant land use classification within the District’s jurisdictional boundary is upland forest (46%) followed by wetlands (29%) and agriculture (14%; Table 1; FL DEP Bureau of Watershed Restoration 2009).

Table 1. Level 1 land use classification within the jurisdictional boundaries of the Suwannee River Water Management District.

Land Use Classification, Level 1	Acres	% of total
Urban	288,916.5	6%
Agriculture	707,010.3	14%
Rangeland	117,522.3	2%
Upland Forest	2,243,097.6	46%
Water	6,6674.7	1%
Wetlands	141,6443.2	29%
Barren	11,966.0	0%
Transportation	35,673.6	1%

Within its boundaries the District holds fee-simple title to approximately 160,800 acres in addition to approximately 125,800 acres of conservation easements and other less-than-fee interests (3.3% and 2.6% of land area within jurisdictional boundaries, respectively). The majority of these lands are located along rivers and streams, headwaters, and water recharge areas within the area. Therefore, many of the historic natural communities on District fee lands are dominated by hardwood trees and shrubs, grasses, or marsh vegetation (Table 2).

Table 2. Historic natural communities, as determined by the Florida Natural Areas Inventory, of District fee title lands.

Natural Community	Acres	% of Total
Hardwood Dominated*	95,402.4	59%
Pine Dominated**	63,026.6	39%
Grass/Grasslike Dominated***	2,397.7	1%
Streams, Lakes, Sinkholes	134.0	0%

*includes communities dominated by hardwood tree or shrubs

**includes flatwoods and upland pine communities

***includes prairies and marshes

The District Land Management Plan (DLMP) establishes the general policies that will guide the management of all fee title lands held by the District. Lands titled to the District are managed under a multiple-use policy that emphasizes water resource protection, maintenance and restoration of the land’s natural state and condition, and provisions for public access and recreation within those lands.

The Excellence in Land Management Program (ELM) quantifies District land management and helps determine whether land managers are meeting the objectives of the DLMP. The ELM scorecard is a

product of tracking multiple quantifiable land management achievements; it is annually calculated and submitted to the District's Governing Board (hereafter Board) and interested stakeholders.

The ELM scorecard is currently under revision, and it is the intention of the District for members of the Land Management Review Team to score future land management compliance with the goals in the DLMP. The following four goals are outlined within the DLMP: Resource Protection, Public Use, Communications, and Fiscal Responsibility.

The purposes of this land management report are twofold; the first purpose is to document efforts and activities during the previous fiscal year in managing District lands as prescribed within the DLMP. Secondly, it serves to narrate land management efforts for the purpose of generating a score for the ELM reporting process.

Legislation

The following Florida Statutes and Florida Administrative Codes and Governing Board Directives guided the development of the DLMP:

Chapter 373.1391 FS., Management of real property – Lands titled to the governing boards of the districts shall be managed and maintained, to the extent practicable, in such a way as to ensure a balance between public access, general public recreational purposes, and restoration and protection of their natural state and condition.

Whenever practicable, such lands shall be open to the general public for recreational uses. General public recreational purposes shall include, but not be limited to, fishing, hunting, horseback riding, swimming, camping, hiking, canoeing, boating, diving, birding, sailing, jogging, and other related outdoor activities to the maximum extent possible considering the environmental sensitivity and suitability of those lands.

Each water management district is authorized and encouraged to enter into cooperative land management agreements with state agencies or local governments to provide for the coordinated and cost-effective management of lands to which the water management districts, the Board of Trustees of the Internal Improvement Trust Fund, or local governments hold title.

The districts have the authority to adopt rules that specify: allowable activities on district-owned lands; the amount of fees, licenses, or other charges for users of district-owned lands; the application and reimbursement process for payments in lieu of taxes; the use of volunteers for management activities; and the processes related to entering into or severing cooperative land management agreements.

Chapter 373.591 FS., Management review teams – To determine whether conservation, preservation, and recreation lands titled in the names of the water management districts are being managed for the purposes for which they were acquired and in accordance with land management objectives, the water management districts shall establish land management review teams to conduct periodic management reviews.

Chapter 40B-9.131 FAC., Public Use of District Lands – The District shall publish and make available to the public an informational “Public Use Guide.”

Chapter 40B-9.1381 FAC., Prohibited Activities – Activities that are prohibited on District lands.

Chapter 40B-9.1411 FAC., Special Use Authorizations – An agreement between the District and users, that details terms, conditions, liability protection and time frame of a proposed use not designated within the Public Use Guide.

Program Directive 90-1. The purpose of this directive is to provide a mechanism for individuals or groups to use District lands on a temporary basis for compatible activities that are either not covered under the DLMP or that require special access.

Program Directive 92-1. The purpose of this directive is to enable District staff to respond to requests for rights-of-way received from private interests, quasi-public utilities or other entities in a consistent and timely manner.

I. RESOURCE PROTECTION

Goal – to protect, enhance and/or restore natural, archaeological, and historical resources on lands owned by the District.

Resource protection and management are rarely effective when ecosystem components are addressed in isolation due to the complex and supportive functions of each resource and process on the others. Because of this, resource specific objectives in the DLMP are often complimentary.

