

St. Johns River Water Management District
2008 Consolidated Annual Report

District Water Management Plan
Annual Progress Report



1. DISTRICT WATER MANAGEMENT PLAN ANNUAL PROGRESS REPORT

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SUMMARY

This progress report evaluates progress made in implementing the current District Water Management Plan using a set of performance measures that were cooperatively developed by the Florida Department of Environmental Protection, the five water management districts, and the Executive Office of the Governor. These measures are in addition to efficiency measures reported to the EOG and the state legislature in the Standard Format Tentative Budget Submission.

A total of 18 performance measures were used to report the District's progress in implementing the current District Water Management Plan that was completed in May 2005. Some important changes are noted in this year's report:

- The use of reclaimed water accounted for 127 million gallons a day, or 41% of the total waste water flow
- The average water use in the District increased slightly from 162 gallons per capita per day (gpcd) in 2005 to 164 gpcd in 2006
- The District now owns 678,660 acres of land through purchase, transfer, donation, or other approaches
- Over 98,000 acres of land have been acquired by the District using the less-than-fee-simple approach
- The acreage of water bodies within SJRWMD found to have invasive, nonnative aquatic plants decreased slightly from 11,500 acres in 2005 to 11,007 acres in 2006
- Upland invasive plants were found on 13% of District managed lands

INTRODUCTION

The St. Johns River Water Management District (SJRWMD or District) has an integrated planning, budgeting and reporting system. Under this system, long-term plans guide short-term plans, budgets are linked to plans, performance on the District water management plan implementation is tracked, and progress is evaluated on an annual basis. This Annual Progress Report (Report) evaluates progress made in implementing the 2005 District Water Management Plan (DWMP) using a set of performance measures that were cooperatively developed by the Florida Department of Environmental Protection (FDEP), the five water management districts (WMDs), and the Executive Office of the Governor (EOG). These measures are in addition to efficiency measures reported to the EOG and the state legislature in the Standard Format Tentative Budget Submission (commonly referred to as August 1 Report) pursuant to section 373.536, Florida Statutes (F.S.).

As required by section 373.036(7)(a), F.S., this Report is prepared annually to report the District's progress in implementing the current DWMP that was completed in May 2005. It uses 18 performance measures to report the District's progress in implementing the current DWMP.

WATER MANAGEMENT PERFORMANCE MEASURES

The five WMDs, FDEP and EOG jointly developed 25 water management performance measures in 2001 that were incorporated into each WMD's District Water Management Plan (DWMP). The performance measures, which reflect statewide priorities, are aimed at promoting sound water resource management and improving agency accountability. Performance on selected measures is being tracked over time and reported annually to:

- Support planning and decision making
- Identify potential problems
- Promote coordination of water resource management activities among agencies

The water management performance measures were envisioned to have changes in future years as the WMDs gain experience using them. They were agreed upon with the understanding that factors beyond the control of the WMDs may affect performance on resource-based measures, such as the ability of surface waters to meet their designated uses.

The original 25 performance measures were revised in June 2004 to streamline the reporting requirements by combining and eliminating several measures that were either redundant or due to data availability issue. The number of water management performance measures was reduced to 16 and incorporated into the District's 2005 DWMP. Listed below are the 16 measures grouped by the WMDs' four Areas of Responsibility (AOR) – water supply (5), flood protection (2), water quality (3), and natural systems (6) – plus two common measures that apply across the AOR.

Water Supply Measures

Objective 1: Increase available water supplies and maximize overall water use efficiency to meet identified existing and future needs

- WS1(a) Percentage of domestic wastewater reuse
- WS1(b) Gross per capita water use (public supply) by District and water supply planning regions
- WS1(c) Within each water supply planning region: (1) the estimated amount of water supply to be made available through the water resource development component of the regional water supply plan; (2) percent of estimated amount under development; and (3) percent of estimated amount actually made available
- WS1(d) Within each water supply planning region, the estimated additional quantities of water supply made available through District water supply development assistance

Objective 2: Prevent contamination of water supplies

- WS2(a) Percentage of surface water supply sources for which water quality fully attains the designated use

Flood Protection Measures

Objective 1: Minimize damage from flooding

FP1(a) Percentage of District works maintained on schedule

Objective 2: Promote non-structural approaches to achieve flood protection and to protect and restore the natural features and functions of the 100-year floodplain

FP2(a) Number of acres identified for acquisition to minimize damage from flooding and the percentage of those acres acquired

Water Quality Measures

Objective 1: Protect and improve surface water quality

WQ1(a) Percentage of water bodies that attain or potentially do not attain their designated uses under the TMDL program

Objective 2: Protect and improve ground water quality

WQ2(a) Improving, degrading, and stable trends in groundwater quality

WQ2(b) Improving, degrading, and stable trends in nitrate concentrations in springs

Natural Systems Measures

Objective 1: Maintain the integrity and functions of water resources and related natural systems

NS1(a) Number of MFLs, by water body type, established annually and cumulatively

NS1(b) Percentage of MFLs established in accordance with previous year's schedule

NS1(c) For the previous fiscal year, total acres of wetlands or other surface waters authorized by environmental resource permit (ERP) to be impacted, and the number of acres required to be created, enhanced, restored, and preserved

Objective 2: Restore degraded water resources and related natural systems to a naturally functioning condition

NS2(a) Acres of invasive, nonnative aquatic plants in inventoried public waters

NS2(b) Acres of District managed lands infested with invasive, nonnative upland plants

NS2(c) Acres of District-owned lands identified in land management plans as needing restoration; acres undergoing restoration; and acres with restoration activities completed

Common Measures

CM(a) Acres of land acquired through fee simple, and less than-fee-simple ownership, respectively, on an annual and cumulative basis

CM(b) Number and percent of land management plan activities being implemented according to plan schedules

WATER SUPPLY MEASURES

WSI(a) Percentage of domestic wastewater reuse

The quantity and percentage of domestic wastewater reused in the District is increasing steadily in keeping with the District's focus on promoting reclaimed water as an alternative to potable water for irrigation, power generation, and other beneficial uses. All District consumptive use permit holders are required to reuse where feasible. The District promotes reuse with funding and technical assistance through its Water Resource Development, Water Supply Development Assistance, and Water Protection and Sustainability programs. Reported reuse for 2006 increased to 127 million gallons per day (mgd), accounting for 41 percent of the total treated wastewater flow (Table 1-1 and Figure 1-1). The reported numbers include only uses that are considered to be beneficial and replace an existing or potential use of higher quality water. Wastewater discharged to spray fields, percolation ponds or infiltration basins not located in recharge areas, wetlands not needing augmentation, and deep well injection are excluded. The numbers appearing in the current report vary slightly from previous years because of retabulation of wastewater treatment and reuse data. Total treatment flows vary annually in part because of variable amounts of rainfall seeping into older sanitary sewers.

