2017 Consolidated Annual Report

March 1, 2017

Strategic Plan Annual Work Plan Report

Minimum Flows and Levels Annual Priority List and Schedule

Five-Year Capital Improvements Plan

Water Resource Development Work Program

Alternative Water Supplies Annual Report

Florida Forever Work Plan Annual Report

Mitigation Donation Annual Report

Water Quality and Water Quantity Grading Report

St. Johns River
Water Management District

EXECUTIVE SUMMARY

The St. Johns River Water Management District's (District's) 2017 Consolidated Annual Report is a compilation of several plans and reports as established by House Bill 727 in the 2005 Florida legislative session and codified in Section 373.036(7), *Florida Statutes* (F.S.).

The Consolidated Annual Report is submitted to the Florida Department of Environmental Protection (DEP), Florida's Governor, the President of the Florida Senate, and the Speaker of the Florida House of Representatives annually by March.

This annual report consists of these plans and reports in the following order:

1. Strategic Plan Annual Work Plan Report (s. 373.036(7)(b)1)
2. Minimum Flows and Levels Annual Priority List and Schedule (s. 373.042(2))
3. Five-Year Capital Improvements Plan (s. 373.536(6)(a)3)
4. Water Resource Development Work Program (s. 373.536(6)(a)4); (s. 373.036(7)(b)8)
5. Alternative Water Supplies Annual Report (s. 373.1961(3)(n)
6. Florida Forever Work Plan Annual Report (s. 373.199(7))
7. Mitigation Donation Annual Report (s. 373.414(1)(b)2)
8. Water Quality and Water Quantity Grading Report (s. 373.036(7)(b)9)

Strategic Plan Annual Work Plan Report
Fiscal Year 2015–2016

1. STRATEGIC PLAN ANNUAL WORK PLAN

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I. Executive Summary

In March 2016 the St. Johns River Water Management District (District) Governing Board adopted *Strategic Plan—Fiscal Year (FY) 2015-2016 through FY 2019-2020* (Strategic Plan) in place of the District Water Management Plan, an option outlined in Section 373.036(2)(e), *Florida Statutes* (F.S.). The Strategic Plan Annual Work Plan Report replaces the District Water Management District Plan Annual Report that is a required element of the annual Consolidated Annual Report.

In accordance with Section 373.036(2)(e)4, F.S., the subsequent pages describe implementation of the Strategic Plan for the previous fiscal year, addressing success indicators and milestones/deliverables. Differing from previous years, the District placed a larger emphasis on the core missions of the District as opposed to initiatives, in an effort to provide employees of the District with a more concise and efficient strategy for success. This year's strategic plan moved forward without relying on the initiatives and continuing core programs, but instead it highlighted four goals and five strategic priorities. These priorities include the core mission areas as well as a dedicated section for the District's successful cost-share partnership program.

The Strategic Plan identified multiple strategies and success Indicators. Success Indicators measure the overall success of the related Strategic Priority from a programmatic perspective. All indicators have an appropriate measure, though not all indicators have been met.

The Goals, Strategic Priorities, Strategies, Success Indicators and Milestones/Deliverables for FY 2015–2016 are identified on the following pages. The progress for each Milestone/Deliverable is also provided.

II. Water Supply

Regional Water Supply Plans: Since 2015, the District established three water supply planning regions, as opposed to the previous model that included five. Water Supply Plans will be updated as needed – at a minimum of once every five years. These plans identify future water supply needs for at least a 20-year planning horizon, as well as the programs and projects to ensure each region has sustainable supplies. Each plan is approved by the Governing Board and is subject to multiple public hearings.

In FY 2015-2016, the District implemented the Central Florida Water Initiative (CFWI) in coordination with the South West Florida Water Management District (SWFWMD) and the South Florida Water Management District (SFWMD). This effort became the first of three new regional water supply plans that are meant to properly execute an efficient plan to deal with future water supply challenges. The CFWI region is made up of portions of Polk, Osceola, Orange, and Seminole counties, and provides goals and methods to ensure the Orlando metropolitan area and the surrounding area is able to support the growing population by 2035. During the 2016 legislative session, the CFWI was codified by Senate Bill 552, and subsequently signed by Governor Rick Scott.

The North Florida Regional Water Supply Plan (NFRWSP) is a collaborative plan developed by both the District and the Suwannee River Water Management District (SRWMD) to ensure water supply needs will be met by 2036. The planning region is represented by eight counties: Nassau, Duval, Baker, Clay, St. Johns, Putnam, Alachua, and Flagler. This plan utilizes the newly developed North Florida-Southeast Georgia (NFSEG) regional groundwater flow model, which will enable both Districts to have the most advanced modeling data and analysis to support future decision-making. Throughout 2016, the District, in coordination with the SRWMD, hosted 17 meetings that were open to the public to ensure stakeholders were given the opportunity to provide each District with feedback regarding the plan. The NFRWSP was submitted and approved during a joint Suwannee and St. Johns Governing Board meeting on January 10, 2017.

The District is currently drafting stages its final water supply plan, for the Central Springs and East Coast (CSEC), which will cover all other counties not being serviced by the above mentioned plans. The draft of the plan is expected to be completed in FY 2016-2017.

Water Conservation: The District is always working with stakeholders and partners to find new and innovative ways conserve water. Efforts include the District implemented multiple outreach efforts during FY 2015-2016. These efforts included sending District staff to discuss water conservation to 20 schools within the District, reaching 5,083 students, as well as 19 other public events, which reached 15,332 individuals.

The District is also offering training and certification for the Florida Water Star program throughout the state, with the assistance of SFWMD, SWFWMD and the Florida Green Building Coalition. This program, developed by the SJRWMD and launched in 2007, certifies builders and real estate properties in an effort to promote water conservation strategies. In 2016, the FWS program exceeded 2,000 homes statewide in the residential certification category and over 2,000 apartments and townhomes.

FWS offers stakeholders the opportunity for developers to receive a rebate funded by the cooperative funding program. A recent study evaluating the program's performance compared to other new homes indicated an indoor water savings of approximately 6.6% and outdoor savings of approximately 39 – 47%.

FWS outreach efforts in 2016 included 14 public events. The District also participated in five FWS training programs for FWS Accredited Professional (AP). These events had 144 participants in attendance. Furthermore, Alachua County, in coordination with District staff, enacted a new landscape ordinance that allows FWS AP's to self-inspect their projects, so the program included three workshops in Gainesville this past year. The ordinance uses FWS landscape irrigation criteria and should result in an increase in FWS certifications in the county in the future.

Minimum Flows and Minimum Levels: In accordance with Section 373.042(2), *Florida Statutes* (F.S.), water managers are tasked with protecting water resources from significant harm due to water withdrawals. To combat withdrawals, Water Management Districts establish necessary and sufficient minimum flows and levels (MFLs), as well as re-evaluate current MFLs as needed, and collaboratively develop technically, environmentally and economically feasible strategies to ensure at-risk water bodies achieve their MFLs. If a proposed or re-evaluated MFL is not being met, or is expected to not be met within 20 years, a prevention or recovery strategy (PRS) is developed and approved concurrent with the MFLs. The PRS includes an implementation schedule and options to address withdrawal-related impacts to the water resource.

Throughout the year, the District completed two draft MFLs Determination Reports: *Minimum Levels Reevaluation for Cowpen Lake in Putnam County*; and *Determination of Minimum Flows for De Leon Springs in Volusia County*. The District's 2015 MFLs Priority List and Schedule included these two systems for completion in calendar year 2016. Cowpen Lake and De Leon Springs MFLs are currently being met and are expected to be met over the next 20 years, and no PRS was needed. During FY 2015-2016, the District also adopted MFLs for two priority water bodies: Lake Kerr in Marion County; and Lake Tarhoe in Putnam County. Both MFLs became effective on January 31, 2016.

the District proposed a 2016 Minimum Flows and Levels (MFLs) Priority List and Schedule for establishing MFLs during the planning period 2017–2020. The District submits a proposed list to DEP for review and approval each year. The list was approved on November 8, 2015. The 2016 priority list is based on the importance of the waters to the state or region and the existence of potential for significant harm to the water resources or ecology of the state or region.

Water Supply Success Indicators

Success Indicator (Water Supply):

1. Progress toward meeting future water demands in each of the three water supply planning regions

Target: Implementation of Regional Water Supply Plans and MFL P/Rs
Measure: Draft Regional Water Supply Plans and Strategies completed

Target: Continued development and implementation of projects in partnership with water users
Measure: Number of projects Water made available (million gallons per day [mgd])

1. Progress toward meeting future water demands in each of the three water supply planning regions:
   The District has successfully implemented the Central Florida Water Initiative in coordination with the SWFWMD and SFWMD. The District, as well as SRWMD provided the public with 17 opportunities throughout 2016 to submit feedback regarding the draft of the NFRWSP. The CSEC is in the drafting stages and will be open to public comment by FY 2016-2017.

   The District submits a yearly Water Resource Development Work Plan (WRDWP). This document lists all of the water resource projects that are ongoing and appropriated for the next five years. Currently, there are 21 projects that have been completed by 9/30/16, and they have been listed in the report. The total estimated water made available in accordance with the projects list in the WRDWP is 25.49 MGD.

Success Indicator (Water Conservation):

1. Implement water conservation strategies to improve water use efficiencies

Target: Public water supply — Decrease in residential per capita water usage
Measure: Annual residential water usage per capita

Target: Agricultural water supply — Increase in percentage of agricultural acres utilizing efficient irrigation methods
Measure: Percent change in acres due to change in irrigation method

1. Implement water conservation strategies to improve water use efficiencies:
   The District, in partnership with local stakeholders, was able to reduce the annual residential per capita water use from 103 gallons per capita daily (gpcd) in 2010 to 93 gpcd in 2015. The District continues to work with the agricultural community to increase the utilization of efficient irrigation methods. Over the past year, the District has funded projects to increase irrigation efficiency for approximately 5,320 agricultural acres.

Success Indicator (MFLs):

1. MFLs setting and re-evaluation
   Target: Protect water resources from significant harm due to water withdrawals by establishing necessary and sufficient MFLs and re-evaluating existing MFLs as needed
   Measure: Percentage of annual Priority List and Schedule milestones met on schedule

2. Implement recovery and Prevention
   Target: Recover or prevent significant harm to water resources due to water withdrawals.
   Measure: Completion of PRS concurrently with the adoption of new or re-evaluated MFLs if needed.

1. MFLs setting and re-evaluation:
   The District has met 100% of it's annual priority list for FY 2015-2016.

2. Implement recovery and Prevention:
   Due to the current levels of MFL water bodies in the District, there was no need to implement a recovery or prevention in FY 2015-2016.

III. Water Quality

St. Johns River: The District has made considerable progress enhancing the St. Johns River and it's supporting waterbodies, such as the completion of the Upper St Johns River Basin project. Below is a breakdown of the activities and progress made in FY 2015-2016:

Lake Apopka North Shore Management:

Since the purchase of the Lake Apopka North Shore (LANS) in the 1990s, the District converted former agricultural lands into a large scale flow-system that minimizes phosphorus discharges to Lake Apopka. The flow-way was developed in coordination with the US Fish and Wildlife Service after years of research. The land was completely repatriated in FY 2012-2013, and the District continues to monitor the progress and develop new strategies to produce a natural and diverse ecological system, such as the planting of mixed-marsh vegetation to stimulate the growth of the bird population. Other improvements during FY 2015-2016 include the upgrade of the Duda alum system. These upgrades included ordering of a new electric pump, an upgraded alum dosing system, and a new weir on the West Pond. All of which will be installed by FY 2016-2017. Most discharges from the LANS received alum treatment to prevent phosphorus from being discharged. Since January 2015, total phosphorus discharges from the LANS were only about 10% of the TMDL load allocation.

In Water-Body Restoration:

Lake Apopka and Lake George Rough Fish Harvest: In the past year the District has harvested approximately 890,000 lbs. of gizzard shad from Lake Apopka and 854,000 lbs. from Lake George, reducing phosphorous by 7,120 lbs and 6,832 lbs, respectfully.

Flow-way projects: Throughout 2016, mass removal for the Lake Apopka Marsh Flow-Way was 24,716 kg total nitrogen, -884 kg total phosphorus, and 1,763,229 kg total suspended solids.

Invasive exotic plant control: During FY 2015-2016, under an FWC contract, the District treated 47.1 acres of hydrilla in Lake Apopka and 37.5 acres of hydrilla at Emeralda Marsh Conservation Area/ Lake Griffin. Additionally, 4 acres of hydrilla were treated within the LANS and 159.75 acres of hydrilla were treated within Harris Bayou.

Floodplain Enhancement / Management:

The Bureau of Land Management conducted habitat management activities at all basin restoration areas, including prescribed burns, herbicide treatments of exotic and invasive vegetation species, and vegetation plantings.

Upon receiving funding by Florida Fish and Wildlife, the District was able to complete the first phase of reconnection of Emeralda Marsh Area 3 to Lake Griffin. The District will begin the phase two reconnection during FY 2016-2017. The District also began the removal of a large floating vegetation

mat in Area 3, which was mainly cattails that limited navigation within the Lake. The mat will be completely removed by spring 2017.

At Harris Bayou, plans to conduct an alum treatment were discontinued due to the continued improvements in phosphorus concentrations and expected future phosphorus discharges into Lake Griffin.

Water levels at Sunnyhill and Ocklawaha Prairie restoration areas were managed passively, with no active discharges during FY 2015-2016. At Sunnyhill, scientists began an evaluation of the potential flood impacts of increasing water levels and flows for habitat enhancement.

Coastal Waters: Coastal waters, such as the Indian River Lagoon (IRL), have become increasingly more fragile due to sea level rise and fresh water discharges from the St Johns River. In an effort to reduce freshwater discharges to the IRL the District has initiated two pilot projects. These projects will reduce nutrient loads from both urban and agricultural stormwater and have been approved to be on private property. The District anticipates reductions from the two projects to be approximately 21 MGD water and 3.6 metric tons of phosphorus. Permitting and construction is planned for FY 2016-2017 and FY 2017-2018. The District has also initiated two pilot programs within the IRL drainage area that evaluates and offers residents the opportunity to reconnect their private septic systems for newer dispersed water storage and treatment systems.

The completion of the C-1 canal rediversion project is helping to redirect the flow of fresh waters due to storm events to the St. Johns River, as opposed to the IRL. Phase 1 of the C-1 project is fully complete and the District is currently finishing bank stabilization on the canal, with Phase 2 set to begin in FY 2016-2017.

Springs/Aquifer: The District is committed to protecting Florida's springs. In 2016, the Legislature committed $50 million in springs protection, which will likely lead to new partnerships with regional stakeholders. As the District moves forward, scientists are continuing to conduct investigations and studies on the springs within six technical working groups. The District will also conduct experimental research and data collection, coordinate efforts and expand the University of Florida (UF) and District collaboration on work plans; and complete the second full year of the existing 3-year integrated work plan.

In an effort to find solutions while reducing the burden upon taxpayers, the District has utilized it's cost Share program to fund 25 projects in support of springs protection. The Legislature was instrumental in providing additional funding for 11 of these projects.

Additionally, the District's Bureau of Real Estate Services coordinated the purchase of approximately 5500 acres, in partnership with DEP and the Conservation Trust for Florida, to connect the District owned portions of Silver Springs with the rest of the Conservation Area property. This acquisition will preserve the area from development, and will result in surface-water quality and flow improvements by restoring and enhancing the hydrology of springs. More importantly, however, is the land will provide a supplementing recharge to the Upper Floridan Aquifer (UFA) through existing features and a passive recharge well.

Water Quality Success Indicators

Success Indicator (St. Johns River):

1. Watershed Load Reduction
   Target: Progress toward TMDL/PLRG targets
   Measure: Reduced nutrient loading to Surface Water Improvement and Management (SWIM) waterbodies

2. In-Water Body Restoration
   Target: Improved water quality
   Measure: Improved nutrient concentration and water transparency, fewer algal blooms, increased submerged aquatic vegetation (SAV)

3. Floodplain Enhancement
   Target: Improve floodplain wetland functions related to water quality
   Measure: Number of acres of functional floodplain restored

1. Watershed Load Reduction:

Upper Ocklawaha Lakes

Nutrient loading estimates are made on a calendar-year basis. For 2015, estimated total phosphorus loading was below the TMDL (total maximum daily load) target for the lakes affected by major District restoration projects, including Apopka, Beauclair, Dora, Eustis, and Griffin. The TMDL loading targets have been met for at least the last 5 years for these lakes. For 2015:

- Lake Apopka estimated total phosphorus loading was 10,175 kg, below the TMDL target of 15,900 kg
- Lake Beauclair estimated total phosphorus loading was 1,062 kg, below the TMDL target of 3,200 kg
- Lake Dora estimated total phosphorus loading was 2,394 kg, below the TMDL target of 6,000 kg
- Lake Harris estimated total phosphorus loading was 10,095 kg, above the TMDL target of 8,300 kg
- Lake Eustis estimated total phosphorus loading was 6,909 kg, below the TMDL target of 9,200 kg
- Lake Griffin estimated total phosphorus loading was 11,187 kg, below the TMDL target of 12,200 kg
- Lake Yale estimated total phosphorus loading was 1,751 kg, above the TMDL target of 1,290 kg
- Lake Weir estimated total phosphorus loading was 1,245 kg, above the District's PLRG target of 1,230 kg

2. In Water-Body Restoration:

Upper Ocklawaha Lakes

Water quality improved throughout 2015-2016 in several of the basin lakes, in some cases meeting (Harris, Eustis, Griffin) or approaching (Apopka, Dora, Yale) the TMDL total phosphorus concentration targets. Chlorophyll-*a* (a measure of the amount of algae) also improved in 2015-16 in several basin lakes.

The phosphorus concentration data below shows the concentration target set by the District and approved by DEP. The data also shows the average phosphorous concentrations throughout calendar year 2015, as well as data from January 2016 to September 2016:

- Lake Apopka TMDL concentration target 55 ppb; 2015 average 122 ppb; 2016 average 63 ppb
- Lake Beauclair TMDL concentration target 32 ppb; 2015 average 62 ppb; 2016 average 44 ppb
- Lake Dora TMDL concentration target 31 ppb; 2015 average 45 ppb; 2016 average 35 ppb
- Lake Harris TMDL concentration target 26 ppb; 2015 average 28 ppb; 2016 average 23 ppb
- Lake Eustis TMDL concentration target 25 ppb; 2015 average 23 ppb; 2016 average 24 ppb
- Lake Griffin TMDL concentration target 32 ppb; 2015 average 34 ppb; 2016 average 31 ppb
- Lake Yale TMDL concentration target 20 ppb; 2015 average 41 ppb; 2016 average 28 ppb
- Lake Weir PLRG concentration target 14 ppb; 2015 average 15 ppb; 2016 average 24 ppb

Chlorophyll-*a*, averages for calendar year 2015, as well as data from January 2016 to September 2016:

- Lake Apopka 2015 average 58 ppb; 2016 average 48 ppb
- Lake Beauclair 2015 average 88 ppb; 2016 average 31 ppb
- Lake Dora 2015 average 56 ppb; 2016 average 24 ppb
- Lake Harris 2015 average 19 ppb; 2016 average 17 ppb
- Lake Eustis 2015 average 14 ppb; 2016 average 13 ppb
- Lake Griffin 2015 average 20 ppb; 2016 average 24 ppb
- Lake Yale 2015 average 21 ppb; 2016 average 19 ppb
- Lake Weir 2015 average 11 ppb; 2016 average 21 ppb

For Lake Apopka, submerged aquatic vegetation (SAV) survey data for 2014-15 were processed and finalized during 2015-16. A total of 48.36 acres of SAV were projected on Lake Apopka from this survey. This represented a 37 % increase in SAV over the previous year's data. During 2015-16, new random transects were established and surveyed. The data from that survey are currently being processed and analyzed. New SAV projections will be complete in January 2017.

3. Floodplain Enhancement:
   A total of 14, 614 acres, on the Lake Apopka North Shore (LANS) have been flooded as functional wetlands since 2013. During 2015-16, the District began active management of the wetlands on 3,000 acres of the former Duda property to create a diversity of wetland habitats, rather than large expanses of emergent marsh. Concurrence was received during 2015-16 from USFWS that will allow active management of wetlands on 1,200 acres in Phase One on the LANS.
   There were no changes in total acreages of restored functional floodplains at Emeralda Marsh Conservation Area, Harris Bayou, Sunnyhill, or Ocklawaha Prairie during FY 2015-16. Land management activities were conducted to enhance habitats at all restoration areas, including prescribed burns, herbicide treatments of exotic and invasive vegetation species, and vegetation plantings.

Success Indicator (Coastal Waters):

1. Reduce nutrient loads from watersheds
   Target: Initiate dispersed water and cost-share projects
   Measure: Reductions in nitrogen and phosphorus loads

2. Rehabilitate natural processes in water bodies
   Target: Successful implementation of grants from the National Oceanic and Atmospheric Administration
   Measure: Acres restored and percent of planned projects completed

3. Enhance links to coastal wetlands
   Target: Wetlands connected to coastal waters
   Measure: Number and size of reconnected wetlands

1. Reduce nutrient loads from watersheds:
   The District has initiated two dispersed water projects in the IRL drainage area to evaluate the use of private property for water storage and treatment.

2. Rehabilitate natural processes in water bodies:
   The District has used NOAA funds for three projects. Two of these projects have been completed to restore natural wetlands, which are the North Peninsula State Park in Volusia County and the IRL Preserve State Park in Brevard county; these projects have restored 10 and 6 acres of wetlands, respectively. A third project, intended to restore wetlands susceptible to subsidence is currently underway and is expected to be completed in FY 2016-2017. 75% of NOAA projects are completed.

3. Enhance links to coastal wetlands:
   The District has provided funding to the Water Tower impoundment in Indian River County, which has connected and or enhanced 106 acres of wetlands.

Success Indicator (Springs/Aquifer):

1. Applied Science: Achieve sufficient scientific understanding to direct cost-effective, long-term solutions for restoration of springs

Target: Complete science work plan within budget on schedule and identify strategic management actions

Measure: Percent of CRISPS budget expended
Number of strategic management actions identified

2. Actively improve water quality and quantity in major springs via leveraging of District financial resources

Target: Continued, aggressive cost-share project implementation in partnership with local governments and utilities

Measure: Number of projects
Money invested (District and collectively)
Nitrogen load reduction achieved
Groundwater offset/increase achieved

3. Preservation/Conservation and Land Acquisition

Target: Acquire full- or partial-fee interest in parcels strategic to springs restoration

Measure: Acres of land preserved or restored

1. Achieve sufficient scientific understanding to direct cost-effective, long-term solutions for restoration of springs:
   - Invoice Q1: $261,932.90
   - Invoice Q2: $114,430.38
   - Invoice Q3: $190,841.13
   - Invoice Q4: $282,798.50
   - Total invoice 1-4 FY 2015-2016: $850,002.91

2. Actively improve water quality and quantity in major springs via leveraging of District financial resources:

   The District has 25 projects. These projects include:

   4 Agricultural CS projects in springsheds

   11 DWCS projects. DEP provided funding for five projects

   4 REDI/Innovative projects

   6 Springs Water Conservation projects partially funded by DEP

3. Preservation/Conservation and Land Acquisition:
   During FY 2015-2016 Silver Springs Forest was purchased. This parcel, which included 4,879.64 acres of land was strategically essential towards the restoration of Silver Springs.

IV. Natural Systems

Overall, The District's Bureau of Land Management has been very successful year treating invasive plants; exceeding goals with regards to aerial treatments of both Lygodium and Carolina Willow. FY 2015-2016 was challenging for prescribed burn managers, as drought conditions extended across District for much of the burn season. Staff was able to conduct prescribed burns on approximately 8,500 more acres in FY 2015-2016 than in the previous year.

In an effort to develop a Geographic Information System (GIS) to establish a more efficient means of repelling invasive species, District staff have created an invasive geodatabase, though this program's data collection methodology is in beta-test mode. It is currently in the initial stages of in-house development with a goal of project completion in early 2017.

This District has begun multiple surveys to track the spread of Lygodium presence and density throughout the District. This invasive species, also known as the old world climbing fern, has threatened plant life and habitats within the District and the state. As of October 2016, a total of 147,958 acres of District lands have been surveyed, with a completion date expected within FY 2015-2016. A similar survey, coordinated in conjuncture with the Central Florida Lygodium Strategy, has already been completed. This survey has located 210,181 acres of old climbing fern in the northern range of its distribution, of which 61,862 acres is in the Ocklawaha River Basin and 41,424 in the Upper St. Johns River Basin. The bureau will implement a plan in coordination with local governments and stakeholders to address these species.

The District completed its dredging of the McDonald canal, as well as construction of boat ramp, dock and facilities connected to the canal. Facilities at the ramp include pit toilets, a picnic pavilion, park benches and parking area to accommodate boaters. The area has been landscaped with native plants. In addition, a kayak ramp was installed in December 2016. Lake County will be managing the McDonald Canal boat ramp. The official grand opening for the site is scheduled for February 23, 2017.

The District has also focused on wetland community mapping for map marsh systems on District lands. In FY 2015-2016, the District completed phase 1 of its mapping for the area within the Upper St. Johns River and Ocklawaha River basins, also known as the USJRB project area. The District intends to complete Phase 2 of the USJRB mapping and Phase 1 of the UORB to be completed in FY 2016-2017.

Natural Systems Success Indicators

Success Indicators (Natural Systems):

1. Improve GIS-based technology capabilities for identifying, managing & planning restoration on District lands
   Target: Identify, develop and implement use of spatially linked techniques for condition assessments, survey and monitoring efforts, data storage, evaluation and planning of restoration and invasive plant management projects
   Measure: Percent complete of identified tasks

2. Restoration and Invasive Plant Management Survey and Treatment
   Target: Survey Upper St. Johns River Basin and Ocklawaha River Basin for presence and coverage of Carolina willow and old world climbing fern
   Measure: Percent of annual survey and treatment acres complete

3. Management Plans
   Target: Develop plans that detail strategies for Carolina willow management and District invasive plant management activities to improve ecologic and hydrologic conditions
   Measure: Annual completion of identified documents, drafts and plans

4. Wetland Plant Community Mapping
   Target: Maintain healthy and diverse wetland plant composition
   Measure: Reduction in percent cover of invasive species

5. Adaptive Management of Wetland Restoration Areas
   Target: Improved or restored wetland habitat
   Measure: Acres of wetlands restored/planted

6. Land Management
   Target: Healthy managed ecosystems on District lands
   Measure: Percent of District property rated Level 1 or Level 2 (out of 4) on scale of Ecological Condition Class
   Acres prescribe burns
   Acres of invasive plants treated

1. Improve GIS-based technology capabilities for identifying, managing & planning restoration on District lands:
   Approximately 40% of these tasks have been completed

2. Restoration and Invasive Plant Management Survey and Treatment:
   - Carolina Willow survey 100% complete. Carolina Willow treatment- 136% of intended acres

- Lygodium survey 67% complete. Lygodium treatment- 106% of intended acres

3. Management Plans:
   The willow compendium was compiled giving District staff a reference guide for planning and strategizing future willow management in the USJRB and UORB

4. Wetland Plant Community Mapping:
   Wetland plant community mapping was completed for phase one of the USJRB project area, covering FDMCA north to FWMA. The District documented net decreases in Carolina willow of 1358 acres and primrose willow of 560 acres. The District also restored 6588 acres of beneficial herbaceous marsh.

5. Adaptive Management of Wetland Restoration Areas:
   - 160 acres of native marsh grass species were planted at Sunnyhill and Lake Apopka.
   - 480 acres of shrub encroached marsh were roller chopped at Seminole Ranch Conservation Area, Canaveral Marshes Conservation Area, Sunnyhill Restoration Area, and Ocklawaha Prairie Restoration Area.

6. Land Management
   - 60% of District properties are in condition class 1, and 20% of are in condition class 2.
   - District staff conducted 26,314 acres of prescribed burns, and treated 24,464 acres of invasive plants.

V. Flood Protection

The District is responsible for flood control structures across the state, as well as their scheduled maintenance. The District's flood control structures, in addition to the multiple agreements with the Federal government to operate Army Corps of Engineers (AOE) structures, provide Florida residents with a successful flood control system. Developments throughout FY 2015-2016 include:

ACOE providing guidance regarding deviations for rehabilitation of S-164. Maintenance of the project was performed according to USACE guidelines. Non-federal structures operated by the District were operated and maintained according to internal guidance.

Flood Protection Success Indicators:

Success Indicator (Flood Protection):

1. Operate and Maintain the Federal Flood Control Project in Compliance with USACE Guidelines.

Target: Deliver System-wide Improvement Framework (SWIF) to USACE for approval by June 2016.
Measure: Final draft to be submitted in March to allow sufficient time for USACE approval.

Target: Resolve all deficiencies identified by USACE within five years of SWIF approval.
Measure: Budget, schedule and complete deficiency resolution at least 20% per year over the five-year period.

Target: Perform semi-annual inspections in the 1st and 3rd quarters.
Measure: Inspections complete on time, with reports finalized and submitted to USACE by the following quarter.
Measure: Deficiencies resolved prior to next inspection or programmed into work plan past the following quarter as approved by the O&M Bureau Chief.

Target: Complete rehabilitation of major water control structures and levees on schedule.
Measure: Budget, schedule and complete water control structure according to the maintenance cycle analysis of concrete and steel.
Measure: Budget schedule and complete levee rehabilitation at an average of 20% per year on a five-year cycle.

2. Operate and Maintain Non-federal Flood Protection Projects in Compliance with Internal O&M Guidance.

Target: Develop, document, and implement inspection and maintenance procedures.
Measure: All existing procedure documents are housed in digital format on District computer servers
Measure: Develop work plan for revising existing documents and creating procedures for new projects as they come on-line.
Measure: Procedures completed on schedule and in compliance with the documents mentioned above.

3. Maintain and Support Flood Control Water Level Data Sites.

Target: Inspection and calibration and maintenance of flood control water level data sites in compliance.
Measure: Priority sites are maintained and repaired within the time frames agreed upon by O&M and WRI.
Measure: Complete year one of calibration study.

1. Operate and Maintain the Federal Flood Control Project in Compliance with USACE Guidelines:
    - The SWIF was submitted on schedule to USACE. The District received additional comments from them in July and are on schedule to reply by 12/31/2016.
    - Inspection report summaries indicate a net 70% deficiency resolution over the 2010 base year, and a 2% improvement over 2015. We need to improve our ability to report on the actual number of deficiencies resolved vs. new deficiencies that are added by subsequent inspections.
    - 1st and 3rd quarter Inspections were completed and reports delivered on schedule.
    - Unresolved deficiencies will be inputted in to future work plans via TMA or other means.
    - Water control structure rehabilitation is on schedule.
    - Levee rehabilitation is on schedule.

2. Operate and Maintain Non-federal Flood Protection Projects in Compliance with Internal O&M Guidance.
    - Initial sweep of documents was completed, and items categorized on an electronic folder located on the District-wide computer network
    - FWMA O&M documents to be prepared in FY 2016-2017 as project are completed.
    - Procedures completed according to the O&M work plans and staff performance objectives.
3. Maintain and Support Flood Control Water Level Data Sites.
    - Maintenance and repairs were completed within acceptable time frames.
    - The first year of the calibration study to provide input regarding the conversion of MOSCAD systems to Cambpell Scientific has been completed. The structures needing conversion include S-161A, which was completed, and conversion of S-161 was 50% complete in FY 2015-2016. The O&M Bureau will continue to cooperate with the WRI Bureau to complete the conversion process according to their schedule.

VI. Cost-Share and Partnerships

Cost-share: Since the beginning of the cost-share program in 2013 the District has collaborated with local partners to implement construction-ready projects that advance the district's core missions: water supply, water quality, flood protection, and natural systems protection. The Governing Board approved 45 projects in FY 2015-2016 for the District-wide cost-share program for a total of $29,377,280.74. The total includes $4.6 million of springs funding that was provided by the Department of Environmental Protection for five projects. Because of the District's cost share program, the residents of the District and the environment have benefited enormously in recent years. Such benefits include:

- Approximate total nitrogen nutrient load reduction of 223,629 lbs/yr;
- Approximate total phosphorus nutrient load reduction of 71,024 lbs/yr;
- Approximate total water conserved 2.047 mgd; and
- Approximate total alternative water supplies developed 40.629 mgd.

The District also utilizes a Rural Economic Development Initiative (REDI) and Innovative cost-share funding cycle, which funded 12 projects from eligible communities during FY 2015-2016. The Governing Board approved $5,047,860 in funding for these projects. Their Benefits include:

- Approximate total nitrogen nutrient load reduction of 4,505 lbs/yr;
- Approximate total phosphorus load reduction of 2,149 lbs/yr;
- Approximate total water conserved 1.60 mgd; and
- Approximate total alternative water supplies developed 1.441mgd

Partnerships: The District also utilizes a third cost-share program, known as the District-wide agricultural cost share program. This program funded 20 projects in FY 2015-2016. These projects are projected to conserve 1,358 mgy of water and reduce TN loading by 88,180 lbs/year and TP by 21,488 lbs/year. 75% of the projects had been completed within 9 months of Governing Board approval.

The Agricultural Advisory Committee met in April 2016 to discuss a variety of topics related to agriculture and provided recommendations to the Governing Board on agricultural cost share funds.

Agricultural Outreach continues to be an important tool to provide opportunities for collaboration between the District and agricultural stakeholders. District staff presented to agricultural commodity groups throughout the year on a variety of topics including dispersed water management, District grazing leases, water supply planning and agricultural cost share funding opportunities.

Cost Share and Partnership Success Indicators:

Success Indicator (Cost Share and Partnerships):

1. Projects that Benefit the District's Core Missions are awarded Cost-share Funding and Successfully Implemented
   Target: Quarterly reports to the Board.
   Measure: Projects are completed in a timely manner and the deliverables document the project's success.

2. Agricultural Advisory Committee
   Target: Meet at least once per year and present to Governing Board.
   Measure: Presentations to Governing Board.

3. Districtwide Agricultural Cost-Share
   Target: Award funding to projects resulting in water conservation and nutrient load reduction.
   Measure: Percent allocated funds expended annually.

4. Outreach to the Agricultural Community
   Target: Present to commodity groups as requested.
   Measure: Number of presentations completed.

1. Projects that Benefit the District's Core Missions are awarded Cost-share Funding and Successfully Implemented:
   The Bureau of Project Management has presents the Board with quarterly reports. Eleven of the 45 District-wide cost-share projects are completed. Two of the 12 REDI Innovative projects are completed. The remaining projects are scheduled to be completed prior to September 30, 2017.

2. Agricultural Advisory Committee:
   The Ag Advisory Committee met in April of 2016 and minutes were presented at the May 2016 Governing Board meeting.

3. Districtwide Agricultural Cost-Share:
   88% of allocated funds were spent during the fiscal year. Some projects came in under budget and others had weather or product delivery delays and are anticipated to be complete in early FY 2016-2017.

4. Outreach to the Agricultural Community:
   Fifteen presentations were given to groups including North Florida Grower's Exchange, Florida Cattlemen, Florida Farm Bureau and IFAS Growing for Profit series.

2017 Minimum Flows and Levels Annual Priority List and Schedule

2. MINIMUM FLOWS AND LEVELS PRIORITY LIST AND SCHEDULE

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Introduction

In accordance with Section 373.042(2), *Florida Statutes* (F.S.), the St. Johns River Water Management District (District) proposed a 2016 Minimum Flows and Levels (MFLs) Priority List and Schedule for establishing MFLs during the planning period 2017–2020. The District submitted the proposed list to the Florida Department of Environmental Protection (DEP) for review and approval on November 7, 2016. A priority list and schedule for establishing MFLs is submitted annually to DEP.

Chapter 373, F.S., requires Florida's water management districts to establish MFLs for water courses, water bodies, and aquifers that represent the limit at which further withdrawals would be significantly harmful to the water resources or ecology of an area. MFLs provide an effective tool to assist in making sound water management decisions that prevent significant adverse impacts due to water withdrawals to the water resources or ecology of the area. MFLs at SJRWMD are established as multiple hydrologic events to protect an ecosystem's natural hydrologic variability and the resources that depend on these seasonal and inter-annual fluctuations. MFLs typically define the minimum frequencies of high, intermediate and low water necessary to protect relevant water resource values. Three MFLs are usually defined for each system—minimum frequent high (FH), minimum average (MA), and minimum frequent low (FL) flows and/or water levels. In some cases, minimum infrequent high (IH) and/or minimum infrequent low (IL) MFLs may also be set (Neubauer et al. 2008). No matter how many MFLs are adopted, the most constraining (i.e., most sensitive to water withdrawal) MFL is used for water supply planning and permitting

Minimum flows and levels are established using the best information available (section 373.042(1), F.S.), with consideration also given to "changes and structural alterations to watersheds, surface waters, and aquifers and the effects such changes or alterations have had, and the constraints such changes or alterations have placed, on the hydrology of the affected watershed, surface water, or aquifer...," provided that none of those changes or alterations shall allow significant harm caused by withdrawals (section 373.0421(1)(a), F.S.).

The minimum flows and levels section of the State Water Resources Implementation Rule (rule 62-40.473, Florida Administrative Code [F.A.C.]) also requires that "consideration shall be given to natural seasonal fluctuations in water flows or levels, non-consumptive uses, and environmental values associated with coastal, estuarine, riverine, spring, aquatic, and wetlands ecology." The environmental values described by the rule include:

1. Recreation in and on the water
2. Fish and wildlife habitats and the passage of fish
3. Estuarine resources
4. Transfer of detrital material
5. Maintenance of freshwater storage and supply
6. Aesthetic and scenic attributes
7. Filtration and absorption of nutrients and other pollutants
8. Sediment loads
9. Water quality
10. Navigation

Rule 62-40.473, F.A.C., states that minimum flows and levels "should be expressed as multiple flows or levels defining a minimum hydrologic regime, to the extent practical and necessary, to establish the limit beyond which further withdrawals would be significantly harmful." Water bodies experience variations in flows and levels that often contribute to significant functions of the system, such as the environmental values listed above.

Legislation passed in 2005 (Section 373.036(7)(b)2, F.S.) requires the final MFLs Priority List and Schedule to be presented as a chapter in the District's Consolidated Annual Report.

In addition, this chapter provides a short description of methodologies used in determining MFLs and the process of adopting MFLs by rule. Historical information on the number of MFLs that have been established and adopted by the District is also presented in this report.

2016 MFLs Priority List and Schedule

During the planning period from 2017 through 2020, the District plans to evaluate or re-evaluate a total of 25 systems. The District's 2016 MFLs Priority Water Body List and Schedule is presented in Tables 2–1 through 2–4. Figure 2–1 summarizes the evaluations by water body type during the planning period. The priority list is based on the importance of the waters to the state or region and the existence of potential for significant harm to the water resources or ecology of the state or region.

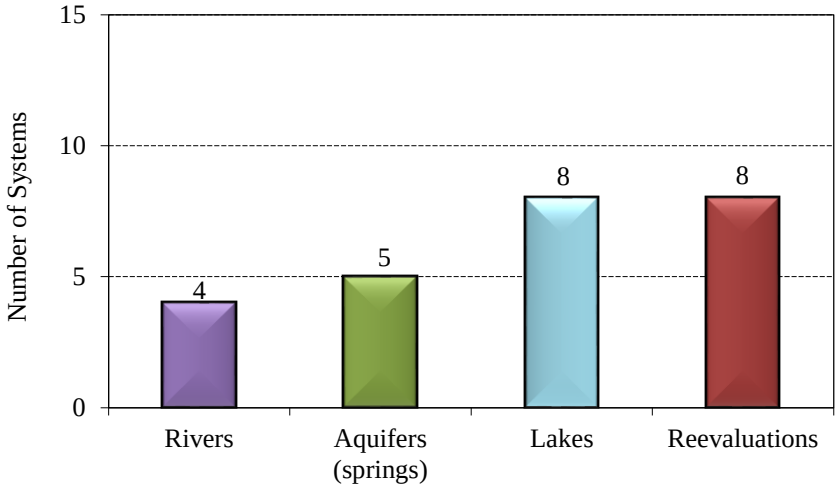

Figure 2-1. Number of systems to be evaluated

As with the 2015 list, springs are a major emphasis due to a legislative mandate (Section 373.042(2), F.S., and priority focus area of the District. Currently, the District has established 123 MFLs (101 lakes, 9 springs, 6 rivers, and 7 wetlands). The status of MFLs water bodies identified in the 2015 List and updates to the Draft 2016 List are summarized below.

Rulemaking for two MFLs water bodies identified in the 2015 List (Lake Cowpen in Putman County and De Leon Springs in Volusia County) have a tentative effective date of February 2017.

The District's 2016 MFLs Priority List and Schedule shows the planned year for completion of new MFLs and reevaluations for the years 2017 through 2020. As work is completed and MFLs are ready for rulemaking, staff may initiate rulemaking earlier than shown on the 2016 List.

Development of the 2016 List included removing the "and associated springs" from the Wekiva River at State Road (SR) 46 MFL. The current method for reevaluating the six associated springs (Wekiwa, Rock,

Miami, Palm, Sanlando and Starbuck) involves using ecological criteria developed for the Wekiva River at SR 46 MFL, which are located far (9–15 miles) from the springs in question. Staff is recommending that these MFLs should instead be reevaluated based on ecological criteria that are closer to the springs. This approach resulted in the removal of "and associated springs" from the Wekiva River at SR 46 MFL, and the addition of the following water bodies:

- Little Wekiva River, and associated springs (Palm, Starbuck and Sanlando springs)
- Wekiwa/Miami Springs
- Rock Springs

Staff recommended the addition of Gemini Springs, in compliance with SB552 requirements to adopt MFLs on all Outstanding Florida Springs identified in the legislation.

In addition, staff is recommended the addition of Lake Avalon, which is located near Johns Lake in Orange County. Staff recommends evaluating both Lake Avalon and Johns Lake, but only adopting the most appropriate MFL. Staff is recommending this approach for the following reasons:

- Compliance assessment shows that Lake Avalon and Johns Lake have similar freeboard. Therefore, they are of similar utility as a constraint to be utilized in consumptive use review to protect the resources of the area.
- Surface water modeling efforts suggest that water levels within Lake Avalon may be simulated more accurately than Johns Lake. This needs to be confirmed by updating and evaluating both surface water models.
- Development within the Lake Avalon basin is currently less intense and the parcels around the lake are larger than those surrounding Johns Lake. Therefore, the natural ecological communities utilized to develop an MFL are likely to be more stable over the period of record.

In addition to removing systems from the list, staff recommended that some systems be rescheduled to new priority years based on one or more of the following reasons:

- To allow for completion of the Central Florida Water Initiative (CFWI) peer review process, including coordination with other districts involved in inter-District collaboration and peer review of MFLs;
- To allow grouping of CFWI systems within the same basin (e.g., Wekiva basin springs);
- To allow for coordination with the development of any needed prevention/recovery strategies within the CFWI; and
- Some systems (e.g., Lochloosa and Orange lakes) were moved to earlier years because the changes described above allow for completion of these MFLs earlier than previously scheduled.

The District is planning to conduct voluntary scientific peer review for all the listed MFLs. The level of complexity and the degree of public concern regarding the MFLs dictate that voluntary peer review should be conducted. MFLs systems located in the Central Florida Water Initiative (CFWI) area will follow the standard peer review process for MFLs and water reservations within the CFWI area.

Table 2-1 Year 2017 priority water body list

Water Body Type	Water Body Name	County	Voluntary Peer Review	Affected by Withdrawals in Other WMDs
Rivers	Alexander Springs Creek	Lake	Yes	Yes
	Silver River	Marion	Yes	Yes
Aquifers (springs)	Alexander Springs	Lake	Yes	Yes
	Gemini Springs	Volusia	Yes	Yes
	Silver Glen Springs	Marion/Lake	Yes	No
	Silver Springs	Marion	Yes	Yes
Lakes				
Re-evaluations	Brooklyn Lake	Clay	Yes	Yes
	Lake Geneva	Clay	Yes	Yes
	Lake Sylvan	Seminole	Yes	Yes

Table 2-2 Year 2018 priority water body list

Water Body Type	Water Body Name	County	Voluntary Peer Review	Affected by Withdrawals in Other WMDs
Rivers				
Aquifers (springs)				
Lakes	Butler	Volusia	Yes	No
	Lochloosa/Orange	Alachua	Yes	Yes
Re-evaluations				

Table 2-3 Year 2019 priority water body list

Water Body Type	Water Body Name	County	Voluntary Peer Review	Affected by Withdrawals in Other WMDs
Rivers	Little Wekiva River and associated springs			
Aquifers (springs)	Wekiwa/Miami	Seminole/Orange	Yes	Yes
	Rock	Orange	Yes	Yes
Lakes	Avalon / Johns	Orange	Yes	Yes
	Apopka	Lake/Orange	Yes	Yes
	Griffin	Lake	Yes	Yes
	Harris Chain of Lakes (Beauclair, Dora, Eustis, Harris)	Lake	Yes	Yes
	East Crystal	Seminole	Yes	Yes
	Hodge	Seminole	Yes	Yes

Re-evaluations	Wekiva River at SR 46 bridge	Seminole/Lake	Yes	Yes
	Lake Apshawa South	Lake	Yes	Yes
	Prevatt Lake	Orange	Yes	Yes

Table 2-4 Year 2020 priority water body list

Water Body Type	Water Body Name	County	Voluntary Peer Review	Affected by Withdrawals in Other WMDs
Rivers	Ocklawaha River at State Road (SR) 40	Marion	Yes	Yes
Aquifers (springs)	Bugg	Lake	Yes	Yes
Lakes				
Re-evaluations				

MFLs Determination and Adoption

Section 40C-8.011(3), *Florida Administrative Code* (F.A.C.), states that "…the Governing Board shall use the best information and methods available to establish limits which prevent significant harm to the water resources or ecology." MFLs are determined based on evaluations of topography, soil and vegetation data collected within plant communities and other pertinent information associated with the water resources.

In establishing MFLs pursuant to Sections 373.042 and 373.0421, F.S., consideration is given to natural seasonal fluctuations in water flows or levels, nonconsumptive uses, and environmental values associated with coastal, estuarine, riverine, spring, aquatic, and wetlands ecology (Rule 62-40.473(1), F.A.C.).

Additionally, MFLs should be expressed as multiple flows or levels defining a minimum hydrologic regime, to the extent practical and necessary to establish the limit beyond which further withdrawals would be significantly harmful to the water resources or the ecology of the area (Rule 62-40.473(2), F.A.C.).

HYDROLOGICAL FACTORS IN MFLS DETERMINATION

The MFLs designate an environmentally protective hydrologic regime (i.e., hydrologic conditions that prevent significant ecological harm) and identify levels and/or flows above which water may be available for use. In addition, "…the Governing Board…may reserve from use by permit applicants, water in such locations and quantities, and for such seasons of the year, as in its judgment may be required for the protection of fish and wildlife or the public health and safety" (Section 373.223, F.S.).

MFLs define high, intermediate, and/or low water events necessary to protect relevant water resource values. Three MFLs are usually defined for each system — *minimum frequent high, minimum average* and *minimum frequent low*, flows and/or water levels. If deemed necessary, a *minimum infrequent high* and/or *minimum infrequent low* flows and/or water levels are also defined. MFLs represent hydrologic statistics comprised of three components: a magnitude (a water level and/or flow), duration (days), and a frequency or return interval (years).

MFLs are water levels and/or flows that primarily serve as hydrologic constraints for water supply development, but may also apply in environmental resource permitting (see Figure 2-2). MFLs take into

account the ability of wetlands and aquatic communities to adjust to changes in the return intervals of high and low water events. Therefore, MFLs allow for an acceptable level of change to occur relative to the existing hydrologic conditions (gray shaded area, Figure 2-2). However, when use of water resources shifts the hydrologic conditions below that defined by the MFLs, significant ecological harm occurs (pink area, Figure 2-2). As it applies to wetland and aquatic communities, significant harm is a function of changes in the frequencies of water level and/or flow events of defined magnitude and duration, causing impairment or loss of ecological structures and functions.

