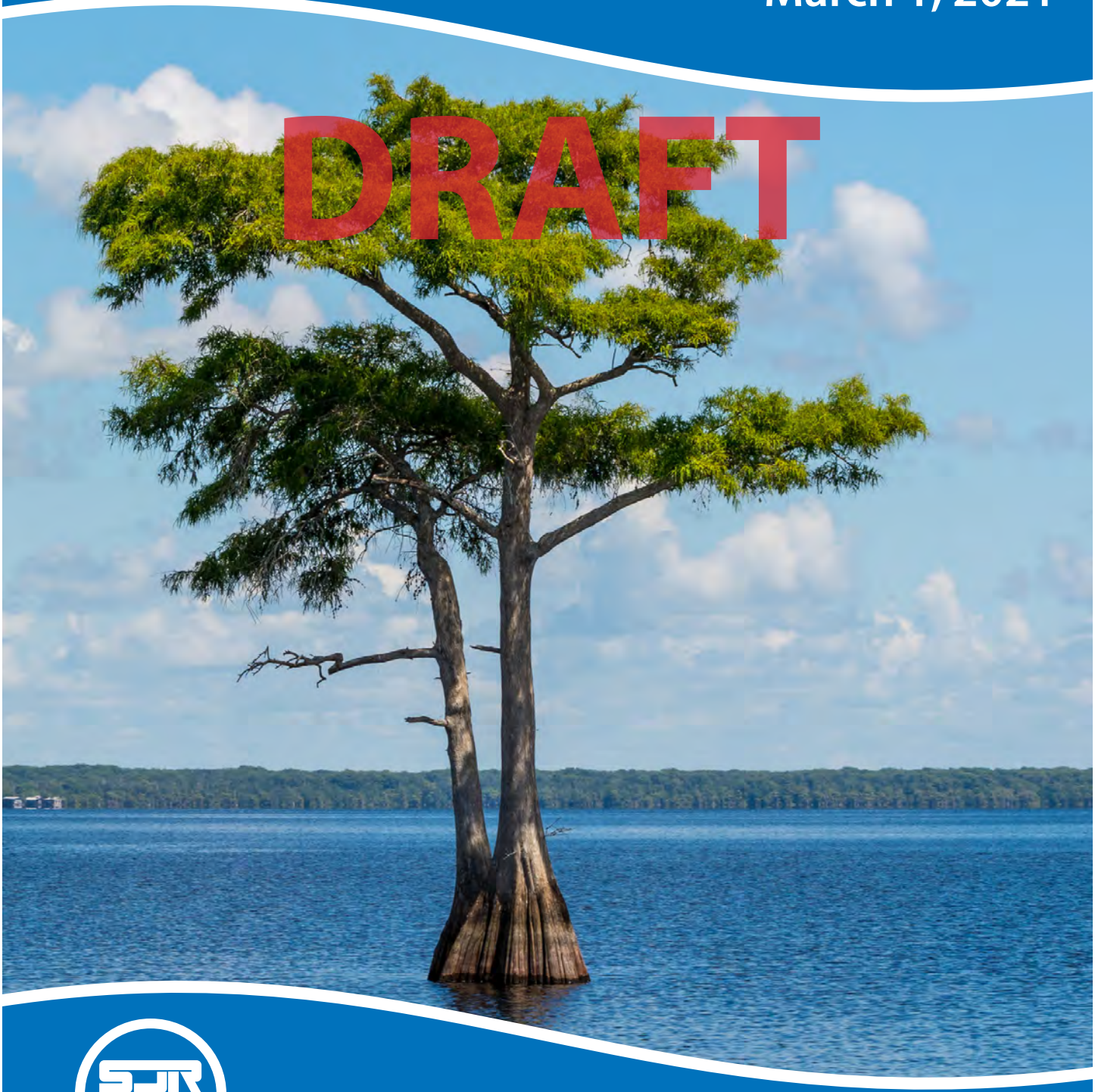
St. Johns River Water Management District

Consolidated Annual Report

March 1, 2021



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EXECUTIVE SUMMARY

The St. Johns River Water Management District's (District) 2021 Consolidated Annual Report is a collection of several plans and reports as established by 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 by March 1 of each year. In addition, copies must be provided, "… to the chairs of all legislative committees having substantive or fiscal jurisdiction over the districts and the governing board of each county in the district having jurisdiction or deriving any funds for operations of the district." The report is available to the public online at www.sjrwmd.com/documents/plans.

This report consists of these documents in the following order:

1. Strategic Plan Annual Work Plan Report (373.036(7)(b), F.S.)
2. Minimum Flows and Minimum Water Levels Priority List and Schedule (373.042(3), F.S.)
3. Annual Five-Year Capital Improvements Plan (373.536(6)(a)3., F.S.)
4. Annual Five-Year Water Resource Development Work Program (373.536(6)(a)4., F.S.)
5. Alternative Water Supplies Annual Report (373.707(8)(n), F.S.)
6. Florida Forever Work Plan Annual Report (373.199(7), F.S.)
7. Wetland Mitigation Cash Donation Report (373.414(1)(b)2., F.S.)
8. Water Quality and Water Quantity Grading Report (373.036(7)(b)9. and 373.036(7)(c), F.S.)
9. 2021–2025 Strategic Plan

Strategic Plan Annual Work Plan Report
Fiscal Year 2019–2020

1. Strategic Plan Annual Work Plan Report

I. Executive Summary

The St. Johns River Water Management District (District) Governing Board adopted the Fiscal Year (FY) 2019–20 Strategic Plan in November 2019. This Strategic Plan Annual Work Plan Report is a required element of the annual Consolidated Annual Report.

In accordance with Section 373.036(2)(e)4, *Florida Statutes* (F.S.), the subsequent pages describe implementation of the Strategic Plan for the previous fiscal year, addressing success indicators, milestones, and deliverables. The District continues to place emphasis on our core missions in an effort to provide employees of the District with a more concise and efficient strategy for success. These priorities include the core mission areas, as well as a dedicated section for the District's successful cost-share partnership program.

District's core missions:

- Water Supply
- Water Quality
- Natural Systems
- Flood Protection

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, milestones, and deliverables for FY 2019–20 are identified on the following pages. The progress for each milestone and deliverable is also provided.

II. Water Supply

Goals

- Plan and implement regional water supply plans
- Develop minimum flows and levels (MFLs) and implement prevention and recovery strategies as necessary
- Implement water conservation strategies

One of the core missions of the St. Johns River Water Management District is to implement regional strategies to provide sufficient water for both people and the environment. For most of us, our main source of water comes from underground aquifers, primarily the Floridan aquifer, and that source of water is limited.

Water managers recognize the need to have water resources available for people, homes, businesses, agriculture and other users, while at the same time ensuring that enough water is available to meet environmental needs. Pumping too much groundwater from the aquifer can result in unacceptable impacts, such as drying out wetlands, reducing spring flows, lowering lake levels and degrading groundwater quality from saltwater intrusion. That's why water supply planning is so important. While the District's regulatory program works to ensure these types of impacts do not occur from permitted water withdrawals, the water supply planning program works to determine how much water we will need during a 20-year planning horizon and develop options for alternative water supplies (AWS) to meet these future demands while ensuring the environment is protected.

In accordance with Chapters 163 and 373 of *Florida Statutes*, the District conducts water supply planning for those regions where it determines that existing sources of water are not adequate to meet all existing and future reasonable-beneficial uses and to sustain the water resources and related natural systems through the planning period. The District's water supply planning approach is comprised of three regional water supply plans (RWSPs) that will be updated at a minimum of once every five years, or as needed. RWSPs identify future water supply needs for at least a 20-year planning horizon and list projects and programs to ensure sustainable water supplies for all reasonable-beneficial uses. The three planning regions identified to address local resource concerns are the Central Florida Water Initiative (CFWI) Area, Central Springs / East Coast (CSEC) Area, and North Florida Regional Water Supply Partnership Area.

As a part of fulfilling its mission and statutory responsibilities and to aid the water supply planning and regulatory programs, the District establishes MFLs for priority water bodies within its boundaries. MFLs define the limits at which further water withdrawals would be significantly harmful to the water resources or ecology of an area. The District is also responsible for development of prevention and recovery strategies when a water body does not currently meet or is projected not to meet the adopted MFL for that water body. The District must develop a prevention and recovery strategy that identifies technically sound, science-based solutions to ensure availability of sufficient water for future uses and achieve the MFLs for those affected water bodies.

The District's planning process is ongoing and plans are continually updated to reflect current and projected conditions, such as changes in anticipated population growth or decline that may result in changes to how much water a region will need and where the water may come from to meet those needs. Water conservation is a key component of ensuring an adequate water supply.

Water conservation is the cornerstone of the sustainability of Florida's water supply, whether it be belowground in the aquifer systems or aboveground in our rivers, lakes and streams. Water conservation continues to be a primary tool to meet the District's future water needs. While significant conservation efforts have already been implemented in the District, additional conservation is critical. The District currently has many active and ongoing water conservation programs, including outreach efforts, cost-share projects, and the Blue School Grant Program. In addition, the District participates in the statewide Florida Water Star^{SM} (FWS) program.

The use of reservoirs can be another tool to meet water supply needs by storing excess water on the landscape for future use. Reservoirs are currently an integral part of management of the Upper St. Johns River Basin. These projects are intended to protect the coastal estuaries that are affected by changing salinity and increased nutrients (phosphorus and nitrogen) and sediments from runoff. Several District projects have been built with a partnership between the U.S. Army Corps of Engineers (USACE) and the District, which has allowed the District to move forward on several additional reservoirs. In addition to conventional reservoirs, the District is evaluating the concept of dispersed water storage on private property as an innovative approach to assist in achieving both water supply and water quality goals. These pilot programs will provide storage for flood management, as an alternative source of irrigation, and reduce nutrient loads to downstream water bodies. The dispersed water storage program incentivizes private property owners to retain water on their land for beneficial purposes.

The District is also using reservoirs as another water conservation tool to store water on the landscape as integral parts of the Upper St. Johns River Basin. These projects are intended to protect the coastal estuaries that are affected by changing salinity and increased nutrients and sediments from runoff via east-west canals dredged to drain inland areas to the coast decades ago. One type of project seeks to reroute those canals' freshwater back to inland areas, where, after treatment, it can supply the St. Johns River. The Fellsmere Water Management Area (FWMA) and future C-10 reservoir are examples of projects which capture and treat such flows, benefiting both the Indian River Lagoon (IRL) and St. Johns River.

Success Indicators

- Measure: Draft RWSPs and MFL prevention and recovery strategies completed and approved
- Measure: Number of projects and water made available
- Measure: Percentage of draft and final annual MFLs Priority List and Schedule milestones met on schedule
- Measure: Annual residential water usage per capita
- Measure: Percent of agricultural areas utilizing efficient irrigation methods

Summary of Activities:

Regional Water Supply Plans

The 2020 CFWI RWSP was approved by all three water management districts' governing boards in November 2020. In addition, District staff finalized the draft CSEC RWSP. As a part of the development of the draft CSEC RWSP, the District conducted more than 27 stakeholder outreach meetings to solicit local stakeholder resource perspectives and input in to the draft CSEC RWSP. The draft CSEC RWSP will be workshopped in 2021 and presented to the District's Governing Board for approval. Also, the District continued to work collaboratively with SRWMD and other stakeholders on the 2022 update to the North Florida RWSP (NFRWSP).

The District publishes an annual Five-Year Water Resource Development Work Program (WRDWP). This document lists all of the water resource projects that are ongoing and funded for the next five years and is included in this report in Chapter 4. By September 30, 2020, 17 projects listed in the 2020 WRDWP were completed. The total estimated water made available through these projects is 8.3 million gallons per day (mgd).

The NFRWSP (2015–2035) identified a series of water resource development (WRD) projects that included the Black Creek WRD project. This project, which will be built over four years, will capture up to 10 mgd of water flow from the Black Creek South Fork during high water periods. The water will then be pumped through a transmission system and discharged to an Upper Floridan aquifer recharge system and into Alligator Creek. The project is expected to contribute to regional MFLs recovery and will help improve water levels in lakes in the Alligator Creek system, including drought-stressed lakes Brooklyn and Geneva. This past year the District re-examined effluent treatment options after attempts to secure Site Specific Alternative Criteria stalled. Ninety percent of project design is complete and permitting activities are ongoing. Land and easements for the project have been acquired. Funding for the estimated $50+ million project includes legislative appropriations from the Land Acquisition Trust Fund in 2017, 2018, and 2019.

Minimum Flows and Levels

The District's Governing Board approved the Draft 2020 MFLs Priority List and Schedule on October 13, 2020, which was then approved by DEP on December 15, 2020. The District plans to adopt MFLs for a total of 15 systems through 2024. The 2020 MFLs Priority List and Schedule 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.

Rulemaking and adoption of the MFL and the required associated Prevention Strategy were completed for Lake Butler, in Volusia County, in August 2020. A Notice of Proposed Rule Development for MFLs for lakes Brooklyn and Geneva, in Clay and Bradford counties, was approved by the District's Governing Board in August 2020. Also, a Notice of Proposed Rule Development for the rules associated with the required Recovery Strategy for lakes Brooklyn and Geneva was approved by the District's Governing Board in November 2020. These MFLs represented all the MFLs the District planned to complete in 2020.

Water Conservation Strategies

The District works with stakeholders and partners to find new and innovative ways to conserve water. The District implemented multiple outreach efforts during FY 2019–20.

These efforts included sending District staff to discuss water conservation to 17 schools within the District, reaching 3,342 students and teachers, 53 civic organizations within the District, as well as 11 other public events, which reached 7,370 individuals. In-person events were not occurring from mid-March until the end of October because of the COVID-19 pandemic and new engagement opportunities in the form of webinars were utilized to engage the public and share information about the District. A total of 16 webinars were hosted during the year engaging a total of 1,627 viewers. An additional new educational program that was begun in FY 2019–20 is offering continuing education courses for community association managers, who manage the numerous HOAs across the District. This program has offered 10 courses and had 221 participants in FY 2019–20.