Table 1-1. Domestic wastewater reused in SJRWMD

Year	Domestic WWTP Flow (mgd)	Reuse Flow (mgd)	Percentage of Reuse
1997	284.46	73.83	26%
1998	301.25	85.87	29%
1999	296.89	95.13	32%
2000	289.82	95.75	33%
2001	288.48	99.64	35%
2002	291.66	106.55	37%
2003	319.06	107.63	34%
2004	308.49	110.68	36%
2005	327.90	118.46	36%
2006	309.67	127.66	41%

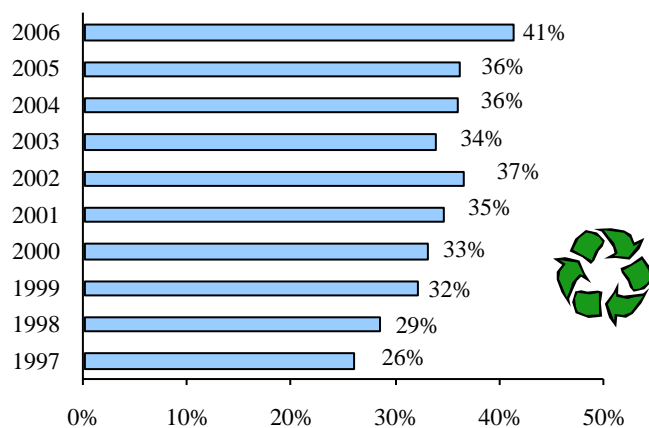


Figure 1-1. Percentage of wastewater reuse in SJRWMD

WS1(b) Gross daily per capita water use (public supply) by District and water supply planning regions

Public supply is the largest water use category in the District and accounts for the major portion of the District’s projected increase in water demand to 2030. The districtwide per capita public supply water use figures in the chart below were calculated by dividing the total quantity of water supplied by public and private utilities (653,390,000 million gallons per day in 2006) by the population served by utilities (3,977,246 in 2006). SJRWMD uses its entire jurisdictional area as its water supply planning region.

Average water use in the District rose slightly from 162 to 164 gallons per capita per day (gpcd) from 2005 to 2006. However, per capita public supply water usage shows no consistent upward or downward trend. The annual quantity, timing, and location of rainfall appear to be the greatest factors affecting per capita water use because of the high proportion of public supply water that is used for landscape irrigation. Increased emphasis is being placed on promoting water conservation to counter the potential of increased water use resulting from more in-ground irrigation systems with automated controllers. Increasing use of reclaimed water for landscape irrigation has reduced the amount of potable water for landscape irrigation. Figure 1-2 below shows the last ten years’ per capita water use in the District.

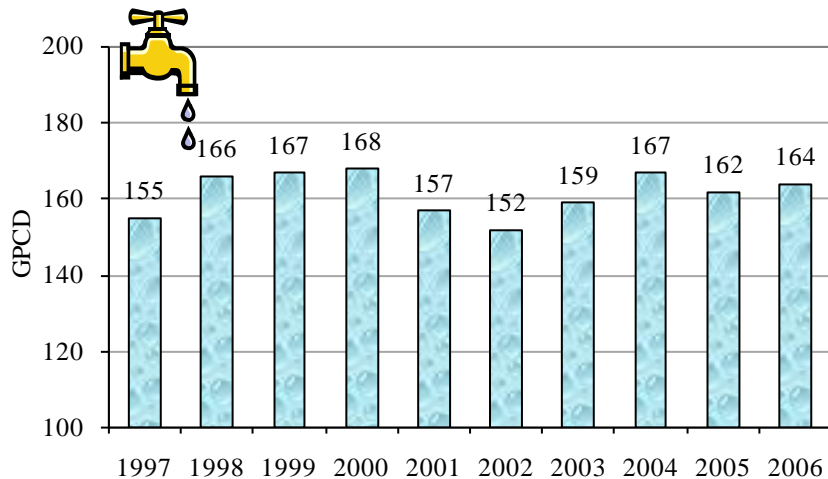


Figure 1-2. Gallons per capita per day water use in SJRWMD

WSI(c) Within each water supply planning region: (1) the estimated amount of water supply to be made available through the water resource development component of the regional water supply plan; (2) percent of estimated amount under development; and (3) percent of estimated amount actually made available

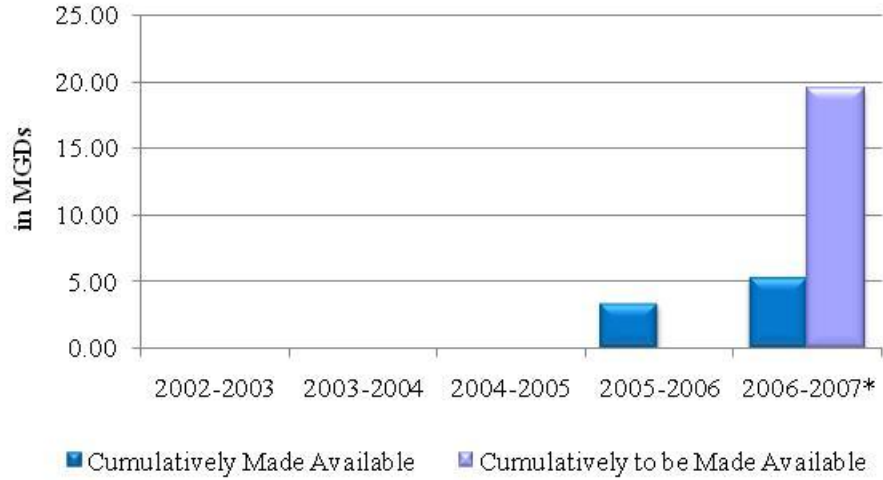
Total water demands are projected to increase by approximately 300 mgd from 2000 to 2025 according to the District Water Supply Assessment 2003. Much of the additional water supply needed to meet this demand is expected to come from alternative water supply sources and from water management strategies. The District Water Supply Plan (DWSP) 2005 has identified 16 water resource development projects (WRD) that are intended to facilitate the development of alternative water supply sources and water management strategies.