MFLs apply to decisions affecting permit applications, declarations of water shortages and assessments of water supply sources. Surface and groundwater computer simulation models are used to evaluate existing and/or proposed consumptive uses and the likelihood they might cause significant harm. Actual or projected instances where water levels fall below established MFLs require the Governing Board to adopt recovery or prevention strategies (Section 373.0421(2), F.S.). MFLs are to be reviewed periodically and revised as needed (Section 373.0421(3), F.S.).

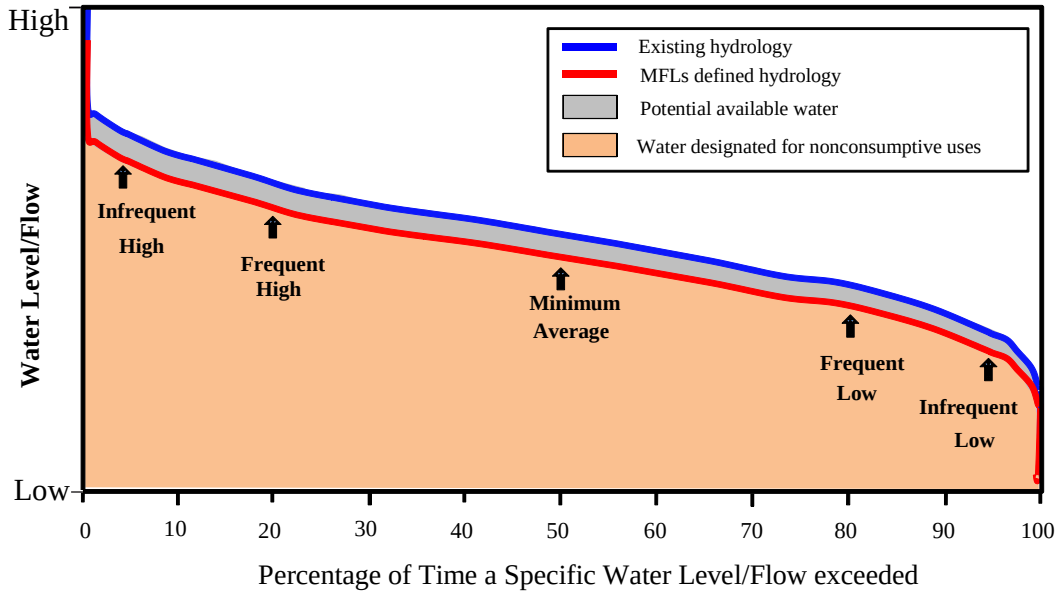

Figure 2-2. Exceedance curves for existing and MFLs defined hydrologic conditions

MFLs Adoption by Rule

MFLs are adopted as water management district rules (Chapter 40C-8, F.A.C.) by the governing boards of the water management districts. This is normally a 12- to 18-month process that involves a public workshop(s), review by DEP, and publication in the *Florida Administrative Register*. Due to changes in climate and availability of additional information, MFLs are reviewed periodically and revised as necessary under Section 373.0421(3), F.S., through the rule adoption process.

History of MFLs Established and Adopted by Rule

Since 1990 when the MFLs program was initiated, the District has established 152 MFLs (including 123 systems and 29 re-evaluations) by rule. The program's emphasis during its early years was on lakes. Recent emphasis has been on springs. Table 2-5 shows the number of MFLs that have been adopted by rule by water body type.

Table 2-5 Summary of MFLs adopted by rule and water body type

Year	Lakes	Rivers	Wetlands	Springs	Re-evaluation	Annual Total	Cumulative Total
1992		2		8		10	10
1993						0	10
1994	7					7	17
1995			1			1	18
1996	36					36	54
1997						0	54
1998	24					24	78
1999						0	78
2000	11	2	2			15	93
2001	4		1		2	7	100
2002	10				6	16	116
2003	4	1	1		1	7	123
2004	4		2			6	129
2005						0	129
2006				1	4	5	134
2007	1	1				2	136
2008						0	136
2009						0	136
2010					6	6	142
2011						0	142
2012						0	142
2013					1	1	143
2014					7	7	150
2015						0	150
2016					2	2	152
Total	**101**	**6**	**7**	**9**	**29**	**152**	**152**

2017 Five-Year Capital Improvements Plan

3. FIVE-YEAR CAPITAL IMPROVEMENTS PLAN

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Introduction

The Five-year Capital Improvements Plan (CIP) is prepared to meet the reporting requirements of Section 373.536(6)(a)3., *Florida Statutes* (F.S.). The format for the CIP was developed jointly by the Executive Office of the Governor (EOG), the Florida Department of Environmental Protection (DEP), and the five water management districts. The CIP presents projected revenues and expenditures for capital improvement projects for Fiscal Year (FY) 2016–2017 through FY 2020–2021.

The CIP contains only those projects that will be owned and capitalized as fixed assets by the St. Johns River Water Management District (District). All capitalized fixed assets include expenditures for basic construction costs (permits, inspections, site development, etc.) and other project costs (land, surveys, existing facility acquisition, professional services, etc.). As directed by Section 373.536(6)(a)3., F.S., the CIP has been prepared in a manner comparable to the fixed capital outlay format set forth in Section 216.043., F.S. The format for this plan is drawn from the standard budget reporting format prescribed by the EOG. The EOG format requires capital improvement projects be budgeted in the standard program categories. The 2017 CIP covers three standard programs and associated activities and subactivities shown below:

1.0 Water Resource Planning and Monitoring
- 1.2 Research, Data Collection, Analysis, and Monitoring

2**.0 Acquisition, Restoration, and Public Works**
- 2.1 Land Acquisition
- 2.3 Surface Water Projects
- 2.5 Facilities Construction and Major Renovations
- 2.6 Other Acquisition and Restoration Activities

3.0 Operation and Maintenance of Lands and Works
- 3.1 Land Management
- 3.2 Works

Proposed Capital Projects and Expenditures During the Planning Period

The District proposes to spend $60.2 million on 50 projects/subprojects during the planning period from FY 2016–2017 through FY 2020–2021. Figure 3-1 shows the projected annual expenditures during the five-year planning period.

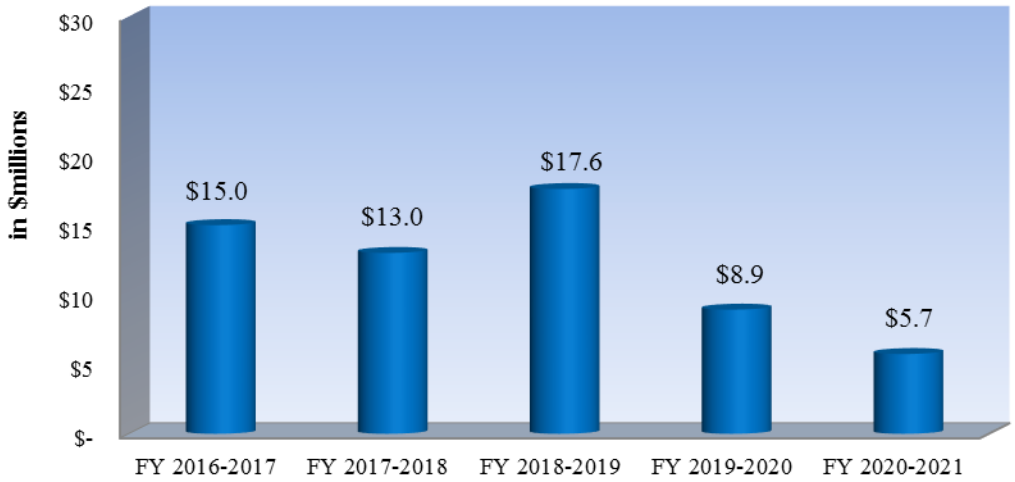


Figure 3-1. Five-year projected expenditures for capital improvement projects

Total planned capital expenditures in FY 2016–2017 are $15 million. In comparison, the adopted budget for FY 2015–2016 was $34.6 million.

Significant changes in capital expenditures during the planning period are:

- The District is planning for 20 multimillion-dollar capital projects. These include CFWI Well Construction ($4.2 million), Well Construction ($2.9 million), Land Acquisitions ($3 million), Lake Jesup In-Lake Phosphorus Reduction ($6.4 million), Blue Cypress Water Management Area (BCWMA) East Water Quality Improvements ($1.9 million), Fellsmere Water Management Area ($1.7 million), Lake Apopka submersed aquatic vegetation (SAV) Restoration ($1 million), Lake Apopka Marsh Flow-way Improvements ($1.5 million), Sunnyhill Berm Improvements ($1.7 million), C-1 Rediversion Phase 1B ($1.4 million), C-10 Reservoir Project ($8.1 million), Earthwork/Hydrologic Restoration ($1 million), Field Activities—Public Use Structures ($1.1 million), Silver River Enhancement Project ($2.6 million), and six major and minor water control structure rehabilitation projects ($17.3 million).
- The District will not have any significant capital outlay for land acquisition beyond FY 2016–2017.
- The District will primarily rely on District revenues (including fund balances and ad valorem revenues) to fund CIP projects.

Among the activities and subactivities that have capital expenditures, Surface Water Projects account for almost 45% of the total expenditures during the planning period (see Figure 3-2).

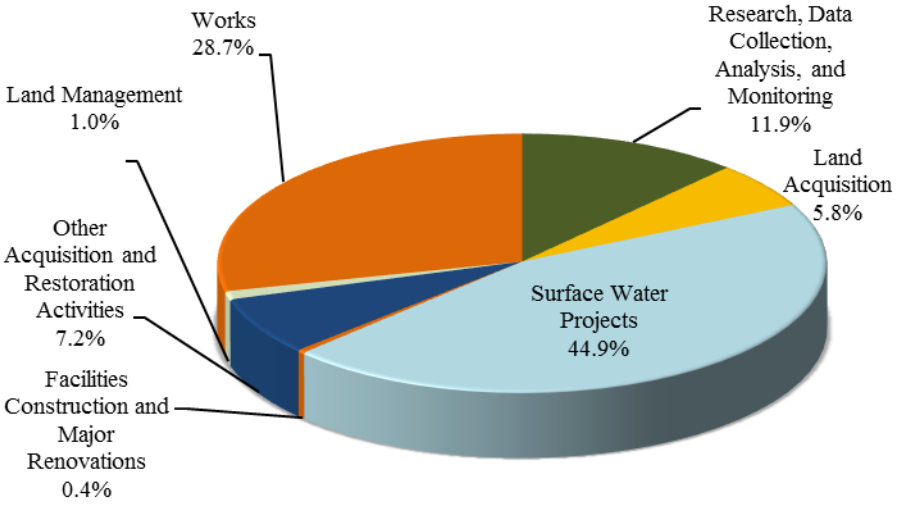


Figure 3-2. Five-year total capital improvement project expenditures by activity

The District's capital improvement projects are funded primarily by District sources. Figure 3-3 shows that almost 90% of the total revenues during the planning period will come from District sources. Historically, state funding sources such as Florida Forever and the Ecosystem Management Trust Fund have provided most of the funding for the District's capital projects. Because of the uncertainties involved in the legislative appropriation processes, the District only includes state funding that the District is likely to receive during the planning period.

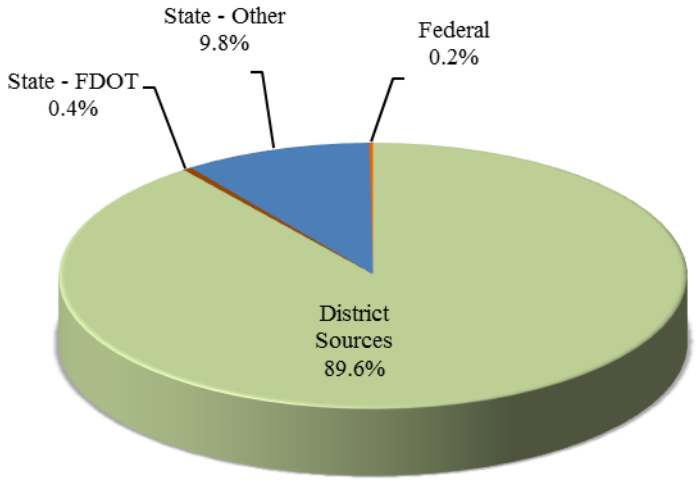


Figure 3-3. Five-year total capital improvement project expenditures by funding source

Five-Year CIP Supporting Documents

The purpose of the CIP is to project future needs and anticipate future funding requirements to meet those needs. This document provides a summation of all capital improvements in the FY 2016–2017 Adopted Budget, FY 2016–2017 Amended Budget, FY 2017–2018 Preliminary Budget, and projected capital improvements through FY 2020–2021. Many of the items in the five-year CIP are contained in other, more descriptive reports and plans. These include, but are not limited to, the following:

- 2015 and 2016 Florida Department of Transportation (FDOT) Annual Mitigation Plan
- 2015 Central Florida Water Initiative (CFWI) Data Management and Investigation (DMIT) workplan
- C-1 Rediversion Plan
- Emeralda Marsh Conservation Area Management Plan
- Five-Year Infrastructure Management, Operations and Maintenance Plan
- Forest Stewardship Plan for Silver Spring Forest
- FY 2016–2017 Adopted Budget
- FY 2016–2017 Amended Budget
- FY 2017–2018 Preliminary Budget
- Individual Land Management Area Plans

Digital copies of the above-referenced reports and plans may be obtained from the District's website at *www.sjrwmd.com*.

Project Descriptions by Program and Activity

This section provides a list of 50 capital improvement projects by program/activity (see Table 3-1) followed by project descriptions for each capital improvement project contained in this plan.

Research, Data Collection, Analysis, and Monitoring: The District proposes three projects for this activity, including two for water well construction activities and one for data collection and monitoring infrastructure work.

Land Acquisition: Only two projects are proposed in the CIP for small parcel acquisitions acquisition related expenses during the planning period.

Surface Water Projects: Twenty-four surface water projects are included in this CIP. These projects are intended to provide improved natural systems, water quality improvements, and flood control. The projects include nutrient reduction, stormwater management, wetland restoration, wetland mitigation, flood protection and floodplain restoration, and construction of major water control structures and reservoirs. In addition, this activity will have one mitigation project, and two preliminary design projects during the planning period.

Facilities Construction and Major Renovations: The District proposes one project under this activity during the planning period.

Other Acquisition and Restoration Activities: Four projects have been planned under this activity that will either provide public access to District-owned lands or enhance springs in the District.

Land Management: Four projects have been planned under this activity with the intent to provide public access to District-owned lands or enhance springs in the District.

Works: Fourteen projects are included under this activity for rehabilitations of major and minor water control structures.

Table 3-1. Five-year capital improvement projects by program/activity

1.0 Water Resource Planning and Monitoring

1.2 Research, Data Collection, Analysis, and Monitoring

REVENUES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
District Sources	$ 2,126,984	$ 1,400,000	$ 1,500,000	$ 1,500,000	$ 600,000	$ 7,126,984
State-Other	$ 34,880					$ 34,880
TOTAL	**$ 2,161,864**	**$ 1,400,000**	**$ 1,500,000**	**$ 1,500,000**	**$ 600,000**	**$ 7,161,864**

EXPENDITURES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
CFWI Well Construction	1,234,000	$ 1,314,000	$ 600,000	$ 600,000	$ 500,000	4,248,000
IRL Continuous Monitoring Platforms	34,880					34,880
Well Construction	892,984	86,000	900,000	900,000	100,000	2,878,984
TOTAL	**$ 2,161,864**	**$ 1,400,000**	**$ 1,500,000**	**$ 1,500,000**	**$ 600,000**	**$ 7,161,864**

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS

2.1 Land Acquisitions

REVENUES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
District Sources	$ 1,127,977	$ 594,500	$ 594,500	$ 594,500	$ 594,500	$ 3,505,977
TOTAL	**$ 1,127,977**	**$ 594,500**	**$ 594,500**	**$ 594,500**	**$ 594,500**	**$ 3,505,977**

EXPENDITURES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
Land Purchases	$ 1,000,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 3,000,000
Other Land Acquisition Expenses	127,977	$ 94,500	$ 94,500	$ 94,500	$ 94,500	505,977
TOTAL	**$ 1,127,977**	**$ 594,500**	**$ 594,500**	**$ 594,500**	**$ 594,500**	**$ 3,505,977**

2.3 Surface Water Projects

REVENUES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
Lower St. Johns River Basin						
District Sources	$ -	$ 400,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 6,400,000
Upper St. Johns River Basin						
District Sources	1,973,155	320,500	1,510,000	10,000	10,000	$ 3,823,655
State-Other	800,000					800,000
Federal	125,000					125,000
UORB/Lake Apopka Basin						
District Sources	838,710	500,000	1,800,000			3,138,710
State-Other	350,000	1,000,000	250,000	1,000,000	250,000	2,850,000
Indian River Lagoon						
District Sources	1,750,000	3,000,000	5,000,000			9,750,000
State-FDOT	62,500	32,500				95,000
Districtwide						
District Sources		100,000				100,000
TOTAL	**$ 5,899,365**	**$ 5,353,000**	**$ 10,560,000**	**$ 3,010,000**	**$ 2,260,000**	**$ 27,082,365**

EXPENDITURES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
Middle St. Johns River Basin						
Lake Jesup In-Lake Phosphorus Reduction		$ 400,000	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ 6,400,000
Upper St. Johns River Basin						
2-D Model of SJMCA	$ 20,948					$ 20,948
BCWMA East Water Quality Improvements	100,000	$ 300,000	$ 1,500,000			1,900,000
Fellsmere Water Management Area	1,603,547	20,500	10,000	10,000	10,000	1,654,047
Mary A Flow Restoration Project	100,000					100,000
SJMCA Canal Plugs in the USJRB	48,660					48,660
SJMCA Project Design	100,000					100,000
TM Goodwin Habitat Improvements	800,000					800,000
Turkey Creek Restoration Project	125,000					125,000

Table 3-1. Five-year capital improvement projects by program/activity (cont.)

2.3 Surface Water Projects

EXPENDITURES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
UORB/Lake Apopka Basin						
Access Improvements to NSRA		300,000				300,000
Area 2 Boat Ramp and Parking			250,000			250,000
Duda East Weir Replacement	100,000					100,000
Duda Lake Water Treatment System	290,790					290,790
Emeralda Marsh Area 3 Reconnection	797,920					797,920
Lake Apopka SAV Restoration		250,000	250,000	250,000	250,000	1,000,000
Lake Apopka Marsh Flow-way Improvements		750,000		750,000		1,500,000
Sunnyhill Berm Improvements		150,000	1,500,000			1,650,000
Sunnyhill Canal Plug Improvements		50,000	50,000			100,000
Indian River Lagoon Basin						
C-1 Rediversion Phase 1B	1,400,000					1,400,000
C-10 Reservoir Project	100,000	3,000,000	5,000,000			8,100,000
Wheeler Grove Stormwater Park Mitigation	62,500	32,500				95,000
Wheeler Grove Stormwater Park Recreational Improve	250,000					250,000
Districtwide						
Preliminary Engineering/Design		100,000				100,000
TOTAL	**$ 5,899,365**	**$ 5,353,000**	**$ 10,560,000**	**$ 3,010,000**	**$ 2,260,000**	**$ 27,082,365**

2.5 Facilities Construction and Major Renovations

REVENUES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
District Sources	$ 250,000					$ 250,000
TOTAL	**$ 250,000**					**$ 250,000**

EXPENDITURES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2019-2021	5-Year Total
Governing Board Room Upgrades	$ 250,000					$ 250,000
TOTAL	**$ 250,000**					**$ 250,000**

2.6 Other Acquisition and Restoration Activities

REVENUES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
District Sources	$ 114,000	884,000	$ 895,000	$ 500,000		$ 2,393,000
State-Other	$ 1,001,715	$ 470,000	$ 475,000			$ 1,946,715
TOTAL	**$ 1,115,715**	**$ 1,354,000**	**$ 1,370,000**	**$ 500,000**	**$ -**	**$ 4,339,715**

EXPENDITURES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2019-2021	5-Year Total
Earthwork/Hydrologic Restoration	$ 750,000	$ 270,000				$ 1,020,000
Field Activities -Public Use Structures	251,715	200,000				451,715
Field Activities -Fencing	114,000	114,000				228,000
Silver River Enhancement Project		$ 770,000	$ 1,370,000	$ 500,000		2,640,000
TOTAL	**$ 1,115,715**	**$ 1,354,000**	**$ 1,370,000**	**$ 500,000**	**$ -**	**$ 4,339,715**

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 Land Management

REVENUES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
District Sources		$ 114,000	$ 30,000	$ 30,000	$ 30,000	$ 204,000
State-FDOT	132,500	35,000				167,500
State-Other	205,000	-	50,000	-	-	255,000
TOTAL	**$ 337,500**	**$ 149,000**	**$ 80,000**	**$ 30,000**	**$ 30,000**	**$ 626,500**

EXPENDITURES	FY 2016-2017	FY 2017-2018	FY 2018-2019	FY 2019-2020	FY 2020-2021	5-Year Total
FDOT Mitigation Enhancement Projects	132,500	35,000				167,500
Field Activities -Fencing		114,000	30,000	30,000	30,000	204,000
Fishing Pier and Boat Launch at C-10 Area			50,000			50,000
Public Access Road at Emeralda Marsh Area 7	205,000					205,000
TOTAL	**$ 337,500**	**$ 149,000**	**$ 80,000**	**$ 30,000**	**$ 30,000**	**$ 626,500**

Program: District Water Management Planning

Activity: Research, Data Collection, Analysis, and Monitoring

Project Title: Central Florida Water Initiative (CFWI) Well Construction

Type: Data Collection

Project Manager: Robert Brooks and David Hornsby

Physical Location: This project is located in the Central Florida Water Initiative counties of Lake, Orange, Seminole, and Osceola.

Square Footage/Physical Description: District constructed monitoring well network sites on properties with various forms of access (fee simple, permissive use agreement, easement etc.).

Expected Completion Date: September 2021

Historical Background/Need for Project: The project implements the five-year Central Florida Water Initiative Data Management Investigation Team monitoring plan.

Plan Linkages: 2016–2017 Adopted Budget, FY 2017–2018 Preliminary Budget, and CFWI DMIT workplan

Area(s) of Responsibility: Water Supply

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $1,234,000 for the project for FY 2016–2017 and plans to budget an additional $1,314,000 in FY 2017–2018, $600,000 in FY 2018–2019, $600,000 in FY 2019–2020, and $500,000 in FY 2020–2021.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: District Water Management Planning

Activity: Research, Data Collection, Analysis, and Monitoring

Project Title: Indian River Lagoon (IRL) Continuous Monitoring Platforms

Type: Data Collection

Project Manager: David Hornsby

Physical Location: This project site is located in Indian River Lagoon in Brevard and Indian River counties.

Square Footage/Physical Description: District constructed monitoring platforms are installed in the lagoon.

Expected Completion Date: April 2017

Historical Background/Need for Project: Recent ecological changes such as algal blooms, continued seagrass decline and major fish kills in the IRL have prompted the District, in partnership with the Florida Department of Environmental Protection (DEP) and several local governmental agencies, to increase efforts to monitor water quality on a much finer temporal scale than previously attempted. Recent technological advancements in instrumentation designed for in situ monitoring of various water quality parameters within the IRL have the potential to quickly define and capture chemical and ecological process that previously may have gone undetected. This fine temporal scale, along with real-time feedback, will be instrumental in supporting the management decisions needed to manage the resource.

The initial deployment methodology for the continuous monitoring instruments, located on bridge fenders under major causeways over the IRL, proved to be very problematic from a safety standpoint due to boat wakes and lack of suitable mooring. To alleviate the unnecessary safety risks, the District is installing free-standing, adequately sized, strategically located, secure platforms on which to install all necessary continuous monitoring instrumentation. These platforms will be safer to access during equipment service and will foster greater public awareness from a standpoint of visibility. In addition, this relocation of the instruments will align and compliment data collected by other stakeholders and facilitate the uninterrupted, publicly available data feed.

Plan Linkages: 2016–2017 Amended Budget

Area(s) of Responsibility: Water Quality

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $34,800 for the project for FY 2016–2017.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: District Water Management Planning

Activity: Research, Data Collection, Analysis, and Monitoring

Project Title: Well Construction

Type: Data Collection

Project Manager: David Hornsby and Rob Brooks

Physical Location: This project has monitoring sites located throughout the District's 18 counties.

Square Footage/Physical Description: District constructed monitoring well network sites on properties with various forms of access (fee simple, permissive use agreement, easement etc.).

Expected Completion Date: Ongoing

Historical Background/Need for Project: The project constructs and maintains long-term dedicated monitoring wells to characterize and assess groundwater conditions in the District. The wells vary in depth and monitor the surficial, intermediate, upper and lower Floridan aquifers. The project supports District Observation Well Network (DOWN) that involves District field services staff and District contractors in constructing and maintaining monitoring wells, conducting aquifer performance tests, and providing geophysical well logging services. Well construction and aquifer performance data are stored in established District databases and finished wells are instrumented for longterm water level and water quality monitoring purposes.

Plan Linkages: FY 2016–2017 Adopted Budget and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Supply

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $892,984 for the project for FY 2016–2017 (including $726,984 in carryover encumbrance) and plans to budget an additional $86,000 in FY 2017–2018, $900,000 in FY 2018–2019, $900,000 in FY 2019–2020, and $100,000 in FY 2020–2021.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Land Acquisition

Project Title: Land Purchases

Type: Land Acquisitions

Project Manager: Ramesh Buch

Physical Location: Throughout the District's 18 counties

Square Footage/Physical Description: Not available

Expected Completion Date: Ongoing

Historical Background/Need for Project: In 1981, the Florida Legislature created the Save Our Rivers (SOR) program as a non-lapsing fund for the acquisition of the fee or other interests in lands for water management, water supply, and the conservation and protection of water resources. The Preservation 2000 (P2000) program, which expanded the scope of the SOR program, was passed by the Florida Legislature in 1990. Since 2000, the Florida Forever (FF) program has replaced the P2000 program and become the primary source of funding for District land acquisitions. In 2008, the Florida Legislature authorized the continuation of the FF program for a second 10-year period. The state appropriated $1.125 million in FF funds to the District for land acquisitions in FY 2010–2011. No appropriations have been received since FY 2011–2012.

Plan Linkages: FY 2016–2017 Adopted Budget and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water supply, water quality, flood protection, and natural systems

Alternative(s): Purchase protective conservation easements or place additional regulations and restrictions on lands to accomplish the same goals attained from the purchase of lands.

Basic Construction Costs (includes permits, inspections, communication requirements, utilities outside building, site development, other): A total of $1,000,000 is budgeted in FY 2016–2017. The District plans to budget an additional $500,000 per year from FY 2017–2018 through FY 2020–2021.

Other Project Costs (includes land survey, existing facility acquisitions, professional service, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Land Acquisition

Project Title: Other Land Acquisition Expenses

Type: Miscellaneous land acquisitions related expenses and fees

Project Manager: Ramesh Buch

Physical Location: Throughout the District's 18-county region

Square Footage/Physical Description: Not available

Expected Completion Date: Ongoing

Historical Background/Need for Project: In 1981, the Florida Legislature created the Save Our Rivers (SOR) program as a non-lapsing fund for the acquisition of the fee or other interest in lands for water management, water supply, and the conservation and protection of water resources. The Preservation 2000 (P2000) program, which expanded the scope of the SOR program, was passed by the Florida Legislature in 1990. Since 2000, the Florida Forever (FF) program has replaced the P2000 program and become the primary source of funding for District land acquisitions. In 2008, the Florida Legislature authorized the continuation of the Florida Forever program for a second 10-year period. The state appropriated $1.125 million in FF funds to the District for land acquisitions in FY 2010–2011. No appropriations have been received since FY 2011–2012.

Plan Linkages: FY 2016–2017 Adopted Budget and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water supply, water quality, flood protection, and natural systems

Alternative(s): None.

Basic Construction Costs (includes permits, inspections, communication requirements, utilities outside building, site development, other): None

Other Project Costs (includes land survey, existing facility acquisitions, professional service, other): A total of $127,977 is budgeted for FY 2016–2017. The District plans to budget an additional $94,500 per year through FY 2020–2021.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Lake Jesup In-Lake Phosphorus Reduction

Type: Evaluation and implementation of in-lake phosphorus reduction technologies for Lake Jesup.

Program Manager: Michael Cullum

Physical Location: Lake Jesup

Square Footage/Physical Description: Pending final design details

Expected Completion Date: September 2021

Historical Background/Need for Project: Lake Jesup is currently experiencing elevated in-lake concentrations for phosphorus. This project will comprehensively evaluate and implement in-lake phosphorus treatment methods to return phosphorus concentrations back to acceptable levels.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality and Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $400,000 in FY 2017–2018 and will need an additional $2,000,000 a year from FY 2018–2019 through FY 2020–2021.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, etc.) Pending final design details

Anticipated Additional Operating Costs/Initial (includes permits, inspections, communications requirements, utilities outside building, site development, other): Pending final design details.

Anticipated Additional Operating Costs/Continuing: Pending final design details.

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Blue Cypress Water Management Area – East Water Quality Improvements

Type: Water Quality

Program Manager: Hector Herrera

Physical Location: This project is located in Indian River County along the northern boundaries of Blue Cypress Water Management Area – East (BCWMA-E) and Blue Cypress Water Management Area – West (BCWMA-W).

Square Footage/Physical Description: The proposed project will redirect the discharge from SunAg Pump Station 7 and Berry Groves pump away from the BCWMA-E toward the Fellsmere Water Management Area (FWMA) via the construction of culverts and the improvement of an east-west flow-way located on SunAg land, which is connected to the FWMA.

Expected Completion Date: September 2018

Historical Background/Need for Project: The District is interested in maintaining a high degree of water quality in the BCWMA-E as this area serves as foraging and nesting habitat for the federally endangered snail kite. This project will redirect the agricultural discharges from SunAg pump station 7 and Berry Groves into the FWMA and out of the BCWMA-E and will help maintain the high water quality in BCWMA-E.

Plan Linkages: FY 2016–2017 Adopted Budget and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality, Flood Control, and Natural Systems, Water Supply

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $100,000 for this project in FY 2016–2017 to aid in the design and cost estimate of the flow-way improvements. An additional $300,000 and $1,500,000 for construction of the flow-way improvements is projected for FY 2017–2018 and FY 2018–2019 respectively.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Fellsmere Water Management Area (FWMA)

Type: Reservoir Construction

Program Manager: Hector Herrera

Physical Location: This project is located immediately east of the St. Johns Water Management Area (SJWMA) and south of the Fellsmere Grade within the Fellsmere Water Control District in Indian River County.

Square Footage/Physical Description: The proposed reservoir will be approximately 10,000 acres.

Expected Completion Date: September 2021

Historical Background/Need for Project: In an effort to improve water quality downstream in the St. Johns River, the District originally proposed to construct a 10,000 reservoir to treat agricultural discharges prior to entering the SJWMA and to provide water supply potential. It is expected that with the completion of this 10,000-acre reservoir, the discharges from SJWMA into Three Forks Marsh Conservation Area will meet projected nutrient targets. The project will provide water quality treatment of agricultural discharges along with habitat improvement and water supply benefits as well as virtually eliminate freshwater discharges to the Indian River Lagoon from the Upper St. Johns River Basin Project.

Plan Linkages: FY 2016–2017 Adopted Budget, FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality, Flood Control, and Natural Systems, Water Supply

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $1.6 million for this project in FY 2016–2017, and plans to budget an additional $20,500 in FY 2017–2018, $10,000 in FY 2018–2019, $10,000 in FY 2019–2020, and $10,000 in FY 2020–2021.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Land acquisition cost of approximately $9.80 million was expended for the purchase of 4,000 acres during FY 2001–2002 and an additional $35 million for the purchase of 6,000 acres in FY 2006–2007.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: Operating expenses will be incurred for the operation and maintenance of Pump Station 4 and 5, which will serve at the outlets for FWMA. These costs have not been quantified.

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Mary A Mitigation Bank Pilot Project

Type: Water Quality

Program Manager: Hector Herrera

Physical Location: This project is located on the Mary A mitigation bank property located immediately east of the C-54 Retention Area and north of C-54 in Brevard County.

Square Footage/Physical Description: The proposed project will pump water from the C-54 through the Mary A mitigation bank and discharge into the S-255 flow-way and into the St. Johns River reducing freshwater inflows to the Sebastian River from the Upper St. Johns River Basin.

Expected Completion Date: September 2019

Historical Background/Need for Project: The S-255 flow-way will be used as a main conduit for potential flow restoration projects to return water currently being discharged to the Sebastian River back to the St. Johns River. Decades of agricultural discharge from a dairy operation has loaded the flow-way with nutrients that would be re-suspended and discharged into the Three Forks Marsh Conservation Area with the additional proposed flow. To protect downstream water quality, mechanical removal of the top 1 foot of soil from the flow-way is proposed. The project will be phased over three fiscal years. Phase 1 in FY2017 will consist of survey and geotech of the flow-way to aid in the development of the dredging plan. Phase 2 in FY 2018 will be to contract the design of the dredging plan along with the dredge material containment area (DMCA). Phase 3 in FY 2018 will be the dredging of approximately 1,000,000 cubic yards of material in the flow-way and depositing it into the DMCA.

Plan Linkages: FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Water Quality, and Natural Systems, Water Supply

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $100,000 for this project in FY 2016–2017 to complete this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: This project will incur long-term operating cost to maintain and operate an electric pump station. These costs have not been quantified.

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: SJMCA Canal Plugs in the USJRB

Type: Stormwater Management

Program Manager: Hector Herrera

Physical Location: Several existing, but degraded, earthen canal plugs are located within the C-40 borrow canal along the eastern boundary of SJRWMD's 23,223-acre SJMCA, all within southern Brevard County, Florida.

Square Footage/Physical Description: Although the length of each canal plug varies, the plugs are typically about 0.5 to 1-acre in size and extend perpendicular to the C-40 canal and extend some distance into the St. Johns Marsh. Ultimately, the final plug design, based on 2-D modeling, will be constructed but the size has not yet been determined.

Expected Completion Date: September 2018

Historical Background/Need for Project: Four of the eight original C-40 canal plugs were repaired in FY 2014–2015 as an interim measure to help improve existing hydrologic conditions within the SJMCA. Anticipating that maintenance on those plugs would be required while District staff completed the 2-D model for SJMCA and developed the final restoration plan, funds were budgeted to cover the anticipated maintenance during FY2015–2016. Staff will evaluate 2D model recommendations, select best restoration alternative, and complete design and permitting during FY 2016–2017 and FY 2017–2018.

Plan Linkages: FY 2016–2017 Amended Budget

Area(s) of Responsibility: Water Quality, Flood Control, and Natural Systems

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $150,000 for this project in FY 2015–2016 and carried over $48,600 encumbered funds into FY 2016–2017.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: St. Johns Marsh Conservation Area (SJMCA) Project Design

Type: Stormwater Management

Program Manager: Hector Herrera

Physical Location: Several existing, but degraded, earthen canal plugs are located within the C-40 borrow canal along the eastern boundary of SJRWMD's 23,223-acre SJMCA—a major component of the Upper St. Johns River Basin Project—all within southern Brevard County, Florida.

Square Footage/Physical Description: Although the length of each canal plug varies, the plugs are typically about 0.5 to 1-acre in size and extend perpendicular to the C-40 canal and extend some distance into the St. Johns Marsh. Ultimately, the final plug design, based on 2-D modeling, will be constructed but the size has not yet been determined.

Expected Completion Date: September 2019

Historical Background/Need for Project: Historic borrow canals along the east and west side of St. Johns Marsh Conservation Area have resulted in over drainage of the marsh and oxidation of the organic soils resulting in release of nutrients and reduce water quality. Plugs have been constructed in the canals as an interim measure but a more robust alternative is required to establish the appropriate hydrology to minimize the over drainage. This project is to aid in the design of the final restoration improvements for St. Johns Marsh Conservation Area.

Plan Linkages: None

Area(s) of Responsibility: Water Quality, Flood Control, and Natural Systems

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $100,000 for this project in FY 2016–2017.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: T.M. Goodwin Habitat Improvements

Type: Stormwater Management

Program Manager: Hector Herrera

Physical Location: Project location is the C-54 Retention Area (T.M. Goodwin Waterfowl Management Area) located in southern Brevard County

Square Footage/Physical Description: Including creation of 62 acres of micro-topography and reparation of approximately 13 miles of internal levees within the wildlife management area.

Expected Completion Date: July 2017

Historical Background/Need for Project: The Florida Fish and Wildlife Conservation Commission (FWC) has requested the District to create micro-topography within a 62-acre designated borrow pit area and reparation of approximately 13 miles of internal levees within the water management area. Permits for these activities have already been secured. This work will create habitat for both fish and wildlife and perform needed repairs to property infrastructure. The cost estimate to complete all the work was estimated $800,000 but differing site conditions and additional work have increased the cost of the project. The District has expended approximately $400,000 of the project budget and is in negotiations with FWC to amend the existing contract to increase the project budget. Anticipated completion of the T.M. Goodwin improvements is anticipated in July 2017.

Plan Linkages: FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budget $400,000 in FY 2016–2017.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Turkey Creek Restoration

Type: Wetland Restoration

Program Manager: Dianne Hall and Hector Herrera

Physical Location: This project is located in the southeast corner of Seminole County immediately adjacent and west of the St. Johns River.

Square Footage/Physical Description: The proposed is comprised of 2,892 acres of historic St. Johns River floodplain, managed upland pasture and mixed wetland hardwood forest.

Expected Completion Date: September 2017

Historical Background/Need for Project: The objective of this project is to restore the hydrology and ecology of the Turkey Creek site using the least amount of design, management, and long-term operational cost to achieve the greatest possibility of restoring natural wetland communities with minimal or no adverse affects to desirable onsite resources of to offsite properties. Ecological improvements will include wetland restoration, hydrologic enhancement, floodwater attenuation, water quality improvements, and enhancement of wildlife habitat.

Plan Linkages: None

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The project will require $125,000 during FY 2016–2017 and it is not currently in the adopted FY 2016–2017 budget. This project will be funded by the Natural Resources Conservation Service (NRCS and a budget amendment will be needed to bring in the revenue.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Access Improvements to Lake Apopka North Shore (LANS)

Type: Water Quality Improvements

Project Manager: Robert Naleway

Physical Location: Lake Apopka and the Lake Apopka North Shore Restoration Area

Square Footage/Physical Description: 20,009 acres (North Shore)

Expected Completion Date: September 2018

Historical Background/Need for Project: The access to the LANS from CR 448A is by a one-way bridge. This bridge now provides access to the property for the new McDonald boat ramp, hikers, and cyclists. Due to the popularity of the Lake Apopka North Shore, this bridge is proposed to be replaced with a two-way bridge with a cycle lane. This will provide safer access to the increasingly popular area.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $300,000 in FY 2017–2018 to complete the project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Area 2 Boat Ramp Improvements

Type: Water Quality Improvements

Physical Location: Emeralda Marsh Restoration Area (EMRA)

Square Footage/Physical Description: The project covers 10 acres of land area in EMRA

Expected Completion Date: September 2019

Historical Background/Need for Project: The existing Area 2 boat ramp is an unimproved slope off an existing paved road. This boat launch area is marginally safe and there is very little parking space at this location. The proposed improvements would include a paved launch, a staging area and parking for up to 10 to 12 vehicles and trailers.

Plan Linkages: None

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $250,000 in FY 2018–2019 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Duda East Weir Replacement

Type: Rehabilitation of Water Control Structures

Project Manager: Robert Naleway

Physical Location: Former Duda farms on the Lake Apopka North Shore

Square Footage/Physical Description: 20,009 acres (North Shore)

Expected Completion Date: September 2017

Historical Background/Need for Project: The Duda East pond weir has failed due to age and requires replacement. Because this pond is no longer a part of the treatment system for Duda, a sheet pile weir is not longer needed and the least cost alterative to replacing the weir is to install a low water rip-rap crossing.

Plan Linkages: FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Water Supply, Water Quality, Natural Systems, Flood Protection

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $100,000 in FY 2016–2017 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Duda Lake Water Treatment System

Type: Rehabilitation of Water Control Structures

Project Manager: Robert Naleway

Physical Location: Former Duda farms on the Lake Apopka North Shore

Square Footage/Physical Description: 20,009 acres (North Shore)

Expected Completion Date: September 2017

Historical Background/Need for Project: At times of low lake level, phosphorus concentrations tend to increase in Lake Apopka. This is primarily due to the concentrating of particulate material in a smaller volume of water in the Lake. A proven treatment process that could take advantage of these times of higher total phosphorus (TP) concentrations is the use of aluminum sulfate (alum) to treat lake water. Most of the infrastructure for an alum treatment is currently in place at Duda and can be retrofitted to provide a treatment system for lake water. A major component needed to make this technique feasible is replacement of a failed weir on the Duda west pond. This project is for the improvement of the pump station and alum system and replacement of the west weir.

Plan Linkages: FY 2016–2017 Amended Budget

Area(s) of Responsibility: Water Quality, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $290,790 in FY 2016–2017 for pump upgrades and weir improvements.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: Approximately $10,000 to $20,000 per year for pump operation and $50,000 per year for alum operation.

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Emeralda Marsh Area 3 Reconnection

Type: Habitat Restoration

Project Manager: Robert Naleway

Physical Location: Area 3 of Emeralda Marsh Conservation Area (EMCA)

Square Footage/Physical Description: 1,000 acres in EMCA

Expected Completion Date: September 2017

Historical Background/Need for Project: Area 3 of EMCA is made up of former muck farms adjacent to Lake Griffin. These fields are now restored wetlands, and hydrologic reconnection of Area 3 of the EMCA to Lake Griffin has been planned for several years. A portion of Area 3 (cell K) was successfully reconnected in 2008. The transition plan developed in 2010 called for reconnection of the rest of Area 3 as conditions allow; however, the dry conditions have limited the ability to bring water levels in this area up to lake level, which would require thousands of acre-feet of water. Depending on available waters and construction conditions, reconnection is anticipated to occur in 2016 and 2017. Reconnection would include levee breaches between the lake and various internal levees within Area 3. Reconnection would lead to reduced long-term maintenance.

Plan Linkages: FY 2016–2017 Amended Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $797,920 in FY 2016–2017 (including $172,920 in carryover encumbrance).

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Lake Apopka Submerged Aquatic Vegetation (SAV) Restoration

Type: Natural Systems and Water Quality

Project Manager: Jodi Slater

Physical Location: Lake Apopka

Square Footage/Physical Description: 31,000 acres

Expected Completion Date: September 2021

Historical Background/Need for Project: One of the critical restoration goals for Lake Apopka is the establishment of native submerged aquatic vegetation (SAV). SAV provides critical habitat for many biota, including important sport fish species. In addition, the presence of the plants reduces the potential for sediment resuspension due to wind or bioturbation. The goal of the District's efforts to reduce phosphorus inputs and availability has been to reduce phytoplankton abundance, and thus allow for sufficient light availability to the sediments to support SAV. As the lake's phosphorus concentration has declined SAV has begun to appear around the lake. Initially, this work will identify the next limitation(s) on SAV growth, such as grazing, lack of seeds or propagules, or sediment conditions. Following that investigation, this project will subsequently develop new projects to overcome those limitations.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality, Natural Systems

Alternative(s): None

Basic Construction Costs (includes contracts, permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $250,000 a year from FY 2017–2018 through FY 2020–2021 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): It is likely that the District will contract with experienced consultants to guide this work and the costs have not been determined.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Lake Apopka Marsh Flow-way Improvements

Type: Water Quality Improvements

Project Manager: Robert Naleway

Physical Location: Lake Apopka and the Lake Apopka North Shore Restoration

Square Footage/Physical Description: 20,009 acres (North Shore)

Expected Completion Date: September 2020

Historical Background/Need for Project: The way the marsh flow-way was constructed and operated, shortcuts tend to develop and reduce the efficiency of the treatment system. These shortcuts can be difficult and quite costly to repair. In FY 2016–2017 the District in contracting an investigation of the system to develop structural and operational solutions to this problem. From this evaluation construction projects are expected to commence in FY 2017–2018.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $750,000 in FY 2017–2018 and FY 2019–2020 respectively for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Sunnyhill Berm Improvements

Type: Water Quality Improvements

Project Manager: Robert Naleway

Physical Location: Sunnyhill Restoration Area

Square Footage/Physical Description: 100 acres of project area

Expected Completion Date: September 2019

Historical Background/Need for Project: The Sunnyhill Restoration Area was originally designed to route water from the channelized Upper Ocklawaha River to the historic river channel. Sedimentation and vegetation in the historic river channel has limited the amount of water that can be routed in this manner. The least cost way to deal with these issues has been determined to be building up some of the internal berms within Sunnyhill which would allow water to be routed into Sunnyhill.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $150,000 in FY 2017–2018 and $1,500,000 in FY 2018–2019 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Sunnyhill Canal Plug Improvements

Type: Water Quality Improvements

Project Manager: Rolland Fulton

Physical Location: Sunnyhill Restoration Area

Square Footage/Physical Description: 5 acres of project area

Expected Completion Date: September 2019

Historical Background/Need for Project: The Sunnyhill Restoration Area has some existing ditches that have resulted in the over-draining of adjacent hardwood swamps. These ditches are proposed to be plugged or filled in to prevent the over-draining and to improve habitats in the Sunnyhill Restoration Area.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $50,000 a year in FY 2017–2018 and FY 2018–2019 respectively for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: C-1 Rediversion Phase 1B

Type: Water Control Structure / Canal Improvements

Program Manager: William Tredik

Physical Location: Phase 1B of the C-1 Rediversion project is located within the Melbourne-Tillman Water Control District (MTWCD) in Brevard County.

Square Footage/Physical Description: The C-1 Rediversion project covers approximately 90 square miles of the MTWCD. Phase 1 of the project involved the modification of an existing water control structure, construction of pump stations, outfall structures, treatment wetlands and improvements in the C-1 Retention Area.

Expected Completion Date: September 2017

Historical Background/Need for Project: The C-1 canal is a major source of excessive freshwater, nutrient and sediment discharges to the Indian River Lagoon, adversely affecting salinity and water quality. The C-1 Rediversion Project consists of two phases. Phase 1 is complete, and pumps water from the MTWCD canals C-1 and C2R into the Sawgrass Lake Water Management Area (SLWMA) for water quality improvement and subsequent discharge to the St. Johns River. Phase 1 consisted of construction of the SLWMA pump stations, the S-262 outlet structure, and the structural and operational modification of the existing MS-1 structure.

In order for the project to meet its target flow restoration goals, water levels in the C-1 system have to be held at a sufficient elevation on a year-round basis to maximize the ability to pump westward to the St. Johns River. The existing MS-1 environmental resource permit (ERP) specified an operating water level of 4.0 NGVD in the wet season and 8.0 NGVD in the dry season. These water levels are insufficient to provide targeted flow restoration. As the levels were specified in the original ERP, a permit modification was required adjusting the operating water levels in the canal.

The higher water levels in the canal system also led to several MTWCD concerns, including:

- Increased sedimentation in the canal system
- Bank destabilization due to higher water levels
- Increase in required time for drawdown prior to tropical rainfall events
- Negative impacts to canal-side vegetation

Phase 1B includes the design, permitting and construction of improvements to the C-1 system to mitigate these concerns. The amount of work is not to exceed $2.5 million and may include canal bank stabilization, vegetation removal, sediment traps, purchase of an aquatic weed harvester, purchase of a hydraulic dredge, and purchase of a floating aquatic vegetation barrier.

The District negotiated a cost-share agreement with MTWCD providing detail as to how the $2.5 million funding would be utilized, and setting the framework for future maintenance cost-sharing. MTWCD received the ERP modification permit on October 9, 2015, and signed the cost-share agreement with the District on October 28, 2015.