The District continued the Water Less campaign that launched in October 2019. The Water Less campaign included seasonal messages to remind homeowners to maintain their irrigation systems and monitor their water use.

Administration of the FWS program by the Florida Home Builders Association (FHBA) continues to gain traction with builders and resulted in just over 6,000 homes certified and 17 multifamily projects with a total of 2,300 residences certified through December 2020. The Accredited Professional program continues to be administered by the Florida Nursery and Landscape Association and has trained more than 1,200 landscape professionals through December 2020. FWS, developed by the District and launched in 2007, became a statewide program by 2010. The program certifies residential and commercial buildings which meet certain criteria that result in measurable water savings. In 2020, District staff collaborated with the University of Florida, Florida-Friendly Landscaping program to develop a joint certification tier to replace FWS Gold. It is expected to launch in 2021.

In 2017, the District launched a water conservation coordinator collaboration with utility and local government staff that meets quarterly to focus on a topic of conservation and provide networking opportunities to advance efforts and knowledge in conservation programs. In 2020, these gatherings were conducted virtually with more than 60 participants.

The District, in partnership with local stakeholders, implemented various water conservation strategies. As a result, residential water use decreased 17 percent from 103 gallons per capita per day (gpcd) in 2010 to 85 gpcd in 2019. Water conservation projects included utility rebate programs for efficient shower heads and faucets, high efficiency toilets as well as funding for more efficient irrigation systems, smart irrigation controllers, and irrigation evaluations to improve efficient delivery of water to our landscape. Since 2014, public water supply conservation has assisted in funding 49 projects totaling $7.1 million and yielding 6.5 mgd.

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 $2.6 million in projects to increase irrigation efficiency for approximately 3,660 agricultural acres. Additionally, these projects reduced overall groundwater consumption for these irrigated acres by 1.7 mgd.

III. Water Quality

Goals

- Provide restoration efforts to springs/aquifer
- Provide restoration efforts to coastal water bodies
- Provide restoration efforts to the St. Johns River

The quality of our water in Florida is vitally important not only to the flora and fauna that live in and around the water, but also to our economy and wellbeing of our residents. Governor DeSantis established water quality as a focus of his administration with Executive Order 19-12, which outlined his environmental priorities. The District, along with the Governor, recognizes that where water quality goals are not being met, it is common to see negative impacts to natural systems, decreased recreational value, increased water treatment costs and impacts to property values.

Assessing and managing programs to protect and restore water quality is a critical component of water resource governance and a primary mission of the District. Water quality is essential to maintaining a high standard of living for our residents and for the health of natural systems. Strategies to achieve these water quality goals include a commitment to comprehensive monitoring of the condition of water resources and, where water quality is impaired, working with our partners to design and implement projects to improve water quality and beneficial ecosystem functions. The District's Bureau of Water Resource Information operates the districtwide water quantity and quality monitoring network. Monitoring provides a wealth of information that enables the District to make resource decisions based on accurate and timely information. In addition, the public can use the data to acquire a basic knowledge of groundwater, springs and water bodies in which they have an interest.

The District also protects water quality and natural systems by implementation of environmental resource protection permits for activities that affect wetlands and/or runoff. In this way development occurs that minimizes environmental impacts and protect water quality.

The District works to address water quality issues through a variety of activities, including cost-share projects with local governments, aquatic systems restoration and protection projects; permitting; land acquisition and management activities. In the Ocklawaha River Basin, the District's acquisition and restoration to wetlands of former muck farms has contributed to water quality and habitat improvements in lakes Apopka, Dora, Eustis, and Griffin. The District partners with anglers and bait processors to harvest rough fish from certain lakes each year. This public private partnership results in the most cost-effective phosphorus removal tool available to the District, while at the same time supporting anglers and local fish processors. Strategies to protect and restore water quality include a commitment to comprehensive monitoring to guide impairment determinations, manage restoration projects and evaluate effectiveness. These efforts are closely coordinated with many partners, including DEP's total maximum daily load (TMDL) and basin management action plan (BMAP) programs.

Springs provide natural, recreational and economic benefits for Florida's residents and visitors and ultimately reflect the health of the Floridan aquifer, the source of drinking water for a

majority of the District's population. To ensure the aquifer is protected, the District is focused on generating scientifically sound approaches and projects to reduce or eliminate pollution-related problems. The District continues to facilitate cost-effective investment of the ongoing allocation by the Florida Legislature of $50 million per year for springs protection through District and DEP cost-share programs with local partners.

The District collaborates in the management and restoration of two major coastal systems, the IRL and the Northern Coastal Basins (NCB). The District's commitment to these basins is exemplified by its ongoing support for the IRL National Estuary Program (NEP) and completion of applied research into water quality problems within the IRL, including algal blooms and losses of seagrass. These coastal waters yield substantial social, economic and ecological benefits, and their health reveals the efficacy of collective management throughout their watersheds because they integrate the influences of stressors delivered by their tributaries. Management focuses on reducing undesirable loads of freshwater, sediments, nutrients, and toxicants, revitalizing altered habitats, tracking key indicators of ecosystem health, and expanding our understanding of existing and future threats to these complex estuarine systems. Through this applied research, District staff have the information to identify more effective management actions.

The St. Johns River and its tributaries is comprised of the Lower, Middle and Upper St. Johns River basins, Lake Apopka and the Ocklawaha River Basin. There are ongoing efforts to improve water quality throughout these basins, primarily to address nutrient pollution. The District's investigation into the land application of biosolids is supporting DEP's efforts to better manage this source of phosphorus to the environment. The District is also dedicated to continuing to fund major water quality projects, such as the Crane Creek/M-1 Canal Project, which is expected to be completed in 2022. These efforts support DEP-approved BMAPs to address water quality impairments. Nutrient load reductions are the focus of many efforts due to their role in stimulating excessive algal growth and bloom frequency and intensity, which harm both native communities and human water uses.

Success Indicators:

Measure: Number of strategically valuable projects implemented
Measure: Number of projects developed and implemented
Money invested (District and collectively)
Nitrogen load reduction achieved
Groundwater offset/increased reuse achieved
MFLs met
Enhanced aquifer recharge achieved
Measure: Acres of land preserved or restored (springs)
Recharge achieved
Nitrogen load reduction achieved
Measure: Fulfill network and project objectives, complete reports of status, trends and projects
Measure: Reductions in loads of freshwater, sediments, nitrogen and phosphorus from watersheds
Measure: Number of projects and acres of restored wetlands

Measure: Complete agreed sampling for BMAPs and submit update on schedule, support adaptation of projects in the plans, and demonstrate the value of completed projects
Measure: Reduced nutrient loading to nutrient-impaired water bodies
Measure: Improved nutrient concentration and water transparency, fewer harmful algal blooms, increased submerged aquatic vegetation (SAV)
Measure: Number of acres of functional floodplain preserved or restored

Summary of Activities:

Districtwide
Since 2015, the District has provided more than $110 million in cost-share funding toward 178 water quality improvement projects districtwide, with a total construction cost of nearly $315 million. These projects have resulted in estimated total nitrogen (TN) nutrient load reductions of nearly 1.5 million pounds/year, a one-time TN load reduction of nearly 273,000 pounds, estimated total phosphorus (TP) nutrient load reductions of more than 180,000 pounds/year, and an estimated one-time TP load reduction of nearly 168,000 pounds.

For FY 2019–20, 49 contracts were executed across all District cost-share programs (Districtwide, REDI, and Agriculture) totaling approximately $23.3 million. The estimated water resources benefits are:

- Approximate total nitrogen (TN) nutrient load reduction: 105,000 lbs./yr.
- Approximate TN nutrient load one-time reduction: 189,000 lbs. (one muck removal project)
- Approximate total phosphorus (TP) nutrient load reduction: 21,500 lbs./yr.
- Approximate TP nutrient load one-time reduction: 115,800 lbs. (one muck removal project)

Springs/Aquifer
Since passage of the Springs and Aquifer Protection Act of 2016, the Legislature has committed $250 million for springs protection which has led to extensive new partnerships with regional stakeholders. The Act also required all prevention and recovery strategies for Outstanding Florida Springs to include a minimum of 25% financial assistance from the District for each listed project.

In an effort to find solutions while reducing the burden upon taxpayers, the District has utilized its cost-share programs, funding 12 projects in support of springs protection in FY 2019–20. The funds invested for these projects are $5,074,442 by the District, $10,363,494 via FDEP and $20,299,032 by partners such as local governments, utilities and agricultural interests resulting in a grand total of $35,736,967 being devoted to springs protection. The estimated benefits include a TN load reduction of 22,655 lbs./yr. and groundwater offset/increase of 7.7 mgd.

Springs science developed in the joint 2018 District and University of Florida Collaborative Research Initiative on Sustainability and Protection of Springs continues to spawn additional research. Numerous resulting findings were presented at the University of Florida's Biennial Water Institute Symposium in February 2020.

Springs and aquifer monitoring proceeded as planned. Aquifer and springs monitoring is shared with DEP for BMAP preparation and evaluation. District field and laboratory staff overcame numerous challenges to their daily routines due to constraints imposed by the COVID-19 pandemic. Despite the challenges, they continued their work, and successfully collected and processed 5,685 water quality surface and groundwater samples. The 2020 update to the Status and Trends water quality report was published on the District website in August 2020. The report summarized water quality at 209 surface water stations, 275 Upper Floridan aquifer wells, and 25 springs monitoring stations.

Coastal Water Bodies

Coastal waters, such as the IRL, have become increasingly more fragile due to rising sea levels and discharges of freshwater routed from the St. Johns River watershed. In an effort to reduce freshwater discharges to the IRL, the District initiated a pilot project involving dispersed water treatment. This project will reduce nutrient loads from both urban and agricultural stormwater and has been approved to be on private property. The pilot project, knows as the Fellsmere Joint Ventures Dispersed Water Storage project, is located in Indian River County and will provide environmental benefits from using private agricultural lands for water storage to improve river and stream flow, and reduced nutrient loading to the St. Johns River and the IRL. Fellsmere Joint Ventures has completed 60% design drawings. The District has reviewed the drawings and provided comments. The design continues and permitting efforts will begin early in 2021.

The District funded a top-ranked project benefitting the IRL, Crane Creek M-1 Canal Flow Restoration. The objective of this project is to reduce nutrient loading to the IRL by redirecting flows to a treatment pond prior to flowing into the headwaters of the St. Johns River. This project will eliminate approximately 7 mgd of base flow of freshwater to the IRL, reducing nitrogen loads by 24,000 lbs./yr. and 3,100 lbs. phosphorus annually.

Additionally, the C-10 Water Management Area is a 1,300-acre reservoir in western Palm Bay intended to increase the re-diversion volume of freshwater to the St. Johns River from the IRL, thereby reducing nutrient and sediment loads to the IRL. The future design includes four miles of new levee, improvement of four miles of existing federal levee, and an outfall structure and pump station.

The District has continued its technical and financial support for the IRL National Estuary Program (IRL Council) by monitoring water quality and seagrass and contributing $500,000 annually.

St. Johns River

Upper St. Johns River Basin:

In 2018, the District's ambient water quality monitoring plan identified a significant increase in total phosphorus concentration in portions of the Upper St. Johns River Basin. Upon investigation, the District identified a significant increase in the land application of Class B biosolids within the basin. The District's data lead DEP, who manages permitting for the land application of Class B biosolids, to develop a Technical Advisory Group to recommend modifications to the permitting rules. The Legislature also directed DEP to update the biosolids rules.

The District expanded water quality monitoring in watersheds with significant biosolids application areas. The District was provided $1.9 million by DEP to advance these efforts by investigating environmental effects of biosolids application and evaluate potential remediation methods. Procurements for this work are underway. In addition, procurements are underway to expand water quality monitoring associated with biosolids in FY 2020–21.

Middle St. Johns River Basin

The District issued a Request For Information during FY 2019–20 to identify promising in-lake nutrient reduction technologies that reduce the recycling of nutrients from sediments to the water. Top ranked technologies will be evaluated in the laboratory using Lake Jesup sediment cores in FY 2020–21.

The design and permitting for the Lake Jesup Nutrient Reduction and Flow Enhancement project is ongoing. The objective of this project is to complete the design for a wetland treatment system that will capture and treat pumped inflow from Lake Jesup, whenever lake water levels make it feasible, and develop a dredging plan for the flow enhancement channel (known as Channel C) connecting the St. Johns River to the eastern portion of Lake Jesup.

Lower St. Johns River Basin

In FY 2019–20 a full-scale demonstration project to remove TP from Doctors Lake wastewater treatment plant effluent began operation. The goal of the project is to clearly demonstrate that nutrient treatment technologies can cost-effectively remove TP from wastewater effluent water. The project is reducing the phosphorus concentration by ~90% and will assist in furthering water quality improvements in Doctors Lake and the Lower St. Johns River Basin. The treatment technology selected will be run at full scale and remove an estimated 6,500 lbs./yr.

Upper Ocklawaha River Basin:

Water quality was good in 2019 and 2020 in several of the basin lakes compared to historical levels, in some cases meeting (Eustis) or close to (Griffin) the TMDL TP concentration targets. The 2016 average TP concentration in Lake Apopka was the lowest in the period of record (64 ppb). Although concentrations had been somewhat higher in 2017 to 2020, the average annual TP concentration has been decreasing from a spike in 2018 to 65 ppb in 2020. Chlorophyll-*a* (a measure of the amount of algae) during this period have generally declined and are good compared to historic levels, despite slight increases in P concentrations.

For 2019, estimated TP loading, which is the water concentration multiplied by the volume of water, exceeded the TMDL or PLRG (pollutant load reduction goal unique to Lake Weir) targets for all the major lakes in the basin, except for Lake Apopka, due largely to high tributary flows from upstream lakes. Loading also exceeded the TMDL or PLRG targets for all the lakes in 2018, but for the lakes affected by major District restoration projects, including Apopka, Beauclair, Dora, Eustis, and Griffin; the TMDL loading targets were met for at least the six preceding years. Summary information is below:

Lake Apopka:

The majority of the phosphorus load reduction to Lake Apopka has been accomplished through the legislatively directed acquisition and restoration of the farms on the former floodplain

wetlands on the lake's north shore. The District is implementing three large projects to improve our ability to manage water on the north shore, reducing the volume needing to be pumped back to the lake.