I.1 Resource Management

District staff plan and oversee land management operations in order to achieve Desired Future Conditions (DFC) in a manner that will protect and/or enhance natural resources. Plant and animal distribution and abundance are dictated by habitat conditions and the availability of resources. When historical natural communities and processes are altered, certain species are unable to relocate, survive, or persist in a given area. By having established a set of DFC parameters that detail plant community structure, representative plant species, average hydrological regime, and the frequency that fire is required to maintain plant community structure, District land managers are able to effectively protect and manage biological diversity. District lands that meet the DFC structural standards are maintained by natural processes (fire and natural flooding events). Communities that are deficient, however, receive additional management to drive the community towards the DFC.

*A note on land management fiscal year reporting, the majority of site prep occurring during the 2011 fiscal year is in preparation for reforesting pine seedlings during the 2012 fiscal year. Therefore, with the exception of the chemical site prep application, each of the reported activities does not affect the pine seedling reforestation that occurred during the 2011 fiscal year.

I.1.1 Mechanical

Table 3. Mechanical operations on lands managed by the District during the 2011 fiscal year (1 October 2010 – 30 September 2011).

Management Objective	Management Action	Acres	Out of Compliance Instances*	Corrective Actions
Hardwood removal	Chipping	224.7	0	0
Reforestation, Site Prep	Roller Chopping	1547.7	0	0
Shrub Mgt.		731.4		
		2,279.1		
Reforestation, Planting	Dozer ops	1,244.1	0	0
Woods Mowing	Tractor ops	0	0	0
Timber Harvest	Skidder ops	1,095.8	0	0

*Instances where the operation did not meet District Operational Standards

I.1.1.a Whole Tree Chipping

During whole tree chipping operations undesirable trees are cut, chipped, and removed off site. The objective of this practice is to move the natural community to meet DFCs; during the 2011 fiscal year this included site prep for reforestation or groundcover restoration. Whole tree chipping is used when other land management tools are not viable or will negatively impact desirable species. The following 3 tracts were chipped during the 2011 fiscal year:

<u>Tract</u>	<u>Acres</u>
• Steinhatchee Falls	66.1
• Swift Creek	97.5
• Withlacoochee Quail Farms	61.1

I.1.1.b Reforestation

Mechanical Site prep – Roller-drum chopping was prescribed over 2,200 acres of District lands. All roller choppers were single drums at least 10 ft. wide with a 5 ft. diameter.

Planting – District staff oversaw reforestation of cutover lands on 1,244 acres during the 2011 FY (Table 4). Both slash and longleaf pine were planted using a Whitfield type planter pulled behind a V-blade mounted on a bulldozer. All the pine seedlings were planted in 12 foot rows. Forestry consultants closely monitored planting to ensure that seedlings were planted to District standards and that the seedlings per acre were within 5% of the prescribed rate.

Pine seedling survival is estimated after one growing season. Although the data is normally collected during the dormant season, District land managers took the opportunity to utilize forestry consultants in the field during the timber inventory process (see Monitoring section). Hence, data was collected during the late growing season.

Survival estimates were lower than anticipated. The DFC range for the Establishment Age Class ranges from 400 – 900 seedlings/acre; 6 of the 7 longleaf planting sites did not meet this criteria. Survival was estimated based on 50th acre plots placed at an approximate density of 1 plot/5 acres; our sample design likely underestimates the number of surviving seedlings. Estimating survival will change; changes will likely include a standard placement of plots, an increase in sampling area, and ensuring an adequate sample size. In addition, District reforestation standards are being revised to minimize mortality to seedlings. During the 2012 planting season, seedlings were kept in a refrigerated trailer to minimize exposure and maintain a constant temperature.

Table 4. Reforestation of pine seedlings on District managed lands during fiscal year 2011; all reforestation occurred during November 2010 – January 2011.

Tract	Natural Communities Planted	Pine Seedling	Compliance* Seedlings/acre	Acres	Survival Seedlings/acre
Lake City WF	Mesic & wet flatwoods	Bare Root Slash	717	216.2	538.0
Mallory Swamp			725	405.1	448.9
			TOTAL	621.3	
47 Bridge**	Sandhill	Container Longleaf	604	67.9	261.6
Cabbage Creek**	Mesic flatwoods		608	259.8	196.1
Jennings Bluff**	Mesic flatwoods & sandhill		636	22.7	125.0
Mallory Swamp	Mesic flatwoods		631	64.6	365.4
Mattair Springs**	Sandhill		597	83.9	179.4
Seven Bridges**	Mesic flatwoods		595	97.4	337.5
Steinhatchee Rise**	Mesic flatwoods		640	26.3	540.0
			TOTAL	622.8	

*Planting compliance was checked during reforestation to ensure planting met District standards and the prescribed seedlings per acre was met (\pm 5%); 726 for slash pine planting, 605 for longleaf seedlings.

**Longleaf pine seedlings planted at these Tracts were sprayed during 29 May – 4 June 2011 with Oustar at a rate of 10 oz/acre.

At the Cabbage Grove Tract, 100 flowering crabapple seedlings were hand planted. These hardwood seedlings were planted to mitigate for damage to existing crabapples during previous land management operations on that tract that occurred during the 2010 fiscal year.

I.1.1.c Timber Harvest

The District harvests timber resources to promote forest health and achieve DFCs. The District has begun a formal process of tracking management decisions in the form of operational prescriptions. Current prescriptions include objectives, goals (target basal area), and resource concerns (soil, rare species, cultural artifacts, ect) for each timber sale. Timber sale objectives include the following:

- Reduce overstocked conditions,
- Remove undesirable species, and
- Natural community improvement.