Plan Linkages: C-1 Rediversion Plan and FY 2016–2017 Adopted Budget,

Area(s) of Responsibility: Water Supply**,** Water Quality, Flood Control, and Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): $The District has budgeted $400,000 in FY 2016–2017 to complete this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes permits, inspections, communications requirements, utilities outside building, site development, other): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: C-10 Reservoir Project

Type: Water Control Structure

Program Manager: Hector Herrera

Physical Location: The C-10 Reservoir project is located within the Melbourne-Tillman Water Control District (MTWCD) in Brevard County.

Square Footage/Physical Description: The C-1 Rediversion project covers approximately 90 square miles of the MTWCD. Phase 1 of the project involved the modification of an existing water control structure, construction of pump stations, outfall structures, treatment wetlands and improvements in the C-1 Retention Area. Phase 2 – C-10 Reservoir Project consists of construction of a 1,300-acre reservoir with pump station and outfall structure.

Expected Completion Date: September 2020

Historical Background/Need for Project: The C-1 canal is a major source of freshwater, nutrients and sediment to the Indian River Lagoon, adversely affecting salinity and water quality. The C-1 Rediversion Project consists of two phases. Phase 1 is already complete and pumps water from the MTWCD canals C-1 and C2R into the Sawgrass Lake Water Management Area (SLWMA) for water quality improvement and subsequent discharge to the St. Johns River. Phase 2 will provide additional rediversion through construction of the C-10 reservoir, including a pump station from MTWCD canal C-9R and an outfall structure to the St. Johns River via the Three Forks Marsh Conservation Area.

Plan Linkages: C-1 Rediversion Plan**,** FY 2016–2017 Adopted Budget, and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality, Flood Control, and Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): $100,000 is currently budgeted in FY 2016–2017 for survey and geotech to support the in-house design of the project. Construction is anticipated in FY 2017–2018 and will take three years to complete. District plans to budget an additional $3,000,000 in FY 2017–2018 and $5,000,000 in FY 2018–2019 to complete the construction phase.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes permits, inspections, communications requirements, utilities outside building, site development, other): None

Anticipated Additional Operating Costs/Continuing: There are operating and maintenance cost for the pump stations associated with this project. Maintenance cost for Phase 2 components are approximately $8,000 per year for the remote operation system and approximately $18,000 per year for electricity cost.

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Wheeler Grove Stormwater Park

Type: Stormwater Management

Program Manager: Woody Boynton

Physical Location: This project is located south of Micco Road in southern Brevard County.

Square Footage/Physical Description: The Wheeler Grove Stormwater Park consists of a 23-acre settling pond (Wet Pond 1) with weir structure, a six-acre wet detention pond (Wet Pond 2) to capture and treat runoff from Fleming-Grant Road, construction of the Herndon Swamp restoration area, and additional wetland restoration areas located adjacent to the Sottile Canal. The stormwater system will be accessible as a passive park that will include walking trails and restored wetlands areas with access to the Herndon Swamp restored headwaters of the St. Sebastian River's north prong. Recreational improvements have been planned for opening of the Park to the public.

The District plans to sell stockpiled fill dirt from excavation of ponds and wetlands located on the Wheeler property in 2017 for approximately $230,000. This revenue will be used to fund recreational improvements in FY 2016–2017 fiscal year for the following work at the stormwater park:

1. Installation of a gated culvert in Pond 1 for improved control of water elevations in the pond.
2. Recreational improvements include parking areas, trail improvements, pedestrian bridge or other crossing of the Sottile Canal, and safety improvements such as installation of guard rails at major structures.
3. Additional plantings of trees around the ponds and other areas.

Expected Completion Date: June 2017

Historical Background/Need for Project: The Sottile canal has a watershed of approximately 21,000 acres, which drains, to the St. Sebastian River and eventually to the Indian River Lagoon. The Wheeler Sottile Stormwater Park is needed to improve the water quality of the Sottile Canal prior to discharge to the Sebastian River.

Plan Linkages: FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Water Quality and Natural Systems

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has already expended nearly $2.0 million from FY 2013–2014 through FY 2015–2016 with funding from DEP and FDOT. The District

budgeted an additional $250,000 in FY 2016–2017 for recreational improvements to the stormwater park.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: The District expects minimal maintenance costs associated with this project.

Program: Acquisition, Restoration and Public Works

Activity: Surface Water Projects

Project Title: Wheeler Grove Stormwater Park Mitigation

Type: Wetland Restoration, Upland Buffer Restoration, Invasive Plant Management, Hydrologic Restoration

Project Manager: Travis Richardson

Physical Location: The Wheeler Grove Stormwater Park Mitigation project is planned for FY 2016–2017. The project will be in Brevard County (at Wheeler Groves Stormwater Park). The project consists of continued maintenance of the wetland restoration areas and enhancement of adjacent uplands within Wheeler Groves Stormwater Park.

Square Footage/Physical Description: The FDOT Mitigation projects within Wheeler Groves Stormwater Park currently encompass approximately 35 acres and are anticipated to include an additional 15 acres of wetland and upland enhancement upon project completion.

Expected Completion Date: September 2018

Historical Background/Need for Project: This project is necessary to implement preservation, restoration, and enhancement projects to meet FDOT's mitigation needs pursuant to Ch. 373.4137, F.S. Project are typically completed on District or jointly owned lands that will improve hydrologic and ecologic conditions of the project areas. The District plans to utilize FDOT funding for these projects.

Plan Linkages: 2015 and 2016 FDOT Annual Mitigation Plan, FY 2016–2017 Adopted Budget, and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $62,500 in FY 2016–2017 for the Wheeler Grove Stormwater Park Mitigation. The District plans to budget an additional $32,500 in FY 2017–2018 for various mitigation projects at Wheeler Groves Stormwater Park.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration, and Public Works

Activity: Surface Water Projects

Project Title: Preliminary Engineering/Design

Type: Water Quality

Project Manager: Karl Hankin

Physical Location: TBD

Square Footage/Physical Description: TBD

Expected Completion Date: September 2017

Historical Background/Need for Project: To better plan, design, and complete projects, all future prospective project ideas will be developed and ranked first by the District's Project Planning Group. Top ranked projects will then be approved by the Executive Leadership Team (ELT) and they may require preliminary designs to determine feasibility. The District intends to fund selective projects that are top ranked and approved by ELT for 10 percent conceptual designs and cost estimates. It is unknown what those projects may be at this time.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $100,000 a year in FY 2017–2018 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration and Public Works

Activity: Facilities Construction and Major Renovations

Project Title: Governing Board Room Upgrades

Type: Facility Renovations

Project Manager: Kevin Brown

Physical Location: District Headquarter in Palatka, Florida

Square Footage/Physical Description: N/A

Expected Completion Date: September 2017

Historical Background/Need for Project: This project will update the technology and lighting to support governing board meetings, including broadcasting over the Internet. The project will address cameras, audio amplification, audio-visual mixing systems, video projection, telecommunications and lighting.

Plan Linkages: FY 2016– 20167 Adopted Budget

Area(s) of Responsibility: N/A

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $250,000 in FY 2016-2017 to complete this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration and Public Works

Activity: Other Acquisition and Restoration Activities

Project Title: Earthwork/Hydrologic Restoration

Type: Stormwater Management

Program Manager: Steven R. Miller

Physical Location: Silver Springs Forest Conservation Area

Square Footage/Physical Description: Modification of existing drainage features to reduce siltation from 12 miles of roads and increase water retention.

Expected Completion Date: September 2017

Historical Background/Need for Project: Silver Springs Forest Tract was acquired in November 2015. Improvements are needed to address water quality issues and to capitalize on water storage opportunities.

Plan Linkages: Forest Stewardship Plan for Silver Spring Forest, FY 2016–2017 Adopted Budget, and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $750,000 in FY 2016–2017 using the state's Land Acquisition Trust Fund for construction of improvements necessary to reduce siltation from roads and increase water retention. An additional $270,000 will be needed in FY 2017–2018.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): Approximately $50,000 in design and engineering

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Approximately $10,000 a year

Anticipated Additional Operating Costs/Continuing: An annual average of $5,000.

Program: Acquisition, Restoration and Public Works

Activity: Other Acquisition and Restoration Activities

Project Title: Field Activities – Public Use Structures

Type: Recreational Facilities

Program Manager: Steven R. Miller

Physical Location: To be determined

Square Footage/Physical Description: Replacement of picnic pavilions, inclement weather shelters, boardwalks and kiosks along existing public trails.

Expected Completion Date: September 2018

Historical Background/Need for Project: Many District lands are popular with the public and the need for picnic pavilions, inclement weather shelters, kiosks arise based upon use. The District has constructed many facilities in the past, but some of the existing structures are aging and the need to replace them arises on an infrequent basis. These facilities will replace existing facilities that have deteriorated over time.

Plan Linkages: Individual Land Management Plans, FY 2016-2017 Adopted Budget, and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, site preparation and other): The District has budgeted $251,715 in FY 2016–2017 (including $46,715 in carryover encumbrance) and plans to budget an additional $200,000 in FY 2017–2018 for the proposed project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None.

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration and Public Works

Activity: Land Management

Project Title: Field Activities **—** Fencing

Type: Land Management

Program Manager: Steven R. Miller

Physical Location: Various Conservation Areas

Square Footage/Physical Description: Fencing to secure boundaries and contain cattle.

Expected Completion Date: September 2018

Historical Background/Need for Project: As a part of securing boundaries or establishing fences in new cattle leases, District staff will identify areas requiring fence construction or replacement.

Plan Linkages: Individual Conservation Area Management Plans, FY 2016–2017 Adopted Budget, and FY 2017–2018 Preliminary Budget,

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $114,000 a year in both FY 2016–2017 and FY 2017–2018 for various fencing projects that are funded by the state's Land Acquisition Trust Fund.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other):

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Approximately $5,000 a year

Anticipated Additional Operating Costs/Continuing: An annual average of $5,000.

Program: Acquisition, Restoration, and Public Works

Activity: Other Acquisition and Restoration Activities

Project Title: Silver River Enhancement Project

Type: Flow Enhancement

Program Manager: Michael Cullum

Physical Location: Silver River Springshed

Square Footage/Physical Description: Pending final design details.

Expected Completion Date: September 2020

Historical Background/Need for Project: The Silver River has experienced reduced flow in recent years. The purpose of this project is to evaluate the feasibility of enhancing flow to the river through either rapid infiltration basins or recharge wells using surface water from the springshed.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $770,000 in FY 2017–2018 and will need an additional $1,370,000 in FY 2018–2019 (including $475,000 from FDEP) and $500,000 in FY 2019–2020.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): The cost of lands and capital expenditures will be determined pending final design details.

Anticipated Additional Operating Costs/Initial (includes permits, inspections, communications requirements, utilities outside building, site development, other): Pending final design details.

Anticipated Additional Operating Costs/Continuing: Pending final design details

Program: Operation and Maintenance of Lands and Works

Activity: Land Management

Project Title: FDOT Mitigation Enhancement Projects

Type: Wetland Restoration, Upland Buffer Restoration, Invasive Plant Management, Hydrologic Restoration

Project Manager: Travis Richardson

Physical Location: The project is planned to occur in Seminole County (at Lake Jesup Conservation Area). This property is east of Lake Jesup in the Black Hammock area.

Square Footage/Physical Description: The enhancement/restoration at Lake Jesup CA is expected to improve hydrology on approximately 25 acres.

Expected Completion Date: September 2017

Historical Background/Need for Project: This project will implement restoration and enhancement projects on District or jointly owned lands that will improve hydrologic and ecologic conditions of the project areas. This project is necessary to offset FDOT's mitigation needs pursuant to Ch. 373.4137 FS. The District plans to utilize funding from the Florida Department of Transportation Mitigation Program for these projects.

Plan Linkages: 2015 and 2016 FDOT Annual Mitigation Plan, FY 2016–2017 Adopted Budget, and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Water Quality, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $132,500 in FY 2016–2017 to implement the project and requires an additional $35,000 in FY 2017–2018.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Acquisition, Restoration and Public Works

Activity: Other Acquisition and Restoration Activities

Project Title: Field Activities **—** Fencing

Type: Land Management

Program Manager: Steven R. Miller

Physical Location: Various Conservation Areas

Square Footage/Physical Description: Fencing to secure boundaries and contain cattle.

Expected Completion Date: September 2017

Historical Background/Need for Project: As a part of securing boundaries or establishing fences in new cattle leases, District staff will identify areas requiring fence construction or replacement.

Plan Linkages: Individual Conservation Area Management Plans, FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $114,000 in FY 2017–2018 and $30,000 a year from FY 2018–2019 through FY 2020–20121 for various fencing projects that are funded by District revenues.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other):

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Approximately $5,000 a year

Anticipated Additional Operating Costs/Continuing: An annual average of $5,000.

Program: Operation and Maintenance of Lands and Works

Activity: Land Management

Project Title: Fishing Pier and Boat Launch at C-10 Area

Type: Recreational Facilities

Program Manager: Steven R. Miller

Physical Location: C-10 portion of Three Forks Conservation Area (TFCA), Brevard County

Square Footage/Physical Description: A small 6'x 15' floating pier and small single-lane semi improved boat ramp.

Expected Completion Date: December 2018

Historical Background/Need for Project: A floating pier and small semi improved boat ramp will be constructed to provide public access to ponds that currently do not have boat access.

Plan Linkages: Three Forks Conservation Area Management Plan

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, site preparation and other): The District plans to budget $50,000 in FY 2018–2019 for the proposed project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Land Management

Project Title: Public Access Road to Emeralda Marsh Area 7

Type: Recreational Access

Program Manager: Steven R. Miller

Physical Location: Area 7 of Emeralda Marsh Conservation Area

Square Footage/Physical Description: New driveway with culvert crossing of Yale Griffin Canal

Expected Completion Date: September 2017

Historical Background/Need for Project: Area 7 had public access until 2002. At that time is was closed because it was determined fish were unfit for human consumption and that a portion of the access road did not belong to the District. Since that time sampling indicates the fish are safe and it is time to consider reestablishing public access to Area 7.

Plan Linkages: Emeralda Marsh Conservation Area Management plan

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to spend $250,000 in FY 2016–2017 for construction of improvements necessary to provide public access.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Approximately $5,000 a year

Anticipated Additional Operating Costs/Continuing: An annual average of $5,000 a year

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Apopka Flow-way-10 Pack Rehabilitation

Type: Rehabilitation of Water Control Structures

Project Manager: Woody Boynton

Physical Location: Former Duda farms on the north shore of Lake Apopka

Square Footage/Physical Description: 12,000 acres (North Shore)

Expected Completion Date: September 2017

Historical Background/Need for Project. The 10-pack is a structure which feeds into the Lake Apopka Marsh Flow-way from Lake Apopka. The 10-pack has 10 54-inch culverts with 10 slide gates in a riser on the upstream side of the culvert. The riser portion of the structure has begun to fail, with many holes rusted all the way through the riser. The inability to close the 10-pack makes other maintenance activities difficult or impossible.

Plan Linkages: FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Water Quality, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $500,000 in FY 2016–2017 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Depending on the overall condition of the 54-inch culverts and the long-term need of the Apopka Marsh Flow-way, it is likely that these culverts will need to be replaced sometime in the next five years. The estimate for replacement has not yet been calculated.

Anticipated Additional Operating Costs/Continuing: None.

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Gopher Tortoise Relocation

Type: Natural Systems

Program Manager: Woody Boynton and David Watt

Physical Location: USJRB in Indian River, Brevard and Osceola counties, UORB in Lake and Marion counties.

Square Footage/Physical Description: There are more than100 miles of federal flood protection levees located within the USJRB and UORB. Periodic and routine inspections of these systems performed by the U.S. Army Corps of Engineers (USACE) and District staff have indicated that some of these levees and structures do not meet current USACE guidelines and require improvements and rehabilitation.

Expected Completion Date: September 2021

Historical Background/Need for Project: District staff developed a plan through the Flood Protection/Levee Structure Rehabilitation Initiative to address the presence of gopher tortoises, a state threatened species, on the USACE and other District levee systems. Subject levees span approximately 103 miles and occur in Indian River, Osceola, Orange, Brevard, and Marion Counties. In January 2016, the District entered into a Memorandum of Agreement (MOA) with the Florida Fish and Wildlife Conservation Commission (FWC) to facilitate the relocation of gopher tortoises from the subject federal levees and other District levees. The MOA is a 10-year agreement and provides the District two five-year permits. Within each five -year permit, the District must provide donor site population estimates and corresponding reserved capacity at an FWC-permitted gopher tortoise recipient site. The capacity reservation must accommodate the total number of gopher tortoises requested in the five -year permit and span the life of the five -year permit. The project entails trapping and relocating gopher tortoises, and filling borrows with non-shrinking grout.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2016–2017 Adopted Budget, and FY 2017–2018 Amended Budget,

Area(s) of Responsibility: Flood Protection, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $400,000 for FY 2016–2017, and plans to budget an additional $200,000 in FY 2017–2018, $200,000 in FY 2018–2019, $50,000 in FY 2019–2020, and $50,000 in FY 2020–2021.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Improvements to Lake Griffin Levee

Type: Water Quality Improvements

Project Manager: Woody Boynton and David Watt

Physical Location: Emeralda Marsh Restoration Area

Square Footage/Physical Description: 3 miles of levee in Lake Griffin

Expected Completion Date: September 2018

Historical Background/Need for Project: The levees along Lake Griffin and Haynes Creek that adjoin the Emeralda Marsh Conservation Area have become eroded due to boat traffic on the Lake and Creek. The Levees provide access for hikers and bikers as well as vehicle access for District maintenance and emergency response. Improvements are proposed to the levees that will reduce erosion and protect the levees from eventual failure.

Plan Linkages: FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $500,000 in FY 2017–2018 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Levee Repairs

Type: Infrastructure Renovation

Program Manager: Woody Boynton and David Watt

Physical Location: Upper St. Johns River Basin (USJRB) in Indian River, Brevard and Osceola counties, Upper Ocklawaha River Basin (UORB) in Lake and Marion counties.

Square Footage/Physical Description: There are more than 100 miles of federal flood protection levees located within the USJRB and UORB. Periodic and routine inspections of these systems performed by the U.S. Army Corps of Engineers (USACE) and District staff have indicated that some of these levees do not meet current USACE guidelines and require improvements and rehabilitation.

Expected Completion Date: September 2018

Historical Background/Need for Project: The District is the local sponsor of the federal levees and is responsible for maintaining the levees and appurtenant structures per USACE guidelines. This rehabilitation work is to address deficiencies associated with levee height, slope geometry, vegetation cover, encroachments, animal control, culverts, and other appurtenant works. Following the rehabilitation work, it is assumed that the levees will be maintained under improved routine and prescriptive maintenance in accordance with USACE guidelines. Approximately 20 miles or more of levee rehabilitation per year over the next five years may be needed, including capping, side slopes, vegetation, encroachment removal, animal control and culvert repairs as dictated by underwater inspection. The District intends to focus on levees within the USJRB in FY 2016–2017.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2016–2017 Adopted Budget, and FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Flood Protection, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $238,554 for FY 2016–2017 (including carryover encumbrance), and plans to budget an additional $750,000 in FY 2017–2018.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Minor Water Control Structure Rehabilitation

Type: Infrastructure Renovation

Program Manager: Woody Boynton and David Watt

Physical Location: USJRB in Indian River, Brevard and Osceola counties, UORB in Lake and Marion counties.

Square Footage/Physical Description: There are 12 major water control structures and 55 minor water control structures located within the USJRB and UORB. Of these, there are eight large vertical lift gates that are part of the USJRB federal flood control project, three spillways with navigational locks as part of the UORB system, and one overshot gate and weir that are part of the Harris Bayou project.

Expected Completion Date: September 2018

Historical Background/Need for Project: Beginning in October 2014, Infrastructure Engineers Inc. performed underwater inspections of all minor water control structures for the District. During these inspections, commercial divers utilizing surface supplied diving equipment performed complete and thorough inspections of the interior and exterior portions of the water control structures as well as the surrounding channel and instrumentation. Pipe culverts less than 24-inch in diameter were also completely and thoroughly inspected. The interior portions of water control structure less than 24-inch utilized a telescopic camera system for the inspection and the exterior portions of the water control structure utilized surface supplied diving equipment. The defects and conditions of the structures inspected were recorded and conveyed through written condition reports and video taken during the inspections.

The District will be correcting the major defects noted during these inspections. The work associated with rehabilitation and repair of the minor water control structures includes, but is not limited to, replacement, slip-lining or minor structural repairs.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Flood Protection

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $500,000 a year from FY 2017–2018 through FY 2019–2010.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Miscellaneous Water Control Structure Upgrades

Type: Infrastructure Renovation

Program Manager: Woody Boynton and James Rider

Physical Location: USJRB in Indian River, Brevard and Osceola counties, UORB in Lake and Marion counties.

Square Footage/Physical Description: There are 12 major water control structures and 55 minor water control structures located within the USJRB and UORB. Of these, there are eight large vertical lift gates that are part of the USJRB federal flood control project, three spillways with navigational locks as part of the UORB system, and one overshot gate and weir that are part of the Harris Bayou project.

Expected Completion Date: September 2021

Historical Background/Need for Project: Much of the District's infrastructure is 30 plus years old. Much of this requires rehabilitation or replacement. The District has identified the following projects that will be completed in FY 2017–2018. The A-Frames for S-96B and S-96C that do not meet safety criteria established for their use need to be replaced. New A-frames are needed to be constructed prior to dewatering these structures for periodic inspections and repairs. Existing waterway barriers upstream of S-96, S-96B and S-96C do not have underwater screens that prevents vegetation from building up against the structure's gates. Installing barriers with vegetation screens will prevent vegetation from flowing to the structure thus eliminating dams created by this vegetation and minimizing water flow through the structure. Drainage pipes under Fellsmere Grade are showing signs of deterioration and could fail if not addressed. Because Fellsmere Grade is the main access to several properties in the upper basin and is heavily used, slip lining is considered the most cost-effective solution to correcting this problem.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Flood Protection

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $350,000 for FY 2017–2018, $290,000 for FY 2018–2019, $290,000 for FY 2019–2020, and $200,000 for FY 2020–2021 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Moss Bluff Structure Rehabilitation

Type: Infrastructure Renovation

Program Manager: Woody Boynton and David Watt

Physical Location: UORB in Marion county

Square Footage/Physical Description: Moss Bluff Lock and Dam is one of the three spillways with navigational locks as part of the UORB system.

Expected Completion Date: September 2017

Historical Background/Need for Project: The Apopka, Burrell, and Moss Bluff Lock and Dam structures were inherited from the Southwest Florida Water Management District (SWFWMD) when the District boundaries were revised during 1970s. In addition to providing flood protection benefits, they are used to manage water levels in the chain-of-lakes to enhance those natural systems.

Rehabilitation or refurbishment of these water control structures generally entails inspecting the structure for deterioration, determining what needs to be refurbished, and doing the actual work. One category of work includes removing the gates for repair and painting, dismantling, repairing and replacing the hydraulic or mechanical operating mechanisms. Another category of work includes repairing or replacing the concrete or steel walls/floors, fixing any erosion or undermining problems and repair or replacement of miscellaneous items such as railings, fencing, riprap, etc. The Moss Bluff Structure Rehabilitation includes a complete rehabilitation including gates, concrete and all ancillary items associated with the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Flood Protection, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $1.75 million for FY 2016–2017 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Roadway and Levee Improvements

Type: Infrastructure Renovation

Program Manager: Robin Harrell and James Rider

Physical Location: USJRB in Indian River, Brevard and Osceola counties, UORB in Lake and Marion counties.

Square Footage/Physical Description: The District maintains more than 105 miles of USACE levee systems and 1,000 miles of roadway systems. Many of these systems require extensive improvements to maintain the integrity of the levee and/or roadway.

Expected Completion Date: September 2021

Historical Background/Need for Project: The District is the local sponsor for the USACE constructed levee systems in the USJRB and the UORB. In July 2010, USACE conducted a Periodic Inspection of District sponsored federal flood protection levees. The levee systems were rated "Unacceptable" and no longer eligible for rehabilitation assistance under USACE Public Law 84–99 Rehabilitation and Inspection Program (PL 84-99). The District has entered into a System Wide Improvement Framework (SWIF) with USACE to provide a framework for the means and methods the District will use to correct all deficiencies and bring the levees back into compliance with PL 84-99.

System deficiencies noted during the inspection, how the deficiencies will be rectified, prioritized and funded as well as progress made to date are addressed within this SWIF. The critical deficiencies noted were: lack of underwater culvert inspections; animal control issues, including gopher tortoise burrows; encroachments; unwanted vegetation including woody vegetation within 15-feet of the levee toe; levee geometry issues which include depressions, rutting, settlement, slope stability, and sod cover. In addition, nearly 30 miles of roadway have been identified as requiring a new lime rock surface due to the high volume of public traffic that utilizes these roadways. This project will correct these deficiencies and improve the roadway conditions identified.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Flood Protection

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $300,000 a year ffrom FY 2017–2018 through FY 2020–2021 for this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: S-164 Structure Rehabilitation

Type: Infrastructure Renovation

Program Manager: Woody Boynton and David Watt

Physical Location: Sec. 5; Twp. 25S; Rng. 34E, St. Johns River at State Road (SR) 532

Square Footage/Physical Description: Structure S-164 is a single vertical gate, hydraulically controlled spillway with a maximum discharge rate of 3,000 cfs. Two manual slide gate flumes allow draw-down below the main gate weir.

Expected Completion Date: December 2016

Historical Background/Need for Project: S-164 (Taylor Creek) was completed in 1970 and is the northernmost structure on levee L-73. It serves to regulate water levels in the Taylor Creek Impoundment area. Taylor Creek is part of the original USACE flood control plan that was drafted in the early 1960s. This plan was later modified to address new water management needs. The large reservoir controlled by the structure has become a fishing lake that is managed by the Deseret Ranch. The impoundment lake also serves as an additional source of drinking water for the City of Cocoa.

Rehabilitation or refurbishment of water control structures generally entails inspecting the structure for deterioration, determining what needs to be refurbished, and doing the actual work. One category of work includes removing the gates for repair and painting, dismantling, repairing and replacing the hydraulic or mechanical operating mechanisms. Another category of work includes repairing or replacing the concrete or steel walls/floors, fixing any erosion or undermining problems and repair or replacement of miscellaneous items such as railings, fencing, riprap, etc. The S-164 Structure Rehabilitation includes a complete rehabilitation including gates, concrete and all ancillary items associated with the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2016–2017 Amended Budget

Area(s) of Responsibility: Flood Protection, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other)**:** The District has budgeted $476,240 for FY 2016–2017 to complete this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: S-259 Culvert Rehabilitation

Type: Infrastructure Renovation

Program Manager: Woody Boynton

Physical Location: St. Johns Water Management Area (SJWMA) in Indian River County

Square Footage/Physical Description: S-259 consists of two 72-inch culverts. One is fitted with a manually operated flap gate on its western end and the other with a screw gate project. S-259 is considered a minor water control structure.

Expected Completion Date: October 2017

Historical Background/Need for Project: S-259 was constructed as part of L-75 in 1993. The structure provides a connection to the SJWMA for a diesel-electric pump station located within the District's Fellsmere Water Management Area (FWMA) project. Maximum flow through both combined culverts is estimated at 200 cfs.

Rehabilitation or refurbishment of water control structures generally entails inspecting the structure for deterioration, determining what needs to be refurbished and doing the actual work. The work associated with rehabilitation and repair of the minor water control structures includes but is not limited to replacement, slip-lining or minor structural repairs. For S-259, slip-lining the pipes was determined to be the most cost-effective solution to rehabilitating the pipes.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2016–2017 Amended Budget

Area(s) of Responsibility: Flood Protection, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $11,000 for FY 2016–2017 to complete this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: S-3 Culvert Rehabilitation

Type: Infrastructure Renovation

Program Manager: Woody Boynton and James Rider

Physical Location: St. Johns Water Management Area (SJWMA) in Indian River County

Square Footage/Physical Description: The structure is located on the east side of S-96D to augment flow from C-65 into the SJWMA. Maximum flow is estimated at 300 cfs. S-3 is considered a minor water control structure.

Expected Completion Date: December 2017

Historical Background/Need for Project: S-3 consists of three screw gate controlled 72-inch culverts. The structure is located on the east side of S-96D to augment flow from C-65 into the SJWMA. Maximum flow is estimated at 300 cfs.

Rehabilitation or refurbishment of water control structure generally entails inspecting the structure for deterioration, determining what needs to be refurbished and doing the actual work. The work associated with rehabilitation and repair of the minor water control structures includes but is not limited to replacement, slip-lining or minor structural repairs. For S-3, work includes extending the existing pipes, slope stabilization, rehabilitate the gates and electrical systems and a new walkway platform.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2016–2017 Amended Budget

Area(s) of Responsibility: Flood Protection, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $16,416 for FY 2016–2017 to complete this project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: S-96B Drum and Cable

Type: Infrastructure Renovation

Program Manager: Woody Boynton and David Watt

Physical Location: Sec. 10; Twp. 31S; Rng. 36E (west end of L-74-E). S 96-B is located at the western end of L-74-E, just north of S-96-C.

Square Footage/Physical Description: S-96B is one of the eight large vertical lift gates that are part of the USJRB federal flood control project.

Expected Completion Date: September 2017

Historical Background/Need for Project: The USJRB structures are part of the federal flood control project constructed by the USACE. The District is the local sponsor of the federal project, responsible for operation and maintenance.

The District is systematically replacing aging hydraulic operating systems to a more reliable drum and cable hoist system. The drum and cable hoist systems are more reliable, more environmentally friendly and less costly to maintain. The proposed drum and cable hoist system replacement is for S-96B only. Similar replacements for other structures in future years will be budgeted under Water Control Structures Rehabilitations and Repairs.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Flood Protection, Natural Systems

Alternative(s): Rehabilitate existing hydraulic operating system

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $200,000 for FY 2016–2017.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: S-96B Gate Rehabilitation

Type: Infrastructure Renovation

Program Manager: Woody Boynton and David Watt

Physical Location: Sec. 10; Twp. 31S; Rng. 36E (west end of L-74-E). S 96-B is located at the western end of L-74-E, just north of S-96-C.

Square Footage/Physical Description: The structure is a single vertical gate, (20.0' wide x 10.9' high, 9,000 lbs.) hydraulically controlled spillway with a maximum flow capacity of l,000 cfs.

Expected Completion Date: August 2018

Historical Background/Need for Project: S-96B was completed in 1990 and is the main outlet from the St. Johns Water Management Area (SJWMA) into the historic St. Johns River floodplain.

Rehabilitation of water control structure generally entails inspecting the structure for deterioration, determining what needs to be refurbished, and doing the actual work. One category of work includes removing the gates for repair and painting, dismantling, repairing and replacing the hydraulic or mechanical operating mechanisms. Another category of work includes repairing or replacing the concrete or steel walls/floors, fixing any erosion or undermining problems and repair or replacement of miscellaneous items such as railings, fencing, riprap, etc. The S-96B gate rehabilitation includes a complete rehabilitation including gates, concrete and all ancillary items associated with the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2017–2018 Preliminary Budget

Area(s) of Responsibility: Flood Protection

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $1,550,000 for FY 2017–2018.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Program: Operation and Maintenance of Lands and Works

Activity: Works

Project Title: Water Control Structures Rehabilitations and Repairs

Type: Infrastructure Renovation

Program Manager: Woody Boynton and David Watt

Physical Location: USJRB in Indian River, Brevard and Osceola counties, UORB in Lake and Marion counties.

Square Footage/Physical Description: There are 12 major water control structures and 55 minor water control structures located within the USJRB and UORB. Of these, there are eight large vertical lift gates that are part of the USJRB federal flood control project, three spillways with navigational locks as part of the UORB system, and one overshot gate and weir that are part of the Harris Bayou project. The minor water control structures are typically large sized gated culverts.

Expected Completion Date: September 2017

Historical Background/Need for Project: The USJRB structures are part of the federal flood control project constructed by USACE. The District is the local sponsor of the federal project, responsible for operation and maintenance. The Apopka, Burrell, and Moss Bluff Lock and Dam structures were inherited from SWFWMD when the District boundaries were revised during 1970s. In addition to providing flood protection benefits, they are used to manage water levels in the chain-of-lakes to enhance those natural systems. The Harris Bayou project was completed in 2008 to provide additional flood control benefits for the basin upstream of the Burrell Lock and Dam, and also to support water level management in the Lake Harris Conservation Area.

Rehabilitation or refurbishment of water control structures generally entails inspecting the structure for deterioration, determining what needs to be refurbished and doing the actual work. The work associated with rehabilitation and repair of the minor water control structures includes but is not limited to replacement, slip-lining or minor structural repairs. All work items are detailed in a Structure Inspection Program – Underwater Component Summary dated March 2015 and is updated every 5 years.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2016–2017 Adopted Budget

Area(s) of Responsibility: Flood Protection, Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has budgeted $514.058 for FY 2016–2017, and plans to budget an additional $2,200,000 in FY 2018–2019, $2,150,000 in FY 2019–2020, and $1,700,000 in FY 2020–2021.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, and other): None

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, and expenses): None

Anticipated Additional Operating Costs/Continuing: None

Appendix A

STANDARD FORMAT PROGRAM DEFINITIONS FOR PROGRAMS AND ACTIVITIES

1.0 Water Resources Planning and Monitoring
This program includes all water management planning, including water supply planning, development of minimum flows and levels, and other water resources planning; research, data collection, analysis, and monitoring; and technical assistance (including local and regional plan and program review).

1.2 Research, Data Collection, Analysis and Monitoring
Activities that support District water management planning, restoration, and preservation efforts, including water quality monitoring, data collection and evaluation, and research.

2.0 Acquisition, Restoration and Public Works
This program includes the development and construction of all capital projects (except for those contained in Program 3.0, including water resource development projects/water supply development assistance, water control projects, support and administrative facilities construction, cooperative projects, land acquisition (including SOR and FF), and restoration of lands and water bodies.

2.1 Land Acquisition
The acquisition of land and facilities for the protection and management of water resources. This activity category does not include land acquisition components of "water resource development projects," "surface water projects," or "other cooperative projects."

2.3 Surface Water Projects
These projects restore or protect surface water quality, flood protection, or surface-water related resources through the acquisition and improvement of land, construction of public works, and other activities.

2.5 Facilities Construction and Major Renovations
This activity involves design, construction, and significant renovation of all District support and administrative facilities.

2.6 Other Acquisition and Restoration Activities
This activity involves the acquisition and restoration activities not otherwise categorized above and/or miscellaneous District-wide management expenses under Program 6.0 that are cross-charged to Program 2.0.

3.0 Operation and Maintenance of Lands and Works
This activity includes all operation and maintenance of facilities, flood control and water supply structures, lands, and other works authorized by Chapter 373, F.S.

3.1 Land Management

Maintenance, custodial, public use improvements, and restoration efforts for lands acquired through SOR, P2000, FF or other land acquisition programs are included in this activity.

3.2 Works

The maintenance of flood control and water supply system infrastructure, such as canals, levees, pump stations, and water control structures. This includes electronic telemetry/communication and control activities.

2017 Water Resource Development Work Program

4. WATER RESOURCE DEVELOPMENT WORK PROGRAM

Table of Contents

I. Introduction

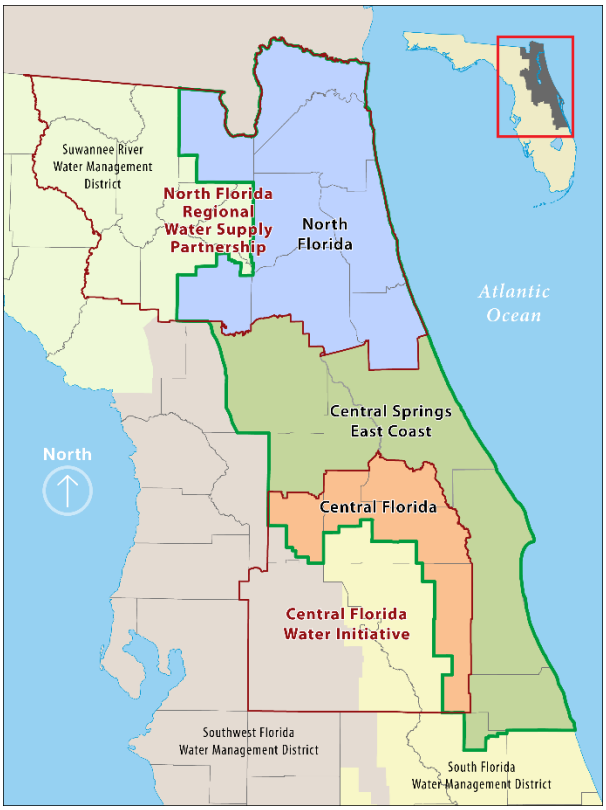
Section 373.536(6)(a)4 of the *Florida Statutes* (F.S.) requires each water management district to prepare an annual Five-Year Water Resource Development Work Program (WRDWP). Accordingly, this report presents the St. Johns River Water Management District's (District) Work Program for fiscal years 2017–2021 (FY 2017–FY 2021) (October 1, 2016–September 30, 2021). This document describes the District's implementation strategy for the water resource development component of the approved regional water supply plan developed or updated under Section 373.709, F.S. Further information on the District's role in managing the region's water resources is available at *sjrwmd.com/watersupply*.

Florida water law identifies two types of projects to meet water needs: water supply development projects and water resource development projects. Water supply development projects generally involve public or private facilities for water collection, treatment, and transmission and are the responsibility of local water users. Water resource development is defined in Section 373.019(24), F.S., as "the formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and non-structural programs to protect and manage water resources; development of regional water resource implementation programs; construction, operation, and maintenance of major public works facilities to provide for flood, surface, and underground water storage and groundwater recharge augmentation; and related technical assistance to local governments and to government owned and privately owned water utilities." These types of projects are regional in nature and are primarily the District's responsibility. These projects support water supply development at the local level and are intended to ensure the availability of adequate water supplies for all uses deemed reasonable and beneficial and to maintain the function of natural systems.

II. Regional Water Supply Planning

In accordance with Chapters 163 and 373, F.S., the District is required to update regional water supply plans every five years for at least a 20-year planning horizon to ensure the availability of water to meet all existing and future reasonable-beneficial water needs and to protect natural systems from harm up to and during a 1-in-10-year drought event.

The District is currently divided into three water supply planning regions as described below:



North Florida Region: Alachua, Baker, Bradford, Clay, Duval, Flagler, Nassau, Putnam and St. Johns counties. Water supply planning in this area is conducted as part of the North Florida Regional Water Supply Partnership (NFRWSP) in coordination with the Suwannee River Water Management District (SRWMD).

Central Springs East Coast Region: Brevard, Indian River, Marion, Okeechobee, Volusia and north Lake counties, including coordination with the South Florida and Southwest Florida Water Management Districts.

Central Florida Region: Orange, Osceola, Seminole and southern Lake counties. Planning in this area is conducted as part of the Central Florida Water Initiative (CFWI) in coordination with the South Florida and Southwest Florida Water Management Districts.

The District is in the process of updating its District Water Supply Plan (DWSP) to address the following topics for each of the three water supply planning regions:

- Population and water demand projections through 2035
- Groundwater modeling to evaluate environmental constraints
- Water conservation (WC) potential
- Water supply, alternative water supply (AWS) and water resource development (WRD) options
- Minimum flows and levels prevention and recovery strategies

III. Funding

The District's sources of revenue are:

- Ad valorem taxes (primary revenue source)
- State sources (general revenue appropriations and funding, when available, through trust funds)
- Federal sources (funding from the U.S. Environmental Protection Agency and U.S. Fish and Wildlife Service)
- District sources (interest, regulatory fees, land leases, timber sales, etc.)

During the period from FY 2005–2006 through FY 2015–2016, the District's Governing Board approved approximately $354 million in cooperative funding for water resource, water supply and AWS development projects. These funds were leveraged with partner funds for total project costs of approximately $863 million.

For FY 2016–2017, the District budgeted approximately $38 million for water resource, water supply and AWS development programs. The proposed budget for the 5-year work program is approximately $154 million through FY 2020–2021. Please see Table 4-2 for the 5-year work program/funding projections.

IV. Water Resource Development Projects/Programs

Overview

Abandoned artesian well plugging

The purpose of this program is to protect groundwater resources by identifying, evaluating and controlling abandoned artesian wells. Uncontrolled or improperly constructed artesian wells reduce groundwater levels and contribute to the potential contamination of both ground and surface waters. Since the program was established in 1983, the District has plugged or repaired approximately 100 abandoned artesian wells per year.

Update since 2016 WRDWP

This program will be funded at $160,000 in FY 2016–2017 and is projected to receive funding through FY 2020–2021.

AWS, WC and WRD projects that support District water supply regions

The District's Governing Board adopted a 5-year strategic plan in March 2016 for the period of October 2015 through September 2020. Five strategic priorities were identified, two of which have WRD, WC and/or AWS project components. Those priorities are briefly described below with specific projects identified in the subsequent tables, and project narratives provided at the end of this section.

- *Water Supply*

The District must conduct water supply planning for each of the three water supply planning regions discussed above. The District develops water supply plans to identify sustainable water supply for all existing and anticipated reasonable-beneficial water uses while protecting water resources and related natural systems. Water supply plans provide a view of projected future water needs, potential water supply sources and avoidable water resource impacts to help all water users make informed decisions regarding how to meet their future water needs. The elements of water supply planning are:

  - Identify projected water demands for all reasonable-beneficial water use types through the planning horizon
  - Identify the water resource impacts that could occur as a result of meeting the projected increase in water demand with traditional sources
  - Identify technically and economically feasible WRD, WC and / or AWS project options that could be implemented to meet future water demands and avoid unacceptable water resource impacts

The development of three regional plans will allow the plans to address local resource concerns expressed by stakeholders, improve planning efficiency and reduce costs

- *Cost Share and Partnerships*

As part of the District's water supply plans, the District addresses funding needs and identifies possible sources of funding for WRD, WC and/or AWS projects. Florida water law identifies two types of projects used to help provide the state with

adequate water supply or those that ensure natural systems are protected. Water resource development projects are generally the responsibility of the District while water supply development projects (AWS and WC) are generally the responsibility of the local entities and/or water suppliers. Currently, the District provides funding for both water resource and water supply development projects. In addition, the District also provides funding for conservation projects and strategies.

Update since 2016 WRDWP

Since completion of the 2016 WRDWP the District has reconfigured water supply planning regions from five regions to three regions. The new CSEC planning region was established to meet the requirements of F.S. Chapters 163 and 373 for the counties not listed within the North Florida or Central Florida regions. Projects specific to this region are solely under the authority of the District, and are included in this WRDWP. AWS and WRD projects were identified and implemented for applicable planning regions and incorporated into the current WRDWP.

Water conservation

The District is committed to water conservation such as implementing water conservation requirements in the consumptive use permitting program. Similarly, the District has been using its cost-share funding on water conservation projects, and staff has been providing water conservation technical assistance to utilities and local governments. Additionally, the District's regional water supply planning process includes water conservation as a key strategy in meeting future needs.

Effective water conservation projects that maximize water efficiency and reduce dependence on groundwater are included in the WRDWP.

Update since 2016 WRDWP

In FY 2011–2012, FY 2012–2013, FY 2013 – 2014, FY 2014-2015 and FY2015-2016, the District provided cooperative funding for 40 water conservation projects. The District recognizes that funding water conservation projects is more cost-effective than funding AWS projects to meet water-supply deficits in several cases, and due to that reason, projected funding for water conservation will increase for the 5-year planning horizon. In addition, the District has started a new agricultural water conservation cost-share program in specified areas of the District, where water conservation will help address water deficits and reduce non-point source storm water runoff nutrient loading.

Hydrologic and water quality data collection, monitoring and analysis

Northeast and east-central Florida relies on groundwater to meet more than 90 percent of their water supply needs. Accurate water level, water quality and hydrogeologic data and information are required to characterize and evaluate groundwater resources.

The District's hydrologic data collection program collects data and information that support the regulatory and scientific programs (including data and information for the DWSP and WRDWP). The District operates and maintains more than 1,500 monitoring stations and processes data from approximately 300 additional sites collected by other agencies. More than 16 million measurements are collected, verified, processed and stored each year.

The District's water quality monitoring network is comprised of approximately 350 long-term sampling stations located on rivers, streams and lakes throughout the District's 18-county service area. The accurate and timely processing of monitoring data enables the District to make sound resource protection and enhancement decisions.

The groundwater resource assessment program provides hydrogeologic evaluations. Specifically, the modeling section develops groundwater models to predict the effects of hydrologic changes on the Floridan aquifer systems.

Update since 2016 WRDWP

This program continues to be integral to the District's mission to ensure the sustainable use and protection of water resources. Funding projections for this program are reflective of past spending/expenditures for the program.

Potable Reuse Projects

The District is investigating the feasibility of implementing direct or indirect potable reuse projects as a method to increase AWS in the District. Using the District's cost share program, the Governing Board was able to fund two potable reuse pilot projects aimed at determining the feasibility of implementing direct potable reuse. These projects are located at the Altamonte Springs Direct Potable Reuse Pilot Project and the Daytona Beach Potable Reuse Demonstration Testing Facility.

Please refer to the subsequent series of tables for identification of the WRD, WC and AWS projects currently under way or anticipated to begin within the 5-year planning horizon. For each project, the tables delineate water resource management strategies, the quantity of water produced and funding.