1. Phase 4 Pump and internal levee upgrades is complete.
2. Zellwood-Duda interconnect began construction in late 2020 and will be completed in 2021.
3. Duda internal levees and water control structures are approved for construction in 2021.

The District is also implementing three in-lake techniques to remove phosphorus from Lake Apopka's water as means to reach the phosphorus target concentration.

1. Lake Apopka Rough Fish Harvest: In the FY 2019–20 fishing season, the District harvested 941,000 pounds of gizzard shad from Lake Apopka, removing 7,528 pounds of phosphorus from the lake.
2. The District's second phosphorus removal technique is the operation of the Marsh Flow-Way (MFW), a recirculating wetland which filters particulate matter from the lake's water. The MFW began operation in 2003 and is currently undergoing maintenance and is hoped to be back in operation in mid-2021.
3. In 2019 the District entered into a pay-for-performance contract with Phosphorus Free Water Technologies (PFWT) to remove phosphorus from the lake's water. PFWT has constructed their facility and has begun operation and expects to ramp up to full capacity in early 2021.

Several lake sediment removal projects were completed in the past year. The experimental sump dredging in Lake Apopka was completed in FY 2019–20. Early indications suggested that the sump is collecting flocculent sediments. Monitoring in future years will be needed to assess the effectiveness of this technique.

Permitting activities of the Lake Apopka Targeted Lake Restoration Dredging of unconsolidated floc were completed in FY 2019–20. The project includes removal of unconsolidated floc present on the lake bottom with placement of this material on the LANS. The unconsolidated floc limits light and submerged aquatic vegetation expansion in the lake. Material placement on the Lake Apopka North Shore (LANS) provides cover over soil with elevated pesticide levels and the soil restoration in areas with significant subsidence and oxidation. The project can proceed if funds become available.

Establishment of native submerged aquatic vegetation (SAV) is a restoration goal for Lake Apopka that also improves water quality. Lakewide estimated SAV coverage increased from 109 acres in 2018 to 202 acres in 2019. To expedite SAV recovery, 9,920 individual Vallisneria and Potamogeton plants (2.01 acres) were planted in FY 2019–20. In addition, emergent plants, including 26,327 spatterdock, 1,455 white water lily, and 600 American lotus, were planted, which reduce wave action and suspended sediments.

IV. Natural Systems

Goals

- Implement activities that conserve or restore native communities

The District's stewardship duties toward natural systems are split between lands in which the District has acquired a legal interest (fee or less-than-fee acquisitions) and the general natural lands and waters within the District. Aquatic natural systems are enhanced through efforts to improve water quality, restored hydrology, planting native species, and management of invasive and/or exotic species. Most of the natural systems benefits to the lands not owned by the District are derived through effective permitting, water quality improvement projects, MFL adoption, water supply planning, and cost-share projects. While these efforts all protect and conserve natural systems, they are tracked in other areas within this plan.

Of the approximately 626,642 acres of land the District has acquired in fee (full and joint), District staff is responsible for managing 425,425 acres. The remaining 201,217 acres are managed by partner agencies, including the Florida Fish and Wildlife Conservation Commission, Florida Forest Service, and a number of counties. In addition, the District also manages 6,077 acres owned by partner agencies. The District's investment in land has focused on wetlands because of the many water resource values and services they provide, such as water quality treatment, flood water storage, and habitat for important species. The District has purchased conservation or flowage easements over approximately 158,000 acres of land. These lands are inspected to ensure the private landowner is managing within the easements' requirements. While performing the inspections, District staff also assist landowners with land management issues they may encounter such as how to manage the newest invasive species.

Providing the right balance between public access, outdoor recreation and restoration activities can prove challenging at times, but currently more than 98% of District land is open for recreation. In addition, the District has 125 active special use authorizations which allow compatible and appropriate uses on District lands. Examples include use for research, trail running competitions, special opportunity hunts for disabled veterans, and outdoor wildlife appreciation festivals. Ongoing management activities, such as prescribed burning and invasive plant management, are key to the protection of the natural systems' condition. Restoration activities focus on encouraging native vegetation through planting and by managing or removing competitive invasive species. Because conditions change over time, a system of adaptive management of prescribed fire, hydrologic management, invasive control and native species planting is used. Sound adaptive management requires an effective monitoring system to evaluate how past treatments have worked, if new treatments are needed, and when actions should be taken.

Managing the lands and restoring them can also include leases for a variety of resource-backed activities that partner the public and private sectors to use public lands for a public good. Uses include 31 grazing leases on approximately 51,500 acres and seven apiary leases on 54 different sites. All revenues generated by these leases are invested in future land acquisition, restoration or management.

Success Indicator:

Measure: Percent complete of identified tasks to 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 of annual survey and treatment acres complete of Upper St. Johns River Basin and Ocklawaha River Basin for presence and coverage of Carolina willow and Old World climbing fern

Measure: Annual completion of strategies for Carolina willow management and invasive plant management activities to improve ecologic and hydrologic conditions, including mechanical treatments that remove nutrients

Measure: Reduction in percent cover of invasive species

Measure: Acres of wetlands restored

Measure: Percent of District property rated level 1 or level 2 on scale of Ecological Condition Class

Acres treated with prescribe burns

Acres of invasive species treated

Summary of Activities:

Conservation and Restoration of Natural Communities

District staff are about 60% complete with development and implementation of the spatial data storage and management to increase effectiveness of evaluation, planning, and monitoring of restoration work and invasive plant management.

District staff completed 100% of the *Lygodium* surveys totaling 258,593 acres. Carolina willow surveys have been moved to once every three years and no surveys were done in FY 2019–20. The District's Bureau of Land Resources had a successful year treating invasive plants; meeting goals with regards to aerial treatments of both *Lygodium* and Carolina willow. Of the 27,363 acres of invasive plant treatments conducted, more than 12,315 acres was *Lygodium* and 3,145 acres were Carolina willow. The District also investigated alternative vegetation removal techniques and completed the mechanical harvest and removal of 12 acres of mixed invasive vegetation, including Carolina willow and cattail, in Volusia County's DeBary Bayou. In the last three years there has been approximately a 30% reduction in willow coverage on the District-managed freshwater marshes.

Also, to reduce herbicide use at the Lake Apopka North Shore, 8,000 triploid carp were stocked into several marsh cells to help manage hydrilla on the property. On another former muck farm restoration project, 65 acres of shrub encroached marsh were mowed at Ocklawaha Prairie Restoration Area.

District land managers track the condition of the properties using a condition class system that tracks the progress of the application of prescribed fire and other disturbances used to manage the different fire-dependent habitats. There are five classes ranging from 1 (within 1 return interval since disturbance) to 4 (too far gone to recover without starting over) and class 5 (ecosystem not maintained by disturbance). Within the District-owned lands that are managed

with disturbance, 47% are in condition class 1 and 9% are in condition class 2 (within two return intervals since disturbance).

FY 2019–20 was a difficult year for the District's prescribed fire program. Weather conditions and the COVID-19 pandemic reduced windows of opportunity for prescribed burns. Despite the challenges staff were able to conduct 61 prescribed burns totaling 16,638 acres on 21 conservation areas. Additionally, staff fought 15 wildfires that burned a total of 1,754 acres and expended 239 hours of work time.

V. Flood Protection

Goals

- Maintain federal flood management systems
- Maintain non-federal flood management systems

Florida has long been susceptible to flooding from natural disasters. Extreme rainfall can cause rivers and streams — such as the north-flowing, 310-mile-long St. Johns River — to surge beyond their banks, damaging homes and businesses. Since the 1920s, state and federal agencies have funded enormous projects to protect homes and families from the dangers of flooding. When the decision was made to form the District in 1972, the Legislature decided one of the four core missions must be flood protection. As of 2018, the District maintains 69 miles of canals in addition to the 116 miles of federal flood protection levees. Working with state, federal and regional partners, the District's flood control structures not only provide flood protection that will support local communities, but also support the core missions of water supply, water quality, and natural systems.

The District employs both structural and non-structural techniques to provide flood protection. The District operates flood-control structures in the Upper Ocklawaha River Basin — the Apopka-Beauclair Lock and Dam, Burrell Lock and Dam and Moss Bluff Lock and Dam. Non-structural flood protection is achieved through stormwater management rules, acquisition and conservation of floodplain wetlands to provide floodwater storage and the collection and dissemination of real-time hydrologic data to guide flood preparedness and responses.

Structural techniques include federal and non-federal flood control structures and levees. The District is the local sponsor of two USACE federal flood management projects: The Upper St. Johns River Basin Project and the Ocklawaha River Basin portion of the Four River Basins, Florida Project. These projects include approximately 116 miles of levees, 12 major water control structures and approximately 76 minor water control structures. The District is responsible for operation and maintenance of these facilities. As the local sponsor, the District is responsible for acquisition of lands required for operation and maintenance of the federal projects.

The District is also responsible for maintaining nearly 18 miles of non-federal levees, several major and minor water control structures, weirs, navigational locks and pump stations. In addition to the federal works, the District has projects that provide additional flood protection benefits, such as the FWMA and the Harris Bayou water control structure. The District maintains more than 69 miles of canals and 1,600 miles of roadways and trails. The District has also purchased full fee or flowage easements of river floodplain that provide non-structural water storage and flood protection. The District, in coordination and cooperation with the U.S. Geological Survey, operates a monitoring network that provides critical hydrologic data to other agencies and governmental entities and the public for flood management activities throughout the District.

Success Indicators:

- Measure: Budget, schedule and resolve deficiencies identified by USACE or District staff within approved time frame
- 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 operation and maintenance bureau chief
- Measure: Provide daily oversight of water level readings, rainfall projections as well as antecedent conditions, making gate changes as necessary and updating published water levels on the District's website
- Measure: Budget, schedule and complete water control structure rehabilitation according to work plan
- Measure: Budget, schedule and resolve deficiencies
- Measure: Inspections completed semi-annually (first and third quarter) with reports finalized by the following quarter
- Measure: Priority flood management water level data sites are maintained and repaired within the agreed upon time frames

Summary of Activities:

Maintenance of federal and non-federal systems

The District's primary flood protection goals are to maintain both the federal and non-federal flood management systems. To this end, the District maintains 115 miles of USACE/District-constructed flood control levees, 175 miles of farm/project levees, 12 major flood control structures, 76 minor water control structures, 15 weirs, and 11 pump stations. In addition, the District maintains 69 miles of canals, more than 1,600 miles of roadways and trails, and three navigational locks on over 700,000 acres of District-owned properties.

To ensure that the District meets its goals, the District adheres to a strict semi-annual inspection schedule of all flood management systems. The results of these inspections are to be submitted to USACE for its review and documentation within 90 days of the inspections being completed. In FY 2019–20, the District completed the semi-annual inspections in November 2019 and June 2020. In addition, USACE completed a routine levee safety inspection of all federal levees in August 2020. The results of the District's inspections were submitted to USACE in February 2020 and September 2020. The results of the USACE routine levee safety inspections have not been received as of November 2020.

Once the inspections are completed, District staff compile a list of all unacceptable and minimally acceptable deficiencies. The unacceptable deficiencies are typically scheduled for rectification within six months of the inspection. Some deficiencies, due to the cost associated with the repair, are typically addressed within 12 months of the inspection. Approximately 70% of the unacceptable deficiencies noted during the November 2019 inspection were rectified and repair work associated with deficiencies from the June 2020 inspection are still ongoing. In addition to resolving individual deficiencies, significant improvements were made to the following flood protection levees in FY 2019–20: approximately six miles of L-75 levee was

reconstructed, vegetation within several miles of canals was removed to promote flow, several miles of woody vegetation along levee toe of slope was removed to promote ease of inspections and reduce concerns associated with piping, and slopes adjacent to S-161 and S-161A on levee L-73 Section 2 were regraded to eliminate erosion and sloughing concerns.

Another success indicator is the completion of work items associated with the District's long-range plan to rehabilitate all major and minor water control structures. In support of this plan, the District completed the rehabilitation of the S-96C structure, replaced the S-161 hydraulic lift system with a more reliable drum and cable lift system, upgraded the remote operations software and hardware on all major flood control structures replacing outdated systems, and installed monitoring/security cameras at each major water control structure. In addition to the above levee work, USACE requires that all submerged minor water control structures be inspected every five years. During FY 2019–20, the District contracted with an underwater diving service to perform inspection on each of the 76 minor water control structures and others that the District deemed important for water quality purposes.

Other success indicators include the day-to-day monitoring of water level readings and rainfall projections to ensure that all water bodies are maintained per the regulation schedule developed for that water body. This includes ensuring that all flood management water level data sites are maintained and repaired as required. For FY 2019–20, water bodies were maintained per the regulation schedule and water level data sites were maintained and repaired within acceptable timeframes.

Other infrastructure that was improved or refurbished include 10 miles of the Lake Apopka Wildlife Drive, which is visited by nearly 200,000 people each year; six miles of Fellsmere Grade, which is the gateway to the Fellsmere Recreational Area; and the newly opened Fellsmere Water Management Area, rehabilitated five pumps and motors at the Marsh Flow-Way pump station, which pumps treated water from Lake Apopka back into the Lake; refurbished two airboat crossovers on L-77W to safely promote public access within the Blue Cypress Marsh Conservation Area; refurbished several water quality monitoring platforms in the Upper St. Johns River Basin and the Upper Ocklawaha River Basin; and stabilized several culverts within the Palm Bluff Conservation Area that were damaged during Hurricane Irma.

Water level monitoring equipment at priority flood control sites was maintained without any issues during important rainfall or flood events. Minimal repairs were needed at other times and were completed within the 72-hour service level agreement for priority sites.