During the 2011 fiscal year, 1,096 acres of pine timber were harvested on seven tracts (Table 5). The majority of these harvests were 3rd, 4th, or 5th row thinning; 110 acres were clearcut. The pine plantation thins retained basal areas between 38 and 50 ft²/acre; this is within the DFC parameter range of 1st and 2nd Thinning Target Forest Structure indicated for those natural communities. Dominant and co-dominant trees were retained.

The District conducted a seed tree harvest on a 37-acre surplus parcel of the Levings Tract; this thinning reduced the basal area to 16 ft²/acre or approximately 12 trees per acre. The objective was to promote natural regeneration by retaining the dominate longleaf and slash pine.

Table 5. Acres of timber harvested from District lands during the previous 6 fiscal years (1 October 2005 – 30 September 2011). Also displayed, the percentage of revenue generated compared to regional estimates from published data.

	Fiscal Year Harvested					
	2011	2010	2009	2008	2007	2006
# Acres Timber Sold for DFC	1,096	1,314	1,079	981	1,259	1,231
Total Value as a % of Published Regional Market Rate	98%	102%	104%	113%	109%	103%

I.1.2 Chemical Application

Chemical herbicides are applied to meet the resource protection goals of the DLMP and drive the natural community towards the DFC. Objectives to meet this goal include chemical site prep; pine release; non-native, invasive weed control; and natural community management.

Table 6. Total amounts of chemical herbicides applied on District lands during the 2011 fiscal year (1 October 2010 – 30 September 2011) by trade name and active ingredient.

<u>Herbicides Applied</u>	<u>Active Ingredient</u>	<u>Total Herbicide Applied oz (gallons or pounds)</u>	<u>Total Active Ingredient Applied oz (gallons or pounds)</u>
Accord	Glyphosate	28.75 (0.22 gal)	50.32 (0.39 gal)
Glyfos X-TRA		85 (0.66 gal)	
Arsenal	Imazapyr	42.5 (0.33 gal)	1,769.04 (13.82 gal)
Habitat		13.08 (0.10 gal)	
Chopper		640 (5 gal)	
Chopper Gen 2		5,904.3 (46.13 gal)	
Element 3A	Triclopyr amine	19.72 (0.15 gal)	8.76 (0.07 gal)
Element 4	Triclopyr ester	26,988.1 (210.8 gal)	16,698.59 (130.46 gal)
Garlon 4		120 (0.94 gal)	
Velpar L	Hexazinone	640 (5 gal)	160 (1.25 gal)
Oustar	Hexazinone	1,210 (75.63 lbs)	764.72 (47.80 lbs)
	Sulfometuron methyl		142.78 (8.92 lbs)
Escort	Metsulfuron methyl	0.33 (0.2 lbs)	0.20 (0.01 lbs)

I.1.2.a Chemical Site Prep

Aerial Broadcast – An aerial application of Chopper Gen 2 and Element 4 (rates 3.75% and 1.25%, respectively) was applied on 123 acres of District lands during December 2010 (Table 6). Both tracts are managed by the Florida Forest Service as part of Twin Rivers State Forest.

Hand Crew Application – The majority of mechanical site prep efforts during the 2011 fiscal year was roller chopping followed by a prescribed fire. However, the Jones Mill Creek and Steinhatchee Falls Tracts were not roller chopped because of sensitive soil and/or remnant desirable species. The contractor was instructed to treat trees and shrubs that met specific criteria, for example volunteer cherry and sweetgum trees while leaving all turkey oak.

The Withlacoochee Quail Farms Tract was treated by the hand crew, as well; that project is detailed under Notable Projects in Resource Protection section. A total of 297 acres were treated by hand with Element 4 and Chopper to meet chemical site prep objectives.

I.1.2.b Chemical Pine Seedling Release

Banded Application – In an effort to successfully establish pine seedlings to meet District objectives, chemical herbicides are band sprayed over the top of recently planted seedlings to control competing herbaceous vegetation. During the 2011 fiscal year the majority of longleaf pine seedlings that were planted during December 2010 – January 2011 were sprayed. The contractor applied the chemical herbicide Oustar at a rate of 10 ounces/acre using a labor force with backpack sprayers and wand applicators. Application occurred during 29 May – 4 June 2011. A total of 558 acres of longleaf pine seedlings were sprayed across 6 tracts.