Table 4-1: Activity, Quantity of Water and Water Resource Management Strategies for each Project

				Strategies				
Project Name	**District Water Supply Planning Region Supported by Project**	**Project Type**	**Water Identified or Made Available (mgd)**	**Collection and evaluation of surface waterand groundwater data**	**Structural and nonstructural programs to protect and manage water resources**	**Development of regional water resource implementation**	**Construction, operation and maintenance of major public works facilities to provide flood control, water storage and recharge augmentation**	**Technical Assistance**
Abandoned Artesian Well Plugging					*			
AWS and WRD Projects that Support District Strategic Initiatives								
Altamonte Springs Direct Potable Reuse Pilot Project	CF	AWS - Potable Reuse	N/A			*		
C-1 Canal Improvements Project*	CSEC	WRD- Restoration	N/A	*	*		*	
C-10 Reservoir Project*	CSEC	WRD- Restoration	N/A	*	*		*	
City of Apopka Reclaimed Water Main Extensions	CF	AWS-Reclaimed Water	12.15		*			
City of DeLand Reclaimed Water Storage & Recovery	CSEC	AWS-Reclaimed Water	0.16		*		*	
City of Groveland Eagle Ridge Water Distribution Facility Phase 3	CF	AWS-Reclaimed Water	0.75		*			
City of Groveland Silver Eagle Reclaimed Storage Tank	CF	AWS-Reclaimed Water	1.50		*			
City of Palm Coast Brackish Upper Floridan Performance Test	NF	AWS-Brackish Groundwater	5.00		*	*		
City of Palm Coast Grand Landings RW transmission main	NF	AWS-Reclaimed Water	0.56		*			
City of Palm Coast WTP # 2 Wellfield Expansion	NF	WRD-Groundwater	2.52		*	*		
City of Sanford Enhancements to ASR System	CF	AWS-Reclaimed Water	0.66		*	*		
Clay County Utility Authority CR 209 Reclaimed Water Transmission Main	NF	AWS-Reclaimed Water	0.05			*		
Clay County Utility Authority Old Jennings Reclaimed Water Plant Ground Storage Tank	NF	AWS-Reclaimed Water	0.75			*	*	
Clermont - South Lake Water Initiative Clermont Sunburst Well # 1 & 2	CF	WRD-Groundwater	4.40		*	*		
Daytona Beach Potable Reuse Demo Testing Facility	CSEC	AWS - Potable Reuse	N/A			*		
Daytona Beach 2.5 MG Reuse Tank	CSEC	AWS-Reclaimed Water	2.50			*	*	
Daytona Beach Rapid Infiltration Basins	CSEC	WRD-Reclaimed Water	2.00		*	*		
Deland Reclaimed Water Retrofit Project Phase 1	CSEC	AWS-Reclaimed Water	0.12			*		
Deland Reclaimed Water Retrofit Project Phase 2B	CSEC	AWS-Reclaimed Water	0.17			*		
Fellsmere Water Management Area*	CSEC	WRD-Restoration	N/A	*	*		*	
Gainesville Regional Utilities Oakmont Reclaimed Water Main Extension	NF	AWS-Reclaimed Water	0.05			*		
Green Cove Springs North Grid RCW System Phase 2 & 3	NF	AWS-Reclaimed Water	0.14			*		
JEA Bartram Park Reclaimed Water Storage Tank Expansion	NF	AWS-Reclaimed Water	0.53			*	*	
JEA Mandarin Wastewater Treatment Plant Upgrades	NF	AWS-Reclaimed Water	3.05		*			
JEA NocateeNorth RW Storage Tank	NF	AWS-Reclaimed Water	1.80		*			
JEA Nocatee Pkwy RW Transmission	NF	AWS-Reclaimed Water	1.65		*	*		
JEA RG Skinner Parkway RW Trans	NF	AWS-Reclaimed Water	0.47			*		
JEA William Burgess Rd	NF	AWS-Reclaimed Water	0.46			*		
Longwood: Florida Central Commerce Park Stormwater Pond	CF	AWS - Stormwater	0.05		*			
Marion County Utilities: Package Plant Removal at Silver Springs	CSEC	AWS-Reclaimed Water	N/A		*			
Orange County Malcolm Rd Minimized Impact Project -Lower Floridan Wells	CF	WRD-Groundwater	4.00		*	*		

**All projects are cost-share projects unless notated with asterisk*

Table 4-1: Activity, Quantity of Water and Water Resource Management Strategies for each Project

				Strategies				
Project Name	**District Water Supply Planning Region Supported by Project**	**Project Type**	**Water Identified or Made Available (mgd)**	**Collection and evaluation of surface waterand groundwater data**	**Structural and nonstructural programs to protect and manage water resources**	**Development of regional water resource implementation**	**Construction, operation and maintenance of major public works facilities to provide flood control, water storage and recharge augmentation**	**Technical Assistance**
Orange County Malcolm Rd Minimized Impact Project -Lower Floridan Wells Ph 2	CF	WRD-Groundwater	3.00		*	*		
Orange County Wekiwa Springshed AWS Expansion	CF	AWS-Reclaimed Water	3.00			*		
Orange County Wekiwa Springshed AWS Expansion - additional improvements	CF	AWS-Reclaimed Water	3.00			*		
Organica World	CF	AWS-Storm Water	0.017		*			
Ormond Beach South Peninsula Reclaimed Water Expansion	CSEC	AWS-Reclaimed Water	0.56			*		
Palm Coast RCW Irrigation Along US1 & Palm Coast Park	NF	AWS-Reclaimed Water	1.00			*		
St. Johns County RW Storage Tank at SR16 WWTF	NF	AWS-Reclaimed Water	1.00		*			
St Johns County St Augustine Beach Reclaimed Water Transmission Main	NF	AWS-Reclaimed Water	0.04			*		
Taylor Creek Reservoir Improvement Project*	CF	WRD-Surface Water	11 to 24		*	*	*	
Vero Beach Reverse Osmosis WTF Expansion	CSEC	AWS-Brackish Groundwater	2.60		*	*		
Volusia County Utilities: RCW Main Extension for I-4/SR 472 Activity Center	CSEC	AWS-Reclaimed Water	0.10			*		
W. Volusia Water Suppliers Project 4A Deltona Storage &Treatment System Improvements	CSEC	AWS-Reclaimed Water	4.00			*		
Woodlawn Memorial Park Irrigation System Upgrade	CF	AWS-Reclaimed Water	0.22			*		
Water Conservation	**N/A**	**N/A**	**N/A**					
Alachua County Landscape Irrigation Retrofit Rebate Program	NF				*			*
Alachua County Water Star Rebate Program	NF				*			*
Apopka Water Conservation Incentive Program	CF				*			*
Atlantic Beach AMI Implementation	NF				*			*
Bekemeyer Family Farm, LLC	NF				*			*
Gainesville Regional Utilities Indoor Plumbing Retrofit Program	NF				*			*
Marion County Enhanced Irrigation Evaluation Program	CSEC				*			*
Ocoee Final Phase of Meter Replacement and Full Integration of AMI	CF				*			*
Orange County Utilities - Toilet Replacement Program	CF				*			*
Orange County Utilities WaterSmart	CF				*			*
Orange County Utilities - Waterwise Neighbor Program	CF				*			*
Orange County Utilities Waterwise Neighbor Program (new)	CF				*			*
Orange County Utilities Waterwise Neighbor Program (retrofit)	CF				*			*
OUC Conservation Project Targeting Irrigation Customers	CF				*			*
Penney Farms Mandatory Meter Reader Replacement	NF				*			*
Sante Fe Community College NW Campus Plumbing Fixture Retrofit	NF				*			*
Seminole County Plumbing Retrofit Rebate Program	CF				*			*
St Johns County AMI Expansion in the NW	NF				*			*
St Johns County Customer Portal	NF				*			*

**All projects are cost-share projects unless notated with asterisk*

Table 4-1: Activity, Quantity of Water and Water Resource Management Strategies for each Project

				Strategies				
Project Name	**District Water Supply Planning Region Supported by Project**	**Project Type**	**Water Identified or Made Available (mgd)**	**Collection and evaluation of surface waterand groundwater data**	**Structural and nonstructural programs to protect and manage water resources**	**Development of regional water resource implementation**	**Construction, operation and maintenance of major public works facilities to provide flood control, water storage and recharge augmentation**	**Technical Assistance**
Hydrologic and Water Quality Data Collection, Monitoring and Analysis **	**N/A**	**N/A**	**N/A**					
Hydrologic and Water Quality Data Collection and Monitoring				*				
Groundwater Assessments and Modeling				*				

*** The activities were not included in the tentative budget Appendix C as the major object is not fixed capital outlay or cooperative funding.*

Table 4-2: Five-Year Work Program/Funding Projections

Project Name	Correlation to District Budget	Five-Year Work Program					Subtotal
		FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	
Abandoned Artesian Well Plugging	2.2.3/other Water Resources Development (WRD)	$ 160,000	$ 160,000	$ 160,000	$ 160,000	$ 160,000	$ 800,000
AWS and WRD Projects that Support District Strategic Initiatives							
Altamonte Springs Direct Potable Reuse Pilot Project	2.2.1 / WRD Projects	$ 300,000					$ 300,000
C-1 Canal Improvements Project*	2.2.1 / WRD Projects	$ 1,400,000					$ 1,400,000
C-10 Reservoir Project*	2.2.1 / WRD Projects	$ 100,000	$ 4,000,000	$ 3,000,000			$ 7,100,000
City of Apopka Reclaimed Water Main Extensions	2.2.1 / WRD Projects	$ 835,500					$ 835,500
City of DeLand Reclaimed Water Storage & Recovery	2.2.1 / WRD Projects	$ 53,250					$ 53,250
City of Groveland Eagle Ridge Water Distribution Facility Phase 3	2.2.1 / WRD Projects	$ 1,057,023					$ 1,057,023
City of Groveland Silver Eagle Reclaimed Storage Tank	2.2.1 / WRD Projects	$ 825,000					$ 825,000
City of Palm Coast Brackish Upper Floridan Performance Test	2.2.1 / WRD Projects	$ 17,325					$ 17,325
City of Palm Coast Grand Landings RW transmission main	2.2.1 / WRD Projects	$ 66,710					$ 66,710
City of Palm Coast WTP # 2 Wellfield Expansion	2.2.1 / WRD Projects	$ 785,569					$ 785,569
City of Sanford Enhancements to ASR System	2.2.1 / WRD Projects	$ 106,274					$ 106,274
Clay County Utility Authority CR 209 Reclaimed Water Transmission Main	2.2.1 / WRD Projects	$ 189,746					$ 189,746
Clay County Utility Authority Old Jennings Reclaimed Water Plant Ground Storage Tank	2.2.1 / WRD Projects	$ 138,460					$ 138,460
Clermont - South Lake Water Initiative Clermont Sunburst Well # 1 & 2	2.2.1 / WRD Projects	$ 1,980,000					$ 1,980,000
Daytona Beach Potable Reuse Demo Testing Facility	2.2.1 / WRD Projects	$ 949,000					$ 949,000
Daytona Beach 2.5 MG Reuse Tank	2.2.1 / WRD Projects	$ 734,250	$ 734,250				$ 1,468,500
Daytona Beach Rapid Infiltration Basins	2.2.1 / WRD Projects	$ 990,000					$ 990,000
Deland Reclaimed Water Retrofit Project Phase 1	2.2.1 / WRD Projects	$ 399,960					$ 399,960
Deland Reclaimed Water Retrofit Project Phase 2B	2.2.1 / WRD Projects	$ 501,180					$ 501,180
Fellsmere Water Management Area*	2.2.1 / WRD Projects	$ 900,000					$ 900,000
Gainesville Regional Utilities Oakmont Reclaimed Water Main Extension	2.2.1 / WRD Projects		$ 146,708				$ 146,708
Green Cove Springs North Grid RCW System Phase 2 & 3	2.2.1 / WRD Projects	$ 132,000	$ 528,000				$ 660,000
JEA Bartram Park Reclaimed Water Storage Tank Expansion	2.2.1 / WRD Projects	$ 627,000					$ 627,000
JEA Mandarin Wastewater Treatment Plant Upgrades	2.2.1 / WRD Projects	$ 1,316,000					$ 1,316,000
JEA Nocatee North RW Storage Tank	2.2.1 / WRD Projects	$ 660,000					$ 660,000
JEA Nocatee Pkwy RW Transmission	2.2.1 / WRD Projects	$ 56,100					$ 56,100
JEA RG Skinner Parkway RW Transmission	2.2.1 / WRD Projects	$ 165,000	$ 495,000				$ 660,000
JEA William Burgess Rd	2.2.1 / WRD Projects	$ 495,000	$ 165,000				$ 660,000
Longwood: Florida Central Commerce Park Stormwater Pond	2.2.1 / WRD Projects	$ 202,310					$ 202,310
Marion County Utilities: Package Plant Removal at Silver Springs	2.2.1 / WRD Projects	$ 309,000					$ 309,000
Orange County Malcolm Rd Minimized Impact Project -Lower Floridan Wells	2.2.1 / WRD Projects	$ 247,500					$ 247,500
Orange County Malcolm Rd Minimized Impact Project -Lower Floridan Wells Ph 2	2.2.1 / WRD Projects	$ 264,000					$ 264,000
Orange County Wekiwa Springshed AWS Expansion	2.2.1 / WRD Projects	$ 200,000					$ 200,000
Orange County Wekiwa Springshed AWS Expansion - additional improvements	2.2.1 / WRD Projects	$ 158,000					$ 158,000
Organica World	2.2.1 / WRD Projects	$ 30,000					$ 30,000
Ormond Beach South Peninsula Reclaimed Water Expansion	2.2.1 / WRD Projects	$ 1,455,178					$ 1,455,178
Palm Coast RCW Irrigation Along US1 & Palm Coast Park	2.2.1 / WRD Projects	$ 462,000					$ 462,000

** All projects are cost-share projects unless notated with asterisk*

Table 4-2: Five-Year Work Program/Funding Projections

Project Name	Correlation to District Budget	Five-Year Work Program FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21	Subtotal
St. Johns County RW Storage Tank at SR16 WWTF	2.2.1 / WRD Projects	$ 41,250					$ 41,250
St Johns County St Augustine Beach Reclaimed Water Transmission Main	2.2.1 / WRD Projects	$ 136,858					$ 136,858
Taylor Creek Reservoir Improvement Project*	2.2.1 / WRD Projects	$ -	$ 6,360,000	$ 6,360,000			$ 12,720,000
Vero Beach Reverse Osmosis WTF Expansion	2.2.1 / WRD Projects	$ 216,000					$ 216,000
Volusia County Utilities: RCW Main Extension for I-4/SR 472 Activity Center	2.2.1 / WRD Projects	$ 202,785					$ 202,785
West Volusia Water Suppliers Project 4A Deltona Storage &Treatment System Improvemts	2.2.1 / WRD Projects	$ 1,485,000	$ 990,000				$ 2,475,000
Woodlawn Memorial Park Irrigation System Upgrade	2.2.1 / WRD Projects	$ 111,052					$ 111,052
Cost Share Placeholder (Ad Valorem)	2.2.1 / WRD Projects		$ 19,400,000	$ 9,400,000	$ 9,400,000	$ 9,400,000	$ 47,600,000
Cost Share Placeholder - Springs (State Funds)	2.2.1 / WRD Projects	$ 8,176,061	$ 6,000,000	$ 6,000,000	$ 6,000,000	$ 6,000,000	$ 32,176,061
AWS and WRD Projects that Support District Water Supply Regions - Total		***$ 29,477,341***	***$ 38,818,958***	***$ 24,760,000***	***$ 15,400,000***	***$ 15,400,000***	
Water Conservation							
Alachua County Landscape Irrigation Retrofit Rebate Program	2.2.1 / WRD Projects	$ 300,000					$ 300,000
Alachua County Water Star Rebate Program	2.2.1 / WRD Projects	$ 105,000					$ 105,000
Apopka Water Conservation Incentive Program	2.2.1 / WRD Projects	$ 70,000					$ 70,000
Atlantic Beach AMI Implementation	2.2.1 / WRD Projects	$ 95,688					$ 95,688
Bekemeyer Family Farm, LLC	2.2.1 / WRD Projects	$ 116,407					$ 116,407
Gainesville Regional Utilities Indoor Plumbing Retrofit Program	2.2.1 / WRD Projects	$ 150,000					$ 150,000
Marion County Enhanced Irrigation Evaluation Program	2.2.1 / WRD Projects	$ 9,000	$ 9,000				$ 18,000
Ocoee Final Phase of Meter Replacement and Full Integration of AMI	2.2.1 / WRD Projects	$ 1,115,283					$ 1,115,283
Orange County Utilities - Toilet Replacement Program	2.2.1 / WRD Projects	$ 10,000					$ 10,000
Orange County Utilities WaterSmart	2.2.1 / WRD Projects	$ 112,334					$ 112,334
Orange County Utilities - Water Wise Neighbor Program	2.2.1 / WRD Projects	$ 10,915					$ 10,915
Orange County Utilities Waterwise Neighbor Program (new)	2.2.1 / WRD Projects	$ 135,981					$ 135,981
Orange County Utilities Waterwise Neighbor Program (retrofit)	2.2.1 / WRD Projects	$ 37,404					$ 37,404
OUC Conservation Project Targeting Irrigation Customers	2.2.1 / WRD Projects	$ 224,029					$ 224,029
Penney Farms Mandatory Meter Reader Replacement	2.2.1 / WRD Projects	$ 5,000					$ 5,000
Santa Fe Community College NW Campus Plumbing Fixture Retrofit	2.2.1 / WRD Projects	$ 13,176					$ 13,176
Seminole County Plumbing Retrofit Rebate Program	2.2.1 / WRD Projects	$ 8,000					$ 8,000
St Johns County AMI Expansion in the NW	2.2.1 / WRD Projects	$ 110,000					$ 110,000
St Johns County Customer Portal	2.2.1 / WRD Projects	$ 48,000					$ 48,000
Water Conservation - Totals		***$ 2,676,216***	***$ 9,000***	***$ -***	***$ -***	***$ -***	
Hydrologic and Water Quality Data Collection, Monitoring and Analysis **							
Hydrologic and Water Quality Data Collection and Monitoring	1.2/Research, Data Collection, Analysis & Monitoring	$ 5,167,000	$ 5,167,000	$ 5,167,000	$ 5,167,000	$ 5,167,000	**$ 25,835,000**
Groundwater Assessments and Modeling	1.1.1 / Water Supply Planning, 1.1.3/ Water Resource Planning	$ 175,000	$ 175,000	$ 175,000	$ 175,000	$ 175,000	**$ 875,000**
Hydrologic and Water Quality Data Collection, Monitoring and Analysis - Totals		***$ 5,342,000***	***$ 5,342,000***	***$ 5,342,000***	***$ 5,342,000***	***$ 5,342,000***	
Fiscal Year Totals		**$ 37,655,557**	**$ 44,329,958**	**$ 30,262,000**	**$ 20,902,000**	**$ 20,902,000**	**$ 154,051,515**

** All projects are cost-share projects unless notated with asterisk*

*** The activities were not included in the tentative budget Appendix C as the major object is not fixed capital outlay or cooperative funding.*

Project narratives

Abandoned artesian well plugging

Status: This is a continuous program established by the District in 1983.
The goal of this program is to protect groundwater resources by identifying, evaluating and controlling abandoned artesian wells.

Projects supporting District water supply planning regions (WSPR)

Altamonte Springs Direct Potable Reuse Pilot Project
Status: Anticipated completion date is September 2017
WSPR: Central Florida
A potable reuse pilot project will add a side stream treatment train to the current wastewater treatment process with a capacity of 20 to 50 gallons per minute (GPM) or greater. Treatment objectives will produce purified water that will exceed current drinking water standards and will be tested for a variety of micro-constituents and pathogens. Construction on the project is scheduled to begin in August 2016.

C-1 Canal Improvements Project
And C-10 Reservoir Project
Status: Phase 1 completed; Phase 2 Anticipated completion date is 2019
WSPR: Central Springs East Coast
The project will restore, to the St. Johns River, a portion of the historic flows which were diverted to the Indian River Lagoon when drainage canals were excavated in the early 20th century. The two project components are listed separately in the Tentative Budget Appendix C. The C-1 Canal Improvements project includes bank stabilization by flattening slopes, vegetation removal and geo textile installation. It will be completed in September 2017.

The C-10 Reservoir project includes construction of levees, pump station, and an outfall structure is estimated. It is to be completed in 2019.

Runoff from Palm Bay will be pumped into two separate water bodies, the Sawgrass Lake Water Management Area and the C-10 Reservoir, for water quality improvement prior to discharging to the St. Johns River. This project benefits the Indian River Lagoon by removing nutrients, sediments and excessive freshwater discharges, and also provides benefit to the St. Johns River by restoring a significant portion of the historic flows back to the river.

Phase 1 was completed in 2011 and has restored approximately 28% of the average annual flow back to the St. Johns River. In 2015, Phase 1 was enhanced by upgrading the two pump stations to Sawgrass Lake Water Management Area, projected to increase average annual flow restoration to 39%. Phase 2 is in the design stage and includes construction of a 1,300-acre reservoir with a pump station and outlet structure. Phase 2 is estimated to increase the average annual flow restoration to near 50%. Construction of Phase 2 is scheduled to be complete in 2019.

City of Apopka Reclaimed Water Main Extensions
Status: Anticipated completion date is September 2017
WSPR: Central Florida
The project consists of constructing of three reclaimed water main segments within the City of Apopka. The pipe segments include: (1) Ocoee-Apopka Road from Keene Road to Alston Bay Boulevard; (2) Keene Road from Marden Road to Ocoee-Apopka Road and Ocoee-Apopka Road from Keene Rd to Parkstone; and (3) Schopke Road from Plymouth Sorrento Road to Schopke-Lester Road. These reclaimed water distribution segments add to the planned or existing network within the city. These three segments were listed as separate projects in the WRDWP report for FY16. Construction is scheduled to begin in October 2016.

City of DeLand Reclaimed Water Storage & Recovery
Status: Anticipated completion date is December 2016
WSPR: Central Springs East Coast
This project will reduce discharge of nutrients, such as plant effluent, into the St Johns River by installing a Rapid Infiltration Basin (RIB), which will also augment reclaimed water supplies during dry weather. Project start was delayed due to contracting delays with selection of contractor. Construction began in May 2016.

City of Groveland Eagle Ridge Water Distribution Facility Phase 3
Status: Anticipated completion date is September 2017
WSPR: Central Florida
This project consists of construction of a 7.3 mile reclaimed water main to interconnect the Sunshine Wastewater Treatment Plant (WWTP) to the Sampey Road WWTP. Sunshine WWTP will double its reclaimed availability, and the additional water reserves will offset withdrawals in the south service area. Design and permitting is underway, and construction is scheduled to start in September 2016.

City of Groveland Silver Eagle Reclaimed Storage Tank
Status: Anticipated completion date is December 2016
WSPR: Central Florida
This project consists of construction of a 1.5 million gallon (MG) storage tank for reclaimed water at the Silver Eagle facility. Project advertised for bid in July 2016. Project start delayed due to issues with design and permitting. Construction is scheduled to start in September 2016.

City of Palm Coast Brackish Upper Floridan Aquifer (UFA) Aquifer Performance Test (APT)
Status: Anticipated completion date is December 2017
WSPR: North Florida
This project consists of conducting an APT to calculate the yield of the brackish UFA for make up water for desalination treatment to provide finished water for public supply. An estimated 3 to 5 millions gallons per day (MGD) may be available as an alternative source of water for public supply in lieu of using the confined surficial aquifer; thereby protecting the health of the surrounding wetlands. Project start was initially delayed, however drilling began in May 2016.

City of Palm Coast Grand Landings Reclaimed Water Transmission Main
Status: Anticipated completion date is December 2016
WSPR: North Florida
This project consists of an extension of the city's reclaimed water system to the SE section of the city. Construction scheduled to begin in August 2016.

City of Palm Coast Water Treatment Plant (WTP) # 2 Wellfield Expansion
Status: Anticipated completion date is May 2017
WSPR: North Florida
This project consists of developing additional wells over a larger area without increasing allocation. This allows optimization of wellfield management by having more flexibility resting and pumping wells, thus reducing the potential for saline water intrusion. Construction began May 2016.

City of Sanford: Enhancements to ASR System
Status: Anticipated completion date is March 2017
WSPR: Central Florida
This project will construct enhancements to the existing ASR System that will allow the City to use two additional water sources individually or blended; the City's Main WTP and raw groundwater from the Hidden Lakes wellfield. Injecting raw groundwater is intended to reduce the pretreatment operating expense. Design is complete. Project was delayed due to the contractor bid and procurement process. This agreement has been combined with the Phase 2 project listed in the FY16 WRDWP report. Construction started in April 2016

Clay County Utility Authority County Road (CR) 209 Reclaimed Water Transmission Main
Status: Anticipated project completion is February 2017
WSPR: North Florida
This project will construct a 3,800 linear foot 20-inch diameter reclaimed water main extension to serve the future development area near the intersection of CR 220 and CR 209/Henley Road. Construction is scheduled to start in October 2016.

Clay County Utility Authority Old Jennings Reclaimed Water Plant Ground Storage Tank
Status: Anticipated project completion is August 2017
WSPR: North Florida
This project will construct a 750,000-gallon ground storage tank at the Old Jennings Road Reclaimed Water Plant facility. The tank will be installed inside the existing facility and be directly integrated into the existing reclaimed water transmission/distribution system. Construction is scheduled to start in February 2017.

Clermont – South Lake Water Initiative Clermont Sunburst Well # 1 & 2
Status: Anticipated project completion is December 2016
WSPR: Central Florida
The project consists of construction of two 2.2 MGD LFA test wells. Construction began in July 2016.

Daytona Beach Potable Reuse Demonstration Testing Facility
Status: Anticipated project completion is March 2018
WSPR: Central Spring East Coast
The project will enable Daytona Beach to investigate how Direct Potable Reuse (DPR) can be successfully implemented in the City's system. Once the demonstration facility (Facility) has been constructed, it will operate for 24 months. The Facility will be located at the city's Westside Regional Waste Water Treatment Facility (WWTF), which currently produces high-level disinfected reclaimed water intended for public access reuse. This location will minimize complexity and cost of piping for providing reclaimed water to the Facility and allow for treated water to return to the headworks of the WWTF. The Facility will produce approximately 200,000 gallons per day (GPD) of product water and 60,000 GPD of concentrate water, which will be recycled back to the headworks. Construction on the project is scheduled to begin in April 2017.

Daytona Beach 2.5 MG Reuse Tank
Status: Anticipated project completion is January 2018
WSPR: Central Spring East Coast
This project includes construction of a 2.5 MG reclaimed water storage tank. Construction is scheduled to begin in April 2017.

Deland Reclaimed Water Retrofit Project Phase 1
Status: Anticipated project completion is June 2017
WSPR: Central Spring East Coast
The project consists of retrofitting three areas currently served with potable water for irrigation to reclaimed irrigation supply. The three areas include Blue Lake Woods Subdivision, University Avenue Region, and South Ridge Pointe Subdivision. Construction on the project is scheduled to begin in December 2016.

Deland Reclaimed Water Retrofit Project Phase 2B
Status: Anticipated project completion is December 2017
WSPR: Central Spring East Coast
The project consists of retrofitting two areas currently served with potable water for irrigation to reclaimed irrigation supply. The two areas include the Waterford and Heather Glen Subdivisions. Construction on the project is scheduled to begin in April 2017.

Fellsmere Water Management Area
Status: Anticipated project completion is June 2017
WSPR: Central Spring East Coast
The Fellsmere Water Management Area is a component of the Upper St. Johns River Basin Project and involves construction of a 10,000-acre reservoir to treat agricultural discharges prior to entering the St. Johns River Water Management Area. The project provides potential for additional water supply and improved wildlife habitat. This is one of the final components of the Upper St. Johns River Basin Project, collectively restoring more than 160,000 acres of the St. Johns River headwaters.

Current status: the eastern perimeter levee and the emergency overflow weir have been completed. Construction on the southern inlet, the last remaining major project feature, has begun and will be completed by summer of 2017.

Gainesville Regional Utilities Oakmont Reclaimed Water Main Extension
Status: Anticipated project completion is September 2018
WSPR: North Florida
This project includes a reclaimed water main for distribution of irrigation water in the Oakmont Phase 2 Subdivision. Construction on the project is scheduled to begin in October 2016.

Green Cove Springs North Grid RCW System Phase 2 & 3
Status: Anticipated project completion is September 2018
WSPR: North Florida
This project is multi-phased. Phases 2 and 3 which includes installation of a reclaimed water line to the Black Creek Marina development and connection to the Phase 1 termination point at Edgewater Landing. Phase 3 is the final leg of the reclaimed water main from the Harbor Road Water Reclamation Facility to the termination point of Phase 1. Construction on the project is scheduled to begin in April 2017

JEA Bartram Park Reclaimed Water Storage Tank Expansion
Status: Anticipated project completion is March 2017
WSPR: North Florida
This project adds one 2.5 MG storage tank to support peak demands. The Bartram facility repumps reclaimed water supplied by two major wastewater facilities (Arlington East & Mandarin) to support St. Johns County demands, (currently 7,000 customers). This storage tank will provide an additional 5 hours of peak supply at the current pumping rate of 11 MGD. Construction on the project is scheduled to begin in October 2016

JEA Mandarin Wastewater Treatment Plant Upgrades
Status: Anticipated project completion is September 2017
WSPR: North Florida
This project includes construction of a 1.6 MG equalization basin, high service pump and disinfection to provide operational storage and equalization of available reclaimed water flow over a 24-hour period. This will increase the reclaimed water operational capacity from 5.7 MGD to 8.75 MGD annual average. Construction is scheduled to begin in September 2016.

JEA Nocatee North Reclaimed Water Storage Tank
Status: Anticipated project completion is September 2017
WSPR: North Florida
This project includes construction of a 2MG storage tank to provide additional capacity. Construction on the project is scheduled to begin in September 2016.

JEA Nocatee Parkway Reclaimed Water Transmission
Status: Anticipated project completion is September 2017
WSPR: North Florida
This project includes construction of a 16-inch diameter transmission line. Construction is scheduled to begin in June 2016.

JEA RG Skinner Parkway Reclaimed Water Transmission
Status: Anticipated project completion is June 2018
WSPR: North Florida
This project is the second phase of a project to expand the reclaimed water system to convey reclaimed water between the Arlington East and Mandarin WWTFs, while also providing reclaimed water in the highest customer demand regions of northern St. Johns County and southern Duval County. Construction on the project is scheduled to begin in June 2017.

JEA William Burgess Road
Status: Anticipated project completion is December 2017
WSPR: North Florida
This project will provide reclaimed water via a 13,000 feet of pipe to a major development called the East Nassau Community Planning Area in Nassau County. Construction on the project is scheduled to begin in March 2017.

Longwood: Florida Central Commerce Park Stormwater Pond
Status: Anticipated project completion is September 2017
WSPR: Central Florida
This project consists of expanding stormwater treatment and storage (which will provide for augmentation of irrigation sources), abandonment of a secondary treatment wastewater plant and rerouting the wastewater to a County plant to improve wastewater effluent quality. The project maximizes reuse availability and also allows for the abandonment of existing irrigation wells. Construction on the project is scheduled to begin in August 2016.

Marion County Utilities: Package Plant Removal at Silver Springs Shores
Status: Anticipated completion date is March 2017
WSPR: Central Springs East Coast
This project will remove five package plants from service and send their flows to the advanced wastewater treatment facility at Silver Springs Shores. The project will reduce nutrient loading to groundwater as well as Silver Springs, and provide an additional irrigation source in lieu of potable water. Project start was delayed by higher than expected bids. Construction on the project is scheduled to begin in August 2016.

Orange County Utilities: Malcolm Road Minimized Impact Project – LFA Wells
Status: Anticipated completion date is December 2016
WSPR: Central Florida
This project includes construction of a Lower Florida Aquifer (LFA) production well at the planned Malcolm Road Water Supply Facility (MRWSF). Construction began in August 2015.

Orange County Utilities: Malcolm Road Minimized Impact Project – LFA Wells – Phase 2
Status: Anticipated completion date is December 2016
WSPR: Central Florida
This project includes construction of two LFA production wells at the MRWSF to provide potable water to the Horizon West development area. Construction began in August 2015.

Orange County Utilities: Wekiwa Springshed AWS Expansion
Status: Anticipated completion date is March 2017
WSPR: Central Florida
This project includes construction of 3,500 feet of 24-inch diameter reclaimed water main and related pumping improvements in order to provide up to 3 MGD of reclaimed water produced at the Northwest Water Reclamation Facility (NWRF) to the City of Apopka for distribution in their reclaimed water system. Construction began in September 2015.

Orange County Utilities: Wekiwa Springshed AWS Expansion additional improvements
Status Anticipated completion date is May 2017
WSPR: Central Florida
This project includes major improvements to the electrical control building and the installation of three additional pumps. Construction is scheduled to begin in August 2016.

Organica World
Status: Anticipated completion date is December 2016
WSPR: Central Florida Water
This project consists of the construction of a rainwater collection system for hydroponic vegetable operation. Construction on the project began in August 2015.

Ormond Beach South Peninsula Reclaimed Water Expansion
Status: Anticipated completion date is August 2017
WSPR: Central Springs East Coast
This project includes expansion of the City's reclaimed water distribution network throughout the South Peninsula area of the City of Ormond Beach. Upon completion, the project reduces groundwater withdrawals from the City's Rima Ridge wells by approximately 0.56 MGD due to a reduction in demand of potable water for irrigation purposes. Construction on the project is scheduled to begin in February 2017.

Palm Coast Reclaimed Water Irrigation along US1 & Palm Coast Park
Status: Anticipated completion date is September 2017
WSPR: North Florida
A reclaimed water line will be constructed along US 1 in Palm Coast. Construction on the project is scheduled to begin in August 2016.

St. Johns County – Reclaimed Water Storage Tank at SR16 WWTF
Status: Anticipated completion date is December 2016
WSPR: North Florida
This project involves construction of a 1 MG ground-storage tank. Construction began in December 2015.

St Johns County St Augustine Beach Reclaimed Water Transmission Main
Status: Anticipated completion date is August 2017
WSPR: North Florida
This project includes expansion of the County's reclaimed water system by providing an 8-inch diameter reclaimed water main from the Ocean Cay development to the St. Augustine Beach City Hall and park. In addition, the reclaimed water main will also serve the Ocean Ridge

subdivision (73 homes). The new reuse main will also provide future service to customers along the route. Construction is scheduled to begin in December 2016.

Taylor Creek Reservoir Improvement Project
Status: Anticipated completion is September 2018
WSPR: Central Florida
This project is intended to restore the levee to its original design characteristics and to incorporate two overflow spillways and a levee toe drainage system. The District is pursuing a project to change the current reservoir operating schedule and corresponding water levels, which range from 41 to 43 feet National Geodetic Vertical Datum (NGVD), to an operating schedule that would bring the water level in the reservoir to 46 feet NGVD. Raising the water level would increase the water supply yield from the reservoir without any supplemental diversions from the St. Johns River. The improvements proposed for this project support the increased water level in the reservoir. Final design is being completed by District staff. Coordination with other agencies for permitting and approval of design has taken longer than anticipated. Design is expected to be complete in 2017 for bid on construction.

Vero Beach Reverse Osmosis (RO) Water Treatment Facility Expansion
Status: Anticipated completion is September 2017
WSPR: Central Springs East Coast
This project involves expanding RO capacity from 2 to 4.5 MGD, improves finished water quality and decreases operation of the lime softening plant. Also, two new high pressure pumps and two RO skids will be installed, as well as modifications to the sulfuric acid and scale inhibitor feed system. Construction began in April 2016.

Volusia County Utilities: Reclaimed Water Main Extension for I-4/SR 472 Activity Center
Status: Anticipated completion is September 2017
WSPR: Central Springs East Coast
The project consists of providing reclaimed water for irrigation to a new commercial / office / light industrial activity development at the intersection of I-4 and SR472 in Volusia County. Construction on the project is scheduled to begin in December 2016.

West Volusia Water Suppliers Project 4A Deltona Storage &Treatment System Improvements
Status: Anticipated completion is March 2018
WSPR: Central Springs East Coast
This project includes construction of a 3 MG stormwater storage tank, 1 MG reclaimed water storage tank, chemical treatment, flocculation, filtration and chlorination systems. The project will augment reclaimed water for peak irrigation demands. Construction is scheduled to begin in November 2016.

Woodlawn Memorial Park Irrigation System Upgrade
Status: Anticipated completion is April 2017
WSPR: Central Florida
The project will abandon three fresh groundwater irrigation wells and connect them to reclaimed water supplied by the Orlando Utilities Commission. In addition, flow sensors will be installed to detect leaks. The project also includes installation of a weather station and evapo-transpiration (ET) controller to optimize efficient irrigation. Construction is scheduled to begin in January 2017.

Water conservation

Alachua County Landscape Irrigation Retrofit Rebate Program
Status: Anticipated completion is June 2017
WSPR: North Florida
This project is a rebate program to encourage Alachua County residents to retrofit their landscapes with either Florida Friendly Landscapes (FFL) that require no irrigation or FFL with correctly installed micro irrigation. The project is scheduled to begin in October 2016.

Alachua County Water Star Rebate Program
Status: Anticipated completion is June 2017
WSPR: North Florida
This project contains a financial incentive for builders to apply for Florida Water Star certification for new construction. The builders will receive a rebate of $700 upon proof of certification. The project is scheduled to begin in October 2016.

Apopka Water Conservation Incentive Program
Status: Anticipated completion is April 2017
WSPR: Central Florida
This project includes utilization of a University of Florida (UF) program that integrates the city's water use meters to target high water use within residential and commercial accounts. The program solicits participation by the targeted users in the City's Water Conservation Incentive Program, links to a mailing effort to individuals specified with efficiency opportunities, and supports compliance with their landscape ordinance. The program will measure pre and post results to verify effectiveness, as well as a free irrigation and landscape evaluation to provide deficiency detection and conservation recommendations. The project is scheduled to begin in October 2016.

Atlantic Beach Advanced Metering Infrastructure (AMI) Implementation
Status: Anticipated completion is March 2017
WSPR: North Florida
This project is an implementation of an AMI program within the city limits to expand water conservation efforts. This program would be installed on 650 meters that include all commercial units and any other units identified as the top 500 users in the city. The automated metering data will be analyzed by city staff to get a more accurate representation of customer side leakage and then encourage customers to identify and fix the leaks in an efficient manner. The smart meters will more accurately track customers who violate the landscape ordinance and more effectively hold users accountable for their water usage. The project is scheduled to begin in January 2017.

Bekemeyer Family Farm, LLC
Status: Anticipated completion date is December 2016
WSPR: North Florida
The project includes construction of irrigation retrofits, tailwater recovery, and vertical hydroponics for citrus and small fruits. Project began in August 2015.

Gainesville Regional Utilities Indoor Plumbing Retrofit Program
Status: Anticipated completion is December 2017
WSPR: North Florida
This program includes rebates for indoor plumbing fixture retrofits. The program will rebate 50% of the costs of replacing inefficient water fixtures with high efficiency fixtures. The project is scheduled to begin in October 2016.

Marion County Enhanced Irrigation Evaluation Program
Status: Anticipated completion is September 2018
WSPR: Central Springs East Coast
The program will provide evaluations for approximately 90 enhanced irrigation system evaluations to Marion County Utility's high water use customers. The project is scheduled to begin in October 2016.

Ocoee Final Phase of Meter Replacement and Full Integration of AMI
Status: Anticipated completion is September 2017
WSPR: Central Florida
This project includes the replacements of 9,000 traditional water meters with AMI meters (about 75% of the City of Ocoee). The remaining 25% have already been converted to AMI. System includes iPERL (smart) water meters, Sensus Analytics and AquaHawk. The project is scheduled to begin in November 2016.

Orange County Utilities - Toilet Replacement Program
Status: Anticipated completion is September 2017
WSPR: Central Florida
This project is a rebate program to retrofit approximately 200 toilets with higher efficiency toilets. The project is scheduled to begin in November 2016.

Orange County Utilities WaterSmart
Status: Anticipated completion is December 2016
WSPR: Central Florida
This project contains implementation of software that combines technology and community-based social marketing to reduce potable water use in 30,000 households by 4.9%, saving an estimated 0.37 MGD. Project completion was extended to allow additional time to finish the surveys. The project began in December 2015.

Orange County Utilities - Waterwise Neighbor Program
Status: Anticipated completion is September 2017
WSPR: Central Florida
This program includes rebates for indoor plumbing fixture retrofits to communities near Wekiwa Springs. The program will rebate 50% of the costs of replacing low efficiency fixtures. The project is scheduled to begin in October 2016.

Orange County Utilities Waterwise Neighbor Program (new)
Status: Anticipated completion is September 2017
WSPR: Central Florida
This program includes rebates for indoor plumbing fixture retrofits. The program will rebate 50% of the costs of replacing low efficiency fixtures for approximately 500 new construction homes in Orange County. The project is scheduled to begin in January 2017.

Orange County Utilities Waterwise Neighbor Program (retrofit)
Status: Anticipated completion is September 2017
WSPR: Central Florida
This program includes rebates for indoor plumbing fixture retrofits. The program will rebate 50% of the costs of replacing low efficiency fixtures for approximately 300 existing homes in Orange County. The project is scheduled to begin in January 2017.

OUC Conservation Project Targeting Irrigation Customers
Status: Anticipated completion is June 2017
WSPR: Central Florida
The goals of this project includes identifying, notifying and educating customers who have a high potential for water conservation. The District will also be assisting customers in implementing improvements through qualified contractors. Furthermore, the project includes landscape retrofits at the Pershing and Gardenia OUC properties using xeriscape, and using UF's Program for Resource Efficient Communities (PREC), and performing measurements and verifications. The project began in November 2015.

Penney Farms Mandatory Meter Reader Replacement
Status: Anticipated completion is December 2016
WSPR: North Florida
This project includes replacement of an outdated Neptune hand-held meter reader with a new reader that will aid in their conservation efforts. The project is scheduled to begin in October 2016.

Santa Fe Community College NW Campus Plumbing Fixture Retrofit
Status: Anticipated completion is December 2017
WSPR: North Florida
This project includes retrofitting indoor plumbing fixtures at Santa Fe Community College's main campus with more efficient plumbing fixtures. The project is scheduled to begin in October 2016

Seminole County Plumbing Retrofit Rebate Program
Status: Anticipated completion is September 2017
WSPR: Central Florida
The project consists of a toilet rebate program targeting high volume toilets. Estimated water savings is 3,241,200 gallons per year. The expiration date of this agreement was extended to allow for more toilet rebates. The project began in December 2015.

St Johns County AMI Expansion in the NW Service Area
Status: Anticipated completion is September 2017
WSPR: North Florida
For this project, St Johns County Utilities Department (SJCUD) will install two new tower gateway base stations to effectively maintain signal communication with smart meters installed at new developments. The project is scheduled to begin in October 2016.

St Johns County Customer Portal
Status: Anticipated completion is April 2017
WSPR: North Florida
For this project, SJCUD will utilize a customer portal to provide information for customers on their usage and billing, which will provide customers with more control over their water use. The project is scheduled to begin in October 2016.

Name	Contract Number	SJR Basin	Construction Cost, $	SJR Cost-Share Total Amount, $	BMAP	County	Planned Start	Planned Finish	SJR Springs	TN Reduction	TP Reduction
A W Baylor Irrigation Retrofit	28727	St. Johns River	$138,743.88	$104,057.91	Lower St. Johns Mainstem	Flagler	3/1/2016	9/30/2017	No	1,282	356
Apopka Water Reclamation Facility Nutrient Removal	28457	Ocklawaha River	$6,078,000.00	$3,039,000.00	Wekiva	Orange	3/1/2018	3/1/2019	Yes	45,662	
Atlantic Beach Phosphorus Treatment Facility	28464	Lower St. Johns River	$190,000.00	$62,700.00	Lower St. Johns Mainstem	Duval	4/1/2016	3/29/2017	No		10,129
Blue Cypress Grain	28577	Indian River Lagoon	$128,448.75	$128,448.75	Indian River Lagoon	Indian River	3/1/2016	3/30/2017	No	21,600	6,144
Brevard County Passive Nutrient Reduction for OSTDS	28752	Indian River Lagoon	$45,000.00	$14,850.00	Indian River Lagoon	Brevard	10/17/2016	12/15/2016	No	115	20
Brevard County Pines Industrial Pond	28491	Indian River Lagoon	$484,900.00	$160,017.00	Indian River Lagoon	Brevard	2/1/2016	9/30/2017	No	802	101
Brevard County South Patrick Drive Baffle Box	28401	Indian River Lagoon	$175,000.00	$57,750.00	Indian River Lagoon	Brevard	12/1/2015	11/30/2016	No	244	48
CCUA CR 209 Reclaimed Water Transmission Main	28795	Lower St. Johns River	$574,989.78	$189,746.00	Lower St. Johns Mainstem	Clay	10/5/2016	2/28/2017	No	452	140
CCUA Old Jennings Reclaimed Water Plant Ground Storage Tank	28810	Lower St. Johns River	$419,578.60	$138,460.00	Lower St. Johns Mainstem	Clay	2/3/2017	8/10/2017	No	7,011	2,169
Cherry Lake Tree Farm Irrigation Retrofit	28654	Middle St. Johns River	$300,000.00	$300,000.00	Upper Ocklawaha	Lake	5/2/2016	5/31/2017	Yes	861	428
Clermont West Lake Wetlands	28760	Middle St. Johns River	$2,850,330.20	$940,608.00	Upper Ocklawaha	Lake	2/15/2017	6/30/2017	No	11	52
Cocoa Beach Muck Removal Phase 2	28732	Indian River Lagoon	$680,000.00	$224,400.00	Indian River Lagoon	Brevard	11/1/2016	5/31/2017	No	28,350	17,370
Cocoa Church Street Stormwater Retrofit	28740	Indian River Lagoon	$171,620.00	$56,634.60	Indian River Lagoon	Brevard	4/3/2017	6/30/2017	No	173	35
Cocoa Factory Street Stormwater Retrofit	28728	Indian River Lagoon	$169,096.00	$55,801.00	Indian River Lagoon	Brevard	10/17/2016	5/1/2017	No	34	7
Crescent City Crescent Lake Outfall Improvements	28663	Lower St. Johns River	$500,000.00	$500,000.00	Lower St. Johns Mainstem	Putnam	5/1/2016	11/30/2016	No	180	65
Eustis Eastern Wastewater Treatment Plant Expansion	28818	Middle St. Johns River	$7,500,000.00	$2,475,000.00	Wekiva Upper Ocklawaha	Lake	10/3/2016	9/29/2017	Yes	91,378	
First Farms	28728	Lower St. Johns River	$239,333.00	$179,499.75	Lower St. Johns Mainstem (P), (N-TBD)	St. Johns	8/2/2016	9/30/2017	No	34	38
GRU Hogtown Creek Improvements-Wastewater Service Lateral	28449	Ocklawaha River	$32,000.00	$10,560.00	Orange Creek	Alachua	10/3/2016	9/29/2017	Yes	84	37
Indian River County North Sebastian Phase 1 Septic to Sewer	28771	Indian River Lagoon	$1,967,395.00	$649,240.35	Indian River Lagoon	Indian River	11/15/2016	12/15/2017	No	2,190	365
Indian River County Osprey Acres Stormwater Park	28730	Indian River Lagoon	$3,637,123.00	$1,200,250.00	Indian River Lagoon	Indian River	5/1/2017	1/31/2018	No	9,000	400
Indian River County West Wabasso Septic to Sewer	28467	Indian River Lagoon	$1,041,445.60	$343,677.05	Indian River Lagoon	Indian River	11/9/2015	9/30/2017	No	3,224	520
Jacksonville Beach Sewer Main Extension & Septic Removals	28769	Lower St. Johns River	$256,113.00	$84,517.00	Lower St. Johns Mainstem	Duval	1/3/2017	6/30/2017	No	240	32
Jacksonville Crystal Springs Drainage Improvements	28469	Lower St. Johns River	$2,988,000.00	$926,805.00	Lower St. Johns Mainstem	Duval	7/11/2016	7/31/2017	No	741	246
Jacksonville Noroad/Lambing Water Quality & Drainage	28729	Lower St. Johns River	$1,134,000.00	$374,220.00	Lower St. Johns Mainstem	Duval	10/3/2016	8/31/2017	No	36	10
JEA Bartram Park Reclaimed Water Storage Tank Expansion	28804	Lower St. Johns River	$1,900,000.00	$627,000.00	Lower St. Johns Mainstem	Duval	10/3/2016	3/31/2017	No	32,724	9,132
JEA Mandarin Wastewater Treatment Plant Upgrades	28428	Lower St. Johns River	$3,994,000.00	$1,316,000.00	Lower St. Johns Mainstem	Duval	3/22/2016	9/29/2017	No	38,066	13,927
JEA Nocatee Parkway Reclaimed Water Transmission	28427	Northern Coastal	$340,000.00	$112,200.00	Lower St. Johns Mainstem	St. Johns	4/1/2016	9/29/2017	No	20,593	7,534
JEA North Nocatee Reclaimed Water Storage Tank	28425	Northern Coastal	$2,000,000.00	$660,000.00	Lower St. Johns Mainstem	St. Johns	9/1/2016	9/29/2017	No	22,465	8,219
Jon Revels	28618	Lower St. Johns River	$429,559.80	$227,403.82	Lower St. Johns Mainstem (P), (N-TBD)	St. Johns	6/1/2016	12/31/2016	No	512	133
Lake County Magnolia Lane Water Quality Project	28780	Middle St. Johns River	$411,500.00	$61,500.00	Upper Ocklawaha	Lake	2/15/2017	7/24/2017	No	78	12
Leesburg Heritage Estates Stormwater Park	28517	Ocklawaha River	$313,000.00	$93,900.00	Upper Ocklawaha	Lake	8/1/2016	7/14/2017	No	75	13
Leesburg Lake Griffin Stormwater Improvements	28393	Ocklawaha River	$402,000.00	$120,600.00	Upper Ocklawaha	Lake	5/2/2016	2/28/2017	No	150	36
Longwood FCCP Stormwater Pond	28430	Middle St. Johns River	$538,840.00	$269,420.00	Wekiva Rock Springs	Seminole	1/31/2017	9/29/2017	Yes	3,204	830
Longwood Island Lake Septic Tank Abatement		Middle St. Johns River	$3,458,320.00	$1,729,160.00	Wekiva Rock Springs	Seminole	6/30/2017	9/28/2018	Yes	3,100	500
Longwood N. CR 427 & Lake Ruth Septic Tank Removal	28735	Middle St. Johns River	$2,013,040.00	$664,303.20	Lake Jesup	Seminole	1/3/2017	12/29/2017	No	3,193	515
Longwood Septic Tank Abatement	28402	Middle St. Johns River	$3,911,220.00	$1,290,703.00	Lake Jesup	Seminole	4/1/2016	9/29/2017	No	6,270	1,200
Longwood South Septic Tank Abatement Phase 2	28734	Middle St. Johns River	$1,336,610.00	$441,081.00	Lake Jesup	Seminole	6/30/2017	9/28/2018	No	1,550	250
MLSJR - TCAA Nutrient Reduction-Masters (St. Johns Co.) (M&LSJR)	27440	Lower St. Johns River	$6,432,000.00	$2,600,000.00	Lower St. Johns Mainstem	St. Johns	10/1/2013	9/30/2017		5,225	2,624
Neptune Beach WTF Nutrient Removal Enhancements	28421	Lower St. Johns River	$835,000.00	$275,550.00	Lower St. Johns Mainstem	Duval	10/2/2015	9/29/2017	No	5,936	
Oakland Stormwater Drainage Improvements	28782	Ocklawaha River	$560,010.16	$560,010.06	Upper Ocklawaha	Orange	10/3/2016	3/31/2017	No	56	10
Ocala Septic Tank and Well Elimination Program	28128	Florida Ridge	$10,000,000.00	$5,000,000.00	Silver Springs River, Solver Springs	Marion	4/1/2015	3/31/2017	Yes	12,193	
Orange Blossom KOA Sewage Treatment Plant Elimination		Middle St. Johns River	$137,700.00	$68,850.00	Upper Ocklawaha	Orange	10/3/2016	11/3/2016	Yes	550	275
Orange City Blue Spring Nutrient Reduction	28413	Lake George	$1,624,540.00	$536,098.00	Harney,Monroe, MSJR	Volusia	8/18/2015	3/31/2017	Yes	1,080	299
Orange County EPD Passive Onsite Treatment System		Middle St. Johns River	$30,000.00	$9,900.00	Wekiva	Orange	10/3/2016	12/30/2016	Yes	77	14
Palm Bay Inlet Treatment Train In High-Tech Corridor	28751	Indian River Lagoon	$1,485,000.00	$490,050.00	Indian River Lagoon	Brevard	4/3/2017	8/31/2017	No	1,630	43
Seminole County Passive Onsite Treatment System	28737	Middle St. Johns River	$40,000.00	$13,200.00	Wekiva	Seminole	10/3/2016	12/30/2016	Yes	96	17
Vero Beach Hybrid STEP System	28183	Indian River Lagoon	$885,000.00	$292,050.00	Indian River Lagoon	Indian River	2/23/2015	3/30/2017	No	40,500	
Volusia County Advanced Wastewater Treatment for the Protection of Blue Spring	28459	Middle St. Johns River	$12,129,500.00	$5,527,500.00	Harney,Monroe, MSJR	Volusia	1/4/2016	9/29/2017	Yes	27,000	14,000
Winter Garden Reclaimed Water & Stormwater Recharge	28432	Ocklawaha River	$3,162,940.00	$1,581,470.00	Upper Ocklawaha	Orange	10/3/2016	9/29/2017	Yes	10,950	1,988
Totals:			$90,070,896.77	$36,784,191.49						450,977	100,283

2017 Alternative Water Supplies Annual Report

5. 2017 Alternative Water Supply Annual Report

Table of Contents

I. Introduction

This report has been prepared in accordance with Section 373.707(8)(n), *Florida Statutes* and contains information about alternative water supply (AWS) projects funded by the St. Johns River Water Management District (District) through the Water Protection and Sustainability Program Trust Fund (WPSPTF) and other sources of funding since fiscal year (FY) 2005–2006.