VI. Supporting Activities

Goals

- Develop and implement supporting activities that efficiently assist District goals

The District strives for constant self-evaluation and improvement in all areas in order to successfully manage and protect our natural resources. The District focus is on providing exceptional service to taxpayers, businesses and other government entities through communication, fiscal efficiency and implementation of core missions. Project and operational progress, along with overall organizational efficiency and effectiveness, are continuously measured and reported. A highly skilled, motivated work force is the key to achieving the goals set out in this strategic plan. As such, the District is committed to investing in and empowering District employees so that they can develop personally, professionally and provide high-quality service.

The District recognizes that it cannot support each core mission without reaching out to local stakeholders and businesses within the District. In accordance with Chapter 373, *Florida Statutes*, the Governing Board may participate and cooperate with county governments, municipalities, water supply authorities, and other interested public and private entities in water management programs and projects of mutual benefit. These programs and projects must be consistent with the District's statutory authority and ensure proper development, utilization and conservation of water resources and ecology within the jurisdictional boundaries of the District. The District currently funds three cost-share programs on an annual basis to support the core mission areas; these are the Districtwide Program, Rural Economic Development Initiative (REDI) Communities/Innovative Projects Program and the Agricultural Program.

Success Indicators:

Measure: Projects are completed in a timely manner and the deliverables document the projects' success for Districtwide and REDI Communities / Innovative Projects cost-share
Measure: Number of new applicants from annual outreach efforts
Measure: Percent allocated agricultural cost-share funds expended annually
Measure: Number of presentations to agricultural commodity groups as requested completed

Summary of Activities:

Supporting Activities that Assist District Goals

Since the beginning of the District's cost-share programs beginning in FY 2014–15, the District collaborated with local partners to implement construction-ready projects and water conservation programs that advance the District's four core missions: water supply, water quality, flood protection, and natural systems protection. From October 1, 2019, through September 30, 2020, the District's outreach efforts resulted in the receipt of three cost-share applications to the districtwide cost-share (DWCS) program from first-time applicants: Bishop's Gate Homeowner's Association, Holly Hill, and the Kashi Church. For FY 2019–20, 21 contracts

were executed for the DWCS program totaling $19,733,312. The estimated water resources benefits are:

- Approximate total nitrogen (TN) nutrient load reduction: 54,000 lbs./yr.
- Approximate TN nutrient load one-time reduction: 189,000 lbs. (one muck removal project)
- Approximate total phosphorus (TP) nutrient load reduction: 11,350 lbs./yr.
- Approximate TP nutrient load one-time reduction: 115,800 lbs. (one muck removal project)
- Approximate total water conserved: 0.01 mgd.
- Approximate total alternative water supplies developed: 2.1 mgd.
- Approximate total acres protected from flooding: 53.5 acres.

The District also administers the Rural Economic Development Initiative (REDI) and Innovative Cost-Share funding program. For FY 2019–20, the District provided construction costs for two projects, up to the program cap of $500,000 per project, for a total of $1,000,000. The estimated water resources benefits are:

- Approximate TN nutrient load reduction of 750 lbs./yr.
- Approximate TP nutrient load reduction of 470 lbs./yr.

As of September 30, 2020, 33% percent of the allocated funds were expended for the 21 FY 2019–20 DWCS projects. Of those 21 projects, six were approved for no-cost time extensions. One FY 2019–20 approved project was cancelled. One hundred percent of the funds allocated for the two FY 2019–20 REDI / Innovative cost-share projects were expended.

The District also makes funding available to agricultural producers through the Districtwide Agricultural Cost-Share Program and the Tri-County Agricultural Area (TCAA) Water Management Partnership. During FY 2019–20, 21 districtwide projects and five TCAA projects were approved for $2.6 million in funding. Out of the 26 projects, 22 were completed during the fiscal year and four were approved for no-cost time extensions. The estimated water resources benefits are:

- Estimated TN annual loading reduction of 50,300 lbs.
- Estimated TP annual loading reduction of 9,650 lbs.
- Estimated water conservation: 2.25 mgd

Seventy-seven percent of allocated agricultural funds were expended in FY 2019–20.

Agricultural outreach continues to be an important forum 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 virtual presentations during COVID-19 shutdowns. This outreach included updates on District agricultural projects, District grazing leases, water supply planning, and agricultural cost-share funding opportunities. There have been 12 presentations to various agricultural groups, including the Florida Cattlemen, Florida Farm Bureau, Association of Florida Conservation Districts and various University of Florida Institute of Food and Agricultural Services groups.

Minimum Flows and Minimum Water Levels Priority List and Schedule

2. Minimum Flows and Minimum Water Levels Annual Priority List and Schedule

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Tables

I. Introduction

Pursuant to Sections 373.036(7) and 373.042(3), *Florida Statutes* (F.S.), the St. Johns River Water Management District (District) is required to annually update its priority list and schedule for the establishment of minimum flows and levels (MFLs), submit the updated list and schedule to the Florida Department of Environmental Protection (FDEP) by November 15 for review and approval, and include the FDEP-approved list and schedule in the District's Consolidated Annual Report. In accordance with Section 373.042(3), F.S., the District proposed a 2020 MFLs Priority List and Schedule (2020 Priority List) for establishing MFLs during the planning period 2021–2024. The District's Governing Board approved the 2020 Priority List on October 13, 2020, and it was submitted to FDEP for review and approval on October 26, 2020. FDEP approved the District's 2020 Priority List on December 15, 2020.

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 the District are typically 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 levels of flows 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). For some springs, MFLs are set as long-term minimum average flows, and for some lakes, MFLs are set as exceedance percentiles (e.g., minimum P25, P50 and/or P75). 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.

Section 373.036(7)(b)2, F.S., requires the FDEP-approved MFLs priority list and schedule to be included 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.

II. 2020 MFLs Priority List and Schedule

During the planning period from 2021–2024, the District plans to adopt MFLs for a total of 13 systems. The 2020 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 summarizes the evaluations by water body type during the planning period. There are no new springs on the 2020 Priority List; Wekiwa Springs and Rock Springs are reevaluations, and therefore not listed under springs. The District's 2020 Priority List is presented in Tables 2–1 through 2–4. As noted in Tables 2-1 through 2-4, some systems will have adopted MFLs only if they are the most constraining within their group. For example, the Burrell basin lakes will result in one adopted MFL (the most constraining), not four.

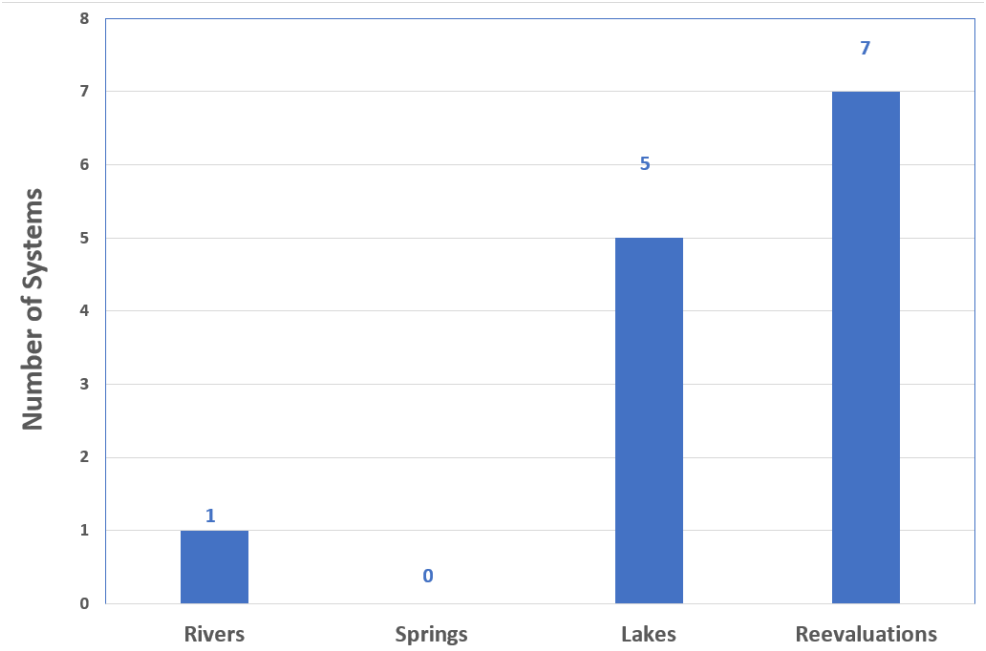

Figure 2-1. Number of systems to be evaluated

Currently, the District has established MFLs for 130 water bodies (103 lakes, 14 springs, six rivers, and seven wetlands), and has re-evaluated 32 MFLs, for a total of 162 rules. The updates reflected in the 2020 Priority List are summarized below.

The Notice of Proposed Rule for Lake Butler, in Volusia County, and the Notice of Rule Development for Lakes Brooklyn and Geneva, Clay and Bradford counties, were approved by the District Governing Board on August 11, 2020.

The 2020 Priority List includes the following changes to the approved 2019 MFLs Priority List and Schedule:

- Rescheduling to 2021 of Wekiva River at SR46, Wekiwa Springs, Rock Springs and Little Wekiva River to allow for completion of collection of critical hydrological data, and potential surface water model updates to better estimate potential impacts to these systems;
- Rescheduling of Sylvan Lake, and Lake Apshawa South to 2021, rescheduling of Johns Lake, Redbug Lake, and Lake Prevatt to 2022, and East Crystal Lake to 2023 to allow time for the completion of surface water modeling and to allow time for the Central Florida Water Initiative (CFWI) peer review process; and
- Rescheduling of Lake Weir to 2024 to allow for completion of, and inter-district collaboration on, a new regional groundwater model (the Central Springs model) that will be used to assess potential withdrawal impacts to this lake.

It should be noted that the adoption dates for CFWI systems may change due to CFWI rulemaking regarding “a single, consistent process, to set minimum flows and minimum water levels and water reservations” as required by Section 373.0465(2)(d)4, F.S., and completion of the CFWI collaborative peer review process that involves all interested stakeholders.

The 2020 Priority List shows the planned year for completion of new MFLs and reevaluations for the years 2021–2024. As work is completed and MFLs are ready for rulemaking, staff may initiate rulemaking earlier than shown on the 2020 Priority List. At this time, the District is not requesting that FDEP adopt any of the MFLs on the 2020 Priority List.

The District is planning to conduct voluntary scientific peer review for all 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 CFWI area will follow the peer review process for MFLs and water reservations within the CFWI area.

Table 2-1. St. Johns River Water Management District (SJRWMD) Minimum Flows and Levels to be adopted in 2021

New or Re-Evaluation	Water Body Name or Compliance Point	System Name	Water Body Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
Re-Evaluation	*Sylvan**	*Sylvan**	*Lake*	*Seminole*	*Yes*	*Yes*	*28.8050*	*-81.3803*	N/A
New	*Little Wekiva and associated springs † **	*Little Wekiva**	*River and springs - 3*	*Seminole/ Orange*	*Yes*	*Yes*	*28.7021*	*-81.3922*	N/A
Re-Evaluation	*Wekiva at SR46**	*Wekiva**	*River*	*Seminole/ Lake*	*Yes*	*Yes*	*28.8152*	*-81.4195*	N/A
Re-Evaluation	*Wekiwa/and associated spring †† **	*Wekiwa**	*Springs - 2*	*Seminole/ Orange*	*Yes*	*Yes*	*28.7120*	*-81.4603*	N/A
Re-Evaluation	*Rock**	*Rock**	*Springs - 2*	*Orange*	*Yes*	*Yes*	*28.7558*	*-81.4992*	N/A
Re-Evaluation	*Apshawa South**	*Apshawa South**	*Lake*	*Lake*	*Yes*	*Yes*	*28.6012*	*-81.7754*	N/A

* Water bodies within the Central Florida Water Initiative (CFWI) area. The adoption dates for CFWI systems may change due to CFWI rulemaking regarding "a single, consistent process, to set minimum flows and minimum water levels and water reservations" as required by Section 373.0465(2)(d)4, *Florida Statutes* and completion of the CFWI collaborative peer review process that involves all interested stakeholders and the potential for prevention or recovery strategies.
† Associated springs include Palm, Sanlando, and Starbuck
†† Associated spring includes Miami

Table 2-2. SJRWMD Minimum Flows and Levels to be adopted in 2022

New or Re-Evaluation	Water Body Name or Compliance Point	System Name	Water Body Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
New	*Griffin*	*Griffin*	*Lake*	*Lake*	*Yes*	*Yes*	*28.8425*	*-81.8492*	N/A
New	*Harris (or other Burrell basin lake)*	*Burrell basin*	*Lake*	*Lake*	*Yes*	*Yes*	*28.7750*	*-81.8181*	N/A
New	*Johns* or Apopka**	*Johns* or Apopka**	*Lakes*	*Orange/Lake*	*Yes*	*Yes*	*28.53528 or 28.65167*	*-81.6328 or -81.6581*	N/A
Re-Evaluation	*Prevatt**	*Prevatt**	*Lake*	*Orange*	*Yes*	*Yes*	*28.7121*	*-81.4899*	N/A
New	*Redbug**	*Redbug**	*Lake*	*Seminole*	*Yes*	*Yes*	*28.6510*	*-81.2914*	N/A

* Water bodies within the Central Florida Water Initiative (CFWI) area. The adoption dates for CFWI systems may change due to CFWI rulemaking regarding "a single, consistent process, to set minimum flows and minimum water levels and water reservations" as required by Section 373.0465(2)(d)4, Florida Statutes and completion of the CFWI collaborative peer review process that involves all interested stakeholders and the potential for prevention or recovery strategies.