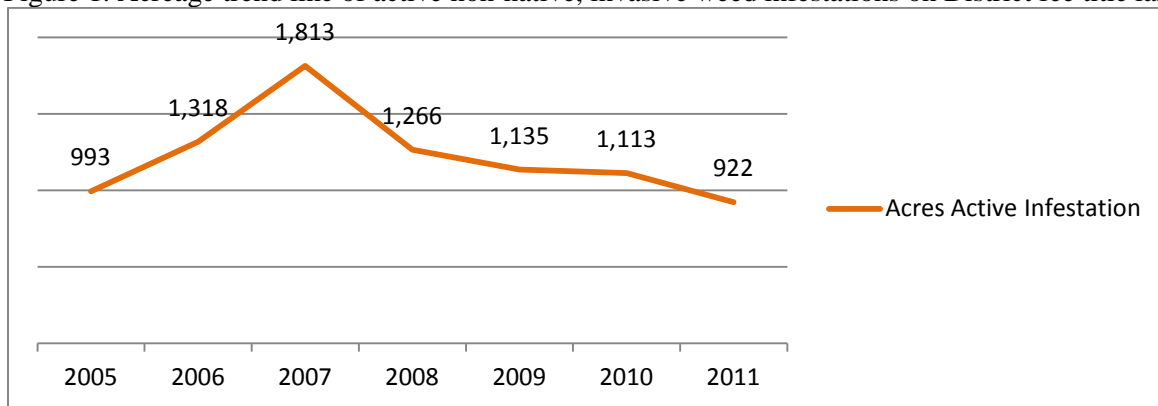
Backpack Application – Sixty-nine acres of the Grady Tract were treated with chemical herbicides (Element 4, Chopper, and Velpar L) to reduce the amount of volunteer oaks within a sandhill natural community. Prescribed fire was not recommended due to the level of oak encroachment within the 10-year old longleaf pine stand. A backpack application was preferred due to desirable species (turkey, bluejack oak) interspersed with target species (sweet gum, sand live oak). Upcoming plans include reintroducing fire to this sandhill community.

I.1.2.c Non-native, Invasive Weed Control

A total of 124 weed infestations were monitored during the fiscal year. Of those active infestations, half (62) were treated with chemical herbicides (Accord, Arsenal, Element 3A and 4, Escort, Garlon 4, Glyphos X-TRA, and Habitat) or pulled by hand; no living weed material was observed at 52 of the monitored infestations.

Efforts to control non-native, invasive weeds are showing a reduction of the total acreage of infestations (Figure 1). A total of 34 infestations were reclassified as “Inactive.” Active infestations are reclassified Inactive when no weed material is observed at or within close proximity of the georeferenced infestation for 3 consecutive years.

Figure 1. Acreage trend line of active non-native, invasive weed infestations on District fee title lands.



I.1.3 Prescribed Fire

Several of Florida’s natural communities were historically influenced by fire. Of those fire adapted natural communities, District land managers and contractors routinely target and conduct prescribed burns within the following six: scrubby, mesic, and wet flatwoods; shrub bogs; sandhills; and upland pine. Combined, the targeted communities make up approximately 76% of the total acres that were historically influenced by fire (Table 7).

Table 7. Acres of fire maintained natural communities that are targeted or non-targeted for prescribe fire by District land managers.

SRWMD Fire Maintained Communities	Acres	% of Total
Targeted Communities*	76,508.0	76%
Non-Targeted Communities**	23,989.0	24%

*Includes scrubby, mesic, and wet flatwoods; shrub bogs; sandhills; and upland pine natural communities

**Includes basin, depression, and tidal marsh and dome and basin swamp natural communities

The remaining 24% of fire influenced acres on District land consists of wetland natural communities. These communities are not actively targeted for prescribed burning. Instead, fire is allowed to carry into these areas from adjacent communities targeted for prescribed burning. Fire is allowed to carry into these areas only when the risk is minimal for issues such as prolonged duff consumption, smoke management problems, mortality to wetland trees, and when containment lines can be safely installed without impacting water resources.

The District uses information from the Florida Natural Areas Inventory (FNAI) to establish the Natural Fire Return Interval (NFRI) for each natural community. The NFRI status is then evaluated at the end of each fiscal year for all targeted communities. This process includes identifying if the community is in or out of its corresponding NFRI. The District’s long term goal is to increase the number of acres that are within their NFRI (Table 8).

Burn objectives are designed to help meet or maintain DFCs within the burn units that overlay the natural community. For example, if the percent cover of the shrub layer of vegetation is too high within a unit, a burn objective is designed to help lower the density of vegetation and move it toward DFC parameters. Post burn evaluations are then conducted to determine if the burn objectives were met.

Table 8. Acreages of fires on District lands during the previous 5 fiscal years (1 October 2006 – 30 September 2011).

	<u>2011</u>	<u>2010</u>	<u>2009</u>	<u>2008</u>	<u>2007</u>
% Total Acres of Targeted Communities within Natural Fire Return Interval	49%	45%	43%	43%	36%
Acres Prescribed Burned	11,742	15,765	7,659	9,171	10,884
Acres Burned That Met Objective	11,692	13,189	7,229	7,014	10,735
Wildfire Acres	5,535	2	1	1,788	5,689

I.2 Resource Monitoring

I.2.1 Groundcover Resource Monitoring

District DFCs list target groundcover percent cover as components of natural community structure, and the District is working to develop a shrub and groundcover monitoring program. The monitoring program will focus on percent covers and broad genera classification of grasses, forbs, and shrubs on District lands. No groundcover plots were collected during the 2011 fiscal year. Land managers are currently developing a sampling design that is accurate and quick to deploy across a wide range of community types.

I.2.2 Timber Resource Monitoring

A total of 4,806 pine timber inventory plots were collected across 26,598 acres of District lands during the 2011 fiscal year. Inventory data were collected on pines within pine dominated natural communities. The inventory data were grouped based on the following pine tree age classes: ≤ 7 years old, 8 – 15 years old, and merchantable stands that were > 15 years old. The data collected during this inventory is being used to select future timber sales; it will be critical in providing more accurate timber sale revenue forecasts. The inventory is scheduled for completion during the 2012 fiscal year.