All 16 WRD projects described in the DWSP 2005 and the District's 2007 Water Resource Development Work Program (WRDWP) have been initiated and several studies, plans and construction projects have been completed. As identified in the WRDWP, completed work includes: Adaptive Management, Central Florida Aquifer Recharge Enhancement Phases (CFARE) I and II, Identification of Areas Where Domestic Wells Are Sensitive to Ground Water Withdrawals, and Surface Water Instream Monitoring and Treatability Studies. Several sub-projects within the Regional Aquifer Management Project (RAMP) and CFARE III are complete. Work on Aquifer Storage and Recovery (ASR) demonstration sites is in progress with many wells at or near completion of permitting. Work at the Wetland Augmentation Demonstration sites continues and the Lower Lake Louise Water Control Structure and WRD Components of Water Supply Development Projects are expected to begin in FY 2007-2008. Other projects generally require several years of additional data collection before implementation of facilities construction.

Estimates of the amount of water supply that can be made available over the life of the WRD projects are difficult and have a high degree of uncertainty. The projects in the 2007 WRDWP, in conjunction with development of alternative water supplies identified in the DWSP, have the potential to yield the additional 300 mgd needed by 2025 if all projects are developed. Some projects, such as monitoring, will not directly make additional water supply available but are essential for the overall program to be effective. Others, such as demineralization concentrate management and seawater demineralization, will determine the feasibility of making additional water supply available with specific technologies in specific locations. All projects having the potential to make additional water supply available are not expected to be implemented. In addition, full implementation of some of the projects will depend on implementation of water supply development projects by water supply utilities. Finally, approximately 100 wells are plugged each year under the District's Abandoned Artesian Well Plugging Program but only a small portion of the water conserved by well plugging can be considered to be made available for water supply because the amount of water made available cannot be reasonably estimated and there are undetermined quality and location issues.

Approximately 0.8 mgd (annual average) of additional water became available from the City of Deland Bent Oaks Project in Volusia County during FY 2006-2007. This brings the total amount of water from RAMP projects to 4.11 mgd or about 40 % of the expected 10 mgd. Additionally, the City of Orlando drainage well project and City of Apopka storage pond/RIB projects were

completed in FY 2006-2007 and provide approximately 1.13 mgd of wet weather recharge or 47% of the recharge expected from contracted CFARE projects. Figure 1-3 below shows total amount of water cumulatively made available and to be made available through the District's WRD program since FY 2002-2003.



* Total planned for FY 2006-2007 includes RAMP, CFARE III, and Lower Lake Louise projects

Figure 1-3. Water made and to be made available since FY 2002-2003

WS1(d) Within each water supply planning region, the estimated additional quantities of water supply made available through District water supply development assistance

The District's Alternative Water Supply Construction Cost-Sharing Program provides funding to assist water suppliers and users in constructing or modifying their facilities to make alternative water supplies available. Since 1996, the District has awarded \$7.56 million to 134 projects and \$5.8 million of those District funds have been paid out towards 105 projects. In addition, \$14.79 million in federal funds has been provided through SJRWMD from 1998 through 2006 for water supply construction projects.

Table 1-2 below shows the additional quantities of water supply that have been or are being developed by projects funded under the Alternative Water Supply Construction Cost-Sharing Program since FY 1999-2000. The 29.44 million gallon per day (mgd) water already made available accounts for 9.8% of the additional 300 mgd of water supply needed to meet the projected increase in demand from 2000 to 2025. When the remaining projects are completed, the amount of water made available by these projects will account for 11.0% of the additional 300 mgd of water supply needed to meet the projected increase in demand from 2000 to 2025.

The Alternative Water Supply Construction Cost-Sharing Program was replaced by the Water Protection and Sustainability Program during FY 2005-2006, which was created under Section 403.890, F.S. Therefore, progress made on this measure after FY 2005-2006 has been reported in the Water Resource Development Work Plan and Alternative Water Supply Annual Report within the Consolidated Annual Report.

Table 1-2. Water made and to be made available since FY 1999-2000 (mgd)

Fiscal Year	Total Planned	Made Available	To be Made Available	Cumulatively Made Available	Cumulatively to be Made Available
1999-2000	2.395	2.395	0.000	2.395	0.000
2000-2001	2.327	2.327	0.000	4.722	0.000
2001-2002	9.819	9.819	0.000	14.541	0.000
2002-2003	7.103	2.865	0.00	17.406	0.00
2003-2004	5.147	2.286	1.062	19.692	1.062
2004-2005	16.461	9.748	2.500	29.440	3.562
Total	43.252	29.440	3.562		

WS2(a) Percentage of surface water supply sources for which water quality fully attains the designated use

The purpose of this performance measure is to indicate whether or not the surface water supply sources in SJRWMD attain their designated uses. Of 7,200 public drinking-water systems in Florida, only 19 obtain their water from surface water. Two of these are in SJRWMD and withdraw water from Lake Washington and Taylor Creek. Based on the 2007 Integrated Water Quality Assessment for Florida, 305(d) List both water sources meet their designated use.