Table 2-3. SJRWMD Minimum Flows and Levels to be adopted in 2023

New or Re-Evaluation	Water Body Name or Compliance Point	System Name	Water Body Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
New	*East Crystal**	*East Crystal**	*Lake*	*Seminole*	*Yes*	*Yes*	*28.7683*	*-81.3137*	N/A

* Water bodies within the Central Florida Water Initiative (CFWI) area. The adoption dates for CFWI systems may change due to CFWI rulemaking regarding "a single, consistent process, to set minimum flows and minimum water levels and water reservations" as required by Section 373.0465(2)(d)4, *Florida Statutes* and completion of the CFWI collaborative peer review process that involves all interested stakeholders and the potential for prevention or recovery strategies.

Table 2-4. SJRWMD Minimum Flows and Levels to be adopted in 2024

New or Re-Evaluation	Water Body Name or Compliance Point	System Name	Water Body Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
Re-Evaluation	*Weir*	*Weir*	*Lake*	*Marion*	*Yes*	*Yes*	*29.0236*	*-81.9381*	N/A

* Water bodies within the Central Florida Water Initiative (CFWI) area. The adoption dates for CFWI systems may change due to CFWI rulemaking regarding "a single, consistent process, to set minimum flows and minimum water levels and water reservations" as required by Section 373.0465(2)(d)4, *Florida Statutes* and completion of the CFWI collaborative peer review process that involves all interested stakeholders and the potential for prevention or recovery strategies.

III. MFLs Determination and Adoption

Section 40C-8.011(3), 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, non-consumptive 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.).

IV. 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 water withdrawals shift the hydrologic conditions below that defined by the MFLs, significant ecological harm would be expected to occur (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.).

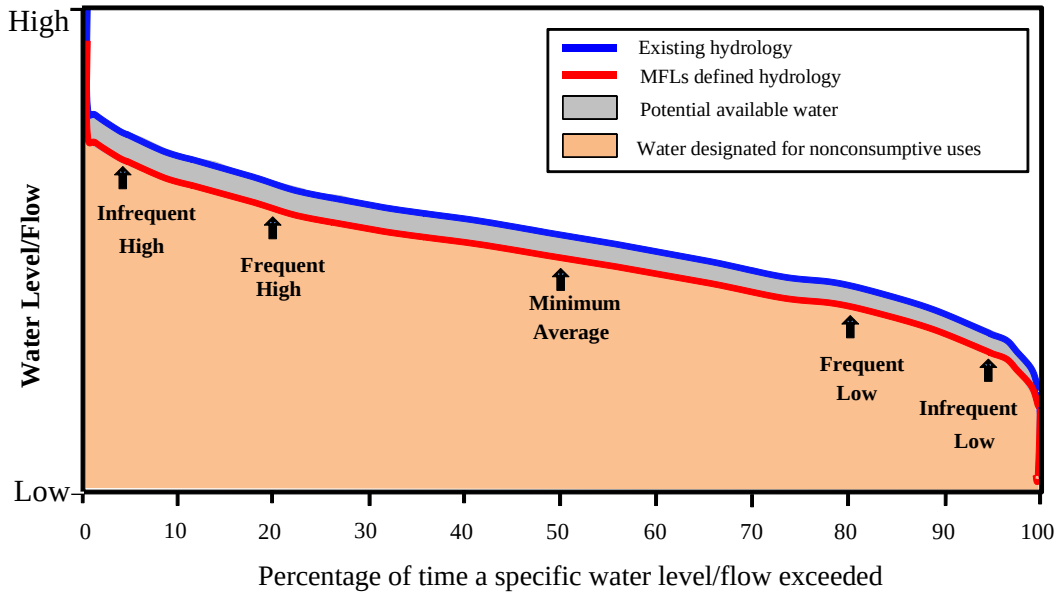

Figure 2-2. Exceedance curves for existing and MFLs defined hydrologic conditions

V. 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, review by FDEP, 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.

VI. History of MFLs Established and Adopted by Rule

Since 1990 when the MFLs program was initiated, the District has established 162 rules for MFLs, including 130 systems and 32 re-evaluations. The program's emphasis during its early years was on lakes. Recent emphasis has been on springs. Table 2-5 shows the number of rules for MFLs that have been adopted by water body type.

Table 2-5 Summary of MFLs (new and re-evaluations) adopted into rule.

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	4	138
2008						0	138
2009						0	138
2010					6	6	144
2011						0	144
2012						0	144
2013					1	1	145
2014					7	7	152
2015						0	152
2016					2	2	154
2017				5	1	6	160
2018	1					1	161
2019						0	161
2020	1					1	162
Total	**103**	**6**	**7**	**14**	**32**	**162**	**162**

Annual Five-Year Capital Improvements Plan

3. Annual Five-Year Capital Improvements Plan

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Table

I. 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 current and projected revenues and expenditures for capital improvement projects for fiscal year (FY) 2020–21 through FY 2024–25.

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 and numbering for this plan is drawn from the standard budget reporting format and numbering prescribed by the EOG. The EOG format requires capital improvement projects be budgeted in the standard program categories. The 2021 CIP covers two standard programs and associated activities shown below:

2.0 Land Acquisition, Restoration, and Public Works
- 2.1 Land Acquisition
- 2.3 Surface Water Projects
- 2.5 Facilities Construction and Major Renovations

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

II. Proposed Capital Projects and Expenditures During the Planning Period

The District proposes to spend $44.91 million on 44 fixed capital projects during the planning period from FY 2020–21 through FY 2024–25. Figure 3-1 shows the projected annual expenditures during the five-year planning period.

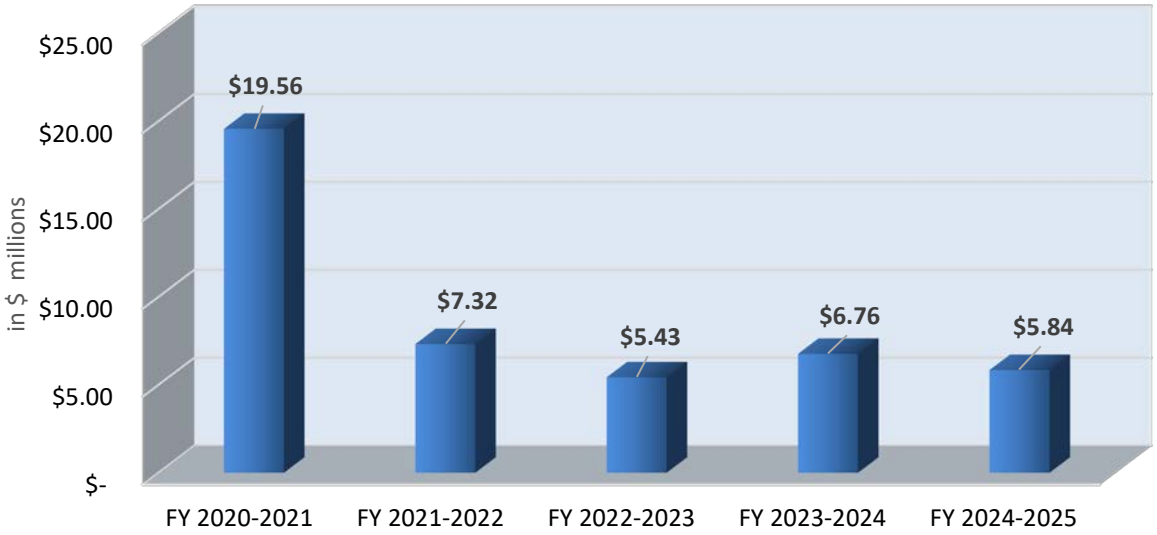

Figure 3-1. Five-year projected expenditures for capital improvement projects

Total planned capital expenditures in FY 2020–21 are $19.56 million, which is a 23.7 percent, or $3.74 million, increase as compared to the adopted CIP budget for FY 2019–20.

Significant changes in capital expenditures during the planning period are:

- Excluding land acquisitions, the District is planning for 13 multimillion-dollar capital projects. Three of these projects are in activity 2.3, including Lake Apopka Duda Property Water Storage Improvements ($2.65 million), Lake Apopka Marsh Flow-Way Improvements ($1.77 million), and Lake Apopka Lake Level Canal Interconnection ($1.4 million). One project is in activity 2.5 for the Building Fund ($6.6 million). The remaining nine projects are in activity 3.2, which consist of major and minor water control structure rehabilitation projects in the range of $1–4 million.
- No significant CIP projects are budgeted under activity 2.3 or 2.5 beyond FY 2021–22.
- The District will primarily rely on District revenues (including fund balances and ad valorem revenues) to fund capital projects.

Among the activities that have capital expenditures, Works accounts for 51.9 percent of the total and leads all other activities for the third year in a row in terms of total projected spending. Surface Water Projects ranks second and account for 14.8 percent of the total expenditures during the planning period, which is just slightly more than the next two activities, including Facilities Construction and Major Renovations (14.7 percent) and Land Acquisition (14.3 percent) (see Figure 3-2).

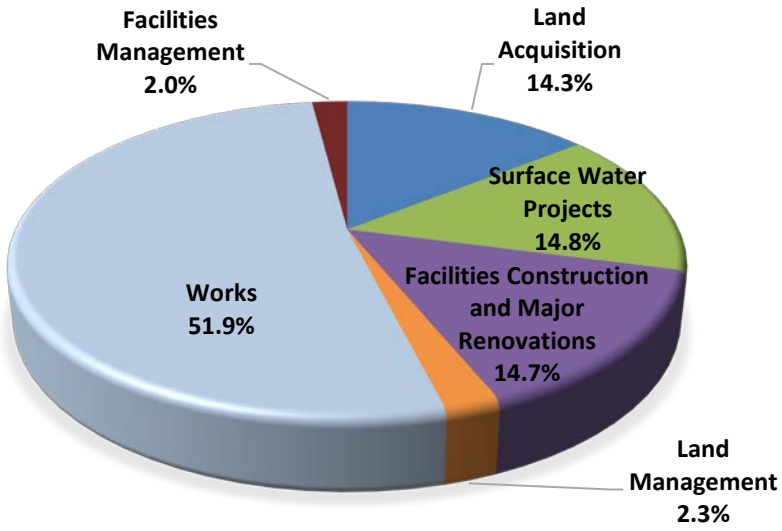

Figure 3-2. Five-year total capital improvement project expenditures by activity

The District's capital improvement projects are funded primarily by District sources. Figure 3-3 below shows that more than 83 percent of the total revenues during the planning period will come from District sources. Potential state funding, yet to be appropriated by the state Legislature, has not been projected in the preparation of this plan.

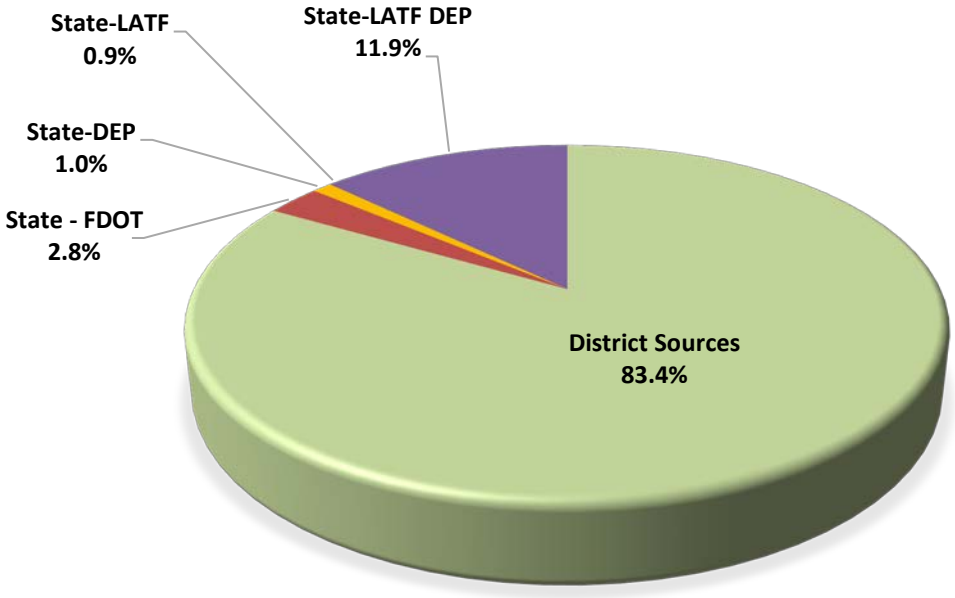

Figure 3-3. Five-year total capital improvement project expenditures by funding source

III. 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 improvement projects in FY 2020–21 Adopted Budget, FY 2021–22 Preliminary Budget, and projected capital improvement projects through FY 2024–25. 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, 2016, 2017, 2018, and 2019 Florida Department of Transportation (FDOT) Annual Mitigation Plan
- Five-Year Infrastructure Management, Operations, and Maintenance Plan
- FY 2020–21 Adopted Budget
- FY 2021–22 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*.

IV. Project Descriptions by Program and Activity

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

Land Acquisition: Three projects are proposed in the CIP, including one for potential land acquisitions and acquisition support services and two for FDOT mitigation-related acquisitions.

Surface Water Projects: Eight surface water projects are included in this CIP. The project benefits include nutrient reductions, 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 three mitigation projects during the planning period.

Facilities Construction and Major Renovations: Only one project is included in this CIP for the construction of a District-owned facility.

Land Management: Three projects have been planned under this activity. Two of these projects are intended to provide public access and enhancements to District-owned lands. The other project is for FDOT mitigation.

Works: Twenty-five projects are included under this activity for rehabilitations and replacements of major and minor water control structures.

Facilities: Four projects are included under this activity, including three for aging roof replacements and one for parking lot resurfacing.