I.2.3 Rare Species Monitoring

The Rare Species and Communities Project documents District procedures for identifying, monitoring, and avoiding detrimental impacts to imperiled species on District managed lands. Rare species are documented and monitored on District lands by surveys and opportunistic observations. Specific watershed basins are surveyed by District staff on a 3 year rotation. Species locations and survey results are maintained within a geodatabase. District land managers are able to access spatial rare species occurrence records during planning, and review best management practice fact sheets that address any management concerns.

Staff surveyed 215 populations of rare plant and animal species on the following basins during the 2011 fiscal year: Aucilla, Ecofina, Lower Suwannee, and Waccasassa. Forty-two tracts were visited during monitoring, and 28 different species were documented on District lands (Table 9).

Table 9. Rare species populations monitored on District lands during the 2011 fiscal year (1 October 2010 – 30 September 2011).

Number of species monitored	Number of Tracts visited during monitoring	Number of populations monitored
28	42	215

Newly acquired lands are surveyed to document imperiled biota occurrences. During 2011 FNAI surveyed 2 District tracts (Gilchrist Regional WF and Santa Fe River Ranch) for rare species locations and to delineate historic and current natural community boundaries. FNAI observed 149 new rare species occurrence records on District lands during the 2011 fiscal year. Gopher tortoise locations represented the majority of these data; however there were a total of 10 different species observed on the separate tracts.

FNAI also revisited the Mallory Swamp Tract to reassess the historic natural community delineations since the initial survey in 2003. The District partnered with the Natural Resource Conservation Service in restoring the natural communities at Mallory Swamp after a sever wildfire in 2001. Since the 2003 survey there have been multiple years of restoration and management, and land managers felt that the historic natural community delineations would be improved. Notable acreage changes included an increase in basin marsh (4%), shrub bog (14%), and wet flatwoods (3%) and a decrease in basin swamp (-18%), depression marsh (-1%), and mesic flatwoods (-2%).

I.2.4 Cultural and Historical Resource Monitoring

Within two years of acquisition, an archeologist visits District lands and delineates any likely areas of historical resources. The most likely areas are classified “High Probability Zones” (HPZ) and District land managers follow the “Protocol for Managing Cultural and Historical Resources on Suwannee River Water Management District Lands” to avoid damaging any historic resources.

Land managers notify the Florida Bureau of Archeological Research (BAR) when cultural resources are discovered on District managed lands. The BAR takes the necessary steps to register the historic resource.

District land managers monitor significant cultural resource sites in order to prevent degradation. Staff report evidence of looting to the Florida Fish and Wildlife Conservation Commission (FWC) law enforcement personnel and assist as requested in the investigation and prosecution of violators. Protective measures such as limiting access to recorded sites and the installation of barriers to excavation are taken as needed.

	Fiscal Year Monitored						
	2011	2010	2009	2008	2007	2006	2005
% acreage assessed for cultural resource high probability zones	98.8%	95%	95%	0%	0%	0%	99%
# / % known significant cultural sites damaged	0/0%	10/6%	9/5%	9 / 5%	9 / 5%	5%	na
# sites monitored for significant cultural resources	3	20	5	3	0	na	0

I.3 Notable Projects in Resource Protection

I.3.1 Withlacoochee Quail Farms

The District entered into cost-share agreement with U.S. Fish and Wildlife Service (USFWS) to restore the native upland pine forested community at the Withlacoochee Quail Farms Tract. The District Tract is predominately an upland pine natural community. Of the 620 acres of upland pine forest only 57% contains groundcover resources and fine fuels sufficient to manage the community with fire. The remainder of the community's structure has been altered extensively due to lack of frequent fire and subsequent overgrowth of various oak species. This project is expected to benefit the natural community by reestablishing native groundcovers, which are vital components to biodiversity and natural community management, and reintroducing fire to the community. As part of that agreement, the District will oversee groundcover restoration on approx 145 acres.

During the 2011 fiscal year, 61 acres of off-site hardwoods were chipped and hauled away; 84 acres were chipped the previous fiscal year. Herbicide application to control resprouting occurred on the 84 acres chipped during the 2010 fiscal year. Herbicide application also occurred within Stand 2; the objective being to limit mature off-site hardwoods such as sweet gum, cherry, and water oak. All herbicide work was conducted by backpack applicators. In-kind services completed during fiscal year 2011 include monitoring and control of invasive weed species (Japanese Climbing Fern) and establishing and collecting preliminary vegetation coverage data.

The next planned restoration actions for the 2012 fiscal year include additional herbicide application on the remaining 61 acres within Stand 3, fireline construction, and a prescribed fire within Stands 1 and 2. Planned in-kind services include continued monitoring and control of invasive weeds, multiple animal surveys (Bachman's Sparrow, Florida Mouse, and Gopher Tortoise), and continued vegetation monitoring.

I.3.2 Cuba Bay

Approximately 60 acres of former timberland at Cuba Bay was bisected by several large windrows from previous forestry operations; there were an estimated 21,773 feet (4.1 miles) of windrows. Natural community management in stands with windrows is often problematic since the rows serve as firebreaks when using prescribed fire; windrows also have the potential to channel storm runoff during heavy rain events.