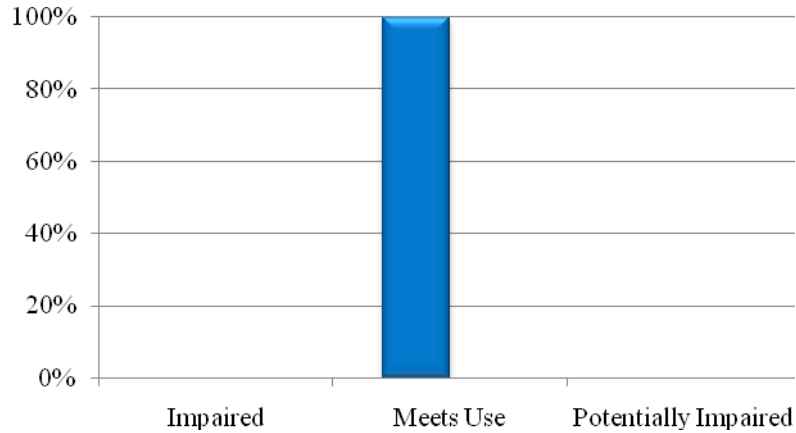


Figure 1-4. Percentage of surface water sources meeting designated uses

FLOOD PROTECTION MEASURES

FPI(a) Percentage of District works maintained on schedule

The District operates and maintains 11 major and 92 minor water control structures (Works), which includes 18-pump stations, three (3) navigational locks, 207 miles of levees, and 63 miles of canals. The 11 major Works function primarily as flood protection and are located in the Upper St. Johns River Basin (USJRB), the Ocklawaha River Basin (ORB), a component of the Four Rivers Basin Project, and the Lake Apopka North Shore Restoration Area (NSRA). During FY 2006-2007, 100% of the major Works were maintained on schedule (see Table 1-3). Maintenance of District Works in the USJRB Project (e.g., weirs and spillways) and the Ocklawaha River Basin Project (e.g., locks, dams, and spillways at Apopka-Beauclair, Burrell and Moss Bluff) adheres to schedules outlined in the SJRWMD Five-Year Infrastructure Management, Operations and Maintenance (IMO&M) Plan. The IMO&M Plan schedules are based on the United States Army Corps of Engineers' Federal Master Water Control Manual (Annual Inspection Program) and SJRWMD Master Stormwater Management Plan. District Works in the Lake Apopka North Shore Restoration Area and the Lake Griffin Flowway (e.g., marsh, levees, screw gates and pump stations) are maintained adhering to schedules outlined in the IMO&M Plan.

Table 1-3. Percentage of District major works maintained on schedule

Fiscal Year	USJRB	ORB	NSRA	Districtwide
1998-1999	100%	100%	100%	100%
1999-2000	100%	100%	100%	100%
2000-2001	100%	100%	100%	100%
2001-2002	100%	100%	100%	100%
2002-2003	100%	100%	100%	100%
2003-2004	100%	100%	100%	100%
2004-2005	100%	100%	100%	100%
2005-2006	100%	100%	100%	100%
2006-2007	100%	100%	100%	100%

FP2(a) Number of acres identified for acquisition to minimize damage from flooding and the percentage of those acres acquired

The District’s primary vehicle for identifying land for potential acquisition is its acquisition plan. Land in the 100-year floodplain identified for potential acquisition in the plan totaled 107,616 acres in 2007. During FY 2006-2007, the District purchased 11,136 acres of floodplains identified for acquisition, accounting for less than 1% of the total acres of floodplains identified for acquisition. Table 1-4 below shows the total acres of floodplains acquired by the District since FY 1999-2000.

Table 1-4. SJRWMD land acquisition in floodplains

Fiscal Year	Acres of Floodplains Acquired	Acres of Floodplains Identified for Acquisition	Floodplains Acquired as % of Total Identified
1999-2000	4,044	173,172	2%
2000-2002	28,885	144,428	20%
2001-2002	20,968	115,541	18%
2002-2003	8,280	124,561	7%
2003-2004	4,708	212,668	2%
2004-2005	11,587	257,941	4%
2005-2006	2,046	240,084	1%
2006-2007	11,136	107,515	1%

WATER QUALITY MEASURES

WQ1(a) Percentage of water bodies that attain or potentially do not attain their designated uses under the TMDL program

The purpose of this performance measure is to show whether or not the surface water bodies in SJRWMD attain their designated uses. Under Florida’s water quality protection programs, waters are classified for different uses (such as drinking water, shellfishing, and fish and wildlife maintenance). This performance measure shows whether or not the water quality needed to support the designated use is being attained in the SJRWMD. Data available from the 2007 Integrated Water Quality Assessment for Florida, 303(d) List update is presented below on the water quality in SJRWMD by water body type and. Figure 5-1 shows only 28% of estuaries, 41% of lakes, and 13% of streams meet their designated uses.

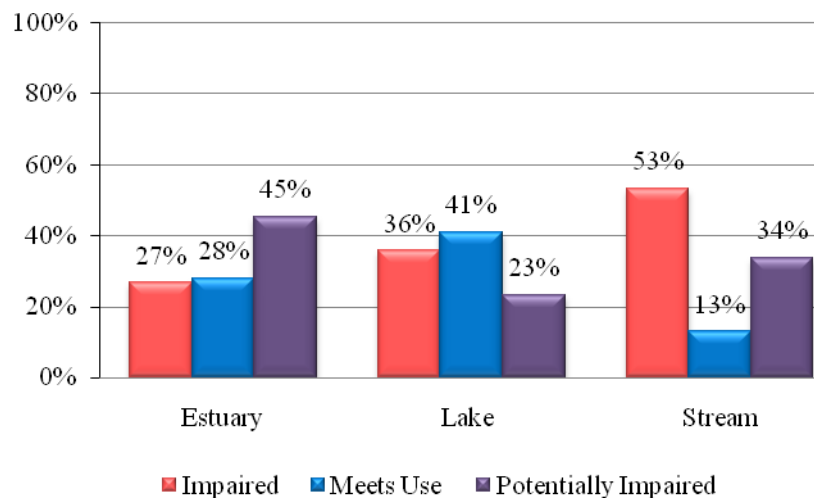


Figure 1-5. Percentage of water bodies that meet use, are impaired or are potentially impaired by water body type

WQ2(a) Improving, degrading, and stable trends in groundwater quality

Monitoring networks managed by the Division of Groundwater Programs provides the data needed to evaluate groundwater quality conditions in SJRWMD. The major focus of water quality monitoring is the Floridan aquifer system, which is the primary source of water for public supply and other uses in most areas of SJRWMD.

The Floridan aquifer monitoring network is based on an analysis of the spatial and temporal variability of historical water quality data. The network consists of 311 monitoring wells that have increased well coverage and sampling frequency in areas with increasing water quality trends; in areas near the potable and nonpotable water interface; in areas of seawater intrusion along parts of the Atlantic coast; and in areas with projected water level drawdowns. Areas that have shown little or no variability in water quality over time have a reduced well coverage and sampling frequency.

Using the District’s evaluation criteria¹, 22 of the 240 (9.2%) Upper Floridan aquifer monitoring wells showed an increasing trend in chloride concentration; 13 of 212 (6.1%) wells showed an increasing trend in sulfate concentration; and 30 of 211 (14.2%) wells showed an increasing trend in TDS concentration (see Table 1-5).