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

2.0 LAND ACQUISITION, RESTORATION, AND PUBLIC WORKS

2.1 Land Acquisition

REVENUES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
District Sources	$ 1,559,500	$ 1,559,500	$ 1,000,000	$ 1,000,000	$ 654,071	$ 5,773,071
State - FDOT	642,701	-	-	-	-	642,701
TOTAL	**$ 2,202,201**	**$ 1,559,500**	**$ 1,000,000**	**$ 1,000,000**	**$ 654,071**	**$ 6,415,772**

EXPENDITURES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
Lake Jesup Conservation Area	$ 65,000	$ -	$ -	$ -	$ -	$ 65,000
Land Purchases and Support Services	1,559,500	1,559,500	1,000,000	1,000,000	654,071	5,773,071
Tomoka River Riparian Habitat Protection Zone	577,701	-	-	-	-	577,701
TOTAL	**$ 2,202,201**	**$ 1,559,500**	**$ 1,000,000**	**$ 1,000,000**	**$ 654,071**	**$ 6,415,772**

2.3 Surface Water Projects

REVENUES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
Upper St. Johns River Basin						
District Sources	$ 323,481	$ -	$ -	$ -	$ -	$ 323,481
UORB/Lake Apopka Basin						
State - DEP	454,761	-	-	-	-	454,761
State – Land Acquisition Trust Fund (LATF) DEP	5,360,239	-	-	-	-	5,360,239
District-Other						
District Sources	26,657	-	-	-	-	26,657
State - FDOT	167,858	100,625	100,000	75,000	50,000	493,483
TOTAL	**$ 6,332,996**	**$ 100,625**	**$ 100,000**	**$ 75,000**	**$ 50,000**	**$ 6,658,621**

EXPENDITURES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
Upper St. Johns River Basin						
Fellsmere Water Management Area Biomonitoring	$ 6,000	$ -	$ -	$ -	$ -	$ 6,000
Fellsmere Water Management Area Construction	317,481	-	-	-	-	317,481
UORB/Lake Apopka Basin						
Lake Apopka Duda Property Water Storage Improvements	2,650,000	-	-	-	-	2,650,000
Lake Apopka Marsh Flow-Way Improvements	1,765,000	-	-	-	-	1,765,000
Lake Apopka Lake Level Canal Interconnection	1,400,000	-	-	-	-	1,400,000
District-Other						
Coastal Oaks Preserve	125,000	58,625	50,000	25,000	25,000	283,625
Halfmile Creek Tract	42,000	42,000	50,000	50,000	25,000	209,000
Nine Mile Rice Creek	27,515	-	-	-	-	27,515
TOTAL	**$ 6,332,996**	**$ 100,625**	**$ 100,000**	**$ 75,000**	**$ 50,000**	**$ 6,658,621**

2.5 Facilities Construction and Major Renovations

REVENUES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
District Sources	$ 6,600,000	$ -	$ -	$ -	$ -	$ 6,600,000
TOTAL	**$ 6,600,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 6,600,000**

EXPENDITURES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
Building Fund	$ 6,600,000	$ -	$ -	$ -	$ -	$ 6,600,000
TOTAL	**$ 6,600,000**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 6,600,000**

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 Land Management

REVENUES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
District Sources	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 100,000	$ 500,000
State - FDOT	18,465	38,000	20,000	20,000	20,000	116,465
State - LATF	198,700	198,700	-	-	-	397,400
TOTAL	**$ 317,165**	**$ 336,700**	**$ 120,000**	**$ 120,000**	**$ 120,000**	**$ 1,013,865**

EXPENDITURES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
Field Activities - Fencing	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000	$ 250,000
Field Activities - Public Use Structures	248,700	248,700	50,000	50,000	50,000	647,400
Lake Jesup Conservation Area	18,465	38,000	20,000	20,000	20,000	116,465
TOTAL	**$ 317,165**	**$ 336,700**	**$ 120,000**	**$ 120,000**	**$ 120,000**	**$ 1,013,865**

3.2 Works

REVENUES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
District Sources	$ 4,020,000	$ 5,227,000	$ 3,756,000	$ 5,567,000	$ 4,740,000	$ 23,310,000
TOTAL	**$ 4,020,000**	**$ 5,227,000**	**$ 3,756,000**	**$ 5,567,000**	**$ 4,740,000**	**$ 23,310,000**

EXPENDITURES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
Airboat Crossing Rehabilitation	$ -	$ -	$ 80,000	$ 60,000	$ 30,000	$ 170,000
Lake Apopka Lock and Dam	-	-	1,811,000	-	-	1,811,000
Infrastructure Rehabilitation and Improvements	300,000	300,000	300,000	-	300,000	1,200,000
Lake Apopka Pump Station Unit 2 Pump Basin Isolation	250,000	-	-	-	-	250,000
Lake Apopka Unit 2 Pump Station Rehabilitation	-	120,000	-	-	-	120,000
Levee Repairs	150,000	250,000	250,000	600,000	255,000	1,505,000
Miscellaneous Infrastructure Improvements	160,000	200,000	465,000	320,000	425,000	1,570,000
Miscellaneous Parking Lot / Roadway Improvements	-	-	550,000	395,000	250,000	1,195,000
Moss Bluff Lock	-	-	-	3,892,000	-	3,892,000
Moss Bluff Drum and Cable	-	440,000	-	-	-	440,000
Pump Management / Remote Gate Operations	-	50,000	-	-	-	50,000
Refurbish Airboat Crossings at L-74W/S-96 Tieback	-	60,000	-	-	-	60,000
Refurbish Airboat Crossings /Ramps at L-76 and State Road (SR) 512	80,000	-	-	-	-	80,000
Refurbish Harris Bayou Gates	-	75,000	-	-	-	75,000
Remove / Mulch Canal Vegetation	100,000	75,000	50,000	50,000	50,000	325,000
Resurface Fellsmere Grade Recreation Area Parking Lot	-	150,000	-	-	-	150,000
Sandblast and Paint Weir Structures	-	-	150,000	150,000	150,000	450,000
S-157 Drum and Cable	660,000	-	-	-	-	660,000
S-157 Rehabilitation	-	-	-	-	3,180,000	3,180,000
S-96 Rehabilitation	-	2,932,000	-	-	-	2,932,000
S-96D Rehabilitation	1,820,000	-	-	-	-	1,820,000
Sawgrass Lake Pump Station — South Rehabilitation	-	200,000	-	-	-	200,000
Slipline Piping at Fellsmere Grade	225,000	225,000	-	-	-	450,000
Tom Lawton Road Resurfacing	125,000	-	-	-	-	125,000
Walkway / Platforms in Support of Data Collection	150,000	150,000	100,000	100,000	100,000	600,000
TOTAL	**$ 4,020,000**	**$ 5,227,000**	**$ 3,756,000**	**$ 5,567,000**	**$ 4,740,000**	**$ 23,310,000**

3.3 Facilities Management

REVENUES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
District Sources	$ 90,000	$ 95,000	$ 450,000	$ -	$ 275,000	$ 910,000
TOTAL	**$ 90,000**	**$ 95,000**	**$ 450,000**	**$ -**	**$ 275,000**	**$ 910,000**
EXPENDITURES	**FY 2020-2021**	**FY 2021-2022**	**FY 2022-2023**	**FY 2023-2024**	**FY 2024-2025**	**5-Year Total**
District Headquarter Executive Building Roof Replacement	$ -	$ -	$ 450,000	$ -	$ -	$ 450,000
Palm Bay Service Center Fleet Building Roof Replacement	-	-	-	-	275,000	275,000
Seal Coating and Striping of Parking Lots	-	95,000	-	-	-	95,000
Sunnyhill Blue House Roof Replacement	90,000	-	-	-	-	90,000
TOTAL	**$ 90,000**	**$ 95,000**	**$ 450,000**	**$ -**	**$ 275,000**	**$ 910,000**
GRAND TOTAL EXPENDITURES	**$ 19,562,362**	**$ 7,318,825**	**$ 5,426,000**	**$ 6,762,000**	**$ 5,839,071**	**$ 44,908,258**

REVENUES	FY 2020-2021	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	5-Year Total
GRAND TOTAL REVENUES	**$ 19,562,362**	**$ 7,318,825**	**$ 5,426,000**	**$ 6,762,000**	**$ 5,839,071**	**$ 44,908,258**

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Land Acquisition

Project Title: Lake Jesup Conservation Area

Type: Land Purchase

Project Manager: Ryan Spohn

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

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

Expected Completion Date: September 2021

Historical Background/Need for Project: This is an existing mitigation project initiated in 2016. The project involves habitat and hydrologic restoration within the LJCA. Site preparation and backfilling of ditches are complete. Planting of the restoration areas was started in FY 2017–18. The work in FY 2020–21 will include additional land acquisition of an outparcel for $65,000 based upon comparable estimates of adjacent parcels. Five years of monitoring will occur after planting is complete and the costs will be budgeted under activity 3.1, if needed.

Plan Linkages: 2016 and 2017 FDOT Annual Mitigation Plan and FY 2020–21 Adopted Budget

Area(s) of Responsibility: Water Quality and Flood Protection

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has expended funds and will incur future expenses for this project under activity 3.1. Additional funds will be required if there is a problem meeting the success criteria of the mitigation project.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): The District budgeted, for the land purchase, $65,000 in FY 2020–21.

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

Anticipated Additional Operating Costs/Continuing: The annual cost per acre for the management of District lands varies based on the type of activity that may be necessary during a fiscal year. The District's current estimated annual activity costs per acre are: recreation, $0.98; invasive plant control, $5.36; prescribed fire, $17.37; security, $0.75.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Land Acquisition

Project Title: Land Purchases and Support Services

Type: Land Purchase

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 Trust Fund (P2000), which expanded the scope of the SOR program, was passed by the Florida Legislature in 1990. In 1999, the Florida Forever Trust Fund (FF) replaced the P2000 program and became the primary source of funding for District land acquisitions through 2011. In 2008, the Florida Legislature authorized the continuation of the FF program for a second 10-year period. The proposed budgets are for potential land purchases, real estate research, and related transactional costs from FY 2020–21 through FY 2024–25.

Plan Linkages: FY 2020–21 Adopted Budget and FY 2021–22 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): None

Other Project Costs (includes land survey, existing facility acquisitions, professional service, other): A total of $1,559,500 was budgeted in FY 2020–21 and plans to be budgeted in FY 2021–22 for potential land acquisitions. Budgets from FY 2022–23 through FY 2024–25 are based on the District's unencumbered land acquisition fund balances and other state sources.

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

Anticipated Additional Operating Costs/Continuing: The annual cost per acre for the management of District lands varies based on the type of activity that may be necessary during a fiscal year. The District's current estimated annual activity costs per acre are: recreation, $0.98; invasive plant control, $5.36; prescribed fire, $17.37; security, $0.75.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Land Acquisition

Project Title: Tomoka River Riparian Habitat Protection Zone (RHPZ)

Type: Wetland and Upland RHPZ Protection

Project Manager: Ryan Spohn

Physical Location: The project is in Volusia County within the RHPZ for the Tomoka River.

Square Footage/Physical Description: The project will encompass 10–20 acres of uplands and wetlands within the Tomoka River RHPZ.

Expected Completion Date: September 2021

Historical Background/Need for Project: This project is for the purchase of a conservation easement and will mitigate wetland and upland impacts within the RHPZ and improve hydrologic and ecologic conditions of the project areas. This project is necessary to offset FDOT's mitigation needs pursuant to Section 373.4137, F.S. The District plans to utilize funding from the FDOT Mitigation Program for this project.

Plan Linkages: 2019 FDOT Annual Mitigation Plan and FY 2020–21 Adopted Budget

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

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements): None

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): The District budgeted $577,701 in FY 2020–21 for this project.

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

Anticipated Additional Operating Costs/Continuing: None

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Surface Water Projects

Project Title: Fellsmere Water Management Area Biomonitoring

Type: Reservoir Construction

Program Manager: Dianne Hall

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 reservoir is approximately 10,000 acres.

Expected Completion Date: Biomonitoring is ongoing and dependent on the spread of apple snails within Fellsmere Water Management Area (FWMA).

Historical Background/Need for Project: The District requires accurate and timely information to assess restoration progress, satisfy reporting requirements, and meet permit conditions. Fish and apple snail tissue samples are collected by District staff and submitted to a commercial laboratory for analysis of pesticides and heavy metals. Biomonitoring of fish and apple snails for contaminants is the District's responsibility as an original permit condition for FWMA. Fish biomonitoring has been completed, but apple snail biomonitoring is ongoing.

Plan Linkages: FY 2020–21 Adopted Budget and FY 2021–22 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 budgeted $6,000 in FY 2020–21.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Other project costs are included in the Fellsmere Water Management Area master project.

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

Anticipated Additional Operating Costs/Continuing: Continuing costs will include staff time for collection and processing of apple snails. These costs have not been quantified.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Surface Water Projects

Project Title: Fellsmere Water Management Area Construction

Type: Reservoir Construction

Program Manager: Hector Herrera

Physical Location: This project is located immediately east of the SJWMA and within the Fellsmere Water Control District in Indian River County.

Square Footage/Physical Description: The reservoir is approximately 10,000 acres.

Expected Completion Date: September 2021

Historical Background/Need for Project: To improve water quality downstream in the St. Johns River (SJR), the District began construction of the 10,000-acre FWMA reservoir in 2007. The FWMA is designed to treat agricultural discharges prior to entering the SJWMA, provide water supply potential, and enhance flood protection benefits of the Upper St. Johns River Basin (USJRB) Project. It is expected that with the completion of the FWMA project, the discharges from SJWMA into Three Forks Marsh Conservation Area will meet projected nutrient concentration targets. The project will provide water quality treatment of agricultural discharges along with habitat improvement and water supply benefits, as well as reduce freshwater discharges to the Indian River Lagoon (IRL) from the USJRB Project.

Plan Linkages: FY 2020–21 Adopted Budget

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

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has expended $54.9 million through September 2020 and budgeted $317,481 in FY 2020–21.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other.): Land acquisition costs of approximately $9.8 million were expended for the purchase of 4,000 acres during FY 2001–02 and $35 million for the purchase of 6,000 acres in FY 2006–07.

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

Anticipated Additional Operating Costs/Continuing: Operating expenses, approximately $100,000, may be incurred, as necessary, for the operation and maintenance of the FWMA boat ramp, discharge pump station, culvert outlets, and perimeter levee for FWMA.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Surface Water Projects

Project Title: Lake Apopka Duda Property Water Storage Improvements

Type: Infrastructure Improvements

Project Manager: Gretchen Kelley

Physical Location: Duda property on the Lake Apopka North Shore

Square Footage/Physical Description: 2,500 acres of wetland habitat with internal levees/roads.