The 60 acres of mesic flatwoods at the Cuba bay Tract were scheduled for reforestation with longleaf pine during the 2012 fiscal year. As part of site prep for reforestation, this area was whole tree chipped during the 2010 fiscal year and chopped during the summer of 2011. The roller chopper was used to break up the slash left from previous forestry operations and to break up and redistribute the windrow material to match a more natural grade.

II. PUBLIC USE

Goal – to provide opportunities for high quality, compatible resource-based recreation and education programs to meet the public’s needs.

District lands provide an extensive set of resource-based recreational opportunities. Of the approximately 160,800 acres of District owned land, over 99% are open to the public for recreation. The District’s Public Use Guide lists allowable recreational uses by tract, including uses that require a Special Use Authorization (SUA). These recommendations take into account the protection of important natural resources, the proximity of similar recreational opportunities, the time and financial requirements to meet recreational facility standards, and public demand for the particular use.

II.1 Facility Management

District lands are open to the public once a tract has met the Recreational Facility Development and Maintenance Standards. The standards provide recreational facility, road and trail, sign and kiosk, and fence construction and maintenance procedures. These standards ensure that facilities on District lands (Table 10) are well maintained to ensure a safe and aesthetically pleasing outdoor environment for general public recreation. District staff inspect public use facilities and schedule any maintenance required to ensure the longevity and continued use of infrastructure. During the 2011 fiscal year 91% of inspected public use facilities met the Recreational Facility Development Standards.

Table 10. The District has consistently increased public use facilities across District managed lands over the past 7 fiscal years (1 October 2004 – 30 September 2011).

	Fiscal Year						
	2011	2010	2009	2008	2007	2006	2005
# Trailheads	26	22	18	18	15	13	13
# Docks & Boat Ramps	10	8	10	10	10	7	6
# Hand & Canoe Launch sites	27	26	70	70	61	38	38
# Picnic Areas	16	16	15	15	12	12	12
# Interpretive Sites	9	8	6	6	5	4	2
# Restrooms	18	14	14	14	10	7	7
# Miles Trails	190	183	183	158	158	108	87
# Miles Driving Trails	345	302	302	302	286	285	312

II.1.1 Facility Construction & Maintenance

During the 2011 fiscal year, District staff and contractors finished repairing roads on the Mt. Gilead Tract where two river access points were improved. At the Reams Landing access, the access road and parking lot were graded to divert the flow of runoff during a rain event; rock and fencing were added to the parking lot to further prevent water quality degradation. A parking lot for the second river access point was constructed away from the river bank to move vehicles out of the 75-foot setback; access was improved and erosion scars were fixed. Funding for this project came from the Florida Department of Transportation for water quality mitigation.

II.2 Special Use Authorizations

In order to protect sensitive resources and reduce management costs, it is necessary to limit some recreational opportunities and restrict the use of certain roads or other access on District lands. Members of the public may need to apply for an SUA to engage in those recreational opportunities requiring special

authorization as listed in the public use guide. An SUA may also be issued for opportunities not listed in the Public Use Guide; examples include research and data collection, placement of bee hives, and nuisance hog removal.

An SUA serves as an agreement between the District and users, and it details terms, conditions, liability protection and time frame of the proposed use. The District issues SUAs and reserves the right to refuse anyone an SUA if the proposed use may threaten natural resource integrity on District lands. A total of 520 SUAs were issued during the 2011 fiscal year (Table 11).

Table 11. The number and types of Special Use Authorizations issued by the District during the 2011 fiscal year (1 October 2010 – 30 September 2011)

Recreation	Temporary Ingress & Egress	Mallory Swamp ATV Trail	Commercial*	Goose Pasture Camping	Total
332	28	17	3	140	520

*Commercial SUAs issued during the fiscal year include research and data collection and an apiary lease.

II.3 Hunting and Fishing

The District’s goal for public hunting is to provide high-quality hunting opportunities for game species. At this time the District does not offer exclusive hunting or fishing rights to any individual or group. Public hunting on District lands is offered through management agreements with the FWC and the USFWS. So long as the user abides by regulations set forth by FWC, fishing is allowed on District-managed tracts.

The District and FWC staff met during February 2011 to evaluate District lands that may be open to hunting and to review the rules for each of the wildlife management areas. District staff submitted to the Governing Board an additional 9,203 acres that will be added to the Wildlife Management Area System (WMA) for the 2012-2013 hunting seasons.

In addition, a special summer hog hunt on the Aucilla Wildlife Management Area was provided in coordination with the FWC. The hunt was one weekend per month during May, June, July, August, and September 2011.

	Fiscal Year						
	2011	2010	2009	2008	2007	2006	2005
# acres open to hunting	96,444*	97,160	97,160	95,675	96,210	95,331	95,796
# fishing access	102	99	94	94	87	82	77

*The number of acres open to hunting decreased due to the District conveying a portion of the Sandlin Bay Tract to the U.S. Forest Service. These acres remain open to hunting as part of the Osceola Forest WMA, but the District does not hold title to the acreage.

II.4 Emergency Closings

On 13 June 2011 the District closed the Santa Fe Swamp Tract to the public due to a wildfire. The tract was closed 59 days and reopened on 11 August 2011.