Table 1-5. Percentage of monitoring wells showing degrading trend

Year	Increasing Chloride	Increasing Sulfate	Increasing TDS
2004*	9.20%	6.10%	14.20%

* Including network wells only

To assure that proper and thorough statistical procedures are used in the future evaluation of groundwater data, current procedures are being reviewed and SPLUSTM scripts will be developed to implement a workflow methodology for statistical trend analysis. The development and use of the SPLUSTM scripts will be automated as much as possible, with batch processing capability.

Because of limited data reporting frequency and slow changes in groundwater quality, the District does not consider it is possible to detect and report changes in groundwater quality on an annual basis. The next update for this performance measure will likely be in 2008. Therefore, the data reported in this year’s report are the same as the last year.

¹ The Mann-Kendall test and Sen’s slope estimator were used to evaluate long-term trends of historical chloride, sulfate, and total dissolved solids (TDS) data collected through February, 2004. Only wells with at least eight analyses over a minimum of two years were used for the analysis of possible trends. For the chloride and sulfate data, wells with an increasing trend from the Mann-Kendall test and a Sen’s slope greater than 3.0 mg/L per year with a probability level of 80% or greater were identified. For TDS, an increasing trend with a slope greater than 10.0 mg/L per year was used to identify wells with a significantly increasing trend.

WQ2(b) Improving, degrading, and stable trends in nitrate concentrations in springs

Although there are 86 natural Floridan springs located within the District, there are only 17 springs for which the District has sufficient data for determining total nitrite and total nitrate concentration trends. In 2005, all 17 springs (100%) were either in stable (No change) or improving (Decreasing) conditions. This shows an improvement over the 2001 data that indicated only 79% of the springs were either in stable or improving conditions. The values in the Table 1-6 are for changes in total nitrate and nitrite concentrations. The District plans to perform new assessments in 2010 using data through 2009. Therefore, the data reported in this year's report are the same as the last year.

Table 1-6. Comparison of median NOX-T¹ changes in selected springs

Spring	Period of Record	1990-1994	1995-1999	2000-2005	Median Test 95-99 vs. 00-05
Alexander Springs	0.05	0.04	0.06	0.04	No change
Apopka Spring	4.41	4.42	4.94	4.51	Decreasing
Blue Spring - Volusia	0.37	0.17	0.40	0.55	No change
Bugg Spring Run	0.52	0.55	0.46	0.50	No change
Fern Hammock Springs	0.08	0.08	0.08	0.09	No change
Juniper Springs	0.08	0.08	0.08	0.08	No change
Miami Springs	0.16	0.08	0.16	0.17	No change
Palm Springs - Seminole	0.65	0.65	0.61	0.65	No change
Ponce de Leon Springs	0.92	0.81	0.96	1.00	No change
Rock Springs	1.50	1.52	1.50	1.50	No change
Salt Springs	0.10	0.09	0.10	0.10	No change
Sanlando Springs	0.52	0.65	0.51	0.52	No change
Silver Glen Springs	0.04	0.05	0.04	0.05	No change
Silver Springs	0.90	0.83	1.00	0.92	No change
Starbuck Spring	0.38	0.59	0.39	0.35	No change
Sweetwater Springs	0.04	0.04	0.04	0.04	No change
Wekiwa Springs	1.46	1.52	1.58	1.29	No change

¹ Total nitrate and nitrite

The method used to determine nitrate concentration trends in spring is briefly described herein. The total nitrite + nitrate values for each spring were grouped into three 5-year periods starting with 1990-1994. Data in the 2000-2005 period includes partial years for some springs. The other two comparison periods (1995-1999 and 2000-2005) were tested to determine if there is a statistically significant difference at the 95% Confidence Interval. The statistical test used is the nonparametric Median Test, which tests for a difference in the medians between sample populations. The populations may have missing values and unequal numbers of samples – as is the case for most of the spring datasets.

For information, another more direct way to present the total nitrite and nitrate concentration in individual springs for a specific period is shown in Figure 1-6. It shows that during the 2000-

2005 period, 25 springs, or 64% of total, had a total nitrate and nitrite value below the 0.20 mg/l threshold (the red line) and were considered to be in “good” condition. Although it is more direct and easy to understand, this figure does not show whether the nitrate concentration in these springs were stable, improving, or degrading over time.