Expected Completion Date: July 2021

Historical Background/Need for Project: The existing vegetation on Lake Apopka's North Shore is dominated by species that have been useful in restricting wildlife access to areas with pesticide residues. As areas are deemed safe, vegetation management actions are initiated to create the mixed marsh habitats that provide safe wetland habitat and reduce phosphorus loading to Lake Apopka. This project will use hydrology management, plantings, herbicides, and ultimately prescribed fire to develop desirable vegetation communities. The improvements also facilitate the ability to retain water, phosphorus, and sediments in the Duda property, reducing loads to Lake Apopka.

Plan Linkages: FY 2020–21 Adopted Budget

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

Alternative(s): None

Basic Construction Costs (includes contracts, permits, inspections, communications requirements, utilities, site development, other): The District budgeted $2,650,000 in FY 2020–21.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): 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: These costs are estimated to be approximately $53,000 per year based on two percent of capital costs.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Surface Water Projects

Project Title: Lake Apopka Marsh Flow-Way Improvements

Type: Rehabilitation

Project Manager: Marc Van Heden

Physical Location: Lake Apopka North Shore

Square Footage/Physical Description: 760 acres of marsh flow-way.

Expected Completion Date: August 2021

Historical Background/Need for Project: After more than 15 years of operation, the marsh flow-way cells have developed hydrologic shortcuts which reduce the efficiency of the water quality treatment. These shortcuts can be difficult and costly to repair. In FY 2016–17, the District hired a consultant to investigate the system and to develop long-term structural and operational solutions. Based on this evaluation, construction projects commenced in FY 2018–19 to improve the efficiency and lifespan of the marsh flow-way.

Plan Linkages: FY 2020–21 Adopted Budget

Area(s) of Responsibility: Water Quality

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities, site development, other): The District expended $8,882 in FY 2017–18, $203,441 in FY 2018–19, and $563,743 in FY 2019–20. An additional $1,765,000 was budgeted in FY 2020–21.

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: These costs are estimated to be approximately $50,820 per year based on two percent of capital costs.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Surface Water Projects

Project Title: Lake Apopka Lake Level Canal Interconnection

Type: Infrastructure Improvements

Project Manager: Robert Naleway

Physical Location: Lake Apopka North Shore

Square Footage/Physical Description: 20,000 acres (North Shore), 30,800 acres (Lake Apopka).

Expected Completion Date: September 2021

Historical Background/Need for Project: Interconnect improvements will help to contain more water and phosphorus on the Lake Apopka North Shore. A study completed by Wood Environment and Infrastructure Solutions, estimated the interconnect improvements between the Duda Area and Unit 1, along with additional improvements around the North Shore, would result in a 57 percent reduction in total discharge and associated total phosphorus loadings to the lake from the North Shore.

Plan Linkages: FY 2020–21 Adopted Budget

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

Alternative(s): Pump all excess water with associated phosphorous from the North Shore to Lake Apopka.

Basic Construction Costs (includes permits, inspections, communications requirements, site development, other): The District expended $40,674 in FY 2018–19, $175,241 in FY 2019–20, and budgeted $1,400,000 in FY 2020–21.

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: These costs are estimated to be approximately $32,300 per year based on two percent of capital costs.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Surface Water Projects

Project Title: Coastal Oaks Preserve

Type: Wetland and Hydrologic Restoration

Project Manager: Ryan Spohn

Physical Location: The project is in Indian River County on multiple parcels adjacent to the Coastal Oaks Preserve, which fronts the IRL in Regulatory Basin 22. This property is north of Vero Beach along U.S. Highway 1.

Square Footage/Physical Description: The wetland creation, enhancement, and restoration will be completed on approximately 40 acres.

Expected Completion Date: September 2025

Historical Background/Need for Project: This project will implement wetland creation, restoration, and enhancement projects on parcels that will be owned by the Indian River Land Trust. The enhancement will improve hydrologic and ecologic conditions of the project areas. This project is necessary to offset FDOT's mitigation needs pursuant to Section 373.4137, F.S. The District plans to use funding from the FDOT Mitigation Program for this project.

Plan Linkages: 2015 FDOT Annual Mitigation Plan, FY 2020–21 Adopted Budget, and FY 2021–22 Preliminary Budget

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

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District expended $116,270 in FY 2017–18, $334,603 in FY 2018–19, and $518,069 in FY 2019–20. In addition, the District budgeted $125,000 in FY 2020–21, and plans to budget $58,625 in FY 2021–22, $50,000 in FY 2022–23, and $25,000 each year in FY 2023–24 and FY 2024–25.

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: Land Acquisition, Restoration, and Public Works
ACTIVITY: Surface Water Projects

Project Title: Halfmile Creek Tract

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

Project Manager: Ryan Spohn

Physical Location: The project is planned to occur in Marion County at Halfmile Creek Conservation Area (HCCA). This property is located east of County Road 326 and north of SR 40.

Square Footage/Physical Description: The enhancement/restoration at HCCA is expected to improve natural communities on approximately 487 acres.

Expected Completion Date: September 2025

Historical Background/Need for Project: This project will implement restoration and enhancement projects on District-owned lands that will improve hydrologic and ecologic conditions of the project area. This project is necessary to offset FDOT's mitigation needs pursuant to Section 373.4137, F.S. The District plans to utilize funding from the FDOT Mitigation Program for this project.

Plan Linkages: 2017 and 2018 FDOT Annual Mitigation Plan, FY 2020–21 Adopted Budget, and FY 2021–22 Preliminary Budget

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

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District has expended $1,445,860, budgeted $42,000 in FY 2020–21, and plans to budget $42,000 in FY 2021–22; $50,000 each year in FY 2022–23 and FY 2023–24; and $25,000 in FY 2024–25.

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 annual cost per acre for the management of District lands varies based on the type of activity that may be necessary during a fiscal year. The District's current estimated annual activity costs per acre are: recreation, $0.98; invasive plant control, $5.36; prescribed fire, $17.37; security, $0.75.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Surface Water Projects

Project Title: Nine Mile Rice Creek

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

Project Manager: Ryan Spohn

Physical Location: The project is planned to occur in Putnam County at the Nine Mile Rice Creek property.

Square Footage/Physical Description: The enhancement/restoration at Nine Mile Rice Creek Property is expected to improve management access within the 5,061-acre property.

Expected Completion Date: September 2021

Historical Background/Need for Project: This project is a habitat enhancement project needed to partially complete the mitigation obligations for multiple road projects by FDOT. This project is necessary to offset FDOT's mitigation needs pursuant to Section 373.4137, F.S. The District plans to utilize funding from the FDOT Mitigation Program for this project.

Plan Linkages: 2017 and 2018 FDOT Annual Mitigation Plan and FY 2020–21 Adopted Budget

Area(s) of Responsibility: Water Quality and Flood Protection

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $27,515 in FY 2020–21.

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 annual cost per acre for the management of District lands varies based on the type of activity that may be necessary during a fiscal year. The District's current estimated annual activity costs per acre are: recreation, $0.98; invasive plant control, $5.36; prescribed fire, $17.37; security, $0.75.

PROGRAM: Land Acquisition, Restoration, and Public Works
ACTIVITY: Facilities Construction and Major Renovations

Project Title: Building Fund

Type: Facilities Construction

Project Manager: Dave Dickens

Physical Location: The project is planned to occur in Orange County near the North Shore of Lake Apopka. This property is located south of Binion Road 437 and west of SR 429.

Square Footage/Physical Description: The new building footprint is expected to encompass approximately 17,000 square feet (sf.) on the five-acre tract acquired from the City of Apopka. This building will reduce the District's current leased square footage and replace the Maitland Service Center.

Expected Completion Date: April 2022

Historical Background/Need for Project: The District has leased space in the Orlando area since 1986. The location allows District staff to work with local customers and stakeholders on a variety of matters, including Regulatory permitting. It is also used for a variety of agency collaborative meetings, outreach and training events, workshops, and serves as a data disaster recovery center. At the end of our current lease we will have worked from leased facilities in the Greater Orlando area for 35 years. Owning both the service center's land and building will result in long-term savings for the District.

Plan Linkages: FY 2020–21 Adopted Budget

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

Alternative(s): Continued leasing service center space at a higher long-term cost

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District expended $51,876 in FY 2018–19 and $617,922 in FY 2019–20; budgeted $6,600,000 in FY 2020–21 and plans to carry over any unspent funds to FY 2021–22.

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 annual cost per square foot for the management of District building varies based on the type and use of the building. The District's current estimated annual operating cost for this building is $134,810 per year.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Land Management

Project Title: Field Activities — Fencing

Type: Land Management

Program Manager: Brian Emanuel

Physical Location: Various Conservation Areas

Square Footage/Physical Description: TBD

Expected Completion Date: Fencing is an ongoing effort to secure boundaries and is dependent on new cattle leases.

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 2020–21 Adopted Budget, and FY 2021–22 Preliminary Budget

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

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $50,000 in FY 2020–21 and plans to budget $50,000 each year through FY 2024–25.

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

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Land Management

Project Title: Field Activities — Public Use Structures

Type: Recreational Facilities

Program Manager: Brian Emanuel

Physical Location: TBD

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

Expected Completion Date: The construction of public use structures is an ongoing effort, as needed, to support the public's needs when accessing District lands.

Historical Background/Need for Project: District lands are popular with the public and the need for picnic pavilions, inclement weather shelters, and kiosks arise based upon use. The District has constructed many facilities, and some of the existing structures are aging and need to be replaced. The need to replace these structures arises on an infrequent basis.

Plan Linkages: Individual Land Management Plans, FY 2020–21 Adopted Budget, and FY 2021–22 Preliminary Budget

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

Alternative(s): None

Basic Construction Costs (includes permits, site preparation and other): The District budgeted $248,700 in FY 2020–21, plans to budget $248,700 in FY 2021–22, and $50,000 each year from FY 2022–23 through FY 2024–25.

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: Lake Jesup Conservation Area

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

Project Manager: Ryan Spohn

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

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

Expected Completion Date: September 2025

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 Section 373.4137, F.S. The District plans to use funding from the FDOT Mitigation Program for this project.

Plan Linkages: 2016 and 2017 FDOT Annual Mitigation Plan, FY 2020–21 Adopted Budget, and FY 2021–22 Preliminary Budget

Area(s) of Responsibility: Water Quality and Flood Protection

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District expended $69,666 in FY 2017–18, $79,619 in FY 2018–19, $8,299 in FY 2019–20, budgeted $18,465 in FY 2020–21, and plans to budget $38,000 in FY 2021–22, and $20,000 each year from FY 2022–23 through FY 2024–25.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): An additional land purchase for $65,000 was budgeted for FY 2020–21 under activity 2.1.

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

Anticipated Additional Operating Costs/Continuing: The annual cost per acre for the management of District lands varies based on the type of activity that may be necessary during a fiscal year. The District's current estimated annual activity costs per acre are: recreation, $0.98; invasive plant control, $5.36; prescribed fire, $17.37; security, $0.75.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Airboat Crossing Rehabilitation

Type: Infrastructure Renovation

Program Manager: Woody Boynton

Physical Location: Multiple locations in the USJRB in Indian River and Brevard counties.

Square Footage/Physical Description: Ramp sizes vary from approximately 10- to 12-foot wide by 100- to 120-foot long.

Expected Completion Date: September 2025

Historical Background/Need for Project: The District has many wooden airboat crossings that are showing signs of deterioration. This project replaces the older airboat crossings with new wooden/composite decking. If not repaired, airboats may incur damage when crossing or if the operator of the airboat chooses to bypass the crossing, damage may occur to the adjacent levee.

Plan Linkages: Five-Year Infrastructure Management and Operations and Maintenance 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 budget $80,000 in FY 2022–23, $60,000 in FY 2023–24, and $30,000 in FY 2024–25.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Lake Apopka Lock and Dam

Type: Infrastructure Renovation

Program Manager: Vince Seibold

Physical Location: This structure is located on the Apopka-Beauclair Canal 500 feet south of Astatula Road (County Road 48).

Square Footage/Physical Description: The structure is a steel sheet pile dam consisting of a 15-foot by 50-foot lock and a concrete spillway equipped with two 12-foot radial gates.

Expected Completion Date: September 2023

Historical Background/Need for Project: Built in 1956, these structures are operated to maintain desirable water levels in Lake Apopka and safely move boat traffic from Lake Apopka to Lake Beauclair.

Plan Linkages: Five-Year Infrastructure Management and Operations and Maintenance Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection, 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 $1,811,000 in FY 2022–23.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Infrastructure Rehabilitation and Improvements

Type: Infrastructure Renovation

Program Manager: Amy Wright

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

Square Footage/Physical Description: Culverts range in size from 36-inches (in.) to 84-in. in width and approximately 100 to 200 feet in length. The culvert material is typically corrugated metal pipe or corrugated aluminum pipe.

Expected Completion Date: Infrastructure rehabilitation and improvements are an ongoing effort, as needed, to support District needs.

Historical Background/Need for Project: The District is responsible for the maintenance of 61 federal and 15 non-federal minor water control structures associated with managing the District's flood control system. The U.S. Army Corps of Engineers (USCAE) requires that all minor water control structures be inspected every five years. Most of these structures are under water and require a diving contractor to complete the inspection. The findings of inspection reports form the basis of a work plan to repair any deficiencies that are identified. The next inspection is scheduled for FY 2024–25.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2020–21 Adopted Budget, and FY 2021–22 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 budgeted $300,000 in FY 2020–21 and plans to budget an additional $300,000 in FY 2021–22, FY 2022–23, and in FY 2024–25.

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: Because the planned work is the rehabilitation of existing structures, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Lake Apopka Pump Station Unit 2 Pump Basin Isolation

Type: Infrastructure Renovation

Program Manager: Rayford McCain

Physical Location: The Unit 2 pump basin is located on the Lake Apopka North Shore at the west end of Lust Road.