II.5 Notable Accolades

The Florida National Scenic Trail (FNST) along the Suwannee River was named one of the 51 scenic hikes by *USA TODAY*. A trail from each state and the District of Columbia were selected as great places to hike; 44 miles of the FNST are on District lands along the Suwannee River. There are an additional 11 miles of FNST on the Econfina and Aucilla Rivers.

III. COMMUNICATIONS

Goal – to coordinate with public and private stakeholders in the management of District lands.

The District must seek and include participation from outside agencies, organizations and private citizens when developing management plans for the lands under its stewardship. However, District facilities and other communication opportunities likely provide greater visibility of land management activities to the general public. Public inquiries are available by visiting the District or contacting District staff by phone, mail, email, or the website.

III.1 District Land Management Plan

The District Land Management Plan establishes the general policies that will guide the management of all fee title lands held by the District; the Board approves the DLMP before it is implemented. During May 2011, the Board approved an updated and revised DLMP that replaced the previous 2003 approved plan. The updated management plan is consistent with previous plans in that it was developed using Florida Statute directives and Board policy as guidelines.

The draft version of the DLMP was in development for over a year to allow adequate time for comments from District staff, public land managers, regional advocacy groups, and the local citizenry. Many of the comments were received during annual Land Management Review Team meetings, field trips with interested individuals, and through an interactive internet application.

III.2 Land Management Review Team

The Land Management Review Team gauges and scores District land management and provides a reporting mechanism to the Board for their review. Statutorily, the LMRT must evaluate 1) the extent to which District lands are being managed for the purposes for which they were acquired and 2) the degree to which actual management practices, including public access, are in compliance with the adopted management plan.

On April 5, 2011, staff showcased District land management to the LMRT; the title of the tour was “Restoration and Land Management within the Upper Steinhatchee Conservation Area”. The review team was comprised of a diverse group of 18 individuals from several public land management agencies, private industry, private landowners, and retired university professors. District staff led the group on a round trip from the R.O. Ranch to Mallory Swamp and Steinhatchee Springs Tracts. The LMRT found the District to be in or exceeding compliance with the DLMP and in managing lands for the purpose for which they were required (Table 12).

Table 12. Questionnaire responses from the District’s previous Land Management Review Team meeting held on 5 April 2011.

Question 1 # of Responses	Are District lands being managed in a manner consistent with the purpose for which they were acquired, including public access?
0	The SRWMD is not in compliance.
2	SRWMD compliance is adequate and acceptable.
6	SRWMD exceeds compliance regularly.

Question 2 # of Responses	Does SRWMD land management implement the Resource Protection and Public Use goals identified in the District Land Management Plan?
0	The SRWMD is not in compliance.
4	SRWMD compliance is adequate and acceptable.
4	SRWMD exceeds compliance regularly.

III.3 Cooperative Ventures

- District staff attended the Big Shoals working group meeting on 24 August 2011 during which joint management of the properties was discussed. Big Shoals Public Lands are managed by four entities, and there are three landowners (Department of Environmental Protection, Florida Forest Service, and the District). Hunting is managed by FWC. Big Shoals is managed by one management plan, and all the agencies work together on land management activities.
- A map of recreational opportunities on the Aucilla, Wacissa and Econfina Rivers was completed in a cooperative effort between the District and FWC.
- District staff and Columbia County representatives held an annual planning meeting for the Fall Creek Falls Tract in Columbia County. Columbia County representatives' plans for the 2012 fiscal year include regular maintenance and implementing a park host position. The park host would be allowed to set up an RV at the former home site; in exchange the host would provide maintenance and security services for rent.
- The District hosted the semi-annual Inter-District Recreation Meeting at the Adams Tract River Camp. All five Water Management Districts were represented and the topics included facility maintenance, law enforcement, and the ability to use volunteers. A representative of the FWC was on hand to present information regarding river camp access for non-motorized boats.
- District staff worked with Suwannee Correctional Institution to identify seven tracts that can be used by the K-9 staff to train their dogs. Correctional officers used the areas to develop a training course; the K-9 team used dogs to track the person on the training course.
- The District partnered with the Suwannee County School Board through their Work Force Development Grant. Area teachers shadowed District staff during field activities in order to relate how academics would apply to a variety of careers.
- Area Boy Scout Troupes (597 & 693) received District staff assistance for the following two projects, respectively:
 - Three nest boxes were built to IFAS published specifications for American Kestrels. Each box was erected at the Mattair Springs Tract.
 - Bicycle trails on the Little Shoals and Falling Creek Tracts were marked.
- District staff and volunteers from the Spirit of Suwannee Music Park marked three additional miles of multi-use trail on the Fox Trail Tract. The trails are used primarily for horseback riding.

III.4 Workshop/Training and Working Group Participation

III.4.1 District Staff Training during the 2011 Fiscal Year

<u>Training/ Workshop</u>	<u>Staff</u>				
	Scott Gregor	Bob Heeke	Edwin McCook	Bill McKinstry	Beau Willsey
Groundcover Restoration in Southeastern U.S. November 2010		X			X
Landscape Sclae Mechanical Fuels Reduction & Fire September 2011	X	X		X	
Natural Areas Training Academy – Working Across Boundaries to Protect Ecosystems March 2011					X

III.4.2 Special Interest/Working Group Participation

The following are ongoing working groups that District land managers participate with:

- Prescribed Fire Council
- San Pedro Landowner Association
- 1st Coast Invasive Species Working Group
- North Central Florida Cooperative Invasive Species Management Area
- FWC, Invasive Plant Management Section’s Weed Control Project
- Suwannee River Wilderness Trail
- Florida Trail Association
- Suwannee Bicycle Association
- Florida Greenways and Trails Council

IV. FISCAL ACTIVITIES

Goal – to protect resources and manage District lands in an efficient manner within the District’s annual budget

Land management expenses are met from a variety of funding sources. District staff minimize the costs associated with land management by contracting with the private sector, partnering with other land management agencies and organizations, and submitting proposals for additional land management funding.