Since FY 2005–2006, the District has awarded more than $114.2 million in cost-share funding on 126 AWS projects that will or have resulted in the production of more than 231 million gallons per day (mgd) of alternative water supplies.

Section 2 contains a table and narratives that describe the AWS projects funded through the WPSPTF. The WPSPTF provides funding assistance for the construction of alternative water supplies and conservation projects that result in quantifiable water savings. The Water Protection and Sustainability Program was created in FY 2005–2006 by the Florida Legislature. The water management districts match the amount of funding allocated from the WPSTF.

Section 3 contains a table and narratives that describe the AWS projects funded by the District through the Alternative Water Supply Construction Cost-sharing Program, Central Florida Aquifer Recharge Enhancement Program, the Minimum Flows and Levels Alternative Water Supply Program and the Cooperative Cost Share Program. Further information on these funding sources is below.

- Alternative Water Supply Construction Cost-sharing Program (AWSCCP) — Beginning in 1996, the Florida Legislature directed the water management districts to provide funding for construction of AWS projects. The District established the AWSCCP and provided cost-share funding for construction of AWS projects from this program through FY 2007–2008. Only those projects funded since FY 2005–2006 are captured in this report.

- Central Florida Aquifer Recharge Enhancement (CFARE) Program — Cost-share funding was provided by the District in FY 2005–2006 for construction of reuse and recharge projects in Orange and Seminole counties.

- Minimum Flows and Levels Alternative Water Supply (MFLs AWS) Program — The District created the MFLs AWS Program in FY 2011–2012 to provide cost-share funding for projects that will result in a demonstrated benefit for prevention or recovery of MFL water bodies that are currently not being met or are projected not to be met within 20 years.

- Cooperative Cost Share Program (CCSP) - The District created the Cooperative Cost Share program in FY 2013-2014 to provide cost-share funding for water conservation and construction projects that will contribute to water conservation, alternative water supply development or water quality / nutrient-loading reduction. Only the alternative water supply development projects are captured in this report.

Section 4 contains a summary of AWS funding from the District for FY 2005–2006 through FY 2016–2017. Table 4-1 captures all AWS funding by fiscal year, funding source and water source (brackish groundwater, reclaimed water, surface water, rainwater or storm water).

II. AWS projects funded through the Water Protection and Sustainability Program Trust Fund

Table 2-1: AWS projects funded through the Water Protection and Sustainability Program Trust Fund (WPSPTF)
FY 2005–2006 to FY 2016–2017 (in alphabetical order)

Project Name	Project Type	Local Sponsor	Status	Water Produced (mgd)	WPSP Fiscal Year	WPSP Amount	SJRWMD Amount	Local Sponsor Amount	Total Cost
Alafaya Utilities Reclaimed Water Line Installation	Reclaimed Water	Alafaya Utilities (Seminole County)	Complete	0.00	2005–2006	$ 52,638	$ 52,638	$ 594,724	$ 700,000
Alafaya Utilities Reclaimed Water Storage and High Service Pump	Reclaimed Water	Alafaya Utilities (Seminole County)	Complete	0.41	2005–2006	$ 140,000	$ 140,000	$ 1,120,000	$ 1,400,000
Belleview and Spruce Creek Golf Course Reclaimed Water System	Reclaimed Water	City of Belleview	Complete	1.00	2005–2006	$ 125,176	$ 125,176	$ 1,209,649	$ 1,460,001
Clermont East Side WRF Improvements	Reclaimed Water	City of Clermont	Complete	4.00	2006–2007	$ 300,000	$ 300,000	$ 2,400,000	$ 3,000,000
Clermont Reclaimed and Stormwater System Expansion	Reclaimed Water	City of Clermont	Complete	0.80	2006–2007	$ 203,619	$ 203,619	$ 2,992,762	$ 3,400,000
Cocoa and Rockledge Reclaimed Water Line Connection	Reclaimed Water	City of Cocoa	Complete	0.25	2007–2008	$ 87,839	$ 87,839	$ 1,354,322	$ 1,530,000
Coquina Coast Seawater Desalination	Seawater	City of Palm Coast	Canceled		2007–2008				
Daytona Beach Reclaimed Water System	Reclaimed Water	City of Daytona Beach	Complete	0.20	2005–2006	$ 24,454	$ 24,454	$ 9,851,092	$ 9,900,000
Dunes Community Development District Brackish Groundwater Project	Brackish Groundwater	Dunes CDD (Flagler County)	Complete	0.65	2005–2006	$ 1,342,853	$ 1,342,853	$ 4,314,294	$ 7,000,000
East Putnam Regional Water System	Brackish Groundwater	Putnam County	Complete	0.63	2005–2006	$ 3,140,000	$ 3,140,000	$ 9,420,000	$ 15,700,000
Eastern Orange and Seminole Counties Regional Reuse Project	Reclaimed Water	City of Orlando	Complete	20.00	2005–2006	$ 3,290,000	$ 3,290,000	$ 26,410,000	$ 32,990,000
Eustis Reclaimed Water System Expansion and Augmentation	Reclaimed Water	City of Eustis	Complete	1.10	2005–2006	$ 40,000	$ 40,000	$ 320,000	$ 400,000
Greenwood Lakes Reclaimed Water System Improvements	Reclaimed Water	Seminole County	Complete	1.00	2005–2006	$ 116,000	$ 116,000	$ 1,398,000	$ 1,630,000
Holly Hill and Ormond Beach Reclaimed Water System Expansion	Reclaimed Water	City of Holly Hill	Complete	0.60	2006–2007	$ 21,249	$ 21,249	$ 357,502	$ 400,000
International Corporate Park Reuse Transmission System	Reclaimed Water	Orange County	Complete	4.00	2005–2006	$ 227,631	$ 227,631	$ 3,744,738	$ 4,200,000
Lady Lake Reclaimed Water System, Phase 2	Reclaimed Water	Town of Lady Lake	Complete	0.50	2005–2006	$ 200,000	$ 200,000	$ 1,600,000	$ 2,000,000
Lake Apopka North Shore Reuse Augmentation Facility	Reclaimed Water	City of Apopka	In progress	5.00	2006–2007	$ 2,450,000	$ 2,450,000	$ 11,440,000	$ 16,340,000
Lake Groves Wastewater Treatment Facility Reclaimed Water System Expansion	Reclaimed Water	Utilities Inc. of Florida (Lake County)	Complete	1.00	2005–2006	$ 490,000	$ 490,000	$ 3,920,000	$ 4,900,000
Leesburg Reclaimed Water Project	Reclaimed Water	City of Leesburg	Complete	7.05	2005–2006	$ 1,331,421	$ 1,331,421	$ 23,937,159	$ 26,600,001
Melbourne Reclaimed Water System Expansion	Reclaimed Water	City of Melbourne	Complete	1.50	2005–2006	$ 530,651	$ 530,651	$ 5,538,698	$ 6,600,000

Table 2-1: AWS projects funded through the Water Protection and Sustainability Program Trust Fund (WPSPTF)
FY 2005–2006 to FY 2016–2017 (in alphabetical order)

Project Name	Project Type	Local Sponsor	Status	Water Produced (mgd)	WPSP Fiscal Year	WPSP Amount	SJRWMD Amount	Local Sponsor Amount	Total Cost
Minneola Reclaimed Water Project	Reclaimed Water	City of Minneola	Complete	1.00	2005–2006	$ 780,000	$ 780,000	$ 6,220,000	$ 7,780,000
North Peninsula Reclaimed Water Storage Project	Reclaimed Water	City of Ormond Beach	Complete	0.49	2005–2006	$ 290,000	$ 290,000	$ 2,370,000	$ 2,950,000
North Seminole Regional Reclaimed Water and Surface Water Optimization System Expansion Project	Reclaimed Water	City of Sanford	Complete	4.00	2005–2006	$ 655,000	$ 655,000	$ 2,890,000	$ 4,200,000
Ocoee Reuse System Expansion	Reclaimed Water	City of Ocoee	Complete	0.60	2005–2006	$ 163,061	$ 163,061	$ 2,223,879	$ 2,550,001
Orange County Eastern WRF Reuse Pumping and Storage	Reclaimed Water	Orange County	Complete	2.50	2005–2006	$ 340,000	$ 340,000	$ 2,720,000	$ 3,400,000
Ormond Beach Water Treatment Plant Expansion	Brackish Groundwater	City of Ormond Beach	Complete	4.00	2005–2006	$ 2,923,600	$ 2,923,600	$ 8,770,800	$ 14,618,000
Palm Coast Reclaimed Water System Expansion	Reclaimed Water	City of Palm Coast	Complete	6.09	2005–2006	$ 511,000	$ 511,000	$ 4,088,000	$ 5,110,000
Port Orange Reclaimed Water Reservoir and Recharge Basin Project	Reclaimed Water	City of Port Orange	Complete	2.70	2005–2006	$ 117,000	$ 117,000	$ 1,116,000	$ 1,350,000
Rockledge Reclaimed Water Storage	Reclaimed Water	City of Rockledge	Complete	0.16	2005–2006	$ 161,323	$ 161,323	$ 1,777,355	$ 2,100,001
Rockledge Reclaimed Water System Expansion — Aquifer Storage and Recovery (ASR)	Reclaimed Water	City of Rockledge	Complete	0.55	2006/2007	$ 224,886	$ 224,886	$ 2,910,228	$ 3,360,000
Seminole County Yankee Lake Reclaimed Water System Augmentation	Surface Water	Seminole County	Complete	10.00	2006–2007	$ 3,765,000	$ 3,765,000	$ 17,570,000	$ 25,100,000
St. Augustine Water Supply Project	Brackish Groundwater	City of St. Augustine	Complete	4.00	2005–2006	$ 2,325,927	$ 2,325,927	$ 7,148,146	$ 11,800,000
St. Johns County Water Supply Project	Brackish Groundwater	St. Johns County	Complete	8.00	2005–2006	$ 3,270,000	$ 3,270,000	$ 9,810,000	$ 16,350,000
Tavares Reclaimed Water System Expansion	Reclaimed Water	City of Tavares	Complete	3.50	2006–2007	$ 570,000	$ 570,000	$ 4,560,000	$ 5,700,000
Taylor Creek Water Supply Project	Surface Water	City of Cocoa	Withdrawn		2006–2007				
Volusia County Southwest Reclaimed Water System	Reclaimed Water	Volusia County	Complete	0.25	2006–2007	$ 200,000	$ 200,000	$ 1,600,000	$ 2,000,000
West Melbourne Aboveground Reclaimed Water Storage Tank	Reclaimed Water	City of West Melbourne	Complete	2.48	2006–2007	$ 300,000	$ 300,000	$ 2,409,000	$ 3,009,000
Winter Garden Reclaimed Water Pumping and Transmission	Reclaimed Water	City of Winter Garden	Complete	4.00	2006–2007	$ 497,813	$ 497,813	$ 5,704,374	$ 6,700,000
Winter Springs Lake Jesup Reclaimed Water Augmentation	Reclaimed Water	City of Winter Springs	Complete	2.23	2008–2009	$ 640,000	$ 640,000	$ 5,030,000	$ 6,310,000
Total:				**106.24**		**$ 31,848,141**	**$ 31,848,141**	**$ 200,840,722**	**$ 264,537,004**

Project Narratives

Alafaya Utilities Reclaimed Water Line Installation
Installation of a 20-inch diameter reclaimed water transmission main that extends from the Alafaya Water Treatment Facility (WTF) to Lockwood Boulevard in Orlando.

Alafaya Utilities Reclaimed Water Storage and High-Service Pump
Construction of additional storage volume of 1.0 million gallons and a high-service pumping station that allowed the utility to provide reclaimed water to 891 residential units and 21 commercial units in conjunction with the aforementioned Orlando reclaimed water transmission main.

Belleview and Spruce Creek Golf Course Reclaimed Water System
Construction of a 22,000 linear feet (LF) reclaimed water main to transmit public access reclaimed water from the city of Belleview's Wastewater Treatment Facility (WWTF) to the Spruce Creek Golf Course for irrigation, offsetting the use of groundwater for nonpotable purposes.

Clermont East Side Water Reclamation Facility (WRF) Improvements
Transfer of wastewater from the city's Westside Water Treatment Plant (WTP) to the East Side WRF through construction of a master lift station and 5.5 miles of force mains.

Clermont Reclaimed and Stormwater System Expansion
Construction of a 2.0 million gallon ground storage tank and a high-service pump station that allows the city to receive supplements from other reclaimed systems or pursue stormwater and surface water supplements.

Cocoa and Rockledge Reclaimed Water Line Connection
Construction of a 12-inch diameter reclaimed water interconnection between the cities of Cocoa and Rockledge that allows Cocoa to serve the U.S. Highway 1 corridor south of Cocoa city limits.

Coquina Coast Seawater Desalination **(*Project was cancelled)***
A memorandum of understanding was executed by cooperators in 2008 to begin analysis, investigations and design of a seawater desalination facility in Flagler County. The number of cooperators and total water demand decreased as the project moved forward. Preliminary engineering investigations were completed in October 2011. The project has been cancelled.

Daytona Beach Reclaimed Water System
Construction of a reuse line extension from Tournament Drive to Champion Drive.

Dunes Community Development District (DCDD) Brackish Groundwater Project
Construction of new wells to withdraw brackish water from the Floridan aquifer and construction of a reverse osmosis plant and associated infrastructure to treat the brackish water. Through this project, the DCDD now has a consistent and reliable potable water supply rather than relying on water purchased from the city of Palm Coast.

East Putnam Regional Water System
Construction of a reverse osmosis WTF to treat brackish water from the Floridan aquifer to provide potable water to customers in East Palatka, San Mateo and surrounding areas.

Eastern Orange and Seminole Counties Regional Reuse Project
Construction of a reclaimed water transmission system and wastewater plant improvements to provide reclaimed water from the Iron Bridge WRF that is operated by the city of Orlando. Reclaimed water is provided to a 230-square-mile area to replace potable water use for landscape irrigation, golf course irrigation and certain industrial processes.

Eustis Reclaimed Water System Expansion and Augmentation
Construction of upgrades at the Eastern WWTP to increase reuse capacity and construction of transmission lines for reclaimed water to be used for residential irrigation.

Greenwood Lakes Reclaimed Water System Improvements
Construction by Seminole County of a 1.75 million gallon reclaimed water ground storage tank, associated piping and fittings and SCADA system-controlling access to the Yankee Lake distribution system.

Holly Hill and Ormond Beach Reclaimed Water System Expansion
Construction of a reclaimed interconnection between the cities of Holly Hill and Ormond Beach for Holly Hill to divert up to 750,000 gallons per day into the Ormond Beach system to provide reclaimed water to the Tomoka Oaks Golf Course, Volusia Memorial Park and Nova Road medians.

International Corporate Park Reuse Transmission System
Construction by Orange County of reclaimed water mains, booster pump stations, conversion of rapid infiltration basins (RIBs) to storage basins, ground storage tanks and a high-service pump station to provide reclaimed water to the southeastern Orange County service area.

Lady Lake Reclaimed Water System Phase 2
Expansion of construction of upgrades to the existing WWTF to provide reclaimed water to the eastern and southwestern regions of the town's service area.

Lake Apopka North Shore Reuse Augmentation Facility
Construction of an augmentation facility at Lake Apopka and transmission lines to supplement the city of Apopka's reclaimed water system with water withdrawn from Lake Apopka during peak irrigation periods.

Lake Groves WWTF Reclaimed Water System Expansion
Construction by Utilities Inc. of Florida to upgrade the existing Lake Groves WWTF to treat wastewater to public access reuse standards to provide reclaimed water to four residential subdivisions.

Leesburg Reclaimed Water Project
Construction of upgrades by the city of Leesburg to the existing Canal Street WTF, expansion of the existing Turnpike WTF and construction of a reclaimed water transmission system to maximize the city's beneficial use of all available reclaimed water.

Melbourne Reclaimed Water System Expansion
Construction of improvements to the existing Grant Street WWTP to increase reclaimed water capacity from 4.5 mgd to 6.0 mgd.

Minneola Reclaimed Water Project
Construction of a wastewater reclamation facility, a collection system and pump stations to upgrade effluent to public access reuse water to distribute to rapid infiltration basins and irrigation service areas.

North Peninsula Reclaimed Water Storage Project
Construction by the city of Ormond Beach of a 4.0 million gallon reclaimed water storage basin to provide reclaimed water to the Oceanside Golf Course and surrounding residential areas for landscape irrigation. The project reduced discharges of treated wastewater effluent to the Halifax River.

North Seminole Regional Reclaimed Water and Surface Water Optimization System Expansion Project
A joint project involving the cities of Sanford and Lake Mary and Seminole County that resulted in a surface water augmentation system, reclaimed water system improvements, additional storage, reclaimed water main transmission lines and interconnections with the cities of Altamonte Springs and Winter Springs.

Ocoee Reuse System Expansion
Construction of reclaimed water mains and associated components for the city of Ocoee to provide reclaimed water to the Reflections, Reserve and Silver Glen residential subdivisions.

Orange County Eastern WRF Reuse Pumping and Storage
Expansion of the Eastern WRF to increase pumping and storage capacity of reclaimed water.

Ormond Beach WTP Expansion
Construction of a low-pressure reverse osmosis facility at the city's current WTP to expand the use of brackish groundwater wells.

Palm Coast Reclaimed Water System Expansion
Northerly and southerly extension of the city's reclaimed water system located on Old Kings Road. The northerly extension included the construction of 35,000 LF of reclaimed water main to provide service to two golf courses, residential sites and a school. The southerly extension included construction of new reclaimed transmission mains, ground storage and a high-service pump station to provide reclaimed water to developments south of the airport, near Colbert Lane and the Town Center.

Port Orange Reclaimed Water Reservoir and Recharge Basin Project
Construction of a 3 million gallon storage tank, two reservoir/recharge basins, 8,500 LF of horizontal recovery wells, recovery pumps/controls and high-service distribution pumps. The project also included the harvest of storm water for storage in the basins as a source of reclaimed water supply augmentation and recharge.

Rockledge Reclaimed Water Storage
Construction of a 6 million gallon storage tank and a high-service pump station to allow the city to store effluent that was disposed via a deep injection well.

Rockledge Reclaimed Water System Expansion - Aquifer Storage and Recovery (ASR)
Construction of an aquifer storage and recovery system, including two storage wells, to expand the city's reclaimed water system to provide service during peak periods.

Seminole County Yankee Lake Reclaimed Water System Augmentation
Construction of a surface water treatment plant at the county's Yankee Lake Water Reclamation Facility near Lake Monroe. Design capacity is 10 mgd with surface water intake and infrastructure expandable to 20 mgd. The county is currently permitted to withdraw up to 5.5 mgd from the St. Johns River.

St. Augustine Water Supply Project
Construction of a low-pressure reverse osmosis treatment plant through two new Floridan aquifer wells and a demineralization concentrate transmission main that connects with the city's wastewater collection system. The project limits impacts to wetland vegetation that would be expected to result if projected water use increases were met from the city's existing surficial aquifer wellfield.

St. Johns County Water Supply Project
Construction of a low-pressure reverse osmosis treatment plant at the Tillman Ridge Wellfield through four new Floridan aquifer wells and a demineralization concentrate collection main that connects to the county's wastewater collection system. The project limits wetland impacts in the vicinity of the Tillman Ridge Wellfield.

Tavares Reclaimed Water System Expansion
This project included the construction of 38,000 LF of reclaimed water transmission line, a 5 million gallon storage tank, and upgrades to the city's operation building and wastewater treatment. Approximately 3.5 mgd of alternative water supply was made available.

Taylor Creek Reservoir/St. Johns River Water Supply Project ***(withdrawn from WPSPTF)***
The city of Cocoa is spearheading the effort, together with the city of Titusville, Orange County Utilities, Orlando Utilities Commission, Tohopekaliga (Toho) Water Authority and East Central Florida Services Inc. to increase potable water supplies from the Taylor Creek Reservoir for these partners. Discussions on participation, quantity and timing began in 2010. Expected quantity will likely be in the 11 to 24 mgd range. While timing is still undecided, customer demands, economic conditions, permit and agreement conditions, and the Central Florida Water Initiative will all play a part in determining the project scope and schedule. Project will proceed without WPSPTF once these issues are resolved.

Volusia County Southwest Reclaimed Water System
Utilized dry lines installed by developers to provide reclaimed water to approximately 620 homes for landscape irrigation. This project reduced the amount of groundwater withdrawn from wells at the DeBary Water Treatment Plants, thereby reducing impacts to Blue Springs and area lakes.

West Melbourne Above Ground Reclaimed Water Storage Tank
Construction of a 3 million gallon storage tank, a transfer pump station and expansion of a reclaimed high-service pump station.

Winter Garden Reclaimed Water Pumping and Transmission
Construction of reclaimed water storage tanks at three different sites and extension of reclaimed water transmission mains to provide reclaimed water to subdivisions in both the city of Winter Garden and the city of Ocoee.

Winter Springs Lake Jesup Reclaimed Water Augmentation
Construction of a 3 million gallon storage tank and pumping facilities at an existing WRF and new construction of a 0.25 million gallon storage tank, filtration treatment, pumping facilities and high-level disinfection at new augmentation facilities at Lake Jesup.

III. AWS projects funded through programs other than WPSPTF

Table 3-1: AWS projects funded through programs other than the Water Protection and Sustainability Program Trust Fund FY 2005–2006 to FY 2016–2017 (in alphabetical order)

Project Name	Project Type	Local Sponsor	Status	Water Produced (mgd)	Funding Fiscal Year	Program*	SJRWMD Amount	Local Sponsor Amount	Total Cost
Anguilla Fish Farm Alternative Water Supply Well	Brackish Groundwater	Anguilla Fish Farm (St. Johns County)	Complete	0.33	2005–2006	AWSCCP	$ 34,770	$ 34,770	$ 69,540
Altamonte Springs FDOT I-4 Stormwater Capture & RW Project Ph I & 2	Storm Water	City of Altamonte Springs	Complete	4.50	2013-2014	CCSP	$ 3,500,000	$ 8,000,000	$ 11,500,000
Big Oaks and Twin River Reclaimed Water Expansion, Phase 1	Reclaimed Water	City of Oviedo	Complete	0.09	2011–2012	MFLs AWS	$ 371,054	$ 921,318	$ 1,292,372
Blend Reverse Osmosis Concentrate with Brackish Groundwater	Brackish Groundwater	Indian River County	Complete	2.25	2006–2007	AWSCCP	$ 50,000	$ 2,687,575	$ 2,737,575
Blend Reverse Osmosis Concentrate with Storm Water	Storm Water	Indian River County	Complete	1.50	2006–2007	AWSCCP	$ 125,000	$ 4,224,070	$ 4,349,070
Bunnell State Street Median RCW Irrigation System	Reclaimed Water	City of Bunnell	Complete	0.10	2015-2016	CCSP	$ 45,000	$ 5,000	$ 50,000
Caldwell - Gorgeous Groves RW project	Reclaimed Water	Caldwell Citrus Groves Mgmt, LLC	Complete	0.13	2014-2015	CCSP	$ 14,736	$ 29,917	$ 44,653
Canaveral Port Authority Reclaimed Water Aquifer Storage and Recovery	Reclaimed Water	Canaveral Port Authority	Complete	2.50	2005–2006	AWSCCP	$ 100,000	$ 530,000	$ 630,000
Cape Canaveral Reuse Lines Expansion	Reclaimed Water	City of Cape	Complete	0.12	2005–2006	AWSCCP	$ 75,000	$ 295,920	$ 370,920
CCUA CR209 RW Transmission Main	Reclaimed Water	Clay County Utility Authority	Not Started	0.05	2016-2017	CCSP	$ 189,746	$ 385,244	$ 574,990
CCUA Mid-Clay Water Storage Project	Reclaimed Water	Clay County Utility Authority	Complete	1.09	2013-2014	CCSP	$ 1,129,000	$ 1,304,000	$ 2,433,000
CCUA Old Jennings RWSP GST	Reclaimed Water	Clay County Utility Authority	Not Started	0.75	2016-2017	CCSP	$ 138,460	$ 281,119	$ 419,579
CIty of Apopka Keene Road 48" Reclaimed Water Transmission Main	Reclaimed Water	City of Apopka	Complete	10.40	2013-2014	CCSP	$ 1,401,408	$ 2,102,112	$ 3,503,520
City of Apopka Kelly Park Rd and Ponkan Rd RW Main	Reclaimed Water	City of Apopka	Complete	5.50	2014-2015	CCSP	$ 713,925	$ 713,925	$ 1,427,850
City of Apopka Reclaimed Water Main Extensions	Reclaimed Water	City of Apopka	In Progress	12.15	2015-2016	CCSP	$ 835,500	$ 835,500	$ 1,671,000
City of Atlantic Beach - Selva Marina Reclaimed Water Facilities	Reclaimed Water	City of Atlantic Beach	Complete	0.88	2013-2014	CCSP	$ 442,000	$ 663,000	$ 1,105,000
City of Cape Canaveral Reclaimed Water Tank Project	Reclaimed Water	City of Cape Canaveral	Complete	0.07	2014-2015	CCSP	$ 741,428	$ 1,833,106	$ 2,574,534
City of Daytona Beach 2.5 MG Reuse Tank	Reclaimed Water	City of Daytona Beach	Not Started	2.50	2016-2017	CCSP	$ 1,468,500	$ 2,981,500	$ 4,450,000
City of DeLand Reclaimed Water Retrofit, Part B & Wiley Nash WRF Upgrades	Reclaimed Water	City of Deland	Complete	2.00	2013-2014	CCSP	$ 1,516,050	$ 2,274,075	$ 3,790,125
City of DeLand RW Retrofit - Ph 1	Reclaimed Water	City of Deland	Not Started	0.12	2016-2017	CCSP	$ 606,000	$ 606,000	$ 1,212,000

Table 3-1: AWS projects funded through programs other than the Water Protection and Sustainability Program Trust Fund FY 2005–2006 to FY 2016–2017 (in alphabetical order)

Project Name	Project Type	Local Sponsor	Status	Water Produced (mgd)	Funding Fiscal Year	Program*	SJRWMD Amount	Local Sponsor Amount	Total Cost
City of DeLand RW Retrofit - Ph 2B	Reclaimed Water	City of Deland	Not Started	0.17	2016-2017	CCSP	$ 759,375	$ 759,375	$ 1,518,750
City of Deland Reclaimed Water Storage and Recovery	Reclaimed Water	City of Deland	Complete	0.16	2014-2015	CCSP	$ 338,250	$ 686,750	$ 1,025,000
City of Deltona - Golf Course Reclaimed Pumping and Storage Expansion Project	Reclaimed Water	City of Deltona	Complete	0.75	2013-2014	CCSP	$ 720,000	$ 1,080,000	$ 1,800,000
City of Deltona - Howland Blvd Phase 3 Reclaimed Water Prj	Reclaimed Water	City of Deltona	Complete	2.00	2013-2014	CCSP	$ 196,000	$ 294,000	$ 490,000
City of Groveland Eagle Ridge Water Distribution Facility Phase 2	Reclaimed Water	City of Groveland	Complete	0.21	2013-2014	CCSP	$ 280,000	$ 420,000	$ 700,000
City of Groveland Eagle Ridge Water Distribution Facility Phase 3	Reclaimed Water	City of Groveland	In Progress	0.75	2015-2016	CCSP	$ 1,174,470	$ 2,384,530	$ 3,559,000
City of Groveland Silver Eagle RCW Storage Tank	Reclaimed Water	City of Groveland	Complete	1.50	2015-2016	CCSP	$ 280,000	$ 420,000	$ 700,000
City of Jacksonville Naval Air Station Reclaimed Water Project	Reclaimed Water	City of Jacksonville	Complete	0.10	2011-2012	AWSCCP	$ 1,474,824	$ 2,558,000	$ 4,032,824
City of Ocala Reuse Main	Reclaimed Water	City of Ocala	Complete	0.50	2013-2014	CCSP	$ 392,000	$ 589,000	$ 981,000
City of Oviedo Reclaimed Water Infill Initiative	Reclaimed Water	City of Oviedo	Complete	0.25	2013-2014	CCSP	$ 39,444	$ 59,166	$ 98,610
City of Palm Coast Grand Landing Reclaimed Water Transmission Main	Reclaimed Water	City of Palm Coast	Complete	0.56	2015-2016	CCSP	$ 200,393	$ 406,857	$ 607,250
City of Palm Coast Matanzas Woods Reclaimed Pipeline	Reclaimed Water	City of Palm Coast	Complete	2.27	2014-2015	CCSP	$ 759,000	$ 1,557,472	$ 2,316,472
City of Palm Coast RW Irrigation Along US-1 & Palm Coast Park	Reclaimed Water	City of Palm Coast	Not Started	1.00	2016-2017	CCSP	$ 462,000	$ 938,000	$ 1,400,000
City of Palm Coast Royal Palms Parkway Reclaimed Water Line	Reclaimed Water	City of Palm Coast	Complete	0.05	2014-2015	CCSP	$ 99,000	$ 201,000	$ 300,000
City of Palm Coast Utilization of Concentrate as Raw Water Supply	Reclaimed Water	City of Palm Coast	Complete	0.75	2013-2014	CCSP	$ 494,800	$ 742,320	$ 1,237,120
City of Sanford Enhancement to Aquifer Storage & Recovery System	Reclaimed Water	City of Sanford	In Progress	0.66	2014-2015	CCSP	$ 234,062	$ 475,217	$ 709,279
City of Sanford & Volusia County Reclaimed Interconnect	Reclaimed Water	City of Sanford and Volusia County	Complete	1.50	2013-2014	CCSP	$ 1,376,000	$ 2,064,000	$ 3,440,000
City of Sanford Reclaimed Water Orl-San Airport Expansion Phase 1	Reclaimed Water	City of Sanford	Complete	0.28	2014-2015	CCSP	$ 225,406	$ 457,642	$ 683,048
City of Winter Garden SW RCW	Reclaimed Water	City of Winter Garden	Complete	0.15	2013-2014	CCSP	$ 479,040	$ 718,560	$ 1,197,600
Cocoa Beach Reclaimed Water Control Valves	Reclaimed Water	City of Cocoa Beach	Complete	0.30	2005–2006	AWSCCP	$ 34,040	$ 135,960	$ 170,000

Table 3-1: AWS projects funded through programs other than the Water Protection and Sustainability Program Trust Fund FY 2005–2006 to FY 2016–2017 (in alphabetical order)

Project Name	Project Type	Local Sponsor	Status	Water Produced (mgd)	Funding Fiscal Year	Program*	SJRWMD Amount	Local Sponsor Amount	Total Cost
D.B. Lee WWTP Reclaimed Water System Expansion	Reclaimed Water	City of Melbourne	Complete	1.79	2005–2006	AWSCCP	$ 75,000	$ 697,000	$ 772,000
Drain Well Maintenance Project	Reclaimed Water	Orange County	Complete	0.72	2005–2006	CFARE	$ 210,000	$ 548,286	$ 758,286
Drain Well Maintenance Project	Reclaimed Water	City of Orlando	Complete	0.45	2005–2006	CFARE	$ 70,000	$ 398,559	$ 468,559
Dunes Community Development District Brackish GW Development	Brackish Groundwater	Dunes Community Development District	Complete	0.72	2013-2014	CCSP	$ 902,000	$ 1,353,000	$ 2,255,000
Gainesville Regional Utilities - Reclaimed Water Extension to Innovation District	Reclaimed Water	GRU	Complete	0.11	2013-2014	CCSP	$ 157,000	$ 235,000	$ 392,000
Green Cove Springs North Grid RCW System Phase 2 & 3	Reclaimed Water	City of Green Cove Springs	Not Started	0.14	2016-2017	CCSP	$ 660,000	$ 1,340,000	$ 2,000,000
Greenwood Lakes Reclaimed Water System Improvement	Reclaimed Water	Seminole County	Complete	0.01	2005–2006	CFARE	$ 232,000	$ 1,398,000	$ 1,630,000
Holloway Tree Farm Rainwater Harvesting and Recycling System	Rainwater	Holloway Technology (Lake County)	Complete	0.14	2005–2006	AWSCCP	$ 100,000	$ 320,000	$ 420,000
JEA 9B Reclaimed Water Main	Reclaimed Water	JEA	Complete	13.00	2013-2014	CCSP	$ 181,200	$ 271,800	$ 453,000
JEA Arlington East Water Reclamation Facility Expansion	Reclaimed Water	JEA	Complete	2.00	2014-2015	CCSP	$ 371,580	$ 754,420	$ 1,126,000
JEA Bartram Park Reclaimed Water Storage Tank Expansion	Reclaimed Water	JEA	In Progress	0.53	2016-2017	CCSP	$ 627,000	$ 1,273,000	$ 1,900,000
JEA Mandarin WWTP Upgrades	Reclaimed Water	JEA	In Progress	3.05	2016-2017	CCSP	$ 1,316,000	$ 2,678,000	$ 3,994,000
JEA Nocatee Coastal Oaks Phase 4	Reclaimed Water	JEA	Complete	2.00	2014-2015	CCSP	$ 264,000	$ 536,000	$ 800,000
JEA Nocatee North RW Storage Tank	Reclaimed Water	JEA	In Progress	1.80	2015-2016	CCSP	$ 660,000	$ 1,340,000	$ 2,000,000
JEA Nocatee Pkwy RW Transmission	Reclaimed Water	JEA	In Progress	1.65	2015-2016	CCSP	$ 112,200	$ 227,800	$ 340,000
JEA Nocatee Riverwood RW Transmission	Reclaimed Water	JEA	Complete	0.85	2015-2016	CCSP	$ 30,500	$ 62,000	$ 92,500
JEA Queens Harbor Reclaimed Water Main Extension	Reclaimed Water	JEA	Complete	0.30	2013-2014	CCSP	$ 84,658	$ 126,988	$ 211,646
JEA RG Skinner Parkway RW Trans	Reclaimed Water	JEA	Not Started	0.47	2016-2017	CCSP	$ 660,000	$ 1,340,000	$ 2,000,000
JEA William Burgess Road	Reclaimed Water	JEA	Not Started	0.46	2016-2017	CCSP	$ 660,000	$ 1,340,000	$ 2,000,000
Little Creek Reclaimed Water Expansion	Reclaimed Water	City of Oviedo	Complete	0.18	2011–2012	MFLs AWS	$ 25,110	$ 37,666	$ 62,776

Table 3-1: AWS projects funded through programs other than the Water Protection and Sustainability Program Trust Fund FY 2005–2006 to FY 2016–2017 (in alphabetical order)

Project Name	Project Type	Local Sponsor	Status	Water Produced (mgd)	Funding Fiscal Year	Program*	SJRWMD Amount	Local Sponsor Amount	Total Cost
Marion County Silver Springs Shores Reuse to Spruce Creek G & CC	Reclaimed Water	Marion County	Complete	1.20	2013-2014	CCSP	$ 3,192,000	$ 6,627,738	$ 9,819,738
Mill Creek Reclaimed Water Storage Pond	Reclaimed Water	City of Sanford	Complete	0.28	2005–2006	CFARE	$ 480,000	$ 1,251,038	$ 1,731,038
NW Recreation Center Reclaimed Water Storage/Recharge Phase I	Reclaimed Water	City of Apopka	Complete	0.09	2005–2006	CFARE	$ 705,000	$ 2,200,250	$ 2,905,250
NW Water Reclamation Facility Rapid Infiltration Basin Expansion Project	Reclaimed Water	Orange County	Complete	0.40	2005–2006	CFARE	$ 265,000	$ 692,000	$ 957,000
Old Winter Garden Road Rapid Infiltration Basin Project	Reclaimed Water	Orange County	Complete	0.52	2005–2006	CFARE	$ 305,000	$ 795,000	$ 1,100,000
Old Winter Garden Road Reclaimed Water Transmission Line	Reclaimed Water	Orange County	Complete	0.50	2005–2006	AWSCCP	$ 100,000	$ 150,020	$ 250,020
Orange City Reclaimed Water Main and Water Meters	Reclaimed Water	Orange City	Complete	0.25	2014-2015	CCSP	$ 161,700	$ 328,300	$ 490,000
Orange County Wekiwa Springshed Alternative Water Supply Expansion Phase 1	Reclaimed Water	Orange County	In Progress	3.00	2014-2015	CCSP	$ 700,000	$ 950,000	$ 1,650,000
Orange County Utilities Wekiva Springshed AWS Expansion Phase 2	Reclaimed Water	Orange County	In Progress	3.00	2015-2016	CCSP	$ 198,000	$ 402,000	$ 600,000
Orange County Reuse System Expansion	Reclaimed Water	Orange County	Complete	3.06	2005–2006	AWSCCP	$ 100,000	$ 265,000	$ 365,000
Ormond Beach South Peninsula Reclaimed Water Expansion	Reclaimed Water	City of Ormond Beach	Not Started	0.56	2016-2017	CCSP	$ 1,455,178	$ 2,954,452	$ 4,409,630
Queens Harbor Residential & Golf Course Reclaimed Water Sytem Expansion	Reclaimed Water	Queens Harbor	Complete	0.30	2013-2014	CCSP	$ 80,026	$ 120,040	$ 200,066
Reclaimed Water Augmentation Vertical Well	Reclaimed Water	City of Cocoa	Complete	0.30	2006–2007	AWSCCP	$ 73,462	$ 125,238	$ 198,700
Rockledge Reuse Supplementation	Reclaimed Water	City of Rockledge	Complete	0.14	2006–2007	AWSCCP	$ 22,500	$ 22,500	$ 45,000
Saxon Woods Reclaimed Waterline Extension	Reclaimed Water	Volusia County	Complete	0.20	2005–2006	AWSCCP	$ 125,000	$ 372,000	$ 497,000
Southwest Reclaimed Water Service Area	Reclaimed Water	City of Winter Garden	Complete	2.00	2011–2012	MFLs AWS	$ 954,384	$ 1,431,575	$ 2,385,959
Spring Glen Reclaimed Water Expansion	Reclaimed Water	Volusia County	Complete	0.10	2007–2008	AWSCCP	$ 50,000	$ 250,000	$ 300,000
St. Johns County RW ST at Anastasia Island WWTF	Reclaimed Water	St. Johns County	Complete	2.00	2015-2016	CCSP	$ 552,750	$ 1,122,250	$ 1,675,000
St. Johns County RW ST at SR16 WWTF	Reclaimed Water	St. Johns County	Complete	1.00	2015-2016	CCSP	$ 412,500	$ 837,500	$ 1,250,000
Timucuan Golf Course Reclaimed Water Storage Pond	Reclaimed Water	City of Lake Mary	Complete	2.30	2005–2006	AWSCCP	$ 100,000	$ 153,987	$ 253,987

Table 3-1: AWS projects funded through programs other than the Water Protection and Sustainability Program Trust Fund FY 2005–2006 to FY 2016–2017 (in alphabetical order)

Project Name	Project Type	Local Sponsor	Status	Water Produced (mgd)	Funding Fiscal Year	Program*	SJRWMD Amount	Local Sponsor Amount	Total Cost
Titusville Reclaimed Water Control System	Reclaimed Water	City of Titusville	Complete	0.23	2005–2006	AWSCCP	$ 50,000	$ 54,000	$ 104,000
Tomoka Oaks Golf Course Reclaimed Water System	Reclaimed Water	Tomoka Oaks Golf Course (Volusia County)	Complete	0.50	2006–2007	AWSCCP	$ 200,000	$ 257,000	$ 457,000
Town of Orange Park Reclaimed Water	Reclaimed Water	Town of Orange Park	Complete	0.70	2013-2014	CCSP	$ 1,000,000	$ 1,500,000	$ 2,500,000
Vero Beach Reverse Osmosis WWTF Expansion	Reclaimed Water	City of Vero Beach	In Progress	2.60	2015-2016	CCSP	$ 900,000	$ 1,479,000	$ 2,379,000
Wekiva-Apopka Reuse Transmission Main	Reclaimed Water	Sanlando Utilities (Orange County)	Complete	1.00	2011–2012	MFLs AWS	$ 1,468,000	$ 2,202,000	$ 3,670,000
West Volusia Water Suppliers Doyle Road Reclaimed Water Interconnect	Reclaimed Water	City of Deltona	Complete	2.00	2013-2014	CCSP	$ 2,400,000	$ 3,600,000	$ 6,000,000
West Volusia Water Suppliers Reclaimed Water Interconnect Project #2-A	Reclaimed Water	City of Deland/WVWS	Complete	2.50	2013-2014	CCSP	$ 2,230,632	$ 3,345,948	$ 5,576,580
Western Reclaimed Water Distribution	Reclaimed Water	City of Ormond Beach	Complete	2.00	2011–2012	MFLs AWS	$ 1,313,578	$ 1,967,367	$ 3,280,945
Yothers Road Reclaimed Water Main	Reclaimed Water	City of Apopka	Complete	1.32	2005–2006	AWSCCP	$ 75,000	$ 188,200	$ 263,200
Total:				**125.35**			**$ 50,583,639**	**$ 99,577,922**	**$ 150,161,561**

*AWSCCP = Alternative Water Supply Construction Cost-sharing Program

MFLs AWS = Minimum Flows and Levels Alternative Water Supply Program

CFARE = Central Florida Aquifer Recharge Enhancement Program

CCSP = Cooperative Cost Share Program

Project narratives

Anguilla Fish Farm AWS Well
Construction of a lower Floridan aquifer well to provide brackish groundwater as an alternative water supply for a commercial fish farm operation.

City of Altamonte Springs/Florida Department of Transportation (FDOT) Integrated Stormwater Capture and Reclaimed Water Project
Construction of a comprehensive regional water resource project that will increase reclaimed water supplies by using stormwater runoff from the FDOT expansion of I-4 in central Florida. 1.5 mgd of storm water will be captured and treated in the newly constructed stormwater facility at the city's Water Plant No. 4. The 1.5 mgd of storm water will be combined with 3.0 mgd of reclaimed water from the city's regional water reclamation facility to augment the city's reclaimed water system when needed, and otherwise pumped through a transmission pipeline to the city of Apopka to supplement its reclaimed water system and provide aquifer recharge under wet weather conditions.

Big Oaks and Twin River Reclaimed Water Expansion, Phase 1
Expansion of the city of Oviedo's reuse system into the Big Oaks and Twin Rivers residential developments, including service connections to approximately 183 residences.

Blend Reverse Osmosis (RO) Concentrate with Brackish Groundwater
Project by Indian River County to blend 2.25 mgd of reverse osmosis concentrate with brackish water from the Indian River Lagoon to create water for restoring a 62-acre mangrove habitat. (local project name: Grand Harbor Mosquito Impoundment/Mangrove Restoration)

Blend RO Concentrate with Storm Water
Project by Indian River County to reroute concentrate from the reverse osmosis facility to the Bent Pine Golf Course rapid infiltration basin where it is mixed with storm water and then reused for golf course irrigation.

Bunnell - State Street Median Reclaimed Water Irrigation System
The project will install reclaimed water irrigation to the park and two medians along US1 and SR100 crossroads with a goal of 0 discharge from the WWTP and lower demand for potable from well #5.

Caldwell - Gorgeous Groves RW project
The project will enable the Caldwell Citrus Grove Management, LLC to meter and distribute reclaimed water from the City of Tavares from an existing distribution line to irrigate large plots of citrus groves. The quantity of reclaimed water expected to be used for this project is 40 mgy to serve 85 acres of citrus. The extension consists of 1200' of 10" and 1200' of 8" pipe, dual meter installations, and isolation of two Floridan aquifer production wells. This project will reduce like amounts of groundwater withdrawals and increase the demand on the City of Tavares water reclamation system.

Canaveral Port Authority Reclaimed Water ASR
Construction of ASR wells for storage of reclaimed water during the wet season, resulting in more reclaimed water utilization and less surface water discharge.

Cape Canaveral Reuse Lines Expansion
Installation of pumps, piping and associated systems to use reclaimed water for residential irrigation to replace 116,000 gallons per day (gpd) of Floridan aquifer water. The project reduces surface water discharges into the Banana River and reduces saltwater intrusion in the surficial aquifer.

CCUA County Road (CR) 209 Reclaimed Water Transmission Main
This project will construct a 3,800 linear foot 20-inch diameter reclaimed water main extension to serve the future development area near the intersection of CR 220 and CR 209/Henley Road.