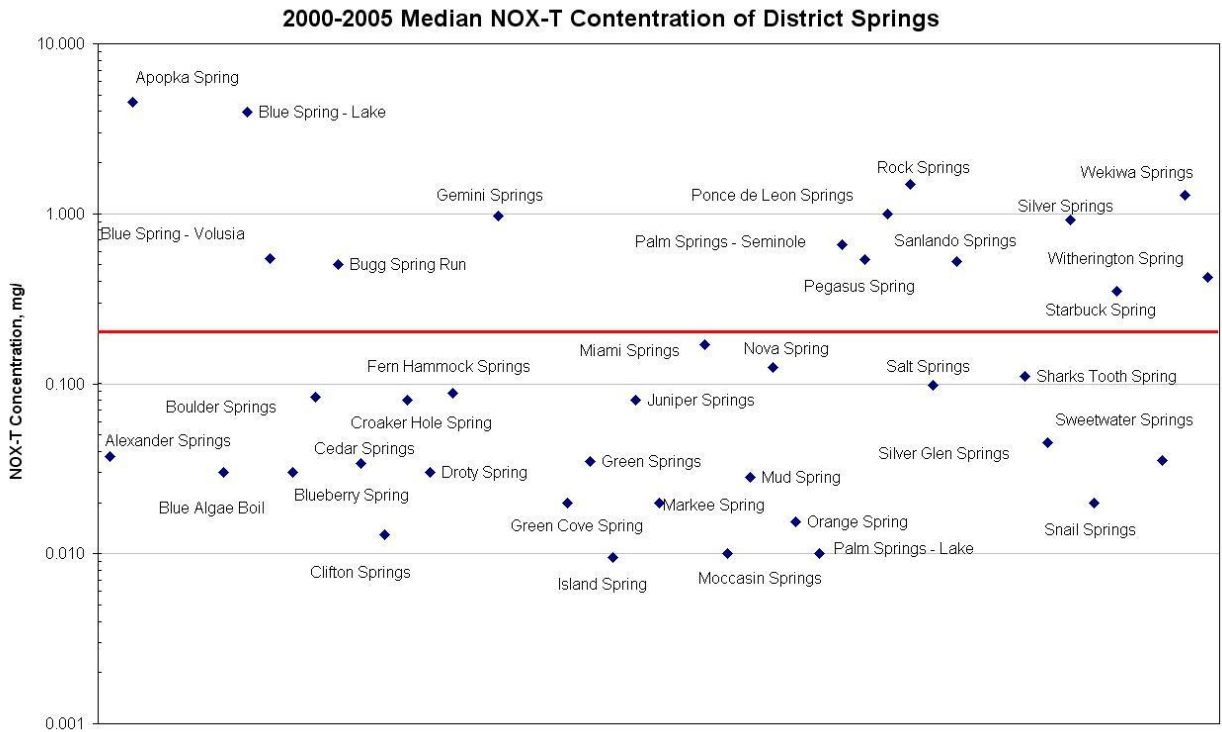


Figure 1-6. 2000-2005 median NOX-T concentration of selected springs

NATURAL SYSTEMS MEASURES

NSI(a) Number of MFLs, by water body type, established annually and cumulatively

In 2007, the District scheduled to establish MFLs for 18 systems, including three river reaches, five lakes, three springs, and five lake and two spring re-evaluations. The rule adoption process was initiated in 2006 for the St. Johns River at Lake Monroe and the St. Johns River at SR50, and final rule adoption was completed in 2007. Reevaluations were completed for Rock and Wekiwa Springs, as directed in the Wekiwa Parkway and Protection Act (Section 369.318(7), F.S.). After a detailed re-evaluation of the existing Rock and Wekiwa Springs MFLs using updated information and data now existing, staff determined that no additional rulemaking is needed at this time for those springs, because the existing MFLs are protective of the springs. Additionally, staff recommended that the existing ecological monitoring currently being conducted at Rock and Wekiwa Springs be expanded to ensure that the existing MFLs continue to be protective in the future. Finalization of the recommended MFLs for the remaining systems scheduled for 2007 was delayed due to completion of technical reports documenting the MFLs determinations. The reports were completed in December 2007 and the rule making process initiated in January 2008.

Table 1-7 and Figure 1-6 present the number of MFLs that have been adopted by rule since 2000.

Table 1-7. Number of MFLs established annually by water body type

Year	Lakes	Rivers	Wetlands	Springs	Re-evaluation	Total
2000	10	2	2		1	15
2001	4		1		1	6
2002	11				4	15
2003	4	1	1		1	7
2004	4		2			6
2005						0
2006				1	4	5
2007		2			2	4

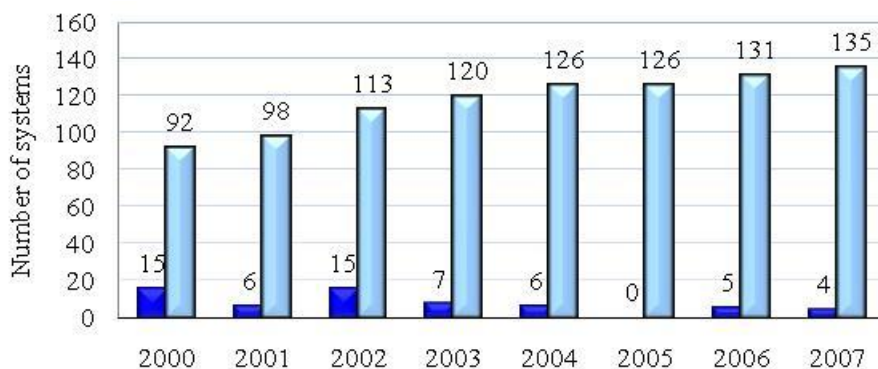


Figure 1-7. Number of MFLs established annually and cumulatively

NSI(b) Percentage of MFLs established in accordance with previous year's schedule

The District scheduled to establish 18 MFLs in 2007. However, only four systems were completed. Finalization of the recommended MFLs for the remaining systems scheduled for 2007 was delayed due to completion of technical reports documenting the MFLs determinations. The reports were completed in December 2007 and the rule making process initiated in January 2008. Figure 1-8 below shows the percentage of MFLs established on schedule by SJRWMD since 2000.

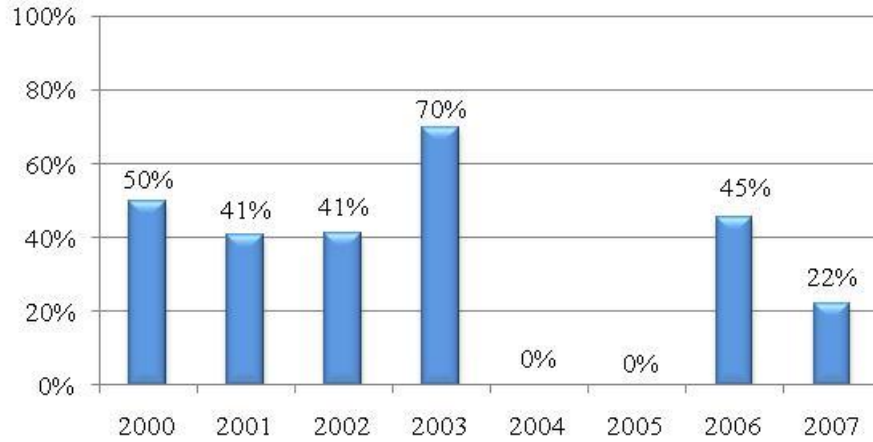


Figure 1-8. Percentage of MFLs Established on Schedule

NSI(c) For the previous fiscal year, the total acres of wetlands or other surface waters authorized by environmental resource permit to be impacted and acres required to be created, enhanced, restored and preserved

The District began issuing Environmental Resource Permits (ERPs) in October 1995. In accordance with District rules, a permit applicant may impact wetlands on site. However, the impact on wetlands is required to be mitigated through recreation, restoration, enhancement, and/or preservation of wetlands/uplands elsewhere. During FY 2006-2007, there were 1,952 acres of wetlands impacted by various projects that were permitted by ERPs. The total acres of created, restored, enhanced, and preserved wetlands and uplands were 8,857. Table 1-8 below provides detailed information on mitigation activities since FY 2000-2001.