IV.1 2011 Fiscal Year Natural Resource Management and Public Recreation Services Budget and Expenditures

Budget Item	Budgeted Amount	Expenditures	% utilized
Prescribed Fire	\$ 560,000.00	\$ 548,925.65	98%
Fireline Establishment	\$ 40,000.00	\$ 36,330.00	91%
Herbicide Application	\$ 110,000.00	\$ 80,928.10	74%
Mechanical Treatments	\$ 80,000.00	\$ 68,431.40	86%
Invasive Weed Mngmt	\$ 95,000.00	\$ 25.00	0%
Tree Seedlings	\$ 66,000.00	\$ 55,387.60	84%
Tree Planting	\$ 130,000.00	\$ 128,072.65	99%
Timber Sale Admin	\$ 125,000.00	\$ 59,122.25	47%
Forestry Consulting	\$ 40,000.00	\$ 53,011.00	133%
Featured Site Maint.	\$ 113,500.00	\$ 111,126.50	98%
Landscape Maint.	\$ 160,000.00	\$ 118,866.50	74%
Site Cleanup	\$ 10,000.00	\$ 250.00	3%
Sanitation	\$ 32,000.00	\$ 16,235.00	51%
Signs	\$ 7,500.00	\$ 9,811.55	131%
Facilities Upgrades	\$ 20,000.00	\$ 16,982.75	85%
Cultural Resources	\$ 5,000.00	\$ 6,500.00	130%
Cooperative Agreements			
FFS Prescribed Fire	\$ 60,000.00	\$ 22,233.50	37%
FFS Twin Rivers	\$ 235,000.00	\$ 169,590.79	72%
Gilchrist County; Otter Springs	\$ 40,000.00	\$ 10,192.60	25%

IV.2 Cooperative Agreements

The District is capable of entering into cooperative management agreements and/or leases with government agencies or private, non-government land management organizations. These agreements ease the economic burden of management on District lands. However, entering into a cooperative agreement does not nullify the District’s land management objectives or resource goals. The cooperating agency must abide by all District land management standards, policies, and management objectives to prevent any degradation to natural resources on its lands. The District has entered into cooperative agreements with the following agencies, among others:

<u>Managing Agency/Entity</u>	<u>Acres under management</u>
• Alachua County	222
• Columbia County	139
• Dept. Environmental Protection	1,980
• Florida Forest Service	12,633
• FL Fish and Wildlife Commission	862
• Gilchrist County	634
• University of Florida	738
• US Fish and Wildlife Service	1,011

Two of the cooperative land management agreements that the District has entered into are with the Florida Department of Agriculture and Consumer Service’s (DOACS) Florida Forest Service (FFS). The “Cooperative Management of Lands Acquired by the Suwannee River Water Management District” agreement is used primarily for the FFS to manage and conduct fireline installation and prescribe fires on District lands. An earlier, similar agreement was entered during 1994; the current agreement was signed in 2004. During the 2011 fiscal year, 37% of the appropriated \$60,000 was utilized.

The Lease Agreement between the District and DOACS for Twin Rivers State Forest allows the FFS to manage multiple tracts of land located along the Withlacoochee and Suwannee Rivers. The initial agreement was signed during 1997 and revised and renewed during 2006. Approximately 12,633 acres of District lands are managed by the FFS under this agreement. Funds generated from resources on those lands are used to offset management costs. During the 2011 fiscal year, 72% of the appropriated funds were utilized.

Public use and recreational services at the Otter Springs Park and Campground is managed by Gilchrist County. The lease was signed during 2008. Operational costs and public use revenues are shared by the county and the District. By the end of the fiscal year, the District and Gilchrist County shared the operational costs at Otter Springs Park and Campground; the cost to the District was \$7,538.71.

The Agreement for the Management and Operations of the R.O Ranch was signed during April 2011. The non-profit R.O. Ranch, Inc. is responsible for all recreational uses on the District’s R.O Ranch Tract and all the facilities that support those activities; this includes an equestrian oriented park and campground. The 10-year agreement details resource sharing, funding, and liability among other provisions.

IV.3 Grants & Cost-share Agreements

The District entered into cost-share agreement with US Fish and Wildlife Service to restore the native upland pine forest community at the Withlacoochee Quail Farms Tract. This project is detailed under the Notable Projects Section. As part of the agreement, the District agrees to contribute funds and in-kind services for preparing the restoration site (chipping, herbicide application to hardwood stumps, hand planting container grown longleaf pine seedlings) and monitoring vegetative changes and rare species occurrences at the site. These contributions are estimated to cost \$75,329; the PFW program will match this contribution to sow the 149 acres with a native, upland seed mix for a cost not to exceed \$75,000.