CCUA Mid-Clay Reclaimed Water Storage Project
Project to provide storage of excess reclaimed water into a series of surficial aquifer rapid infiltration basins (SARIBs).

CCUA Old Jennings Reclaimed Water Plant Ground Storage Tank
This project will construct a 750,000-gallon ground storage tank at the Old Jennings Road Reclaimed Water Plant facility. The tank will be installed inside the existing facility and be directly integrated into the existing reclaimed water transmission/distribution system.

City of Apopka Keene Road Reclaimed Water Transmission Main
Construction of approximately 12,165 linear feet (LF) of a 48-inch diameter reclaimed water transmission main from the city of Apopka's (city's) reclaimed water treatment facility to the Keene Road/Marden Road intersection just north of the Orange County Utilities (OCU) northwest reclaimed water treatment facility.

City of Apopka Kelly Park Rd & Ponkan Rd Reclaimed Water Main Extension
The project consists of construction of a reclaimed water main extension into the future high-density Kelley Park Crossings development. The project begins at the intersection of Jason Dwelley Parkway with the construction of 1,313' of 24" reclaimed water main (RWM), and then continues west along Kelly Park Road with the construction of 4,041' of 20" RWM. The use of reclaimed water is expected to reduce the use of irrigation wells assisting in the protection of the springs' flow in the Wekiva Basin.

City of Apopka Reclaimed Water Main Extensions
The project consists of constructing of three reclaimed water main segments within the City of Apopka. The pipe segments include: (1) Ocoee-Apopka Road from Keene Road to Alston Bay Boulevard; (2) Keene Road from Marden Road to Ocoee-Apopka Road and Ocoee-Apopka Road from Keene Rd to Parkstone; and (3) Schopke Road from Plymouth Sorrento Road to Schopke-Lester Road. These reclaimed water distribution segments add to the planned or existing network within the city.

City of Atlantic Beach Selva Marina Reclaimed Water Facilities
Construction of a 0.5 mgd reclaimed water facility to serve the Selva Marina Country Club and a new 180-home subdivision.

City of Cape Canaveral Reclaimed Water Tank
Construction of a 2.5 million gallon (MG) reclaimed water tank will eliminate 23.9 MG of treated wastewater from entering the IRL on an annual basis. This project will provide additional reclaimed water for citywide irrigation.

City of Daytona Beach 2.5 MG Reuse Tank
This project includes construction of a 2.5 MG reclaimed water storage tank.

City of DeLand Reclaimed Water Retrofit, Part B and Wiley Nash Water Reclamation Facility (WRF) Upgrades
Construction of additional filtration facilities to treat storm water and surface water to augment reclaimed water supplies. The project will result in 2.0 mgd treatment capacity.

City of Deland Reclaimed Water Retrofit Project Phase 1
The project consists of retrofitting three areas currently served with potable water for irrigation to reclaimed irrigation supply. The three areas include Blue Lake Woods Subdivision, University Avenue Region, and South Ridge Pointe Subdivision.

City of Deland Reclaimed Water Retrofit Project Phase 2B
The project consists of retrofitting two areas currently served with potable water for irrigation to reclaimed irrigation supply. The two areas include the Waterford and Heather Glen Subdivisions.

City of DeLand Reclaimed Water Storage & Recovery
This project will provide additional storage of reclaimed water during wet weather and allow recovery of water applied to a retention pond / Rapid Infiltration Basin (RIB) for reuse. This project will also reduce wet weather discharge to the St. Johns River.

City of Deltona Golf Course Reclaimed Water Expansion
Construction of a new reclaimed water pumping station and 1.0 million gallon ground storage tank for the Deltona Golf and Country Club to provide additional reclaimed water supply.

City of Deltona Howland Boulevard Phase 3 Reclaimed Water Expansion
Extension of a reclaimed water main from the intersection of State Road (SR) 415 and Howland Boulevard to the intersection of Howland Boulevard and Elkam Boulevard.

City of Groveland Eagle Ridge Water Distribution Facility Phase 2
Construction of approximately 7,000 LF of reclaimed water pipeline along SR 50 to connect to Groveland's Eagle Ridge Reclaimed Water Distribution Facility.

City of Groveland Eagle Ridge Water Distribution Facility Phase 3
This project consists of construction of a 7.3 mile reclaimed water main to interconnect the Sunshine WWTP to the Sampey Rd. WWTP. Sunshine is doubling its reclaimed availability and the additional water will offset withdrawals in the south service area.

City of Groveland Silver Eagle Reclaimed Storage Tank
This project consists of construction of a 1.5 MG storage tank for reclaimed water at the Silver Eagle facility.

City of Jacksonville Naval Air Station (NAS Jax.) Reclaimed Water Project
Construction of a pump station, an expanded holding pond, a reuse line from the wastewater treatment plant (WWTP) to the pond and construction of pump stations at the pond with distribution lines from the pond to the NAS Jax. golf course, ball fields and weapons storage area. These works will virtually eliminate the annual average wastewater discharge to the St. Johns River and will eliminate consumption of 0.10 mgd of groundwater currently used to irrigate the golf course and ball fields.

City of Ocala Reuse Main
Construction of a reuse water main to two City Parks to reduce the use of potable water for irrigation.

City of Oveido Reclaimed Water Infill Initiative
Project to provide meters for reclaimed water service to residential units.

City of Palm Coast Grand Landings RW Transmission Main
This project consists of an extension of the city's reclaimed water system to the SE section of the city.

City of Palm Coast Matanzas Woods Pkwy Reclaimed Water Transmission Pipeline
This project consists of constructing a reclaimed water transmission main extension along Matanzas Woods Parkway between Old Kings Rd. and US 1.

City of Palm Coast RW Irrigation along US1 & Palm Coast Park
A reclaimed water line will be constructed along US 1 in Palm Coast.

City of Palm Coast Royal Palms Pkwy Reclaimed Water Transmission Pipeline
This project consists of constructing a reclaimed water transmission main extension along Royal Palms Parkway between Town Center Boulevard and Belle Terre Parkway.

City of Palm Coast Utilization of Concentrate as Raw Water Supply
Installation of cartridge filters and an ozone treatment system to treat concentrate at Water Treatment Plant (WTP) #3. The treated water is sent to WTP #1 as an alternative water source for recovery and treatment as drinking water instead of blending it with reclaimed water for irrigation or discharging it to the Intracoastal Waterway.

City of Sanford: Enhancements to ASR System
This project will construct enhancements to the existing ASR System that will allow the City to use two additional water sources individually or blended; the City’s Main WTP and raw groundwater from the Hidden Lakes wellfield. Injecting raw groundwater should reduce the pretreatment operating expense.

City of Sanford RW Orlando-Sanford Int Air Area Expansion Ph 1
This project will construct a reclaimed water main extension along Lake Mary Boulevard from the Sanford Water Resource Center to the Brisson West Development and Silvestry Development.

City of Sanford and Volusia County Reclaimed Interconnect
Construction of an interconnection of the reclaimed water distribution systems of Sanford and Volusia County for Sanford to provide 1.5 mgd of reclaimed water to Volusia County. Volusia County will expand the availability of reclaimed water to residents in the DeBary area.

City of Winter Garden – SW Reclaimed Water Service Area Expansion
Expansion of the existing reclaimed water system to three residential subdivisions.

Cocoa Beach Reclaimed Water Control Valves
Installation of 13 control valves and radio telemetry systems that enables the city to regulate the amount of reclaimed water used by reuse customers thereby increasing the amount available during peak hours.

D.B. Lee WWTP Reclaimed Water System Expansion
Construction of interconnection between the Grant Street and D.B. Lee reclaimed water systems that allows the transfer of reclaimed water between the systems. This interconnection makes available 1.79 mgd more reclaimed water to the Harbour City and Melbourne golf courses.

Drain Well Maintenance Project — Orange County
Replacement or restoration of six wells to increase aquifer recharge from the drain wells and to reduce potential flooding of built-up suburban areas.

Drain Well Maintenance Project — Orlando
Restoration of three wells — one well to improve flood conditions and two wells that provide lake elevation control. Each well is a significant source of recharge in the region.

Dunes Community Development District Brackish Groundwater Development Expansion Project
Expansion of a treatment facility to increase treatment of brackish groundwater by 0.72 mgd for a total treatment capacity of 1.44 mgd.

Gainesville Regional Utilities Reclaimed Water Extension to Innovation District
Extension of a reclaimed water pipeline to provide service to new redevelopment projects in the 76-acre Innovation District in Gainesville.

Green Cove Springs North Grid RCW System Phase 2 & 3
This project is multi-phased. Phases 2 and 3 which includes installation of a reclaimed water line to the Black Creek Marina development and connection to the Phase 1 termination point at Edgewater Landing. Phase 3 is the final leg of the reclaimed water main from the Harbor Road Water Reclamation Facility to the termination point of Phase 1.

Greenwood Lakes Reclaimed Water System Improvement
Construction of a 1.75 million gallon storage tank and associated site piping, adjacent to existing RIBs, for Seminole County to expand its reclaimed water system to provide residential reclaimed

water. The tank is interconnected to receive excess reclaimed water from the cities of Sanford and Lake Mary, which optimizes the use of the RIBs for aquifer recharge.

Holloway Tree Farm Rainwater Harvesting and Recycling System
Installation of a rainwater capturing and recycling system to achieve at least 0.14 mgd of potable groundwater savings.

JEA SR 9B Reclaimed Water Main
Installation of a 1,868 LF 300-inch reclaimed water main to provide reclaimed water to commercial and residential customers to offset potable water used for irrigation and reduce effluent discharge to the St. Johns River.

JEA Arlington East WRF – RW Filter Expansion
This project will construct a reclaimed water filter expansion. The quantity of water expected from this project is 2 mgd. The project consists of a filtering system and appurtenances at the Arlington East Water Reclamation Facility.

JEA Bartram Park Reclaimed Water Storage Tank Expansion
This project adds one 2.5 MG storage tank to support peak demands. The Bartram facility repumps reclaimed water supplied by two major wastewater facilities (Arlington East & Mandarin) to support St. Johns County demands, (currently 7,000 customers). This storage tank will provide an additional 5 hours of peak supply at the current pumping rate of 11 MGD.
JEA Mandarin Wastewater Treatment Plant Upgrades
This project includes construction of a 1.6 MG equalization basin, high service pump and disinfection to provide operational storage and equalization of available reclaimed water flow over a 24-hour period. This will increase the reclaimed water operational capacity from 5.7 MGD to 8.75 MGD annual average.

JEA Nocatee – Coastal Oaks Ph 4
This project will construct a reclaimed water transmission main extension in the Nocatee Coastal Oaks Phase 4 area.

JEA Nocatee North RW Storage Tank
This project will construct of a 2MG storage tank to provide additional capacity

JEA Nocatee Parkway RW Transmission
This project will construct a 16" transmission line.

JEA Nocatee – Riverwood RW Transmission
This project will construct a 12" transmission line providing 0.85 MGD to 3,000 existing and 11,500 future homes

JEA Queens Harbor Reclaimed Water Main Extension
Installation of 1,150 LF of 6-inch force main to provide reclaimed water to the Queens Harbor residential development. The reclaimed water will reduce the amount of water withdrawn from

the Floridan aquifer and will reduce the amount of effluent discharged to the St. Johns River from the Arlington East WWTF.

JEA RG Skinner Parkway Reclaimed Water Transmission
This project is the second phase of a project to expand the reclaimed water system to convey reclaimed water between the Arlington East and Mandarin WWTFs, while also providing reclaimed water in the highest customer demand regions of northern St. Johns County and southern Duval County.

JEA William Burgess Road
This project will provide reclaimed water via a 13,000 feet of pipe to a major development called the East Nassau Community Planning Area in Nassau County.

Little Creek Reclaimed Water Expansion
Expansion of the city of Oveido's reuse system into the Little Creek residential development, including reclaimed water service to approximately 340 residences.
Marion County Silver Springs Shores Reuse to Spruce Creek Golf and Country Club
Upgrade to the existing WWTP located in Silver Springs Shores to reclaimed quality effluent standards.

Mill Creek Reclaimed Water Storage Pond
Conversion by Seminole County of an existing isolated 26-acre borrow pit into reclaimed water storage for re-pumping to augment the supply and increase the operating pressures at Seminole County College and Mayfair Golf Course to improve system reliability.

Northwest Recreation Center Reclaimed Water Storage/Recharge Phase 1
Construction of a 110 million gallon storage/recharge pond at the city of Apopka's Northwest Recreation Facility.

Northwest Water Reclamation Facility (NWWRF) Rapid Infiltration Basin (RIB) Expansion
Excess reclaimed water from Orange County's NWWRF is placed in an 8-acre system of five RIBs located on a 110-acre parcel adjacent to Lake Cora Lee.

Old Winter Garden Road RIB
Construction by Orange County of two RIBs, appurtenant facilities and pipe connecting to the county's south service area distribution system.

Old Winter Garden Road Reclaimed Water Transmission Line
Construction by Orange County of approximately 2,500 LF of 16-inch reclaimed water main and associated piping and valves to transport reclaimed water to the Old Winter Garden Road recharge site.

Orange City Reclaimed Water Main & Meters
This project will provide reclaimed water to the Oakhurst residential development by installing new individual water meters for reclaimed water as well as backflow prevention devices for the potable water system on existing "dry" reclaimed waterlines.

Orange County Reuse System Expansion
Extension of Orange County's reclaimed water system along McCormick Road.

Orange County: Wekiwa Springshed AWS Expansion – Ph 1
This project will construct 3,500 feet of 24" reclaimed water main and related pumping improvements in order to provide 3 million gallons per day (MGD) of reclaimed water produced at the NWRF to the City of Apopka for distribution in their reclaimed water system.

Orange County: Wekiwa Springshed AWS Expansion – Ph 2
This project includes major improvements to the electrical control building and the installation of three additional pumps to the original project for a a total of five pumps.

Ormond Beach South Peninsula Reclaimed Water Expansion
This project includes expansion of the City's reclaimed water distribution network throughout the South Peninsula area of the City of Ormond Beach. Upon completion, the project reduces groundwater withdrawals from the City's Rima Ridge wells by approximately 0.56 MGD due to a reduction in demand of potable water for irrigation purposes.

Queens Harbor Residential and Golf Course Reclaimed Water System Expansion
Installation of approximately 5,115 LF of 6-inch force main from the JEA terminus to the irrigation storage ponds on the golf course to receive reclaimed water from JEA.

Reclaimed Water Augmentation Vertical Well
Construction by the city of Cocoa of a vertical well system for reclaimed water augmentation.

Rockledge Reuse Supplementation
Installation of six surficial aquifer wells to augment the city's reclaimed water system.

Saxon Woods Reclaimed Waterline Extension
Construction by Volusia County of approximately 5,000 LF of 12-inch reclaimed water line for the Saxon Woods subdivision.

Spring Glen Reclaimed Water Expansion
Installation by Volusia County of approximately 1,000 LF of 12-inch and 3,200 LF of 8-inch reclaimed water lines through the established residential golf community of Glen Abbey.

Southwest Reclaimed Water Service Area
Expansion of reclaimed water by the city of Winter Garden for residential and minor commercial irrigation demands within the city's southwest service area.

St. Johns County – RW Storage Tank at SR16 WWTF
This project will construct a 1 MG ground storage tank.

St. Johns County – Parker Canal Regional SW Treatment Facility – Phase 1
This project will construct a 19-acre wet detention pond in the Elkton Drainage District for reclaimed water and nutrient reduction

Timucuan Golf Course Reclaimed Water Storage Pond
Construction by the city of Lake Mary of a 2.3 million gallon reclaimed water storage pond and associated piping and control structures at the Timucuan Golf Course for recharge as well as reclaimed water storage.

Titusville Reclaimed Water Control System
Installation of improvements to the city's reclaimed water system that includes 500 radio-read meters for new and existing reuse customers. These meters enable the city to more accurately determine reclaimed customers' use patterns. Future reclaimed water demands are extrapolated from this data and used by the city to plan future system improvements.

Tomoka Oaks Golf Course Reclaimed Water System
Construction by Tomoka Oaks of a storage pond, pipeline, pumping system and associated improvements to connect to the city of Ormond Beach's reclaimed water facilities to utilize reclaimed water for irrigation and reduce surface water discharges to the Halifax River.

Town of Orange Park Reclaimed Water
Construction of a new reuse system that will provide reclaimed water for irrigation, thereby reducing the use of well water and potable water for irrigation.

Vero Beach Reverse Osmosis WTF Expansion
This project will expand the RO capacity from 2 to 4.5 MGD, improve finished water quality and decrease operation of the lime softening plant. Also, two new high pressure pumps and two skids will be installed and there will be modifications to the sulfuric acid and scale inhibitor feed system.

Wekiva-Apopka Reuse Transmission Main
Construction by Sanlando Utilities of a 6-mile-long reuse transmission main to provide reuse water to the city of Apopka's wastewater treatment facility to offset an equal volume of groundwater used to supplement the city's reuse system.

West Volusia Water Suppliers Doyle Road Reclaimed Water Interconnect
Construction of an interconnection from Deltona's existing Deltona Lakes WRF and the proposed "eastern" facility.

West Volusia Water Suppliers Reclaimed Water Interconnect Phase 2-A
Construction of interconnect transmission lines to the reuse distribution systems of the cities of DeLand and Deltona and Volusia County.

Western Reclaimed Water Distribution
Construction by the city of Ormond Beach of a reclaimed water transmission main to expand reclaimed water service to the western areas of the city to reduce groundwater consumption in the Hunters Ridge and Breakaway Trails developments.

Yothers Road Reclaimed Water Main

Construction by the City of Apopka of approximately 4,700 LF of reclaimed water main along Yothers Road from Plymouth Sorrento Road to Wilkens Farm subdivision to provide reclaimed water for irrigation.

IV. Summary

Since fiscal year 2005–2006, the District has awarded more than $114.2 million in cost-share funding on 126 AWS projects that will or have resulted in the production of more than 231 million gallons per day (mgd) of alternative water supplies.

Table 4-1 provides a summary of funding by fiscal year, funding source and water source for AWS projects. Below is a summary of the AWS sources produced.

AWS Source	Water to be Produced or Recycled (mgd)
Reclaimed water	194.87
Surface water	10.00
Brackish groundwater	20.58
Storm water	6.00
Rainwater	0.14
	231.59

Table 4-1: Funding by AWS Source
FY 2005/2006 to FY 2016/2017

AWS Source	FY 2005–2006					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater	$ 13,002,380	$ 13,002,380	$ 34,770			
Reclaimed Water	$ 9,585,355	$ 9,585,355	$ 834,040	$ 2,267,000		
Surface Water						
Seawater						
Rainwater			$ 100,000			
Storm Water						
Total:	$ 22,587,735	$ 22,587,735	$ 968,810	$ 2,267,000	$ -	

AWS Source	FY 2006–2007					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater			$ 50,000			
Reclaimed Water	$ 4,767,567	$ 4,767,567	$ 295,962			
Surface Water	$ 3,765,000	$ 3,765,000				
Seawater						
Rainwater						
Storm Water			$ 125,000			
Total:	$ 8,532,567	$ 8,532,567	$ 470,962	$ -	$ -	

AWS Source	FY 2007–2008					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water	$ 87,839	$ 87,839	$ 50,000			
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:	$ 87,839	$ 87,839	$ 50,000			

AWS Source	FY 2008–2009					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water	$ 640,000	$ 640,000				
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:	$ 640,000	$ 640,000	$ -	$ -	$ -	

AWS Source	FY 2009–2010					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water						
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:						

AWS Source	FY 2010–2011					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water						
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:	$ -	$ -	$ -	$ -	$ -	$ -

AWS Source	FY 2011–2012					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water			$ 1,474,824		$ 4,132,126	
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:	$ -	$ -	$ 1,474,824	$ -	$ 4,132,126	

AWS Source	FY 2012–2013					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water						
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:	$ -	$ -	$ -	$ -	$ -	$ -

Table 4-1: Funding by AWS Source
FY 2005/2006 to FY 2016/2017

AWS Source	FY 2013–2014					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						$ 902,000
Reclaimed Water						$ 17,791,258
Surface Water						
Seawater						
Rainwater						
Storm Water						$ 3,500,000
Total:	$ -	$ -	$ -	$ -	$ -	$ 22,193,258

AWS Source	FY 2014–2015					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water						$ 4,623,087
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:	$ -	$ -	$ -	$ -	$ -	$ 4,623,087

AWS Source	FY 2015–2016					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water						$ 5,401,313
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:	$ -	$ -	$ -	$ -	$ -	$ 5,401,313

AWS Source	FY 2016–2017					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater						
Reclaimed Water						$ 9,002,259
Surface Water						
Seawater						
Rainwater						
Storm Water						
Total:	$ -	$ -	$ -	$ -	$ -	$ 9,002,259

AWS Source	ALL YEARS					
	WPSPTF	SJRWMD WPSPTF MATCH	AWSCCP	CFARE	MFLs AWS	CCSP
Brackish Groundwater	$ 13,002,380	$ 13,002,380	$ 84,770	$ -	$ -	$ 902,000
Reclaimed Water	$ 15,080,761	$ 15,080,761	$ 2,654,826	$ 2,267,000	$ 4,132,126	$ 36,817,917
Surface Water	$ 3,765,000	$ 3,765,000	$ -	$ -	$ -	$ -
Seawater	$ -	$ -	$ -	$ -	$ -	$ -
Rainwater	$ -	$ -	$ 100,000	$ -	$ -	$ -
Storm Water	$ -	$ -	$ 125,000	$ -	$ -	$ 3,500,000
Subtotal:	$ 31,848,141	$ 31,848,141	$ 2,964,596	$ 2,267,000	$ 4,132,126	$ 41,219,917
Grant Total:	**$**					**114,279,921**

2017 Florida Forever Work Plan
Annual Report

6. FLORIDA FOREVER WORK PLAN ANNUAL UPDATE

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Introduction

As required by Section 373.199(7), *Florida Statutes* (F.S.), the St. Johns River Water Management District (District) has completed the 16th annual update of the 2001 Florida Forever Work Plan. Its purpose is to present projects eligible for funding under the Florida Forever Act (Section 259.105, F.S.), and to report on progress and changes made since the initial July 2001 submission. Prior to 2006, the District was required to submit the annual report to the Governor, the President of the Senate, and the Speaker of the House of Representatives. New legislation passed in 2005 (Section 373.036(7), F.S.) now requires the annual update to be presented as a separate chapter in the Consolidated Annual Report.

In addition to a summary of the proposed Florida Forever (FF) funding and projects during the planning period, the report presents project status, modifications and additions to the 2001 plan and consists of water resource development, restoration, and land acquisition subsections. Other required information for this report includes land acquisitions that were completed and District lands that were surplused during fiscal year (FY) 2015–2016. Finally, land management activities conducted by the District and budget and expenditure information for the FF fund and the Water Management Lands Trust Fund (WMLTF) can also be found in this report.

The Florida Forever Trust Fund was established in 1999 to replace the Preservation 2000 Trust Fund. The funds can be used for land acquisition, water resource development, stormwater management, water body restoration, recreational facility construction, public access improvements, invasive plant control, and related projects. The Florida Forever Act (s. 259.1051) established a not-to-exceed amount of $5.3 billion that would be deposited into the Florida Forever Trust Fund through 2020. This calculates to $300 million annually for all participating agencies and the five water management districts are allocated 30% of this total annually ($90 million) as shown in Table 6-1.

Table 6-1. Florida Forever annual water management district funding distribution

WMD	% Allocation	Amount
South Florida	35.0%	$ 31,500,000
St. Johns River	25.0%	22,500,000
Southwest Florida	25.0%	22,500,000
Suwannee River	7.5%	6,750,000
Northwest Florida	7.5%	6,750,000
Total	100.0%	$ 90,000,000

Based on the allocation formula, the District was designated to receive up to $22.5 million a year. However, no FF funds were appropriated to the District for FY 2009–2010, $1.125 million was appropriated for FY 2010–2011, and no new FF funding has been appropriated since.

This annual update has been prepared with the assumption that there will be no new FF fund allocations through the planning period.

Proposed Florida Forever Funding During the Planning Period

Because the state has not appropriated new FF funding since 2011–2012, this annual update has been prepared with the assumption that there will be no new FF fund allocations through the planning period.

Table 6-2 shows the past expenditures (FY 2000–2001 through FY 2012–2013). The District fully utilized its total allocation of $233.63 million of FF funding during FY 2012–2013. Figure 6-2 shows the shares of lifetime expenditures are 15.8% for water resource development (WRD) projects, 12% for restoration projects, and 72.2% for land acquisitions.

Table 6-2. Past expenditures through FY 2012–2013 (in millions)

Expenditure Category	FY	WRD	Restoration	Land	Combined Total	Cumulative Expenditure
Past 13-years Actual Adopted Budget	2000-2001	$ 0.00	$ 0.63	$ 0.00	$ 0.63	$ 0.63
	2001-2002	0.00	2.02	18.76	20.78	21.41
	2002-2003	0.31	2.36	8.50	11.17	32.58
	2003-2004	1.80	1.28	4.19	7.28	39.86
	2004-2005	6.50	0.39	13.84	20.73	60.59
	2005-2006	4.32	0.68	1.26	6.26	66.85
	2006-2007	9.66	4.43	49.11	63.19	130.03
	2007-2008	4.35	9.33	48.23	61.91	191.94
	2008-2009	7.55	4.08	17.55	29.18	221.12
	2009-2010	2.09	2.47	2.73	7.30	228.42
	2010-2011	0.42	0.23	4.42	5.06	233.48
	2011-2012	0.00	0.00	0.03	0.03	233.51
	2012-2013	0.00	0.11	0.00	0.11	233.63
Adopted Budget + Projection		**0.00**	**0.00**	**0.00**	**0.00**	
FF Lifetime Expenditure		**$ 36.99**	**$ 28.03**	**$ 168.60**	**$ 233.63**	

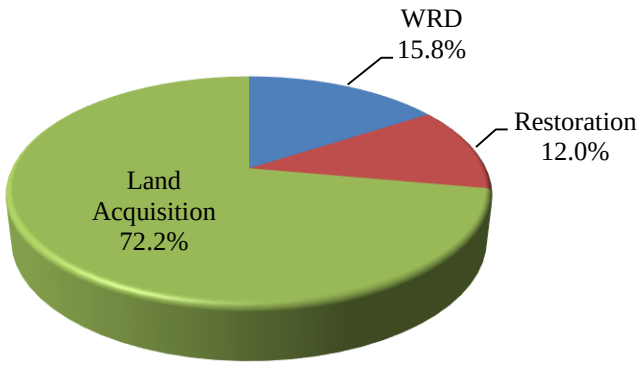


Figure 6-1. Florida Forever program lifetime expenditures by District program

Project Modification and Additions to the 2001 Florida Forever Work Plan

Water Resource Development Projects

The Water Resource Development (WRD) Program was mandated in 1997 by Section 373.0361, F.S., which requires water management districts to complete specific water supply planning activities and initiate water resource development and water supply projects. The legislation defines water resource development to differentiate it from water supply development and states the water management districts' primary responsibilities are water supply planning and water resource development. All water resource development projects are identified in the District's annual Water Resource Development Work Program (WRDWP) as required by Section 373.536(6)(a)4., F.S. The WRDWP is updated annually in October, reviewed by the Florida Department of Environmental Protection (DEP), and finalized for inclusion in the Consolidated Annual Report.

The District plans to use no new FF funds for WRD projects during this planning period. The program's expenditures in the past totaled $36.99 million, accounting for 15.8% of the total estimated FF expenditures by the District.

Restoration Projects

The District plans to use no new FF funds for restoration projects during this planning period. The program's expenditures in the past totaled $28.03 million, accounting for 12% of the total estimated FF expenditures by the District.

Land Acquisitions

The District plans to use no new FF funding for land acquisition-related expenses during the planning period from FY 2016–2017 to FY 2020–2021. The program's expenditures in the past totaled $168.6 million, accounting for 72.2% of the total estimated FF expenditures by the District.

Land acquisition has been a key tool utilized by the District to accomplish its goals. Lands were acquired to build water resource development and restoration projects and to conserve natural resources, including floodplains, springsheds, and recharge areas. In the area of conservation acquisitions, the District emphasized partnerships with other public agencies, including DEP and local and federal governments.

2017 Map Revisions to Potential Acquisition Areas

The District proposes no changes to the potential acquisition areas for the FY 2016–2017 Land Acquisition Map. The areas identified as potential acquisitions in the FY 2016–2017 Land Acquisition Map total 118,358 acres, or a reduction of 1,113 acres from the FY 2015–2016 Land

Acquisition Map. The reduction in potential acquisition acres from last year is attributed to acres that were both purchased by the District or another public agency during FY 2015–2016, and were within the "potential acquisition" layer.

2017 Land Acquisition Strategies

It is expected that land acquisitions will be limited during this year. If funding sources become available for new acquisitions, acquisitions will be focused on:

- Properties where the District can leverage District funds with federal, state, or local partnerships
- Properties that are needed to construct water resource projects or to meet wetlands mitigation requirements
- Properties that meet the District's core missions to safeguard water supply, water quality, flood protection and natural systems.
- Properties that protect springsheds.

Private/public partnerships such as less-than-fee acquisitions will also be considered.

Florida Forever Land Acquisition Projects

The District coordinates with the state's FF program for numerous cost-effective projects. The FF Priority List of projects is developed by the Acquisition and Restoration Council (ARC) and approved by the Governor and Cabinet. Currently there are 118 projects that were ranked and approved by ARC in December 2016 for the 2017 Florida Forever Priority List. There are six project categories, and within each category, projects are ranked in numerical order and given a high, medium or low priority for DEP's annual FF Work Plan. Table 6–3 shows the 38 projects that are within the District's boundaries, sorted by category, county, and rank.

Table 6-3. December 2016 ARC Recommendations for the FF acquisition priority list for projects within the District

Projects listed by Category	County	Rank within Category-Work Plan Group
Critical Natural Lands (CNL)		**9 of 33 Total Projects**
Lake Wales Ridge Ecosystem	Lake, Osceola	CNL-3-High
Wekiva-Ocala Greenway	Lake, Orange, Seminole, Volusia	CNL-4-High
Longleaf Pine Ecosystem	Marion, Volusia	CNL-9-Med
Etoniah Creek/Cross Florida Greenway	Clay, Marion, Putnam	CNL-10-High/Med
Pine Island Slough Ecosystem	Indian River, Osceola	CNL-12-Med
Osceola Pine Savannas	Osceola	CNL-14-Med
Camp Blanding to Raiford Greenway	Baker, Bradford, Clay, Union	CNL-20-Low
Pinhook Swamp	Baker	CNL-21-Low
Southeastern Bat Maternity Caves	Alachua, Marion	CNL-30-Low
Substantially Complete (SC)		**2 of 7 Total Projects**
Lochloosa Wildlife	Alachua	SC-5-Low
Spruce Creek	Volusia	SC-6-Low
Critical Historical Resources ("CHR")		**1 of 5 Total Projects**

Projects listed by Category	County	Rank within Category-Work Plan Group
Three Chimneys	Volusia	CHR-3-Low
Climate Change Lands (CC)		**4 of 13 Total Projects**
Northeast Florida Blueway	Duval, Flagler, St. Johns	CC-3-Med
Archie Carr Sea Turtle Refuge	Brevard, Indian River	CC-8-Low
St. Johns River Blueway	St. Johns	CC-9-Low
Tiger/Little Tiger Island	Nassau	CC-13-Low
Less-Than-Fee (LTF)		**8 of 30 Total Projects**
Big Bend Swamp/Holopaw Ranch	Osceola	LTF-9-Med
Kissimmee-St. Johns River Connector	Indian River, Okeechobee	LTF-10-Med
Matanzas to Ocala Conservation Corridor	Flagler, St. Johns, Putnam	LTF-12-Med/Low
Raiford to Osceola Greenway	Baker, Union	LTF-13-Low
Ranch Reserve	Brevard, Indian River, Osceola	LTF-15-Low
Maytown Flatwoods	Brevard	LTF-17-Low
Mill Creek	Marion	LTF-20-Low
Clay Ranch	Putnam	LTF-23-Low
Partnerships and Regional Incentives (PR)		**14 of 30 Total Projects**
Florida's First Magnitude Springs	Marion	PR-1-High
NE FL Timberlands and Watershed Reserve	Clay, Duval, Nassau	PR-2-High
Indian River Lagoon Blueway	Brevard, Indian River, Volusia	PR-4-High
Brevard Coastal Scrub Ecosystem	Brevard	PR-5-High
Heather Island/Ocklawaha River	Marion	PR-9-Med
Volusia Conservation Corridor	Flagler, Volusia	PR-10-Med
Green Swamp (formerly 4 projects now combined into one project)	Lake, Polk	PR-11-Med/Low
Flagler County Blueway	Flagler	PR-12-Low
Lochloosa Forest – new project in 2016	Alachua	PR-14-Low
Lake Santa Fe	Alachua, Bradford	PR-15-Low
Pumpkin Hill Creek	Duval	PR-24-Low
Baldwin Bay/St. Marys River	Duval, Nassau	PR-26-Low
Carr Farm/Price's Scrub	Alachua, Marion	PR-29-Low
Pringle Creek Forest	Flagler	PR-30-Low

Land Acquisitions Completed During FY 2015–2016

This section is a summary of land transactions between October 2015 and September 2016. During this reporting period, the District completed 15 transactions totaling a net 5,825 acres of land. The types of transactions included fee simple; conservation easements; other easements; and exchanges. The total net purchase price was $12.29 million.

Table 6–4 below provides a list of all land transactions that closed between October 2015 and September 2016, and Table 6–5 presents the lands that were under contract as of September 2016. A summary of all District land transactions since 1979 may be obtained by contacting the District's Division of Water and Land Resources at 386-329-4500.

Table 6-4. FY 2015–2016 land transactions

Closing Date	Parcel Name	LA # and Transaction Type	Surface Water Basins	County	Acres	SJRWMD Portion of Purchase Price	Total Purchase Price	Funding Sources
10/12/2015	Triple N Ranch	1992-069-P1 – Joint Fee surplus	Upper SJR	Osceola	-2.85	($4,873)	($9,746)	Exchange; cash boot
10/12/2015	Transfer from C&SFFCD - Bull Creek - Osceola County	1977-006-P1 – Fee surplus	Upper SJR	Osceola	-1.48	($5,094)	($5,094)	Exchange; cash boot
10/12/2015	Kaschai Faratara Trust Fee Simple	2014-015-P1 – Joint Fee	Upper SJR	Osceola	1	0	0	Exchange
10/12/2015	Kaschai Faratara Trust Conservation Easement	2006-039-P2 – Conservation Easement	Upper SJR	Osceola	4.34	0	0	Exchange
12/8/2015	CFWI Monitoring Well - Seminole Co - Sylvan Lake Easement	2015-006-PA - Easement	Middle SJR	Seminole	0	0	0	Donation
12/8/2015	CFWI Monitoring Well- Seminole Co - Lake Proctor	2015-006-PB - Easement	Middle SJR	Seminole	0	0	0	Donation
12/9/2015	Silver Springs Forest - Rayonier	2015-004-P1 – Fee	Ocklawaha	Marion	4,879.64	$5,279,154	$11,467,154	Forest Legacy Program; Conservation Trust for Florida; State Springs Protection

Closing Date	Parcel Name	LA # and Transaction Type	Surface Water Basins	County	Acres	SJRWMD Portion of Purchase Price	Total Purchase Price	Funding Sources
								funding; SJRWMD Land Acquisition Fund
12/21/2015	Monitoring Well Easement Agreement - Sumter Electric Cooperative, Inc.	2016-007-P1 – Easement	Ocklawaha	Lake	0	0	0	Donation
4/29/2016	ITT Palm Coast - Pellicer Creek	1995-053-P2 – Fee surplus	Northern Coastal	Flagler	-158.46	0	0	Exchange
4/29/2016	Wilson Green Property	2009-003-P1- Fee	Northern Coastal	Flagler	40.16	0	0	Exchange
4/29/2016	Wilson Green-Dave Branch Conservation Easement	2009-003-P2 –Easement	Northern Coastal	Flagler	1,061.28	0	0	Exchange
7/21/2016	CFWI - Monitoring Well - Escape Ranch Easement	2016-012-P1 - Easement	Upper SJR	Osceola	0	0	0	Donation
7/28/2016	Green Property-Camp Blanding Buffer	2011-007-P1 – Asst. to other Gov't Program-Fee-154.39 acres; title held by Clay County	Lower	Clay	0	0	$840,000	Clay County; Clay Co. Development Auth., Federal Dept. of Defense
8/24/2016	CFWI-City of Ocoee Monitoring Easement	2016-002-PC - Easement	Ocklawaha	Orange	0	0	0	Donation
9/27/2016	Duke Energy Easement-Lake Apopka North Shore	1996-083-P2 - Easement	Ocklawaha	Orange	0	0	0	Contract work - $93,217.44
Total					**5,824.63**	**$5,269,187**	**$12,292,314**	

Table 6-5. Parcels under contract as of September 30, 2016

Estimated Closing Date	Surface Water Basin	Parcel Name	LA Number and Transaction Type	County	Acres	SJRWMD'S Portion of Purchase Price	Estimated Purchase Price	Funding Source
10/5/2016	Ocklawaha	Hart	1999-019-P1 – Fee	Marion	185.4	$751,180	$751,180	Ad Valorem
12/31/2016	Lower St. Johns	Julington Durbin	1990-011-P1 – Joint Fee surplus	St. Johns	-1.50	-$1,250	-$5,000	Exchange; 25% SJRWMD, 75% BOT.
12/31/2016	Lower St. Johns	Julington Durbin Addition	1990-011-P2 – Joint Fee	Duval	5.00	0	0	Exchange; 20% SJRWMD, 80% BOT.
4/1/2017	Upper St. Johns River	MTWCD - Melbourne Tillman Water Control District Property - C-10 Reservoir	2015-003-P1 - Fee	Brevard	96.00	0	0	Exchange
4/1/2017	Upper St. Johns River	MTWCD Perpetual Easement	1996-034-PC - Easement	Brevard	9.00	0	0	Exchange
12/31/2017	Northern Coastal	Spruce Creek Preserve parcels – 2012 District Lands Assessment Plan	LA1998-021-P1; LA1998-016-P1; and LA2007-031-P1 - Fee and Joint Fee surplus	Volusia	(129.00)	0	0	Surplus - donation to Volusia County subject to a conservation easement and fee reverter
12/31/2017	Northern Coastal	Volusia County - Spruce Creek Conservation Easement and Fee Reverter	2014-012-P1 - Easement and Fee Reverter	Volusia	129.00	0	0	Donation as a result of surplus of fee
12/31/2017	Upper St. Johns River	Fellsmere Exchange - *Closing 1*	2001-058-PC (existing Fellsmere parcel) - Fee surplus and easement	Indian River	(233.00)	0	0	Exchange

Estimated Closing Date	Surface Water Basin	Parcel Name	LA Number and Transaction Type	County	Acres	SJRWMD'S Portion of Purchase Price	Estimated Purchase Price	Funding Source
12/31/2017	Upper St. Johns River	Fellsmere Exchange - Closing 1	2001-058-PD and PE (new Fellsmere parcels) - Fee, flowage easements, road and maintenance easement	Indian River	472.70	0	0	Exchange
12/31/2017	Upper St. Johns River	Fellsmere Exchange - Closing 2	2001-058-PC - Fee surplus and retain road easement	Indian River	(31.50)	0	0	Exchange
Totals					**502.10**	**$750,180**	**$746,180**	

Surplus Lands during FY 2015–2016

Occasionally, the District may dispose of lands that are usually small, isolated, not suitable for land management or restoration, or lands designated for a local government water quality improvement project. The money received from the sale of surplus lands is designated for future land acquisitions. In addition, over the course of the next few years, the District may surplus lands designated in the District Lands Assessment Implementation Plan approved by the Governing Board in December 2012.

During FY 2015–2016, the District disposed of 162.79 acres of lands in three transactions and received land, conservation easements, and $14,840 in compensation. Table 6–6 below shows more details about the transactions. Since 1997, the District has disposed of 14,123 acres of land and received approximately $11.4 million in compensation.

Table 6-6. Surplus parcels during FY 2015–2016

Closing Date	Parcel Name	LA # and Transaction Type	Surface Water Basin	County	Acres	Compensation
10/12/2015	Triple N Ranch	1992-069-P1 – Joint Fee surplus	Upper SJR	Osceola	-2.85	Exchanged fee acres; rec'd conservation easement; rec'd $9,746.00
10/12/2015	Transfer from C&SFFCD - Bull Creek - Osceola County	1977-006-P1 – Fee surplus	Upper SJR	Osceola	-1.48	Exchanged fee acres; rec'd conservation easement; rec'd $5,094.00
4/29/2016	ITT Palm Coast - Pellicer Creek	1995-053-P2 – Fee surplus	Northern Coastal	Flagler	-158.46	Exchanged fee acres; rec'd conservation easement and access easement.
Total					**(162.79)**	

District Land Management Activities

District Land Management Program

Since 1979, the District has acquired nearly 760,000 acres of land (including less-than-fee acquisitions) for the purposes of water management, water supply, and conservation and protection of water resources. These lands largely consist of wetlands or historically wet areas. Of less acreage, but not of less importance, are upland areas, which are necessary to preserve the wetlands, waters and wildlife. They also provide critical buffers between encroaching development and important wetland areas.

District lands and related resources are subject to demands from public and private interests for a wide range of uses, including recreational activities such as hunting, camping, and boating; sites for radio towers, utility easements, and District monitoring equipment; and agricultural purposes. These uses are evaluated based on their (1) compatibility with the natural resource function and character of the land and (2) the extent to which they are of benefit to the public. A multiple-use approach is favored, one with an emphasis on ecosystem viability, yet which also provides for public recreation when possible.

Of the 754,000 acres, the District is the lead manager for more than 400,000 acres. As demands for use of lands have increased and District responsibilities have expanded, the need for a consistent, systematic approach to managing District lands and meeting these demands and responsibilities has arisen. The land management plan approved by the Governing Board for each property establishes the philosophy and direction for management and use of District lands.

The land management plan provides a framework for water resource protection, a diversity of habitats, compatible recreational uses, wildlife habitat restoration and enhancement, and the continuation, when possible, of traditional land and water resource uses. Legislative directives guide the land management planning process from acquisition evaluations to the development of land. These plans identify resource needs and compatible uses. This land management planning process is briefly described below.

Management Planning Process
The management planning process has three phases of evaluation by District staff: (1) the management classification system (pre-acquisition phase), (2) the property assessment phase (post-acquisition), and (3) the management implementation phase (annual and ten-year work plans), with Governing Board direction at each phase. This process provides the mechanism and the opportunity for District staff, other agencies, and the public to participate in the process.

Management Classification System: Lands are grouped according to a management classification system in one of three categories based on primary acquisition purpose and proposed water management use. Categories include Water Management Areas, Restoration Areas, and Conservation Areas. Each of these categories has different management objectives. These objectives determine what land uses may be appropriate at each area.

Property Assessment Phase: Property assessments begin during the pre-acquisition phase, when a resource assessment is completed for the parcel of land in question. After a property is acquired, continued evaluation of ecosystems, planned water management uses, and special protection areas are considered during preparation of the land management plan for the property. This type of evaluation combined with identification of existing roadways provides the basis for determining appropriate land use activities. This process has been adapted from guidelines used by the U.S. Forest Service, Southwest Florida Water Management District, and DEP's Division of Recreation and Parks. Land management plans, which are developed using this process, contain descriptions of property-specific information and lead to the management implementation phase.

Management Implementation Phase: This phase provides an opportunity to review the District's (or other managing agency's) annual funding commitments. Annual work plans that are tied to funding commitments and seek to implement the land management plan are developed for each property during this phase.

These three phases of evaluation provide the District with a comprehensive management planning process that is systematic and consistent with legislative priorities. The land management plan establishes the most appropriate use of the District's significant land holdings. The District's Division of Water and Land Resources is required to complete a land management plan for acquired properties within one year of purchase. Land management plans are revised approximately every 10 years. The current status of all land management plans is reported in Table 6-7 below.