Table 1-8. Wetlands impact permitted and mitigation required by ERP

Fiscal Year	Wetlands Impacted	Mitigation Type			Mitigation Total
		Wetlands Created/ Restored	Wetlands Enhanced	Uplands/ Wetlands Preserved	
2000-2001	1,191	481	2,110	9,712	12,302
2001-2002	1,538	411	1,909	12,355	14,675
2002-2003	1,281	275	725	10,653	11,653
2003-2004	1,844	330	1,038	17,336	18,704
2004-2005	1,619	190	897	11,457	12,544
2005-2006	2,282	430	1,596	15,499	17,525
2005-2006	1,952	101	1,476	7,280	8,857

NS2(a) Acres of invasive nonnative aquatic plants in inventoried public waters

Of the total 346,011 acres of water bodies surveyed by FDEP in 2006, 11,007 acres were found to have invasive, nonnative aquatic plants, or 3.2% of total water bodies within SJRWMD. A significant increase in the acres of invasive aquatic plants from 2004 to 2005 was due to both a significant increases in water lettuce (from 157 acres in 2004 to 3,474 acres in 2005) and hyacinth (from 48 acres in 2004 to 3,954 acres in 2005) in the St. Johns River. Figure 1-9 below shows the acres of invasive nonnative aquatic plants found in the water bodies within SJRWMD for the last nine years.

It should be noted that the number of nonnative aquatic plants surveyed by the FDEP has been increased in recent years. For the purposes of consistency and comparison over a long term, this report includes acres of hyacinth, water lettuce and hydrilla only.

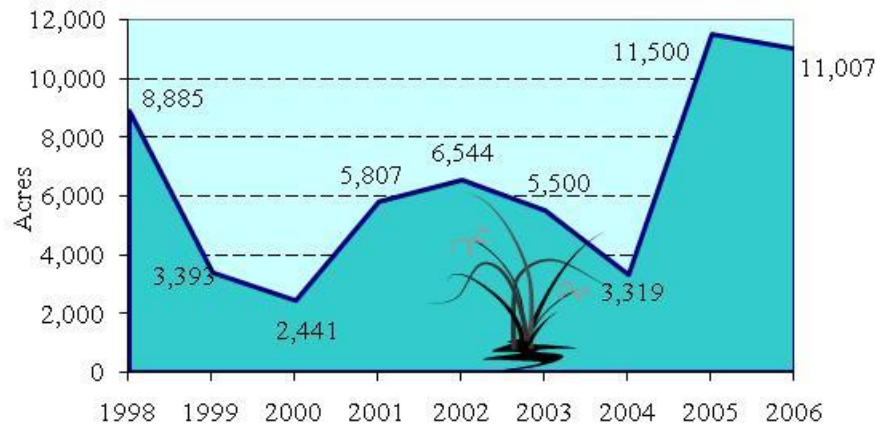


Figure 1-9. Acres of invasive, nonnative aquatic plants in the water bodies within SJRWMD

NS2(b) Acres of District-managed lands infested with invasive nonnative upland plants

During FY 2006-2007, the District found a total of 54,500 acres of land inventoried with invasive species, which accounted for 13% of all District managed lands. The acreages shown in Table 1-9 and the percentages shown in Figure 1-10 below represent properties where SJRWMD has responsibility for invasive plant management. The District also owns some properties for which the District is not the lead manager and these lands are not included in the estimate.

Table 1-9. Acres of District-managed lands with invasive species

Fiscal Year	Total acres	Inventoried with invasive species	Inventoried w/o invasive species	Not inventoried
1999-2000	380,915	6,317	246,713	127,885
2000-2001	348,299	28,880	231,903	87,516
2001-2002	398,826	60,907	280,707	57,212
2002-2003	398,826	57,449	294,391	46,986
2003-2004	398,826	50,919	311,113	36,794
2004-2005	401,926	51,039	321,093	29,794
2005-2006	403,221	54,150	334,033	15,038
2006-2007	407,506	54,500	337,801	15,205

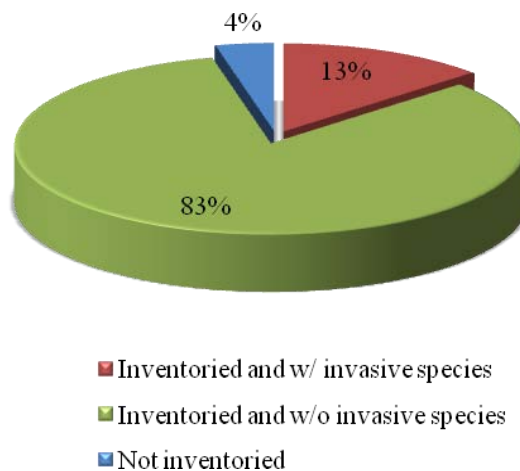


Figure 1-10. Percentage of District lands infested with invasive species

NS2(c) Acres of District-owned lands identified in land management plans as needing restoration; acres undergoing restoration; and acres with restoration activities completed

Each year, the Division of Land Management restores certain developed lands to their pre-development conditions based on land management plans approved by the Governing Board. The pace of restoration was less than 1,000 acres a year between 2001 and 2005 but accelerated to almost 3,000 acres during FY 2005-2006. As of September 2007, the District has identified a total of 42,716 acres of land needing restoration. Of the total, 22,079 acres, or 44% of the total acres needing restoration, have been restored. The remaining acreage of lands needing restoration or undergoing restoration is 18,555 and 2,082 acres, respectively (see Figure 1-11).

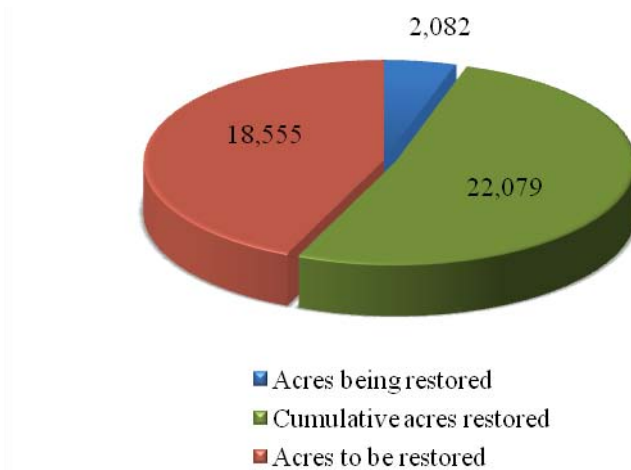


Figure 1-11. Restoration status of District-owned lands as of September 2007

COMMON MEASURES

CM(a) Acres of land acquired through fee simple, less than-fee-simple, respectively, on an annual and cumulative basis

During FY 2006-2007, the District acquired an additional 21,513 acres of land. However, a total of 3,931 acres of land were disposed through surplus, exchanges and title transfers. The net gain was 17,542 acres, resulting a cumulative total of 678,660 acres of land in District ownership. Table 1-10 and Figure 1-12 below show all acquisitions during the last 10 fiscal years. It should be noted that the District has revised the previous years' acreage numbers as a result of the use of a newly implemented land inventory database.