Table 6-7. Land management status of District lands

Management Area	Mgmt. Plan Status	Cooperative Management Agreement	Public Access	Recreational Opportunities					
				Fish	Hunt	Horse	Boat	Camp	Hike
Austin Cary Forest	In dev.	SJRWMD/Univ. of Florida							
Bayard Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
Belmore State Forest	comp.	FFS/SJRWMD	✓	No	✓	✓	No	No	✓
Black Creek Ravines Conservation Area	comp.	SJRWMD/Clay Co.	✓	✓	No	✓	✓	✓	✓
Blue Cypress Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	No	✓	✓	✓
Buck Lake Conservation Area	comp.	SJRWMD/FWC /Brevard Co.	✓	✓	✓	✓	No	✓	✓
Canaveral Marshes Conservation Area	comp.	SJRWMD/DEP/Great Outdoors	✓	✓	No	✓	✓	No	✓
Caravelle Ranch Wildlife Management Area	comp.	FWC/SJRWMD	✓	✓	✓	✓	Canoe/ kayak	✓	✓
Cary State Forest	comp.	FFS/SJRWMD	✓	No	✓	✓	No	✓	✓
Charles H. Bronson State Forest	comp.	FFS/SJRWMD/Orange Co.	✓	✓	✓	✓	Canoe/ kayak	✓	✓
Clark Bay Conservation Area	comp.	Volusia Co./SJRWMD	✓	✓	✓	✓	No	No	✓

Management Area	Mgmt. Plan Status	Cooperative Management Agreement	Public Access	Recreational Opportunities					
				Fish	Hunt	Horse	Boat	Camp	Hike
Crescent Lake Conservation Area	comp.	SJRWMD	✓	No	No	✓	No	✓	✓
Deep Creek Conservation Area	comp.	SJRWMD/DEP	✓	✓	No	✓	✓	No	✓
Deep Creek Preserve	comp.	SJRWMD/Volusia Co.	✓	□		✓	□		✓
Dunns Creek Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
Econlockhatchee Sandhills Conservation Area	comp.	SJRWMD	✓	✓	No	✓	No	No	✓
Emeralda Marsh Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
Faver-Dykes State Park	comp.	DEP/SJRWMD	✓	✓	No	✓	✓	✓	✓
Fellsmere Water Management Area	In dev.	SJRWMD	✓	✓	✓	No	✓	No	✓
Fort Drum Marsh Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
Four Creeks State Forest	comp.	FFS/SJRWMD	✓	✓	✓	✓	✓	No	✓
Gemini Springs Addition	comp.	SJRWMD	✓	No	No	✓	No	No	✓
Gemini Springs County Park	comp.	Volusia County/SJRWMD	✓	✓	No	No	No	No	✓
Gourd Island Conservation Area	comp.	SJRWMD	✓	No	No	✓	No	No	✓
Hal Scott Regional Preserve and Park	comp.	SJRWMD/Orange Co.	✓	✓	No	✓	No	✓	✓
Haw Creek Preserve	comp.	Flagler Co./SJRWMD/FFS	✓	✓	No	✓	✓	✓	✓
Heart Island Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	✓	No	✓	✓
Herky Huffman/Bull Creek Wildlife Management Area	comp.	FWC/SJRWMD	✓	✓	✓	✓	Canoe/ kayak	✓	✓
Hull Swamp Conservation Area	In dev.	SJRWMD	□	□	□	□		□	□
Newnans Lake Conservation Area	comp.	FFS/SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
John Bethea State Forest	comp.	FFS/SJRWMD	✓	✓	✓	✓	No	✓	✓
Julington-Durbin Preserve	comp.	SJRWMD/DEP/COJ	✓	✓	No	✓	✓	No	✓
Lake Apopka North Shore	comp.	SJRWMD/NRCS	✓	✓	No	✓	No	No	✓
Lake George Conservation Area	comp.	SJRWMD/ FWC/Volusia Co.	✓	✓	✓	✓	✓	✓	✓

Management Area	Mgmt. Plan Status	Cooperative Management Agreement	Public Access	Recreational Opportunities					
				Fish	Hunt	Horse	Boat	Camp	Hike
Lake George Forest	comp.	Volusia County/FWC/SJRWMD	✓	✓	✓	✓	✓	✓	✓
Lake Jesup Conservation Area	comp.	SJRWMD	✓	✓	No	✓	✓	✓	✓
Lake Monroe Conservation Area	comp.	SJRWMD/Seminole Co./FWC	✓	✓	✓	✓	✓	✓	✓
Lake Norris Conservation Area	comp.	SJRWMD/LCWA	✓	✓	No	✓	Canoe/ kayak	✓	✓
Lake Woodruff National Wildlife Refuge	comp.	USFWS/SJRWMD	✓	✓	✓	No	✓	No	✓
Little-Big Econ State Forest	comp.	FFS/SJRWMD	✓	✓	✓	✓	✓	✓	✓
Lochloosa Wildlife Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
Longleaf Flatwoods Reserve	comp.	SJRWMD/Alachua Co.	✓	No	No	✓	No	✓	✓
Longleaf Pine Preserve	comp.	Volusia County/SJRWMD	✓	✓	No	✓	No	✓	✓
Matanzas State Forest	comp.	FFS/SJRWMD	✓	✓	✓	✓	No	✓	✓
Micco Water Management Area	draft	SJRWMD	✓	No	No	✓	No	No	✓
Moses Creek Conservation Area	comp.	SJRWMD	✓	✓	No	✓	✓	✓	✓
Murphy Creek Conservation Area	comp.	SJRWMD	✓	✓	No	✓	✓	✓	✓
Neighborhood Lakes	comp.	Lake Co./SJRWMD	✓	No	No	✓	No	No	✓
Newnans Lake Conservation Area	comp.	SJRWMD/Alachua Co.	✓	✓	✓	✓	Canoe/ kayak	✓	✓
Ocklawaha Prairie Restoration Area	comp.	SJRWMD/NRCS	✓	✓	✓	✓	✓	✓	✓
Orange Creek Restoration Area	comp.	SJRWMD/NRCS	✓	✓	✓	✓	No	✓	✓
Oslo Riverfront Conservation Area	comp.	Indian River County/SJRWMD	✓	✓	No	No	✓	No	✓
Palm Bluff Conservation Area	comp.	SJRWMD	✓	✓	No	✓	No	✓	✓
Paynes Prairie Preserve State Park	comp.	DEP/SJRWMD	✓	✓	No	✓	✓	✓	✓
Pellicer Creek Conservation Area	comp.	SJRWMD/FWC/Flagler Co.	✓	✓	No	✓	✓	✓	✓
Pine Island Conservation Area	comp.	Brevard Co/SJRWMD	✓	✓	No	✓	✓	No	✓
Princess Place Preserve	comp.	Flagler Co./SJRWMD	✓	✓	No	✓	✓	✓	✓
Pumpkin Hill Creek Preserve State Park	comp.	DEP/SJRWMD	✓	✓	No	✓	✓	No	✓

Management Area	Mgmt. Plan Status	Cooperative Management Agreement	Public Access	Recreational Opportunities					
				Fish	Hunt	Horse	Boat	Camp	Hike
Ralph E. Simmons Memorial State Forest	comp.	FFS/SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
River Lakes Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	No	✓	✓	✓
Rock Springs Run State Reserve	comp.	DEP/SJRWMD/Orange Co.	✓	✓	✓	✓	Canoe/ kayak	✓	✓
Salt Lake Wildlife Management Area	In dev.	FWC/SJRWMD	✓	✓	✓	✓	No	No	✓
Sand Lakes Conservation Area	comp.	SJRWMD	✓	No	No	✓	No	No	✓
Sebastian Stormwater Park	comp.	SJRWMD/City of Sebastian	✓	No	No	No	No	No	✓
Seminole Ranch Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
Seminole State Forest	comp.	DOF/SJRWMD	✓	✓	✓	✓	✓	✓	✓
Silver Springs Forest Conservation Area	draft	SJRWMD	✓	✓	No	✓	No	No	✓
Spruce Creek Preserve	comp.	Volusia County/SJRWMD	✓	✓	No	No	✓	No	✓
St. Sebastian River Preserve State Park	comp.	DEP/SJRWMD/Indian River Co.	✓	✓	No	✓	✓	✓	✓
Stokes Landing Conservation Area	comp.	SJRWMD	✓	✓	No	✓	✓	✓	✓
Sunnyhill Restoration Area	comp.	SJRWMD/NRCS	✓	✓	No	✓	✓	✓	✓
T.M Goodwin Waterfowl Management Area	comp.	FWC/SJRWMD	✓	✓	✓	No	✓	No	✓
Thomas Creek Conservation Area	comp.	SJRWMD/COJ/FWC	✓	✓	✓	✓	✓	No	✓
Three Forks Conservation Area	comp.	SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
Tiger Bay State Forest	comp.	FFS/SJRWMD/FWC	✓	✓	✓	✓	✓	✓	✓
Triple N Ranch Wildlife Management Area	comp.	FWC/SJRWMD	✓	✓	✓	✓	No	✓	✓
Turnbull Hammock Conservation Area	comp.	SJRWMD	✓	✓	No	No	Canoe/ kayak	No	✓
Twelve Mile Swamp Conservation Area	comp.	SJRWMD/DEP	✓	No	✓	✓	No	No	✓
Wekiva River Buffer Conservation Area	comp.	SJRWMD	✓	✓	No	No	✓	No	✓
Wiregrass Prairie Preserve	comp.	Volusia County/SJRWMD	✓	✓	No	✓	✓	✓	✓

Tours by District staff are available for environmental education on all District-owned lands, by request.

FY 2015–2016 Land Management Activities

This section provides a summary of various land management activities that were conducted by the District from October 2015 through September 2016.

Land Management Planning

- The management plans for Canaveral Marshes Conservation Area, Emeralda Marsh Conservation Area, Lochloosa Wildlife Conservation Area, Ralph E. Simmons Memorial State Forest, and T.M. Goodwin Waterfowl Management Area were approved by the Governing Board.

Recreational Public Meetings

- Five recreational public meetings were conducted. Three were in the District's Southern Region, one in the Central Region, and one in the Northern Region.

Management Review Teams

- One Management Review Team (MRT) tour was conducted at Wekiva River Buffer Conservation Area.
- Findings from the MRT tour indicated that this conservation area is being managed for the purposes for which it was acquired and it is compliant with the approved management plan.

Intergovernmental Management Agreements

- District staff have continued to work with partner agencies on the development of agreements for the management of District lands.
- Intergovernmental agreements have been finalized and executed with the following management partners: U.S. Fish and Wildlife Service; U.S. Forest Service; U.S. Department of Agriculture — Natural Resources Conservation Service; DEP/Florida Park Service; Florida Forest Service; Florida Fish and Wildlife Conservation Commission; Florida Department of Transportation; Alachua, Brevard, Clay, Flagler, Indian River, Lake, Orange, Osceola, Seminole, and Volusia counties; the cities of Apopka, Jacksonville and Sebastian, and the Orlando-Orange County Expressway Authority.

Less-than-fee Acquisitions

- The monitoring of conservation easements for compliance is an ongoing activity of the Bureau of Real Estate Services. District staff is currently monitoring activities on 68 easements, four of which will ultimately become full fee ownership properties for the District.
- Two of the 68 conservation easements are in favor of the Trustees but are monitored by District staff at the request of the Trustees.

Recreation/Public Use Improvements

- Approximately 30 miles of previously closed USACE levees were opened for public use. Permitted activities include access by foot or bike.

- Sunnyhill South Tract – 7.1 miles of additional trail opportunity. Included new trailhead with entrance sign and information kiosk.
- Lake Apopka Loop Trail-Phase III completion (last three miles of the 19 miles that traverses the LANS. Estimated 10,000 users annually.
- Silver Springs Forest- 12.4 miles of trail (3 trailheads, one being for equestrian access, each with entrance sign and information kiosk).

Forest Management/Restoration

- Completed tree planting projects on 496 acres within six conservation areas (Hal Scott, Heart Island, Lake George, Rice Creek, River Styx, and Thomas Creek).
- Conducted site preparation on 321 acres for tree planting.
- Conducted 9 timber sales on 1039 acres. Total timber revenue resulting from these sales was $898,762.35.
- Marked 371 acres for thinning to facilitate harvesting.

Fire Management

- Conducted 65 prescribed burns on 26,314 acres across 22 conservation areas.
- Fought 23 wildfires that burned more than 2,448 acres. Staff expended 1,107 hours during and after the fires.

Restoration Activities

- District staff completed 1,128 acres of drum chopping to restore habitat.
- Planted native marsh grass species on 160 acres at Sunnyhill and Lake Apopka.
- District staff completed 972 acres of mechanical shrub reduction on Buck Lake, Hal Scott and Newnans Lake.
- Staff completed 104 acres of oak control to enhance sandhill at Lochloosa.
- Completed 228 acres of sand pine removal at Twelve Mile Swamp and Pellicer creek
- A fallow 9-acre orange grove was leveled at Micco Water Management Area for future planting of pine seedlings and move toward enhancement of the site.
- 77 acres of upland groundcover enhancement was completed mostly at Pellicer Creek, but also at Lake Apopka to enhance scrub.
- Several miles of wildfire suppression lines (plow lines) were rehabilitated on multiple District conservation areas.

Special Projects

- District staff worked with 43volunteers in the ninth annual Jaywatch survey. This equated to 208 volunteer hours to survey for scrub jays concurrently at Lake Monroe Conservation Area and Buck Lake Conservation Area on three consecutive days.
- District staff had 1,000 cypress trees donated from the Cherry Lake nursery. A workforce of 49 adult volunteers (including nursery staff and Orange County Commissioner), seven Boy Scouts, and 10 District staff members who volunteered their time, was assembled to plant these trees.
- District staff removed and relocated 60 gopher tortoises from almost 8 miles of U.S. Army Corps Levee related to the Taylor Creek Reservoir L-73 improvement project.

Invasive Plant Management:

- District staff treated 8,584 acres of climbing fern, of which 600 acres were of the Lygodium japonicum species. District staff treated 1575.88 acres of upland invasive species
- District staff treated 14,304.26 acres of aquatic invasive species.
- District staff also treated 778.36 acres of Sovereign waters under contract with FWC.

Leases of District Land

- Over the past year, 84 leases have been developed and/or renewed for use of 469,010 acres of District properties, primarily for agricultural and land management purposes. (See Table 6-8 below for more details).

Table 6-8. Inventory of leases

Lessee	Use	Acres	Counties	Management Area
Lake Jem Farms	Agriculture	300	Orange	Lake Apopka North Shore
Sun Gro	Agriculture	1,320	Lake	Emeralda Marsh Conservation Area
Brinson	Apiary	4	Alachua, Lake, Marion	Emeralda Marsh Conservation Area, Lochloosa Wildlife Conservation Area, Sunnyhill Restoration Area
JDE Lake	Apiary	2	Putnam, Orange, Volusia	Heart Island Conservation Area, Lake Apopka North Shore, Lake George Conservation Area
Keel	Apiary	1	Alachua	Longleaf Flatwoods Reserve
Smith, Charles	Apiary	1	Duval	Thomas Creek Conservation Area
Smith, Edward	Apiary	1	Brevard, Indian River	C-54, Fellmere Grade, Ft. Drum Marsh Conservation Area
Sutton	Apiary	1	Clay	Bayard Conservation Area
Tyrell	Apiary	1	Volusia	Heart Island Conservation Area
Webb	Apiary	2	Brevard, Orange	Buck Lake Conservation Area, Hal Scott Regional Preserve and Park, Seminole Ranch Conservation Area
Outfront Media - No. 1170	Billboard	1	St. Johns	Gourd Island Conservation Area
Outfront Media - No. 1172	Billboard	1	St. Johns	Gourd Island Conservation Area
Clear Channel Wordwide	Billboard	1	Brevard	Buck Lake Conservation Area
Clear Channel Worldwide	Billboard	1	Brevard	Canaveral Marshes Conservation Area
Clear Channel	Billboard	1	St. Johns	Gourd Island Conservation Area
Outfront Media - SR 407	Billboard	1	Brevard	Canaveral Marshes Conservation Area
Dean, James	Cattle Grazing	32	Volusia	Turnbull Hammock Conservation Area
Deseret Ranch	Cattle Grazing	1,866	Brevard	Three Forks Conservation Area
Duda & Sons	Cattle Grazing	7,695	Brevard	River Lakes Conservation Area

Lessee	Use	Acres	Counties	Management Area
Elliott, Ken	Cattle Grazing	400	Putnam	Murphy Creek Conservation Area
Evans Farms	Cattle Grazing	690	Flagler	Heart Island Conservation Area
Farley, Jim Cattle Company	Cattle Grazing	377	Clay	Bayard Conservation Area
Fleckinger, Lawrence/BCSWCD	Cattle Grazing	4,000	Brevard	Canaveral Marshes Conservation Area
Freel - Country Oaks Angus Ranch	Cattle Grazing	3,108	Marion	Sunnyhill Restoration Area
Lee, David/C.S. Cattle Company	Cattle Grazing	2,890	Seminole	Charles H. Bronson State Forest
Lee, David — DEP/District owned west parcel	Cattle Grazing	1,623	Seminole	Charles H. Bronson State Forest
LeFils, James (Seminole Soil and Water Conservation)	Cattle Grazing	2,031	Seminole	Lake Jesup Conservation Area
LeFils, James C.	Cattle Grazing	1,210	Volusia	Lake Monroe Conservation Area
Mack	Cattle Grazing	3,000	Seminole, Volusia	Lake Monroe Conservation Area
Palmer, Willard — Three Forks — North of Malabar Road	Cattle Grazing	320	Brevard	Three Forks Conservation Area
Palmer, Willard — Three Forks — South of Malabar Road	Cattle Grazing	1,409	Brevard	Three Forks Conservation Area
Russell, Jeff and Debra Russell Bowman	Cattle Grazing	3,160	Volusia	Palm Bluff Conservation Area
Schuller / Crescent TS Cattle Company	Cattle Grazing	2,200	Indian River	Fort Drum Marsh Conservation Area
Schuller / Crescent TS Cattle Company - Marl Bed Flats	Cattle Grazing	788	Seminole	Lake Jesup Conservation Area
Schuller / Crescent TS Cattle Company	Cattle Grazing	1,313	Indian River	Sand Lakes Conservation Area
Smith, Elerice	Cattle Grazing	82	Clay	Bayard Conservation Area
Speer, Ilean	Cattle Grazing	114	Brevard	Buck Lake Conservation Area
Strawn	Cattle Grazing	73	Volusia	Heart Island Conservation Area
C & E Farms	Cattle Grazing	277	Alachua	Lochloosa Wildlife Conservation Area
Tanner, John - Canaveral	Cattle Grazing	630	Brevard	Canaveral Marshes Conservation Area
Tanner, John - Seminole Ranch	Cattle Grazing	1,980	Orange	Seminole Ranch Conservation Area
Townsend, Ivan I.	Cattle Grazing	4,966	Brevard	Canaveral Marshes Conservation Area
Tucker (Far Reach Ranch)	Cattle Grazing	559	Brevard	Three Forks Conservation Area
Ward, Shirley	Cattle Grazing	1,600	Seminole	Little-Big Econ State Forest
Williams, Mo	Cattle Grazing	418	Lake	Lake Norris Conservation Area
Yarborough	Cattle Grazing	6,320	Seminole	Little-Big Econ State Forest
Wheeler Farms, Inc.	Citrus	70	Brevard	Micco Water Management Area
Aquafiber	Facility	10	Seminole	Lake Jesup Conservation Area

Lessee	Use	Acres	Counties	Management Area
City of Apopka Reclaimed Water Lease	Facility	40	Orange	Lake Apopka North Shore
FWC - Office Space	Facility	1	Brevard	Palm Bay Service Center
Florida Dept. of Agriculture and Consumer Services - HWCTT	Facility	60	St. Johns	Deep Creek Conservation Area
Florida Institute of Technology — Rowing Facility	Facility	5	Brevard	C-54
Lake County Water Authority — CC Ranch Stormwater Treatment Lease	Facility	244	Lake	Lake Apopka North Shore
Marion County Fire Department Lease	Facility	3	Marion	Sunnyhill Restoration Area
Refuge at Ocklawaha	Facility	103	Marion	Ocklawaha Prairie Restoration Area
Belmore State Forest — Bull Creek North (Satsuma Tract)	Management Lease	3,496	Clay	Belmore State Forest — Satsuma Tract
Charles H. Bronson State Forest Lease — Turkey Creek West	Management Lease	1,624	Seminole	Charles H. Bronson State Forest
Charles H. Bronson State Forest Lease — Joshua Creek	Management Lease	2,699	Orange	Charles H. Bronson State Forest
Faver-Dykes State Park Lease	Management Lease	697	St. Johns	Faver-Dykes State Park
Four Creeks State Forest — Geiger Lease	Management Lease	395	Nassau	Four Creeks State Forest
Herky Huffman/Bull Creek WMA Lease	Management Lease	23,646	Osceola	Herky Huffman/Bull Creek WMA
Little Big Econ State Forest Lease - Yarborough	Management Lease	7,156	Seminole	Little-Big Econ State Forest
Rock Springs Run State Reserve — Neighborhood Lakes — Orange County	Management Lease	316	Orange	Rock Springs Run State Reserve
T.M. Goodwin Waterfowl Management Area Lease	Management Lease	3,870	Brevard	T.M. Goodwin Waterfowl Management Area
Trustees Lease #4009 — Lake George WMA	Management Lease	11,303	Putnam, Volusia	Lake George Conservation Area
Trustees Lease #4116 — Triple N Ranch WMA	Management Lease	7,599	Osceola	Triple N Ranch WMA
Trustees Lease #4326 — Tiger Bay State Forest	Management Lease	11,156	Volusia	Tiger Bay State Forest
Trustees Lease #4336 — Indian River Lagoon State Park	Management Lease	256	Brevard	Indian River Lagoon State Park
Trustees Lease #4359 — John Bethea State Forest	Management Lease	21,874	Baker	John Bethea State Forest
Trustees Lease #4397 — St. Sebastian River Preserve State Park	Management Lease	16,386	Brevard, Indian River	St. Sebastian River Preserve State Park
Trustees Lease #4441 — Matanzas State Forest	Management Lease	4,668	St. Johns	Matanzas State Forest

Lessee	Use	Acres	Counties	Management Area
Trustees Lease #4445 — Faver-Dykes State Park	Management Lease	4,166	St. Johns	Faver-Dykes State Park
Trustees Lease #4507 — Four Creeks State Forest	Management Lease	10,222	Nassau	Four Creeks State Forest
Trustees Lease #4609 — Cary State Forest	Management Lease	2,235	Duval, Nassau	Cary State Forest
Higginbotham - palm fronds	Palm Frond Harvest	15,310	Brevard, Seminole, Volusia	Buck Lake Conservation Area, Lake Jesup Conservation Area, Lake Monroe Conservation Area, Seminole Ranch Conservation Area
Puckett Ferneries	Palm Frond Harvest	11,042	Volusia	Heart Island Conservation Area
Puckett Ferneries	Palm Frond Harvest	11,045	Putnam, Volusia	Lake George Conservation Area
Lake County Water Authority Dredge Disposal Lease	Project	1,140	Lake	Lake Apopka North Shore
Smith, C P. & Wesley, Inc. — Yarborough	Row Crop	40	St. Johns	Deep Creek Conservation Area
Rayonier	Timber	12,427	St. Johns	Twelve Mile Swamp Conservation Area
American Tower - Tiger Bay	Tower	1	Volusia	Tiger Bay State Forest
American Tower - Clark Bay Road	Tower	1	Volusia	Tiger Bay State Forest
FWC WMA/PSGHA Lease	WMA Lease	220,361	Multiple	19 Managed Areas
Caravelle Ranch WMA Lease	WMA Lease	6,573	Putnam	Caravelle Ranch WMA
TOTAL = 84 LEASES		**469,010**		

Special Use Authorizations

- A total of 150 Special Use Authorizations were in effect during the FY 2015–2016 for activities ranging from scientific research to feral hog trapping to miscellaneous recreational activities. (See Table 6-9 below for more details.)

Table 6-9. Inventory of special use authorizations

Agreement Name	Management Area	Purpose
Adams, Jeff	Murphy Creek Conservation Area	Hog Trapping/Removal
Al Roberts Operation Outdoor Freedom Wounded Warrior Alligator Hunt	Ocklawaha Prairie Restoration Area	Recreational Event
Anastasia Mosquito Control District	Moses Creek Conservation Area, Stokes Landing Conservation Area	Special Use
Anne Zimmer Horse Drawn Buggy	Hal Scott Regional Preserve and Park	Special Use
Antonio Cruz	Lake George Conservation Area	Special Use
Audubon Florida	Julington-Durbin Preserve	Research
Barrett	Deep Creek Conservation Area	Hog Trapping/Removal
Benjamin S. Williams	Rice Creek Conservation Area	Hog Trapping/Removal

Agreement Name	Management Area	Purpose
Bertha Wright Haven Hospice Poker Ride Benefit	Lake George Conservation Area	Recreational Event
Bill Baylor	Crescent Lake Conservation Area	Hog Trapping/Removal
Black, Dean A.	Thomas Creek Conservation Area	Hog Trapping/Removal
Brevard County Airboat Association (Trim Willows)	Three Forks Conservation Area	Special Use
Brevard County Airboat Association, Inc.	Three Forks Conservation Area	Special Use
Brevard Nature Alliance Space Coast Birding and Wildlife Festival	Hal Scott, Lake Apopka, Lake Jesup, and Lake Monroe	Recreational Event
Brevard Zoo (Scrub Jays)	Buck Lake Conservation Area	Survey
Brunner	Twelve Mile Swamp Conservation Area	Hog Trapping/Removal
BSTR Inc.	Lake George Conservation Area, Lochloosa Wildlife Conservation Area	Recreational Event
BSTR Inc. Off-Road Event	Lochloosa Wildlife Conservation Area	Recreational Event
Carr-Miless Access	Newnans Lake Conservation Area	Other
Chelsea Whitaker	Econlockhatchee Sandhills Conservation Area	Hog Trapping/Removal
Christine Wiese University of Florida	Lake Jesup Conservation Area	Research
City of Apopka	Lake Apopka North Shore	Research
Clary & Associates, Inc. Greg Clary	Bayard Conservation Area	Special Use
Clay County Development Authority	Bayard Conservation Area, Black Creek Ravines Conservation Area	Special Use
Cribb Philbeck Weaver Group Inc.	Econlockhatchee Sandhills Conservation Area	Research
D. Steve Dennis	Moses Creek Conservation Area	Research
Danny Bales RCW Monitoring/Photography	Hal Scott Regional Preserve and Park	Other
Darwin Rutz	Sunnyhill Restoration Area	Special Use
David Baldwin	Thomas Creek Conservation Area	Hog Trapping/Removal
David Simpson Breeding Birds Survey USJRB	Blue Cypress, Ft. Drum Marsh, River Lakes, Three Forks	Survey
DB Aster LLC Joe Steinheiser	Thomas Creek Conservation Area	Special Use
DEP Jason Lynn	Moses Creek Conservation Area	Research
East Flagler Mosquito Control	Pellicer Creek Conservation Area	Research
Eco Treks By Rod	Three Forks Conservation Area	Recreational Event
ecoProducts Limited LLC	Lake Apopka North Shore	Sampling
Epic Sports Marketing LLC Felix Hernandez	Hal Scott Regional Preserve and Park	Recreational Event
Epic Sports Marketing LLC Felix Hernandez	Lake Apopka North Shore	Recreational Event
Eric Meade	Pellicer Creek Conservation Area	Hog Trapping/Removal
FWC - Aquatic Habitat Restoration	Orange Creek Restoration Area	Other
FWC Bat Survey Kevin Oxenrider	Newnans Lake Conservation Area	Research
FWC Songbird Survey	Moses Creek Conservation Area	Survey
Flagler County Hog Trapper at Princess Place	Pellicer Creek Conservation Area	Hog Trapping/Removal
Flagler County Tim Telfer	Pellicer Creek Conservation Area	Special Use

Agreement Name	Management Area	Purpose
Florida Fish and Wildlife Conservation Commission (FWC)	Sand Lakes Conservation Area	Recreational Event
Florida Fish and Wildlife Conservation Commission	Longleaf Flatwoods Reserve, Newnans Lake Conservation Area	Recreational Event
Florida Fish and Wildlife Conservation Commission	Newnans Lake Conservation Area, Rice Creek Conservation Area	Research
Florida Fish and Wildlife Conservation Commission	Sunnyhill Restoration Area	Special Use
Florida Fish and Wildlife Conservation Commission (Habitat Enhancement)	Orange Creek Restoration Area	Other
Florida Forest Service	Newnans Lake Conservation Area, Rice Creek Conservation Area	Recreational Event
Florida Forest Service David Hunt	Orange Creek Restoration Area	Research
Florida Forest Service Operation Outdoor Freedom	Seminole Ranch Conservation Area	Recreational Event
Florida Native Plant Society Plant Surveys	Lake Apopka North Shore	Research
Florida Natural Areas Inventory FSU	Dunns Creek, Julington-Durbin, Lake George, Lake Jesup, Seminole Ranch	Research
FWC Boat Storage PBSC	Palm Bay Service Center	Other
FWCC Turkey Research	Lochloosa, Longleaf Flatwoods, Newnans Lake	Research
Gallus C. Quigley Christmas Bird Count 2015	Emeralda Marsh Conservation Area, Lake Apopka North Shore	Recreational Event
Gallus Quigley Jr. Birding Tour	Emeralda Marsh Conservation Area	Recreational Event
Grace Sheridan Tree Trimming Grover Road	North Region Stormwater Parcels	Special Use
Handex Consulting & Remediation Northeast LLC	Lake Apopka North Shore	Research
Hayward Construction Group LLC	Thomas Creek Conservation Area	Special Use
Horse Drawn Buggy	Longleaf Flatwoods Reserve, Newnans Lake Conservation Area	Special Use
Imler, Lorna (Sparkman Cemetery Access)	Newnans Lake Conservation Area	Other
Island Grove, LLC (Permissive Use Agreement)	Orange Creek Restoration Area	Other
James Watson	Buck Lake Conservation Area	Hog Trapping/Removal
Jason Ferrell University of Florida	Heart Island, Longleaf Flatwoods, Rice Creek	Research
Jay Hinchman Care of Mo Brangus	Lake Norris Conservation Area	Hog Trapping/Removal
Jebbie, FL, LLC Ed Lassiter C-54 Discharge Withdraw Water	C-54	Special Use
Jeff Barton	Seminole Ranch Conservation Area	Hog Trapping/Removal
Jeff Caswell	Hal Scott Regional Preserve and Park	Hog Trapping/Removal
Jesse C. Black	Gemini Springs Addition, Lake Jesup Conservation Area	Hog Trapping/Removal
John Chris Anderson	Deep Creek Conservation Area	Hog Trapping/Removal
John Lang-Vegetation Mgmt.	Canaveral Marshes Conservation Area	Other
Joshua Williams	Dunns Creek Conservation Area	Hog Trapping/Removal

Agreement Name	Management Area	Purpose
K-9 Search Dog Training	Heart Island, Lake Apopka, Lake Monroe, Lake Norris, Seminole Ranch, Wekiva	Special Use
Ken Willis	Bull Creek Wildlife Management Area, Three Forks Conservation Area	Hog Trapping/Removal
Lake County Florida Debi Dyer	Emeralda Marsh Conservation Area, Lake Apopka North Shore	Recreational Event
Lawrence and Fran Fleckinger	Canaveral Marshes Conservation Area	Hog Trapping/Removal
Lester Frank Smith	Thomas Creek Conservation Area	Other
Linda Hunter	Sunnyhill Restoration Area	Special Use
Lorne Malo Butterfly Count	Hal Scott Regional Preserve and Park	Research
Luscuskie, Vivian Jean (pony pulled cart)	Econlockhatchee	Recreational Event
Marion County Parks and Recreation Jason Maurer	Emeralda Marsh, Ocklawaha Prairie, Orange Creek, Silver Springs Forest, Sunnyhill	Special Use
Maris Ramsey -Horse/Buggy	Sunnyhill Restoration Area	Recreational Event
McLemore Ted, St Augustine Trail Riders (SORBA-Flagler Chapter)	Moses Creek Conservation Area	Other
Mike Monroe	Fellsmere Water Management Area	Hog Trapping/Removal
Mills, Danny	Lake George Conservation Area	District
Mount Dora Area Chamber of Commerce	Emeralda Marsh Conservation Area	Recreational Event
Myrna Brown Horse Drawn Cart	Ocklawaha Prairie Restoration Area, Sunnyhill Restoration Area	Special Use
National Wild Turkey Federation, Inc. Gator Gobbler Chapter	Longleaf Flatwoods Reserve	Recreational Event
Norman Huggins (disabled) Econlockhatchee Bridge Fishing	Hal Scott Regional Preserve and Park	Recreational Event
Norman Huggins Fishing at Hal Scott Disabled	Hal Scott Regional Preserve and Park	Recreational Event
North Carolina Outward Bound School Inc	Buck Lake, Crescent Lake, Hal Scott, Lake Monroe, Palm Bluff, Seminole Ranch	Camping
North Carolina Outward Bound School Inc Ropes	Seminole Ranch Conservation Area	Camping
North Florida Boy Scouts of America	Palm Bluff Conservation Area	Special Use
Orange Audubon Society Birdapalooza	Lake Apopka North Shore	Recreational Event
Orange Audubon Society, Inc.	Lake Apopka North Shore	Research
Paul Faircloth PFG Corp. DBA Mosquito Creek Outdoors	Lake Apopka North Shore	Recreational Event
Paul Washko	Pellicer Creek Conservation Area	Special Use
Peace River Electric Cooperative, Inc.	Fort Drum Marsh Conservation Area	Special Use
Pelican Island Audubon Society	Fellsmere, Fort Drum, Three Forks	Research
Peter Johnson UF Herbarium Collection	Julington-Durbin Preserve	Special Use
PIMCORP LLC Half Marathon	Lake Apopka North Shore	Recreational Event
PIMCORP, LLC Josh Weisman	Hal Scott Regional Preserve and Park	Recreational Event
Power of 2, Inc.	Newnans Lake Conservation Area	Recreational Event
Power of 2 Inc.	Newnans Lake Conservation Area	Recreational Event

Agreement Name	Management Area	Purpose
Quails, Ron (Joe Wayne Quails property)	Lake Norris Conservation Area	Other
Randy Bowlin	Blue Cypress Conservation Area, Fort Drum Marsh Conservation Area	Hog Trapping/Removal
Relay Hunting Club	Hull Swamp Conservation Area	Special Use
Robert Cook - Astronomy	Bayard Conservation Area	Other
Robert Holmquist	Gourd Island Conservation Area	Hog Trapping/Removal
Runner's High Timing and Race Management LLC	Palm Bluff Conservation Area	Recreational Event
Sandy Juba Foot Bridge Repair	Canaveral Marshes Conservation Area	Special Use
Scott Sumpter	Sunnyhill Restoration Area	Hog Trapping/Removal
SEARCH, Inc.	Sunnyhill Restoration Area	Special Use
Seminole Audubon Society Inc.	Hal Scott Regional Preserve and Park	Recreational Event
SePRO Corporation Kelli Gladding	Three Forks Conservation Area	Research
Smith, Margaret M. & Martin (access route)	Newnans Lake Conservation Area	Other
Smith, Ronnie M. (access routes)	Newnans Lake Conservation Area	Other
Sparkman, Royce R. (access route)	Newnans Lake Conservation Area	Other
St. Johns County Tree Trimming	Twelve Mile Swamp Conservation Area	Special Use
Stetson University	Heart Island Conservation Area	Research
Stetson University Plant Collection	Clark Bay, Heart Island, Lake George Conservation Areas	Research
Stetson University Pygmy Rattlesnake Research	Heart Island, Lake George, Lake Monroe, Lake Norris Conservation Areas	Research
SUA Crescent Lake CA	Crescent Lake Conservation Area	Other
SUA Stetson University Plant Research	Clark Bay, Heart Island, Lake George Conservation Areas	Research
Sue Doyle Property Tour	Ocklawaha Prairie Restoration Area	Special Use
Susan Killeen Christmas Bird Count	Pellicer Creek Conservation Area	Recreational Event
Ted Thompson	Seminole Ranch Conservation Area	Camping
Terracon Consultants, Inc.	Bayard Conservation Area	Special Use
Texas Aquatic Harvesting, Inc.	Emeralda Marsh Conservation Area	Special Use
The Refuge A Healing Place LLC	Ocklawaha Prairie Restoration Area	Recreational Event
Three Forks Cabin Maintenance - Cliff Rogge	Three Forks Conservation Area	Management Designation
Three Forks Cabin Maintenance - Reynolds	Three Forks Conservation Area	Management Designation
Tom Galladay	Hal Scott Regional Preserve and Park	Special Use
United States Air Force - 301 Rescue Squadron	Bull Creek Wildlife Management Area, River Lakes, Three Forks Conservation Area	Special Use
University of Central Florida Gregg Klowden	Econlockhatchee Sandhills Conservation Area	Research
University of Central Florida Janet Ho	Fellsmere Water Management Area, River Lakes Conservation Area	Research
University of Central Florida Jonathon Martin	Buck Lake, Canaveral Marshes, Econlockhatchee Sandhills, Hal Scott, Lake Apopka	Research

Agreement Name	Management Area	Purpose
University of Florida David Kaplan Upland Restoration Study	Longleaf Flatwoods Reserve	Research
University of Florida IFAS	Longleaf Flatwoods Reserve	Research
University of Florida Pocket Gopher Study	Hal Scott, Lake Apopka, Lake George Conservation Areas	Research
University of Florida Sarah Duncan	Hal Scott, Lake Apopka, Lake George Conservation Areas	Research
USGS Water Sampling Stations	Julington-Durbin Preserve	Research
VClear Environmental Tim Amidon Cofferdam	Lake Apopka North Shore	Special Use
Vivian Soriero	Buck Lake Conservation Area	Research
Watershed Technologies LLC	Deep Creek Conservation Area	Special Use
Watershed Technologies LLC	Deep Creek Conservation Area	Special Use
Wayne Thomas Firewood Harvesting	Orange Creek Restoration Area	Special Use
Williamson	Lochloosa Wildlife Conservation Area	Hog Trapping/Removal
Young, Richard & Patricia (access route)	Gemini Springs Addition	Other

Progress of Funding, Staffing and Resource Management of Projects

This section provides information on FY 2015–2016 budget and expenditure for programs and projects that received funding from FF and WMLTF.

As of September 30, 2013, the District has expended all remaining FF funds. There was no use of FY funds since FY 2014–2015.

In FY 2014–2015, $13.03 million was appropriated by the state to pay off the District's debt service obligation. The District expended all the appropriated funds for the debt payment. There was no use of WMLTF funds since FY 2014–2015.

Appendix A — Applicable Legislations

The preparation and subsequent public hearings of the annual report are governed by sections 373.199 and 373.139, F.S. Section 373.199, F.S., specifies the level of detail required for the initial work plan and subsequent annual updates. Section 373.139, F.S., has the provision for a public hearing when a proposed work plan project is modified or a new project is added. Both sections are provided below for reference and the text of specific provisions for the annual update requirements and public hearing are **bolded**.

Section 373.199 — Florida Forever Water Management District Work Plan

(1) Over the years, the Legislature has created numerous programs and funded several initiatives intended to restore, conserve, protect, and manage Florida's water resources and the lands and ecosystems associated with them. Although these programs and initiatives have yielded individual successes, the overall quality of Florida's water resources continues to degrade; natural systems associated with surface waters continue to be altered or have not been restored to a fully functioning level; and sufficient quantities of water for current and future reasonable beneficial uses and for natural systems remain in doubt.

(2) Therefore, in order to further the goals of the Florida Forever Act, each water management district shall develop a five-year work plan that identifies projects that meet the criteria in subsections (3), (4), and (5).

(3) In developing the list, each water management district shall:

(a) Integrate its existing surface water improvement and management plans, Save Our Rivers land acquisition lists, stormwater management projects, proposed water resource development projects, proposed water body restoration projects, proposed capital improvement projects necessary to promote reclamation, storage, or recovery of water, and other properties or activities that would assist in meeting the goals of Florida Forever.

(b) Work cooperatively with the applicable ecosystem management area teams and other citizen advisory groups, the Department of Environmental Protection and its district offices, the Department of Agriculture and Consumer Services, the Florida Fish and Wildlife Conservation Commission, the Department of Community Affairs, the Department of Transportation, other state agencies, and federal agencies, where applicable.

(4) The list submitted by the districts shall include, where applicable, the following information for each project:

(a) A description of the water body system, its historical and current uses, and its hydrology; a history of the conditions which have led to the need for restoration or protection; and a synopsis of restoration efforts that have occurred to date, if applicable.

(b) An identification of all governmental units that have jurisdiction over the water body and its drainage basin within the approved surface water improvement and management plan area, including local, regional, state, and federal units.

(c) A description of land uses within the project area's drainage basin, and of important tributaries, point and nonpoint sources of pollution, and permitted discharge activities associated with that basin.

(d) A description of strategies and potential strategies, including improved stormwater management, for restoring or protecting the water body to Class III or better surface water quality status.

(e) A listing and synopsis of studies that are being or have been prepared for the water body, stormwater management project, or water resource development project.

(f) A description of the measures needed to manage and maintain the water body once it has been restored and to prevent future degradation, to manage and maintain the stormwater management system, or to manage and maintain the water resource development project.

(g) A schedule for restoration and protection of the water body, implementation of the stormwater management project, or development of the water resource development project.

(h) An estimate of the funding needed to carry out the restoration, protection, or improvement project, or the development of new water resources, where applicable, and the projected sources of the funding.

(i) Numeric performance measures for each project. Each performance measure shall include a baseline measurement, which is the current situation; a performance standard, which water management district staff anticipates the project will achieve; and the performance measurement itself, which should reflect the incremental improvements the project accomplishes towards achieving the performance standard. These measures shall reflect the relevant goals detailed in s. 259.105(4).

(j) A discussion of permitting and other regulatory issues related to the project.

(k) An identification of the proposed public access for projects with land acquisition components.

(l) An identification of those lands which require a full fee simple interest to achieve water management goals and those lands which can be acquired using alternatives to fee simple acquisition techniques and still achieve such goals. In their evaluation of which lands would be appropriate for acquisition through alternatives to fee simple, district staff shall consider criteria including, but not limited to, acquisition costs, the net present value of future land management costs, the net present value of ad valorem revenue loss to the local government, and potential for revenue generated from activities compatible with acquisition objectives.

(m) An identification of lands needed to protect or recharge groundwater and a plan for their acquisition as necessary to protect potable water supplies. Lands which serve to protect or recharge groundwater identified pursuant to this paragraph shall also serve to protect other valuable natural resources or provide space for natural resource based recreation.

(5) The list of projects shall indicate the relative significance of each project within the particular water management district's boundaries, and the schedule of activities and sums of money earmarked should reflect those rankings as much as possible over a five-year planning horizon.

(6) Each district shall remove the property of an unwilling seller from its five-year work plan at the next scheduled update of the plan, if in receipt of a request to do so by the property owner.

(7) By June 1, 2001, each district shall file with the President of the Senate, the Speaker of the House of Representatives, and the Secretary of Environmental Protection the initial five-year work plan as required under subsection (2). By March 1 of each year thereafter, as part of the consolidated annual report required by s. 373.036(7), each district shall report on acquisitions completed during the year together with modifications or additions to its five-year work plan. Included in the report shall be:

(a) A description of land management activity for each property or project area owned by the water management district.

(b) A list of any lands surplused and the amount of compensation received.

(c) The progress of funding, staffing, and resource management of every project funded pursuant to s. 259.101, s. 259.105, or s. 373.59 for which the district is responsible.

The secretary shall submit the report referenced in this subsection to the Board of Trustees of the Internal Improvement Trust Fund together with the Acquisition and Restoration Council's project list as required under s. 259.105.

History.--s. 36, ch. 99-247; s. 16, ch. 2000-170.

Section 373.139 — Acquisition of Real Property

(1) The Legislature declares it to be necessary for the public health and welfare that water and water-related resources be conserved and protected. The acquisition of real property for this objective shall constitute a public purpose for which public funds may be expended.

(2) The Governing Board of the district is empowered and authorized to acquire in fee or less-than-fee title to real property, easements and other interests or rights therein, by purchase, gift, devise, lease, eminent domain, or otherwise for flood control, water storage, water management, conservation and protection of water resources, aquifer recharge, water resource and water supply development, and preservation of wetlands, streams, and lakes. Eminent domain powers may be used only for acquiring real property for flood control and water storage or for curing title defects or encumbrances to real property owned by the district or to be acquired by the district from a willing seller.

(3) The initial five-year work plan and any subsequent modifications or additions thereto shall be adopted by each water management district after a public hearing. Each water management district shall provide at least 14 days' advance notice of the hearing date and shall separately notify each county commission within which a proposed work plan project or project modification or addition is located of the hearing date.

(a) Appraisal reports, offers, and counteroffers are confidential and exempt from the provisions of s. 119.07(1) until an option contract is executed or, if no option contract is executed, until 30 days before a contract or agreement for purchase is considered for approval by the governing board. However, each district may, at its discretion, disclose appraisal reports to private landowners during negotiations for acquisitions using alternatives to fee simple techniques, if the district determines that disclosure of such reports will bring the proposed acquisition to closure. In the event that negotiation is terminated by the district, the title information, appraisal report, offers, and counteroffers shall become available pursuant to s. 119.07(1). Notwithstanding the provisions of this section and s. 259.041, a district and the Division of State Lands may share and disclose title information, appraisal reports, appraisal information, offers, and counteroffers when joint acquisition of property is contemplated. A district and the Division of State Lands shall maintain the confidentiality of such title information, appraisal reports, appraisal information, offers, and counteroffers in conformance with this section and s. 259.041, except in those cases in which a district and the division have exercised discretion to disclose such information. A district may disclose appraisal information, offers, and counteroffers to a third party who has entered into a contractual agreement with the district to work with or on the behalf of or to assist the district in connection with land acquisitions. The third party shall maintain the confidentiality of such information in conformance with this section. In addition, a district may use, as its own, appraisals obtained by a third party provided the appraiser is selected from the district's list of approved appraisers and the appraisal is reviewed and approved by the district.

(b) The Secretary of Environmental Protection shall release moneys from the appropriate account or trust fund to a district for preacquisition costs within 30 days after receipt of a resolution adopted by the district's governing board which identifies and justifies any such preacquisition costs necessary for the purchase of any lands listed in the district's five-year work plan. The district shall return to the department any funds not used for the purposes stated in the resolution, and the department shall deposit the unused funds into the appropriate account or trust fund.

(c) The Secretary of Environmental Protection shall release acquisition moneys from the appropriate account or trust fund to a district following receipt of a resolution adopted by the governing board identifying the lands being acquired and certifying that such acquisition is consistent with the five-year work plan of acquisition and other provisions of this section. The governing board also shall provide to the Secretary of Environmental Protection a copy of all certified appraisals used to determine the value of the land to be purchased. Each parcel to be acquired must have at least one appraisal. Two appraisals are required when the estimated value of the parcel exceeds 500,000. However, when both appraisals exceed 500,000 and differ significantly, a third appraisal may be obtained. If the purchase price is greater than the appraisal price, the governing board shall submit written justification for the increased price. The Secretary of Environmental Protection may withhold moneys for any purchase that is not consistent with the 5-year plan or the intent of this section or that is in excess of appraised value. The governing board may appeal any denial to the Land and Water Adjudicatory Commission pursuant to s. 373.114.

(4) The governing board of the district may purchase tax certificates or tax deeds issued in accordance with chapter 197 relating to property eligible for purchase under this section.

(5) This section shall not limit the exercise of similar powers delegated by statute to any state or local governmental agency or other person.

(6) A district may dispose of land acquired under this section pursuant to s. 373.056 or s. 373.089. However, no such disposition of land shall be made if it would have the effect of causing all or any portion of the interest on any revenue bonds issued pursuant to s. 259.101 or s. 259.105 to fund the acquisition programs detailed in this section to lose the exclusion from gross income for purposes of federal income taxation. Revenue derived from such disposition may not be used for any purpose except the purchase of other lands meeting the criteria specified in this section or payment of debt service on revenue bonds or notes issued under s. 373.584.

(7) The districts have the authority to promulgate rules that include the specific process by which land is acquired, the selection and retention of outside appraisers, surveyors, and acquisition agents, and public notification. Rules adopted pursuant to this subsection shall be submitted to the President of the Senate and the Speaker of the House of Representatives, for review by the Legislature, no later than 30 days prior to the 2001 Regular Session and shall become effective only after legislative review. In its review, the Legislature may reject, modify, or take no action relative to such rules. The districts shall conform such rules to changes made by the Legislature, or, if no action was taken by the Legislature, such rules shall become effective.

History.--s. 26, part I, ch. 72-299; s. 1, ch. 72-318; s. 3, ch. 85-347; s. 7, ch. 86-294; s. 4, ch. 89-117; s. 5, ch. 91-288; s. 6, ch. 94-240; s. 16, ch. 96-389; s. 173, ch. 96-406; s. 12, ch. 97-160; s. 13, ch. 97-164; s. 33, ch. 99-247; s. 13, ch. 2000-170; s. 13, ch. 2001-256.