Table 1-10. District acquired land annually and cumulatively

Fiscal Year	Acres Acquired	Cumulative Total
1997-1998	36,900	462,482
1998-1999	33,497	495,979
1999-2000	18,161	514,140
2000-2001	57,397	571,537
2001-2002	32,638	604,175
2002-2003	20,760	624,935
2003-2004	3,549	628,484
2004-2005	30,560	659,044
2005-2006	2,074	661,118
2006-2007	17,542	678,660

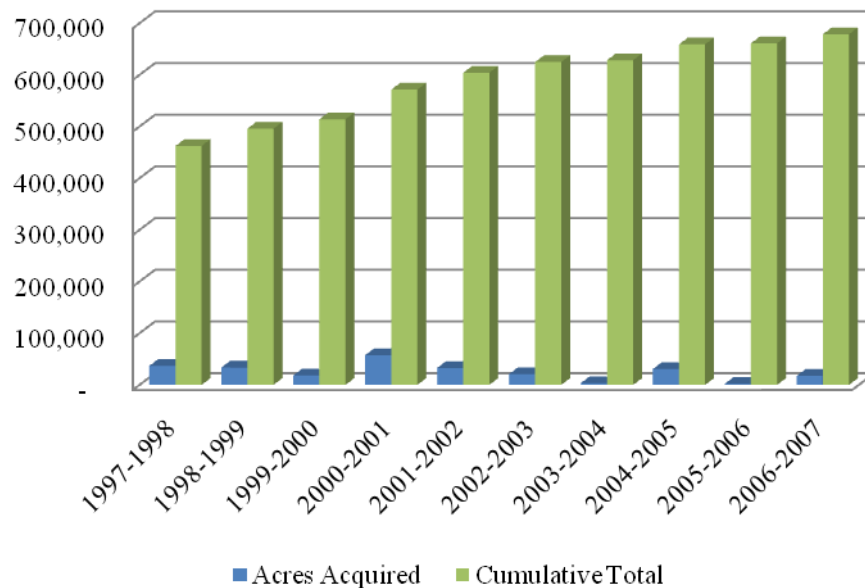


Figure 1-12. Acres of District acquired land annually and cumulatively

In addition to the fee-simple approach, the District has been acquiring approximately 7,000 acres of land annually using the Less-Than-Fee (LTF) approach since 1994. During FY 2006-2007, the District acquired 2,895 acres of land through LTF, resulting a cumulative total of 98,743 acres of land in the LTF ownership. Table 1-11 and Figure 1-13 below show a 10-year history of LTF acquisitions by fiscal year. It should be noted that the District has revised the previous years' acreage numbers as a result of the use of a newly implemented land inventory database

Table 1-11. District LTF acquisition annually and cumulatively

Fiscal Year	Acres Acquired	Cumulative Total*
1997-1998	6,896	36,046
1998-1999	11,294	47,340
1999-2000	4,017	51,357
2000-2001	3,752	55,109
2001-2002	11,720	66,829
2002-2003	5,415	72,244
2003-2004	7,625	79,869
2004-2005	15,404	95,273
2005-2006	575	95,848
2006-2007	2,895	98,743

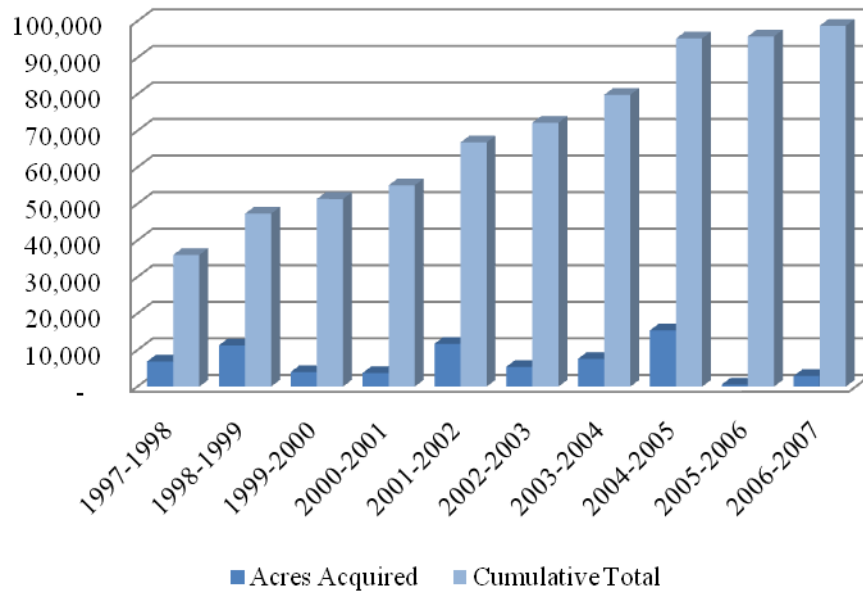


Figure 1-13. Acres of District LTF acquisition annually and cumulatively

CM(c) Number and percent of land management plan activities being implemented according to plan schedules

In FY 2006-2007, the District implemented 216 land management activities, or 90% of the total 254 land management activities planned for that fiscal year. Table 1-12 below presents historical information on land management activities implementation over the last nine years. Typical District land management activities include prescribed burns, tree planting, invasive plants management, etc. All land management activities are conducted in a land management area and include both planning and implementation phases. The implementation of land management activities is heavily influenced by local weather conditions.

Table 1-12. Land management activity implementation

Fiscal Year	Activities Planned	Activities Implemented	% Activities on Schedule
1998-1999	181	173	96%
1999-2000	141	139	99%
2000-2001	93	93	100%
2001-2002	177	159	90%
2002-2003	140	115	82%
2003-2004	211	185	88%
2004-2005	261	231	89%
2005-2006	254	220	87%
2006-2007	241	216	90%