Appendix B — History of Florida Forever Expenditures

Table 6-10. History of Florida Forever expenditures by project

	Through FY 2008-2009	FY 2009-2010	FY 2010-2011	FY 2011-2012	FY 2012-2013	Cumulative Total
Water Resource Development						
Aquifer Storage and Recovery	$ 19,027,353	$ 2,034,422	$ 420,105			$ 21,481,881
Central Florida Aquifer Recharge Enhancement						
- CFARE Projects - Phase I	132,758					132,758
- CFARE Projects - Phase III	2,336,782	13,218				2,350,000
Regional Aquifer Management Project (RAMP)	5,587,997					5,587,997
Lower Lake Louise Water Control Structure	42,471					42,471
WRD Components of WSP Projects	-					
- St. Johns River/Taylor Creek Reservoir WSP						-
- Water Supply Development Assistance	1,158,818					1,158,818
- Fellsmere Farms Restoration Area	5,000,000					5,000,000
Water Storage Projects						
Well Plugging and Capping Services	1,194,880	45,369				1,240,249
Water Resource Development Total	**34,481,060**	**2,093,010**	**420,105**	**-**		**36,994,174**
Restoration						
Lower St. Johns River Basin						
Water Quality Best Management Practices	108,694					108,694
Mill Cove Improvements	122,649					122,649
Upper St. Johns River Basin						
BCWMA Water Quality Berm	21,190					21,190
Ocklawaha River Basin						
Lake Apopka						
NSRA Restoration	3,692,688	458,349				4,151,037
- Soil Amendment Application & Wetland Restoration	515,473					515,473
- Stormwater Management	75,337					75,337
Fish Landing Access	199,680					199,680
Upper Ocklawaha River Basin						
Emeralda Marsh Restoration	250,000					250,000
- Chemical Treatments to Bind Phosphorus	19,988					19,988
- Restoration at Emeralda Areas 1,2,3,4 5, 6	1,030,339					1,030,339
Harris Bayou	6,641,837					6,641,837
Sunnyhill Restoration	1,043,736					1,043,736
Indian River Lagoon						
Stormwater Management						
- Town of Fellsmere	449,973					449,973
- Indian River Farm WCD	1,101,248					1,101,248
- Sebastain Stormwater Park	1,203,001					1,203,001
Wetland Restoration	-					
- Wetland Restoration Dike Removal/Ditch Line Work	1,134,123					1,134,123
Sebastian River Dredging	787,278					787,278
C-1 Retention Area Internal Improvements	1,376,246	1,815,010	211,669			3,402,926
Sawgrass Water Management Area	2,112,087					2,112,087
Turkey Creek Dredging/BV 52 Site Clean Up	1,228,921					1,228,921
Fellsmere Water Management Area	2,075,365	195,981	14,350		110,564	2,396,260
Restoration Total	25,189,851	2,469,340	226,019	-	110,564	27,995,774
Land Acquisition Total (minus fund balance)	**161,449,350**	**2,733,153**	**4,418,029**	**34,519**		**168,635,052**
Grand Total	**$ 221,120,260.92**	**$ 7,295,502**	**$ 5,064,154**	**$ 34,519**	**$ 110,564**	**$ 233,625,000**

Table 6-11. History of land acquisitions funded by Florida Forever

Original Close Date	LA Number	Parcel Name	Florida Forever Amount	Acquisition Type	Acres
12/21/2001	2001-032-P1	Edgefield - Fee Simple	$ 116,240.00	Fee	203.48
12/21/2001	2001-032-P2	Edgefield Life Estate	329,000.00	Life Estate	26.16
3/7/2002	2001-066-P1	Cassel Creek - City of Maitland Fee Reverter	361,600.00	Fee Reverter	0.00
3/21/2002	2001-061-P1	Plum Creek - Rice Creek	1,700,000.00	Fee	4,191.65
6/14/2002	2001-048-P1	Menard	756,357.34	Joint Fee	1,347.03
6/14/2002	2001-048-P1	Menard	(756,357.34)	Joint Fee	
7/1/2002	2001-058-PA	Fellsmere - Sun Ag - former NRCS_WRP parcel	434,561.40	Fee	3,890.71
7/1/2002	2001-058-PA	Fellsmere - Sun Ag - former NRCS_WRP parcel	(8,000,000.00)	Fee	
7/1/2002	2001-058-PA	Fellsmere - Sun Ag - former NRCS_WRP parcel	8,669,700.00	Fee	
7/1/2002	2001-058-PB	Fellsmere Water Control District - Sun Ag	690,300.00	Fee	
7/1/2002	2001-058-PB	Fellsmere Water Control District - Sun Ag	65,964.60	Fee	323.19
7/30/2002	1994-046-P7	Plum Creek Volusia (Parcel 5) Cell Tower Site	215.45	Fee	0.20
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	(2,126,806.52)	Joint Fee	
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	8,281,200.00	Joint Fee	
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	(27,146.53)	Joint Fee	
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	(4,000,619.70)	Joint Fee	3,750.99
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	(2,126,806.52)	Joint Fee	
7/30/2002	1994-046-P4	Volusia-Pineland Conservation Easement-Plum Creek	7,663.50	Joint Less Than Fee	
7/30/2002	1994-046-P4	Volusia-Pineland Conservation Easement-Plum Creek	(1,042,063.50)	Joint Less Than Fee	
7/30/2002	1994-046-P4	Volusia-Pineland Conservation Easement-Plum Creek	2,068,800.00	Joint Less Than Fee	
7/30/2002	1994-046-P4	Volusia-Pineland Conservation Easement-Plum Creek	(1,034,400.00)	Joint Less Than Fee	6,947.09
7/30/2002	2001-014-P1	Volusia-Hutton Conservation Easement-Plum Creek	2,347,069.56	Joint Less Than Fee	4,780.44
7/30/2002	2001-014-P1	Volusia-Hutton Conservation Easement-Plum Creek	(1,160,532.28)	Joint Less Than Fee	
12/19/2002	1993-006-PB	Keen Ranch - B	171,311.61	Fee	49.69
2/17/2003	2001-040-PB	Bud Henry	900,000.00	Fee	584.54
2/28/2003	2001-051-P1	Fore - Marvin Kelley - Conservation Easement	1,202,064.11	Joint Less Than Fee	
2/28/2003	2001-051-P1	Fore - Marvin Kelley - Conservation Easement	(17,947.02)	Joint Less Than Fee	741.92

Original Close Date	LA Number	Parcel Name	Florida Forever Amount	Acquisition Type	Acres
2/28/2003	2001-049-P1	Fore-Donald Ray (now Double T Ranch fka Hartford Ranch) Conservation Easement	779,439.37	Joint Less Than Fee	461.89
2/28/2003	2001-050-P1	WT Ranch - Conservation Easement	497,843.70	Joint Less Than Fee	0.00
4/22/2003	2002-012-P1	Redshirt Farms - Thomas Creek C.A.	984,878.80	Fee	1,205.93
5/16/2003	1997-032-P1	O'Neal	300,000.00	Fee	373.45
7/2/2003	2003-001-P1	Timberlands Consolidated	587,058.75	Joint Fee	1,043.66
7/16/2003	2003-004-P1	Smith, Phillip	26,400.00	Joint Fee	60.00
7/31/2003	2001-024-P1	Wolf Creek Ranch Conservation Easement	2,287,428.60	Less Than Fee - Conservation Easement	3,812.38
10/31/2003	2003-007-PA	Fore - Norman - Conservation Easement	388,970.44	Joint Less Than Fee	691.50
10/31/2003	2003-007-PB	Fore-Norman Children Conservation Easement	70,068.94	Joint Less Than Fee	124.57
12/8/2003	2003-021-P1	Lindsey - Banjo Groves - Silver Springs	1,000,000.00	Fee	298.00
12/8/2003	2003-021-P1	Lindsey - Banjo Groves - Silver Springs	(443,235.00)	Fee	
12/9/2003	1996-110-P1	Tashkede	22,000.00	Fee	24.47
4/15/2004	1986-004-PB	Far Reach Ranch-Tucker - Conservation Easement	206,971.40	Less Than Fee - Conservation Easement	311.92
4/15/2004	1986-004-PA	Far Reach Ranch-Tucker-Conserv. Easement-NRCS parcel	1,246,818.20	Less Than Fee - Conservation Easement	3,758.08
5/20/2004	2003-005-PA	LeFils Corporation - Conservation Easement A	534,707.58	Joint Less Than Fee	1,267.44
5/20/2004	2003-005-PC	LeFils Corporation - Conservation Easement C (SAZ)	305,319.38	Joint Less Than Fee	361.70
5/20/2004	2003-005-PB	Lefils, Donald and Mary - Conservation Easement B	34,446.51	Joint Less Than Fee	81.65
6/18/2004	2003-016-P1	Tennyson - Red Bug Road Project - Fee Reverter	600,000.00	Fee Reverter	0.00
7/28/2004	2004-001-P1	Rogers - Fee Reverter	2,000,000.00	Fee Reverter	0.00
1/12/2005	2004-004-P1	Minter - Solary Canal Project - Fee Reverter	1,820,000.00	Fee Reverter	0.00
1/25/2005	2003-030-P1	Relay Tract-South Conservation Easement	4,033,206.77	Less Than Fee - Conservation Easement	9,673.24
4/12/2005	2000-024-P1	Fly'n R Ranch Conservation Easement - 3,108.36 acres of the total 3,582.26 acres purchased converted to Fee Simple upon demise of Grantor - 9/8/2014, LA2000-024-P2	5,183,028.70	Less Than Fee - Conservation Easement	474.00
4/27/2005	2001-065-P1	Four Creeks Forest	2,667,079.84	Joint Fee	10,221.10
4/28/2005	1994-048-P1	Skinner, Bryant Conservation Easement	1,602,386.51	Less Than Fee - Conservation Easement	1,569.49

Original Close Date	LA Number	Parcel Name	Florida Forever Amount	Acquisition Type	Acres
6/1/2005	2004-002-P1	Newnans Lake Addition - Rayonier/Alachua	1,619,563.30	Joint Fee	1,708.20
7/20/2005	2003-026-P1	Rayonier - Thomas Creek - Parcel A - West	728,277.92	Joint Fee	
7/20/2005	2003-026-P1	Rayonier - Thomas Creek - Parcel A - West	1,572,131.99	Joint Fee	2,078.16
7/20/2005	2003-026-P2	Rayonier - Thomas Creek - Parcel B - East	0	Joint Fee	130.18
1/24/2006	2003-022-P1	Jacksonville Stormwater - Lenox Ave - Fee Reverter	209,274.08	Fee Reverter	0.00
3/10/2006	2005-009-P1	Jacksonville Stormwater - Wesconnett - Fee Reverter	82,275.00	Fee Reverter	0.00
3/10/2006	2005-008-P1	Jacksonville Stormwater - Grace Lane - Fee Reverter	170,500.00	Fee Reverter	0.00
3/10/2006	2004-019-P1	Snag Harbor - The Conservation Fund	32,000.00	Fee	14.63
6/28/2006	2005-010-P1	West Augustine Fee Reverter	260,403.00	Fee Reverter	0.00
6/28/2006	2005-010-P1	West Augustine Fee Reverter	714,597.00	Fee Reverter	0.00
7/26/2006	2006-012-P1	Holy Cross Evangelical Lutheran Church - Fee Reverter	86,250.00	Fee Reverter	0.00
8/28/2006	2006-010-P1	City of Ocala - Ghannam - Fee Reverter	750,000.00	Fee Reverter	0.00
3/2/2007	2001-058-PC	Fellsmere - Sun Ag	31,592,194.95	Fee	6,020.00
3/2/2007	2007-011-P1	Neighborhood Lakes - Orange County parcel	3,606,099.80	Joint Fee	315.54
3/2/2007	2001-058-PC	Fellsmere - Sun Ag	3,657,805.05	Fee	
3/2/2007	2007-011-P2	Neighborhood Lakes - Lake County parcel	5,000,000.00	Joint Fee	210.58
3/2/2007	2007-011-P2	Neighborhood Lakes - Lake County parcel	(5,000,000.00)	Joint Fee	
3/2/2007	2007-011-P1	Neighborhood Lakes - Orange County parcel	125,000.00	Joint Fee	
4/5/2007	2006-026-P1	Joshua Creek Conservation Area	(12,491,700.66)	Joint Fee	2,699.02
4/5/2007	2006-026-P1	Joshua Creek Conservation Area	24,983,401.32	Joint Fee	
8/15/2007	2007-008-P1	Hollondel Road Property - Fee Reverter	935,000.00	Fee Reverter	0.00
8/24/2007	2007-006-P1	Evergreen Village/Engle/Melbourne - Fee Reverter	1,882,920.00	Fee Reverter	0.00
8/30/2007	2005-007-P1	Bull Creek - North (West)	3,291,452.47	Fee	
8/30/2007	2005-007-P1	Bull Creek - North (West)	29,835.00	Fee	3,525.28
8/30/2007	2005-007-P1	Bull Creek - North (West)	468,854.90	Fee	
9/14/2007	2005-030-P1	Longbranch Crossing, LLC - Conservation Easement	7,072.31	Less Than Fee - Conservation Easement	2,684.65
9/14/2007	2005-030-P1	Longbranch Crossing, LLC - Conservation Easement	2,919,140.69	Less Than Fee - Conservation Easement	

Original Close Date	LA Number	Parcel Name	Florida Forever Amount	Acquisition Type	Acres
9/14/2007	2005-030-P1	Longbranch Crossing, LLC - Conservation Easement	4,787,037.31	Less Than Fee - Conservation Easement	
12/7/2007	2007-017-P1	Geiger	3,163,200.00	Fee	395.40
12/14/2007	2007-034-P1	Blue Villa - City of So. Daytona - Fee Reverter	1,051,100.00	Fee Reverter	0.00
12/14/2007	2006-013-P1	Robert Berner - City of So. Daytona Fee Reverter	50,000.00	Fee Reverter	0.00
2/4/2008	1991-020-PB	Turkey Creek/Lee Ranch - East/NRCS C.E. Parcel	(18,586,864.42)	Fee	
2/4/2008	1991-020-PB	Turkey Creek/Lee Ranch - East/NRCS C.E. Parcel	28,650,699.89	Fee	2,892.45
2/4/2008	1991-020-PA	Turkey Creek/Lee Ranch - West Parcel	(2,079.00)	Joint Fee	1,620.58
2/4/2008	1991-020-PA	Turkey Creek/Lee Ranch - West Parcel	1,593,241.96	Joint Fee	
2/13/2008	2007-027-P1	Rayonier - River Styx	1,276,703.00	Joint Fee	1,428.09
2/15/2008	1991-064-P1	Yarborough Ranch - North - Parcels 1 and 2	5,834,375.00	Fee	3,927.14
2/15/2008	1991-064-P1	Yarborough Ranch - North - Parcels 1 and 2	11,224,335.93	Fee	
2/15/2008	1991-064-P4	Yarborough Ranch - South - Parcel 4 - Lamont Pasture	10,107,162.03	Fee	
3/12/2008	2007-001-P1	Masters, Lawrence	(2,162,810.00)	Fee	112.88
3/12/2008	2007-001-P1	Masters, Lawrence	85,288.27	Fee	
3/12/2008	2007-001-P1	Masters, Lawrence	3,340,432.25	Fee	
3/12/2008	2007-001-P1	Masters, Lawrence	30,775.80	Fee	
3/12/2008	2007-001-P1	Masters, Lawrence	214,856.89	Fee	
3/14/2008	2006-019-P1	Chain of Lakes Expansion - Fee Reverter	876,033.79	Fee Reverter	0.00
8/15/2008	1994-098-P1	Kaufman - Lumbert	556,666.67	Joint Fee	30.46
8/15/2008	2007-022-P1	Young	100,000.00	Joint Fee	11.42
9/4/2008	2006-046-P1	ITERA - Putnam Timberland	448,057.70	Fee	189.18
9/26/2008	2006-007-P1	City of Ocala - Thompson Bowl - Fee Reverter	152,750.00	Fee Reverter	0.00
9/26/2008	2006-008-P1	City of Ocala - Tuscawilla - Fee Reverter	173,740.00	Fee Reverter	0.00
9/29/2008	2007-036-P1	Bloom/Frank	152,418.50	Joint Fee	123.11
10/17/2008	2008-003-P1	Medlock	381,491.42	Fee	162.14
10/17/2008	2008-004-P1	Motes	739,744.92	Fee	215.02
12/10/2008	2008-012-P1	Econ Project Addition-Rybolt	(381.19)	Joint Fee	

Original Close Date	LA Number	Parcel Name	Florida Forever Amount	Acquisition Type	Acres
12/10/2008	2008-012-P1	Econ Project Addition-Rybolt	8,118,211.41	Joint Fee	
12/10/2008	2008-012-P1	Econ Project Addition-Rybolt	3,129,658.59	Joint Fee	706.79
12/10/2008	2008-012-P1	Econ Project Addition-Rybolt	(1,000,000.00)	Joint Fee	
12/19/2008	2005-033-P1	Arahatchee Conservation Easement	2,360,000.00	Less Than Fee - Conservation Easement	900.01
12/19/2008	2006-006-P1	David Strawn Lands, Inc.	1,247,785.21	Joint Fee	1,203.43
12/19/2008	2006-006-P1	David Strawn Lands, Inc.	(1,247,785.21)	Joint Fee	
12/22/2008	2008-028-P1	Titus	77,520.00	Fee	8.16
1/21/2009	2008-025-P1	Plum Creek - Rice Creek Conservation Area Addition	411,703.50	Fee	152.13
5/27/2009	2009-011-P1	Golden Gem Road (City of Apopka) - Fee Reverter	4,490,175.00	Fee Reverter	0.00
7/9/2009	1998-006-P3	Gladstone Addition (Jonathan)	150,000.00	Joint Fee	36.00
7/31/2009	2008-015-P1	Edwards	493,653.14	Joint Fee	0.00
10/15/2009	2001-040-PA	Evans Conservation Easement	1,023,074.96	Joint Less Than Fee	680.20
10/15/2009	2001-040-PA	Evans Conservation Easement	182,155.88	Joint Less Than Fee	
12/29/2009	2009-021-P1	Maytown Tract	1,557,692.61	Fee	
12/29/2009	2009-021-P1	Maytown Tract	3,510.58	Fee	3,321.60
12/8/2010	2010-006-P1	BJ Bar Ranch Conservation Easement - total acres purchased reduced by 500 acres for sale to Morrison (LA2010-006-P2) on 5/24/2012	2,500,000.00	Less Than Fee - Conservation Easement	4,388.00
5/27/2011	2000-006-P1	Kemcho - formerly American Timberlands	1,600,405.20	Fee	3,200.00
5/27/2011	2000-006-P1	Kemcho - formerly American Timberlands	4,399,594.80	Fee	
5/24/2012	2010-006-P2	Morrison Conservation Easement - 500 acre subdivision of BJ Bar Ranch (LA2010-006-P1)	0	Less Than Fee - Conservation Easement	500.00
9/18/2014	2000-024-P2	Fly'n R Ranch - 3,108.26 acres of the total 3,582.26-acre purchase that closed on 4/12/2005 converted to Fee Simple upon demise of Grantor	0	Fee	3,108.26
Total			**$ 185,511,867.16**		

1) The cost to the District in Table 6-11 is different from the total expenditures for land acquisition in Table 6-10. While land acquisition expenditures in Table 6-10 are the total expenditures minus fund balance, the total expenditures for FF funded land acquisitions in Table 6-11 reflect all land acquisitions that have expended FF funds that includes fund balances.

2) Fee Reverter refers to land purchased all or in part by the District and transferred to a local government to be used for a specific project (usually for water quality improvement). If the

project is not constructed within an agreed upon period of time, at the District's option, either the fee simple title to the land "reverts" back to the District, or the local government must reimburse the District the purchase price and costs of the land, plus interest.

Appendix C — 2017 Land Acquisition Map

The 2017 Land Acquisition Plan Map on the next page indicates the general location and type of District owned lands, and identifies areas of "Potential Acquisition." District owned lands are separated into different sub-categories, including:

(1) "Full Fee" describes natural resource conservation land owned in full by the District.

(2) "Joint Fee" indicates land in public ownership in which the District holds a less than 100% undivided interest in the property. State, federal, or local governments usually hold the remaining joint interest.

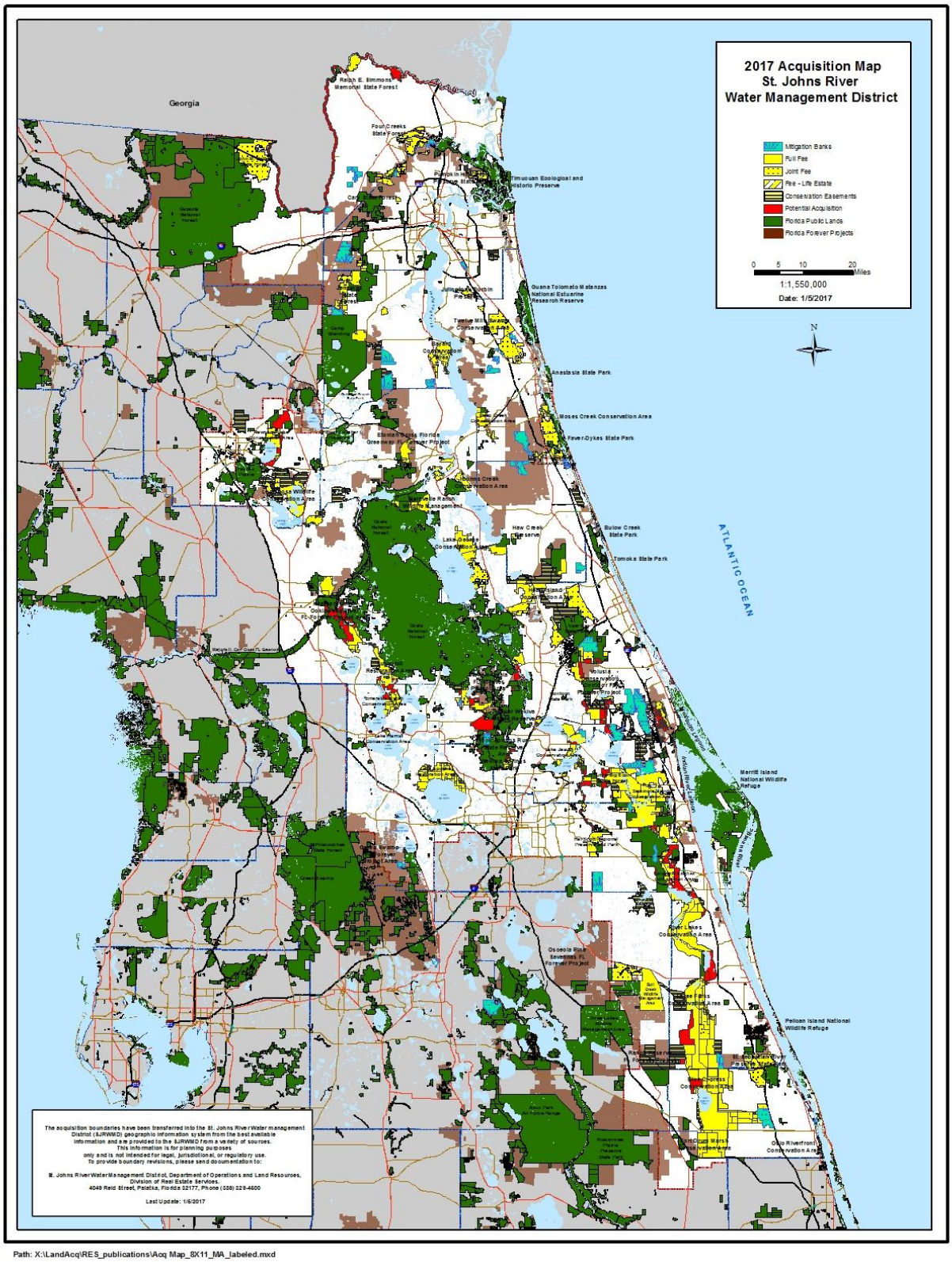
(3) "Conservation Easements" indicates private lands on which the District has acquired a conservation easement interest in the property via a voluntary, negotiated transaction. The private owner retains title and pays taxes. Public access may or may not be allowed.

(4) The "Mitigation Banks" category indicates permitted mitigation banks on private property for which one or more conservation easements have been recorded in favor of the District through the regulatory or permitting process. Mitigation Banks are not included in any of the acreage totals for District-owned land in this plan.

(5) The "Potential Acquisition" category indicates areas of conservation interest or lands with potential water resource value that the District may consider acquiring at some time in the future. Identification as "Potential Acquisition" in the FF Work Plan is a necessary step prior to the expenditures from the WMLTF, Preservation 2000, or FF funds. For the majority of District acquisitions, the District may seek to acquire land in any of the four sub-categories described above in order to achieve water resource protection goals. Pursuant to Section 373.199(6), F.S., property owners who are not willing sellers may have their property removed from the District's Land Acquisition Map by submitting a "Request for Mapping Change" form to the District. Potential Acquisition lands are shown in red on the map, and also include lands within FF project boundaries and lands within the 100-year floodplain of the St. Johns River and its tributaries.

(6) The "FNAI Florida Public Lands" category indicates federal, state, county, or city owned property that has some value for conservation planning purposes, as reported by the Florida Natural Areas Inventory (FNAI) organization. Some "FNAI Florida Public Lands" contain urban infrastructure and may be further developed for non-conservation uses in the future. Government property designated for military purposes is the largest example of this situation. Usually there are no permanent natural resource conservation restrictions on military lands.

There were no additions to the "Potential Acquisition" layer of the map for 2017. The reduction in Potential Acquisition acres from last year is attributed only to acres that were both purchased during FY 2015-2016 and were within the "Potential Acquisition" layer. The number of acres in the 2017 "Potential Acquisition" layer is 118,358 acres.



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2017 Mitigation Donation Annual Report

7. WETLAND MITIGATION CASH DONATION REPORT

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INTRODUCTION

Subsection 373.414(1)(b)2, *Florida Statutes* (F.S.) requires that "…each water management district shall report by March 1 of each year, as part of the consolidated annual report required by s. 373.036(7), all cash donations accepted under subparagraph 1 during the preceding water management district fiscal year for wetland mitigation purposes." The statute also requires the report to include a description of the endorsed mitigation projects and, except for projects governed by s.373.4135(6), address success criteria, project implementation status and time frame, monitoring, long-term management, provisions for preservation, and full cost accounting.

For the purposes of wetland mitigation, the donation of cash to the St. Johns River Water Management District (District) is acceptable when the cash payments are specified for use in a District- or Florida Department of Environmental Protection-endorsed environmental preservation, enhancement, or restoration project and the payments initiate a project or supplement an ongoing project. The project or portion of the project funded by the donation of money must offset the impacts of the proposed system to be permitted.

The cash donation method is one of many mitigation alternatives available to permit applicants. Typically, a permit applicant would take the cash donation option when there is a suitable District restoration site within the surface water basin and other mitigation alternatives may incur higher costs or are not readily available to the applicant. A close coordination between the District's Division of Regulatory Services, which handles the permitting, and the Division of Water and Land Resources, which handles mitigation sites, is essential to finding suitable mitigation sites, determining mitigation acreage, and assessing the full cost of mitigation for permit applicants under the cash donation option.

CASH DONATIONS RECEIVED DURING FY 2015-2016

During FY 2015–2016, the District did not receive any cash donation for wetland mitigation purposes. Figure 7-1 provides information on cash donations received over the last 10 years.

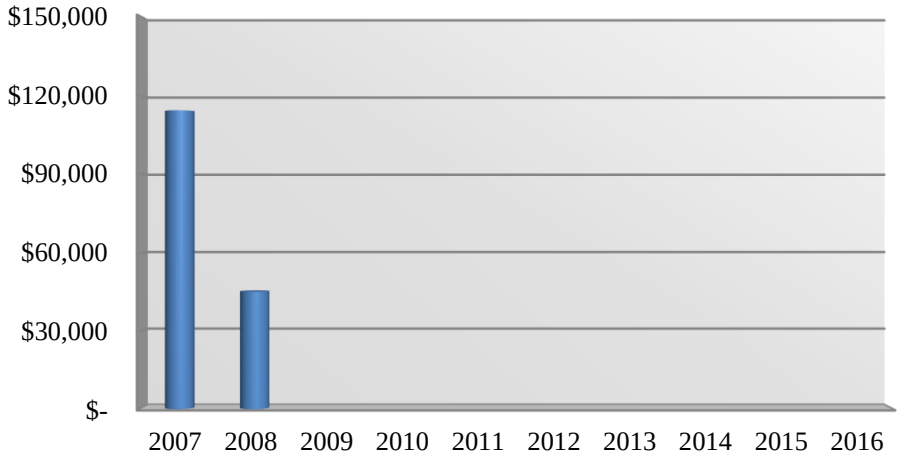

Figure 7-1. Cash donations for wetland mitigation purposes by fiscal year

Water Quality and Water Quantity Grading Report

8. Projects in the Five-Year Work Program with Grading for each Watershed, Water Body, or Water Segment

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INTRODUCTION

Section 373.036(7)(b)9., F.S., provides that the Consolidated Annual Report shall contain a "grade for each watershed, water body, or water segment in which a project listed under subparagraph 8. is located representing the level of impairment and violations of adopted minimum flow or minimum water levels. The grading system must reflect the severity of the impairment of the watershed, water body, or water segment."

Table 1 lists the projects contained within the 2017 Five-year Water Resource Development Work Plan, the watershed, water body, or water segment the project impacts, and a grade for two items: 1) the water quality level of impairment and 2) the level of violation of a minimum flow or minimum water level.

Level of Impairment Grade

The Level of Impairment grade is represented as follows:

Impaired—High: This grade is assigned if the waterbody is impaired for one or more parameters other than mercury and based on a consideration of other factors, including the number of impairments, the presence of Outstanding Florida Waters, the proximity to ongoing or planned restoration activities, the ecological priority of the water for endangered and threatened species, environmental justice concerns, the amount of anthropogenic land use, and local aquifer vulnerability.

Impaired: This grade is assigned if the waterbody is impaired for one or more parameters other than mercury.

Not impaired: This grade is assigned if the waterbody is not impaired for any parameters other than mercury.

The FDEP provided the impairment grades based upon Total Maximum Daily Loads (TMDL) based Water Body IDs (WBIDs). Projects that impact a specific WBID were identified in Table 1 for that WBID. As an example, a project that replaced disposal of treated waste water in a spray field or Rapid Infiltration Basin (RIB) with beneficial use of reclaimed water utilized the impairment grade associated with the WBID where the spray field or RIB were originally located. It is important to note that projects contained within a Water Resource Development Work Program are focused on water use/conservation with the exception of the projects contained in appendix A – District Projects for Implementing Basin Management Action Plans.

The Level of Violation of Adopted MFL is represented as follows:

The waterbody was evaluated based on the relative magnitude of the MFL violation and rated as close, moderately close, or not close to meeting the MFL. In evaluating this element, the Districts considered the magnitude of the variance from the MFL, the magnitude of the ecological impact, the timeframe for recovery, and the timeframe for completion of the projects.

The waterbody was also evaluated based on the regional significance of the water body and rated as Tier 1, Tier 2 or Tier 3 with Tier 1 being the highest rating for regional significance and Tier 3 being the lowest rating. In evaluating this element, the Districts considered the waterbody's size and geographical extent, ecological importance, recreational uses, navigation, threatened/endangered species, wildlife utilization, aesthetics, and historical and archeological significance.

Level 0: This grade is assigned if the waterbody is meeting the MFL, but is projected to not meet the MFL within 20 years (that is, the waterbody is in prevention).

Level I: This grade is assigned if the waterbody is close to meeting the MFL and the waterbody is rated as a Tier 3 or Tier 2 for regional significance; or the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 3 for regional significance

Level II: This grade is assigned if the waterbody is close to meeting the MFL and the waterbody is rated a Tier 1 for regional significance; or the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 2 for regional significance; or the waterbody is not close to meeting the MFL and the waterbody is rated a Tier 3 for regional significance.

Level III: This grade is assigned if the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 1 for regional significance; or the waterbody is not close to meeting the MFL and the waterbody is rated a Tier 2 or Tier 1 for regional significance.

Many of the projects in the Water Resource Development Work Program will directly assist MFLs waterbodies within a Water Use Caution Area (WUCA) or Prevention and Recovery (PR) strategy. Those projects are anticipated to impact all waterbodies that are included within the WUCA or PR area. As an example, the CFWI Water Use Caution Area with the SJRWMD covers all or parts of Orange, Seminole and Lake counties. There are a total of 14 waterbodies (one 5 springs, one river segments, and 8 lakes) that are not achieving or projected to not achieve their established minimum flow or level in this region. Because the basis for not meeting these MFL's are due to groundwater withdrawals within the confined Upper Florida aquifer, a project within this area is anticipated to impact the entire area. Therefore, all the impacted waterbodies within a WUCA have been included for each project.

Table 8-1: BMAP projects identified in the Five-Year Water Resource Development Work Program, with the level of impairment and level of violation of adopted MFL associated with the receiving water body.

Contract Number	Table 2 Water Resource Development Projects (Appendix C)	Watershed, Water Body, Water Segment (WBID)	Level of Water Quality Impairment	Level of Violation of Adopted MFL
28390	Vero Beach Reverse Osmosis WTF Expansion	INDIAN RIVER LAGOON Main Canal (3153A)	Impaired	None*
28087	Orange County Malcolm Rd Minimized Impact Project -Lower Floridan Wells	KISSIMMEE RIVER Lake Hancock Drain (Orange County) (3170G)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28493	Orange County Malcolm Rd Minimized Impact Project -Lower Floridan Wells Ph 2	KISSIMMEE RIVER Lake Hancock Drain (Orange County) (3170G)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28492	OUC Conservation Project Targeting Irrigation Customers	KISSIMMEE RIVER Lake Underhill Outlet (3168Z)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28807	Green Cove Springs North Grid RCW System Phase 2 & 3	LOWER ST. JOHNS Governor Creek (2464)	Impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28762	Atlantic Beach AMI Implementation	LOWER ST. JOHNS Sherman Creek (2227)	Impaired - High	None*
28747	St Johns County Customer Portal	LOWER ST. JOHNS Sixmile Creek (2411)	Not impaired	None*
28851	Deland Reclaimed Water Retrofit Project Phase 2B	LOWER ST. JOHNS Talmadge Lake Drain (2630D)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28749	St Johns County AMI Expansion in the NW	LOWER ST. JOHNS Unnamed Branch (2461)	Not impaired	None*
28842	Orange County Utilities Waterwise Neighbor Program (retrofit)	MIDDLE ST. JOHNS Bay Branch Drain (3033)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28408	Seminole County Toilet Rebate Program	MIDDLE ST. JOHNS Lake Jesup (2981)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28591	Altamonte Springs Direct Potable Reuse Pilot Project	MIDDLE ST. JOHNS Little Wekiva River (2987)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28819	Volusia County Utilities: RCW Main Extension for I-4/SR 472 Activity Center	MIDDLE ST. JOHNS Noncontributing Area (2941)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28820	Woodlawn Memorial Park Irrigation System Upgrade	MIDDLE ST. JOHNS Ocoee Drain (3002M)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28848	Apopka Water Conservation Incentive Program	MIDDLE ST. JOHNS Rock Springs Run (2967)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28909	Orange County Utilities - Waterwise Neighbor Program (SWC)	MIDDLE ST. JOHNS Rock Springs Run (2967)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody

Contract Number	Table 2 Water Resource Development Projects (Appendix C)	Watershed, Water Body, Water Segment (WBID)	Level of Water Quality Impairment	Level of Violation of Adopted MFL
28472	City of Sanford Enhancements to ASR System	MIDDLE ST. JOHNS Sanford Drains To Lake Monroe (2893EB)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28423	Orange County Utilities WaterSmart	MIDDLE ST. JOHNS Unnamed Ditches (3038)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28806	JEA William Burgess Rd	NASSAU - ST. MARYS Nassau River (2148B)	Impaired	None*
28318	Bekemeyer Family Farm, LLC	OCKLAWAHA Beulah Slough (2872)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28711	Ocoee Final Phase of Meter Replacement and Full Integration of AMI	OCKLAWAHA Crown Point Slough (2866)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28908	Alachua County Water Star Rebate Program	OCKLAWAHA Hogtown Creek (2698)	Impaired - High	None*
28911	Gainesville Regional Utilities Indoor Plumbing Retrofit Program	OCKLAWAHA Hogtown Creek (2698)	Impaired - High	None*
28316	Organica World	OCKLAWAHA Howard Lake Outlet (2855)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28473	Clermont - South Lake Water Initiative Clermont Sunburst Well # 1 & 2	OCKLAWAHA Johns Lake Outlet (2873)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28910	Orange County Utilities - Toilet Replacement Program	OCKLAWAHA Lake Apopka Outlet (2835B)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28475	Orange County Wekiwa Springshed AWS Expansion	OCKLAWAHA Lake Apopka Outlet (2835B)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28452	City of Groveland Eagle Ridge Water Distribution Facility Phase 3	OCKLAWAHA Palatlakaha River (2839)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28399	City of Groveland Silver Eagle Reclaimed Storage Tank	OCKLAWAHA Palatlakaha River (2839)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28913	Alachua County Landscape Irrigation Retrofit Rebate Program	OCKLAWAHA Possum Creek (2696)	Impaired	None*
28857	Marion County Enhanced Irrigation Evaluation Program	OCKLAWAHA Silver River Drain (2772)	Not impaired	None*
28128	City of Ocala - Well & Septic Tank Reduction Program	OCKLAWAHA Silver River Drain (2772B)	Not impaired	None*
28369	Marion County Utilities: Package Plant Removal at Silver Springs	OCKLAWAHA Silver River Drain (2772B)	Not impaired	None*
28912	Sante Fe Community College NW Campus Plumbing Fixture Retrofit	OCKLAWAHA Unnamed Drain (2694)	Not impaired	None*
28455	City of Apopka Reclaimed Water Main Extensions	OCKLAWAHA Zellwood Farms (2841)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28471	City of Palm Coast Grand Landings RW transmission main	UPPER EAST COAST Bulow Creek (2620)	Impaired	None*
28470	City of Palm Coast WTP # 2 Wellfield Expansion	UPPER EAST COAST Bulow Creek (2620)	Impaired	None*
28592	Daytona Beach Potable Reuse Demo Testing Facility	UPPER EAST COAST Drainage Canals (2654)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28846	Ormond Beach South Peninsula Reclaimed Water Expansion	UPPER EAST COAST Granda Blvd (8118A)	Not impaired	None*
28777	Palm Coast RCW Irrigation Along US1 & Palm Coast Park	UPPER EAST COAST Hulett Branch (2597)	Not impaired	None*
28419	St Johns County RW Storage Tank at SR16 WWTF	UPPER EAST COAST Matanzas River (Upper Segment) (2363G1)	Not impaired	None*

Contract Number	Table 2 Water Resource Development Projects (Appendix C)	Watershed, Water Body, Water Segment (WBID)	Level of Water Quality Impairment	Level of Violation of Adopted MFL
28812	Daytona Beach 2.5 MG Reuse Tank	UPPER EAST COAST Unnamed Ditch (2652)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28468	Daytona Beach Rapid Infiltration Basins	UPPER EAST COAST Unnamed Drain (2673)	Impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28843	Orange County Utilities Waterwise Neighbor Program (new)	UPPER ST. JOHNS Christmas Creek (3015)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
30049	Taylor Creek Reservoir Improvement Project*	UPPER ST. JOHNS Lake Poinsett Outlet (2893K1)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
	Surface Water Projects (Programmatic Code 2.3.0)			
28430	Longwood: Florida Central Commerce Park Stormwater Pond	MIDDLE ST. JOHNS Soldier Creek (2986)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28850	Deland Reclaimed Water Retrofit Project Phase 1	LOWER ST. JOHNS Talmadge Lake Drain (2630D)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28815	JEA RG Skinner Parkway RW Trans	LOWER ST. JOHNS Big Davis Creek (2356)	Impaired - High	None*
28768	Penney Farms Mandatory Meter Reader Replacement	LOWER ST. JOHNS Unnamed Branch (2456)	Not impaired	None*
28254	City of DeLand Reclaimed Water Storage & Recovery	MIDDLE ST. JOHNS Lake Beresford Drain (2893U1)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28855	West Volusia Water Suppliers Project 4A Deltona Storage &Treatment System Impro	MIDDLE ST. JOHNS Gleason Lake Drain (2893G1)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28143	Orange County Wekiwa Springshed AWS Expansion - additional improvements	OCKLAWAHA Lake Apopka Outlet (2835B)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28132	City of Palm Coast Brackish Upper Floridan Performance Test	UPPER EAST COAST Pringle Branch (2577)	Impaired	None*
28778	St Johns County St Augustine Beach Reclaimed Water Transmission Main	UPPER EAST COAST Salt Run (Shellfish Portion) (2502C)	Impaired	None*
	C-1 Canal Improvements Project	UPPER ST. JOHNS Drained Farmland (3108A)	Impaired	None*
	C-10 Reservoir Project	UPPER ST. JOHNS Drained Farmland (3090)	Impaired	None*
	Fellsmere Water Management Area*	UPPER ST. JOHNS Drained Farmland (3138)	Not impaired	None*
	Appendix A District Projects for Implementing Basin Management Action Plans			
	District Projects that assist in implementing a BMAP			
28727	A W Baylor Irrigation Retrofit	LOWER ST. JOHNS Mud Lake Outlet (2626)	Not impaired	None*
28457	Apopka Water Reclamation Facility Nutrient Removal	MIDDLE ST. JOHNS Lucy Lake Outlet (3002A)1	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody

Contract Number	Table 2 Water Resource Development Projects (Appendix C)	Watershed, Water Body, Water Segment (WBID)	Level of Water Quality Impairment	Level of Violation of Adopted MFL
28464	Atlantic Beach Phosphorus Treatment Facility	LOWER ST. JOHNS Sherman Creek (2227)	Impaired - High	None*
28577	Blue Cypress Grain	UPPER ST. JOHNS Drained Farmland (3155)	Not impaired	None*
28752	Brevard County Passive Nutrient Reduction for OSTDS	INDIAN RIVER LAGOON Indian River Above Melbourne Causeway (2963C1)	Impaired - High	None*
28491	Brevard County Pines Industrial Pond	INDIAN RIVER LAGOON Indian River Above Melbourne Causeway (2963C1)	Impaired - High	None*
28401	Brevard County South Patrick Drive Baffle Box	INDIAN RIVER LAGOON Banana River Below 520 Causeway (3057A)	Impaired - High	None*
28795	Clay County Utility Authority CR 209 Reclaimed Water Transmission Main	LOWER ST. JOHNS Little Black Creek (2368)	Impaired - High	None*
28810	Clay County Utility Authority Old Jennings Reclaimed Water Plant Ground Storage Ta	LOWER ST. JOHNS Little Black Creek (2368)	Impaired - High	None*
28654	Cherry Lake Tree Farm Irrigation Retrofit	OCKLAWAHA Palatlakaha River (2839)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28760	Clermont West Lake Wetlands	OCKLAWAHA Palatlakaha River (2839)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28732	Cocoa Beach Muck Removal Phase 2	INDIAN RIVER LAGOON Banana River Below 520 Causeway (3057A)	Impaired - High	None*
28740	Cocoa Church Street Stormwater Retrofit	INDIAN RIVER LAGOON Indian River Above Melbourne Causeway (2963C1)	Impaired - High	None*
28728	Cocoa Factory Street Stormwater Retrofit	INDIAN RIVER LAGOON Indian River Above Melbourne Causeway (2963C1)	Impaired - High	None*
28663	Crescent City Crescent Lake Outfall Improvements	LOWER ST. JOHNS Crescent Lake (2606B)	Impaired - High	None*
28818	Eustis Eastern Wastewater Treatment Plant Expansion	MIDDLE ST. JOHNS Seminole Spring (2955)	Not impaired	None*
28728	First Farms	LOWER ST. JOHNS Unnamed Drain To St Johns River (2213R)	Impaired	None*
28449	GRU Hogtown Creek Improvements-Wastewater Service Lateral	OCKLAWAHA Unnamed Drain (2710)	Impaired	None*
28771	Indian River County North Sebastian Phase 1 Septic to Sewer	INDIAN RIVER LAGOON South Indian River (Near St. Sebastian River) (5003D1)	Impaired - High	None*
28730	Indian River County Osprey Acres Stormwater Park	INDIAN RIVER LAGOON South Canal (3158)	Impaired	None*
28467	Indian River County West Wabasso Septic to Sewer	INDIAN RIVER LAGOON South Prong St. Sebastian River (Freshwater Segment) (3129	Impaired - High	None*
28769	Jacksonville Beach Sewer Main Extension & Septic Removals	LOWER ST. JOHNS Hopkins Creek (2266)	Impaired - High	None*
28469	Jacksonville Crystal Springs Drainage Improvements	LOWER ST. JOHNS Unnamed Ditch (2286)	Not impaired	None*
28729	Jacksonville Noroad/Lambing Water Quality & Drainage	LOWER ST. JOHNS Ortega River (2249A)	Impaired	None*
28804	JEA Bartram Park Reclaimed Water Storage Tank Expansion	LOWER ST. JOHNS Bowen Branch (2402)	Impaired	None*
28428	JEA Mandarin Wastewater Treatment Plant Upgrades	LOWER ST. JOHNS Deep Bottom Creek (2361)	Impaired - High	None*
28427	JEA Nocatee Pkwy RW Transmission	LOWER ST. JOHNS Durbin Creek (2365)	Impaired - High	None*
28425	JEA NocateeNorth RW Storage Tank	UPPER EAST COAST Smith Creek (2400)	Impaired	None*
28618	Jon Revels	LOWER ST. JOHNS Unnamed Ditches (2563)	Impaired	None*
28780	Lake County Magnolia Lane Water Quality Project	OCKLAWAHA Lake Blue Springs (2838C)	Not impaired	None*
28517	Leesburg Heritage Estates Stormwater Park	OCKLAWAHA Lake Harris Outlet 2838G1	Not impaired	None*
28393	Leesburg Lake Griffin Stormwater Improvements	OCKLAWAHA Lake Griffin Outlet (2814)	Not impaired	None*
28430	Longwood FCCP Stormwater Pond	MIDDLE ST. JOHNS Fairy Lake Outlet (2994W)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28845	Longwood Island Lake Septic Tank Abatement	MIDDLE ST. JOHNS Island Lake Drain (2994D1)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28735	Longwood N. CR 427 & Lake Ruth Septic Tank Removal	MIDDLE ST. JOHNS Soldier Creek (2986)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28402	Longwood Septic Tank Abatement	MIDDLE ST. JOHNS Fairy Lake Outlet (2994W)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28734	Longwood South Septic Tank Abatement Phase 2	MIDDLE ST. JOHNS Fairy Lake Outlet (2994V)		CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody

Contract Number	Table 2 Water Resource Development Projects (Appendix C)	Watershed, Water Body, Water Segment (WBID)	Level of Water Quality Impairment	Level of Violation of Adopted MFL
27440	MLSJR - TCAA Nutrient Reduction-Masters (St. Johns Co.) (M&LSJR)	LOWER ST. JOHNS Deep Creek (2549)	Impaired - High	None*
28421	Neptune Beach WTF Nutrient Removal Enhancements	LOWER ST. JOHNS Hopkins Creek (2266)	Impaired - High	None*
28782	Oakland Stormwater Drainage Improvements	OCKLAWAHA Lake Apopka Outlet (2835B)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28128	City of Ocala - Well & Septic Tank Reduction Program	OCKLAWAHA Silver River Drain (2772B)	Not impaired	None*
28844	Orange Blossom KOA Sewage Treatment Plant Elimination	OCKLAWAHA Zellwood Farms (2841)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28413	Orange City Blue Spring Nutrient Reduction	MIDDLE ST. JOHNS Noncontributing Area (2941)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28853	Orange County EPD Passive Onsite Treatment System	OCKLAWAHA Lake Apopka Outlet (2835B)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28751	Palm Bay Inlet Treatment Train In High-Tech Corridor	INDIAN RIVER LAGOON Unnamed Ditch (3095)	Not impaired	None*
28737	Seminole County Passive Onsite Treatment System	MIDDLE ST. JOHNS Wekiva River (2956)	Impaired - High	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody
28183	Vero Beach Hybrid STEP System	INDIAN RIVER LAGOON Main Canal (3153A)	Impaired	None*
28459	Volusia County Advanced Wastewater Treatment for the Protection of Blue Spring	MIDDLE ST. JOHNS Noncontributing Area (2941)	Not impaired	Volusia PR* Level 0 - 5 waterbody Level 1 - 1 waterbody Level 3 - 1 waterbody
28432	Winter Garden Reclaimed Water & Stormwater Recharge	OCKLAWAHA Black Lake Outlet (2875)	Not impaired	CFWI WUCA* Level 0 - 13 waterbodies Level 1 - 1 waterbody

CFWI WUCA* - SJRWMD Projects within the CFWI Water Use Caution Area (WUCA) are anticipated to benefit all SJRWMD waterbodies included within the WUCA. There is 1 waterbody not meeting its MFL and another 14 waterbodies that are projected to not meet the MFL within 20 years. Because the basis for not meeting these MFL's are due to groundwater withdrawals within the confined Upper Florida aquifer in the WUCA, a project within this area is anticipated to benefit the entire area. Therefore, all the impacted waterbodies within the WUCA have been included for each project.
Level 0: Lakes Apshawa North, Apshawa South, Cherry, Louisa, Minneola, Pine Island, Prevatt, and Brantley; Rock, Sanlando, Starbuck, and Wekiwa; and Wekiva River.
Level 1: Palm Springs

Volusia PR* - SJRWMD Projects within the Volusia Prevention and Recovery (PR) area are anticipated to impact all SJRWMD waterbodies included within the Volusia PR. There are 2 waterbodies not meeting their MFLs and another 5 waterbodies that are projected to not meet the MFL within 20 years. Because the basis for not meeting these MFL's are due to groundwater withdrawals within the confined Upper Florida aquifer in the Volusia PR area, a project within this area is anticipated to impact the entire area. Therefore, all the impacted waterbodies within the Volusia PR have been included for each project.
Level 0: Big Lake, Lake Daugharty, Lake Helen, Lake Hires, and Three Island Lakes
Level 1: Indian Lake
Level 3: Blue Spring

None* - Project is in an area with no adopted MFLs or no MFLs recovery strategy or is not expected to fall below a minimum flow or level in 20 years