Square Footage/Physical Description: The pump basin is approximately 280 feet wide by 600 feet long and 15 feet deep.

Expected Completion Date: September 2021

Historical Background/Need for Project: This basin is used to treat and mix discharges from Phases 3, 4, and 5, (2 East and 2 West), with alum prior to discharging into Lake Apopka.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2020–21 Adopted 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 budgeted $250,000 in FY 2020–21.

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: These costs are estimated to be approximately $5,000 per year based on two percent of capital costs.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Lake Apopka Unit 2 Pump Station Rehabilitation

Type: Infrastructure Renovation

Program Manager: Rayford McCain

Physical Location: The pump station is located on the north shore of Lake Apopka at the west end of Lust Road.

Square Footage/Physical Description: The pump station consists of three pumps, with a total pumping capacity of approximately 61,000 gallons per minute (gpm).

Expected Completion Date: September 2022

Historical Background/Need for Project: This pump station has not been rehabilitated since its initial installation more than 40 years ago. The proposed rehabilitation will minimize future repairs and allow the system to operate more efficiently.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2021–22 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 $120,000 in FY 2021–22.

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: Because the planned work is the rehabilitation of existing structures, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Levee Repairs

Type: Infrastructure Renovation

Program Manager: James Rider/Rayford McCain

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

Square Footage/Physical Description: There are more than 115 miles of USACE-constructed flood control levees and 175 miles of farm/project levees located within the USJRB and the UORB. Periodic and routine inspections of these systems performed by the USACE and District staff have indicated that some of these levees do not meet current USACE and/or District guidelines and require improvements and rehabilitation.

Expected Completion Date: Levee repairs are an ongoing effort, as needed, to support District needs.

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. In addition, the District maintains more than 175 miles of project levees that separate various water bodies and/or provide access throughout the property. This rehabilitation work is to address deficiencies associated with levee depressions/rutting, levee height, slope geometry, vegetation cover, levee driving surfaces, encroachments, animal control, and other appurtenant works.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2020–21 Adopted Budget, and FY 2021–22 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 budgeted $150,000 in FY 2020–21 and plans to budget $250,000 each year in FY 2021–22 and FY 2022–23, $600,000 in FY 2023–24, and $255,000 in FY 2024–25.

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: Because the planned work is the rehabilitation of existing levee systems, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Miscellaneous Infrastructure Improvements

Type: Infrastructure Renovation

Program Manager: Woody Boynton

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

Square Footage/Physical Description: Varies

Expected Completion Date: Miscellaneous infrastructure improvements are an ongoing effort, as needed, to support District needs.

Historical Background/Need for Project: The District has many structures, including pumps, bridges, weirs, generators, and airboat crossings that are reaching the end of the useful life of the structure. These structures are important aspects of the District lands, including providing flood protection, public and District access, and environmental protections. They require rehabilitation to maintain the long-term viability of the District's infrastructure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2020–21 Adopted Budget, and FY 2021–22 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 budgeted $160,000 in FY 2020–21 and plans to budget $200,000 in FY 2021–22, $465,000 in FY 2022–23, $320,000 in FY 2023–24, and $425,000 in FY 2024–25.

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: Because the planned work is the rehabilitation of existing structures, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Miscellaneous Parking Lot / Roadway Improvements

Type: Infrastructure Renovation

Program Manager: Woody Boynton

Physical Location: Multiple locations in the USJRB in Indian River and Brevard counties.

Square Footage/Physical Description: Parking lots vary in size from approximately 100,000 sf. to 250,000 sf. The proposed parking lots will be resurfaced and striped for parking. Roadways vary in width and length throughout the District.

Expected Completion Date: Miscellaneous parking lot / roadway improvements are an ongoing effort, as needed, to support District needs.

Historical Background/Need for Project: Parking lot surfaces in several locations are deteriorating and need to be resurfaced to protect the long-term investment of the paved surface. Roadways generally consist of a sandy-clay base that requires grading two to three times per week. Constructing compacted limerock driving surfaces should reduce this maintenance cycle and associated costs.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan

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 $550,000 in FY 2022–23, $395,000 in FY 2023–24, and $250,000 in FY 2024–25.

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: Because the planned work is the rehabilitation of existing parking lots or roadways, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Moss Bluff Lock

Type: Infrastructure Renovation

Program Manager: Vince Seibold

Physical Location: In the UORB on the edge of the Ocala National Forest in Marion County.

Square Footage/Physical Description: The spillway incorporates two hydraulic motor operated gates. The gates are 20 feet wide by 12.9 feet high. The concrete lock has a 30-foot wide by 125-foot long chamber with filling and emptying times of approximately 8–10 minutes.

Expected Completion Date: September 2024

Historical Background/Need for Project: The structure was completed in 1968 and serves as a navigational aid and flood control structure on the Ocklawaha River. The lock can drop the navigational water level by 23 feet.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan

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 $3,892,000 in FY 2023–24.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Moss Bluff Drum and Cable

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: In the UORB on the edge of the Ocala National Forest in Marion County.

Square Footage/Physical Description: The spillway incorporates two hydraulic motor operated gates. The gates are 20 feet wide by 12.9 feet high. The concrete lock has a 30-foot wide by 125-foot long chamber with filling and emptying times of approximately 8–10 minutes.

Expected Completion Date: September 2022

Historical Background/Need for Project: The District is converting all major water control structure gates in the USJRB and the UORB from a hydraulic lift system to a drum and cable winch system. These gates are frequently used during minor and major storm events. Because of the drifting of the gate hydraulics, constant monitoring is required, and frequent adjustments are necessary to maintain flood control flows. The District has evaluated replacing/refurbishing the hydraulic cylinders but determined that a drum and cable system will be more reliable and appropriate for the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2021–22 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 $440,000 in FY 2021–22.

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: The new system should require less maintenance than the existing hydraulic system.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Pump Management / Remote Gate Operations

Type: Infrastructure Renovation

Program Manager: John Richmond

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

Square Footage/Physical Description: The size of main gate position indicators at major water control structures varies. These monitoring devices allow staff to see the gate position when operated remotely.

Expected Completion Date: September 2022

Historical Background/Need for Project: These monitoring devices are electrically wired into the main operational control systems for the structures. The physical connection is the "string," a thin stainless-steel wire, connected directly to the gate hydraulic rams or drum and cable shaft. As the string pulls out or winds back in with gate motion, the monitoring device sends an electronic signal, which converts it to a position. These monitoring devices are 10–15 years old and are becoming less reliable. This project will replace the existing monitoring devices before they fail.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2021–22 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 $50,000 in FY 2021–22.

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: Because the planned work is replacing aging equipment, little or no operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Refurbish Airboat Crossings at L-74W and S-96 Tieback

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: One crossing is located on L-74W just west of the S-96C structure, and the second crossing is located on the S-96 Tieback levee just north of the S-96C structure in the USJRB in Indian River County.

Square Footage/Physical Description: Ramp sizes vary from approximately 10- to 12-foot wide and from 100- to 120-foot long.

Expected Completion Date: September 2022

Historical Background/Need for Project: The wooden crossings on L-74W and S-96 Tieback are showing signs of deterioration. If not repaired, airboats may incur damage when crossing.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2021–22 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 $60,000 in FY 2021–22.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Refurbish Airboat Crossings/Ramps at L-76 and SR512

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: The L-76 crossing is located on L-76 just north of the S-96D structure and the SR512 ramp is located at the SR512 Recreational Area. Both sites are located in the USJRB in Indian River County.

Square Footage/Physical Description: Ramp sizes vary from approximately 10- to 12-foot wide by 100- to 120-foot long.

Expected Completion Date: September 2021

Historical Background/Need for Project: The wooden crossing and ramp are showing signs of deterioration. If not repaired, airboats may incur damage when crossing.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2020–21 Adopted Budget

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

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $80,000 in FY 2020–21.

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: Because the planned work is the rehabilitation of existing structures, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Refurbish Harris Bayou Gates

Type: Infrastructure Renovation

Program Manager: John Richmond

Physical Location: The structure is located approximately 1.3 miles south of SR 441 in Lake County. The structure is on the western edge of Lake Harris and discharges to the Lake Harris Conservation Area before discharging into Lake Griffin.

Square Footage/Physical Description: The Harris Bayou structure is a two-gate system consisting of overshot gates with a capacity of 1,000 cubic feet per second (cfs).

Expected Completion Date: September 2022

Historical Background/Need for Project: During periods of high-water events, the elevation in Lake Harris would continue to increase due to limited outlet capacity to Lake Eustis and eventually Lake Griffin. This structure and corresponding box culverts under SR 441 provided an alternative outlet to Lake Griffin allowing enhanced water management within Lake Harris. Constructed in 2009, it allows flows to bypass and augment the Burrell Dam flows.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2021–22 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 $75,000 in FY 2021–22.

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: Because the planned work is the rehabilitation of existing structures, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Remove / Mulch Canal Vegetation

Type: Vegetation Management

Program Manager: Steven Turrentine

Physical Location: Multiple canals and levees within the USJRB in Indian River, Brevard and Osceola counties, and the UORB in Lake and Marion counties.

Square Footage/Physical Description: Canals and levees include L-74N, L-73 Section 1, and the FWMA. These canals and levees vary in shape and size.

Expected Completion Date: Removal of mulch canal vegetation is an ongoing effort, as needed, to support District needs

Historical Background/Need for Project: Vegetation islands restrict the flow of water within the canal and can adversely affect flood protection during storm events. Using a "cookie cutter" type of equipment, the vegetation islands are mulched, creating an open water body. Woody vegetation at the toe of slope prevents for comprehensive inspections and could lead to piping through the structure. USACE guidelines dictate that the federal levee be free of woody vegetation within 15-feet from toe of slope.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2020–21 Adopted Budget, and FY 2021–22 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 budgeted $100,000 in FY 2020–21 and plans to budget $75,000 in FY 2021–22 and $50,000 each year from FY 2022–23 through FY 2024–25.

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: Maintaining canals and levees free of unwanted vegetation should reduce annual maintenance costs.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Resurface Fellsmere Grade Recreation Area Parking Lot

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: The Fellsmere Grade Recreation Area parking lot is located in Brevard County at the west end of Fellsmere Grade.

Square Footage/Physical Description: The paved parking area is approximately 130- by 520-feet and provides parking for recreational users to access the Blue Cypress Marsh Conservation Area (BCMCA).

Expected Completion Date: September 2022

Historical Background/Need for Project: This recreational parking area was constructed to allow the public access to the BCMCA. This recreation area provides the public with access to hiking trails, bird watching, picnic areas, and a boat ramp. The pavement is showing signs of deterioration. Resurfacing the parking lot now will minimize the need to fully reconstruct the parking lot in the future.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2021–22 Preliminary Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): Reconstruct entire parking lot once deterioration is beyond repairing via resurfacing.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $150,000 in FY 2021–22.

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: Because the planned work is repairing an existing parking lot, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Sandblast and Paint Weir Structures

Type: Infrastructure Renovation

Program Manager: James Rider

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

Square Footage/Physical Description: Weir structures range in length. The construction material is typically metal sheet piling.

Expected Completion Date: September 2025

Historical Background/Need for Project: The District is responsible for the maintenance of 15 primary weir water control structures associated with managing the District's flood control system. These structures require routine repairs to include sandblast and painting to maintain the long-term integrity of the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection, 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 $150,000 each year from FY 2022–23 through FY 2024–25.

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: Because the planned work is the rehabilitation of existing structures, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: S-157 Drum and Cable

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: The S-157 structure is located on the C-54 canal in Brevard County, just north of Indian River County. It is approximately 6,300 feet east of I-95.

Square Footage/Physical Description: The S-157 structure is a three bay U-shaped gated spillway. It has an ogee weir with vertical lift gates with a design discharge rate of 6,500 cfs. Each gate is 25 feet wide by 12.5 feet high.

Expected Completion Date: September 2021

Historical Background/Need for Project: The District is converting all major water control structure gates in the USJRB and the UORB from a hydraulic lift system to a drum and cable winch system. These gates are frequently used during minor and major storm events. Because of the drifting of the gate hydraulics, constant monitoring is required, and frequent adjustments are necessary to maintain flood control flows. The District has evaluated replacing/refurbishing the hydraulic cylinders on the existing hoist mechanism, but determined that a drum and cable system will be more reliable and appropriate for the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2020–21 Adopted Budget

Area(s) of Responsibility: Flood Protection

Alternative(s): Repair the existing hydraulic system.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $660,000 in FY 2020–21.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: S-157 Rehabilitation

Type: Infrastructure Renovation

Program Manager: Vince Seibold

Physical Location: The S-157 structure is located on the C-54 canal in Brevard County, just north of Indian River County. It is approximately 6,300 feet east of I-95.

Square Footage/Physical Description: The structure is a three bay, U-shaped gated spillway. It has an ogee weir with vertical lift gates with a design discharge rate of 6,500 cfs. Each gate is 25 feet wide by 12.5 feet high.

Expected Completion Date: September 2025

Historical Background/Need for Project: S-157 was constructed in 1966 as part of the original flood control plan that was later incorporated into the USJRB Project. S-157 is designed to discharge water from the SJWMA via the C-54 canal in times of high water. The S-157 rehabilitation includes dewatering, concrete repairs, and all ancillary items associated with the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan

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 $3,180,000 in FY 2024–25.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: S-96 Rehabilitation

Type: Infrastructure Renovation

Program Manager: Vince Seibold

Physical Location: S-96 is located at the western end of C-54, six miles west of SR507 (Babcock Street).

Square Footage/Physical Description: The structure is a two bay, hydraulically controlled vertical gate, with a total maximum discharge capacity of 6,000 cfs.

Expected Completion Date: September 2022

Historical Background/Need for Project: S-96 was built in 1968 as part of the original flood control plan that was later incorporated into the USJRB Project. S-96 is designed to discharge water from the SJWMA into C-54 in times of high water. The S-96 rehabilitation includes dewatering, concrete repairs, and all ancillary items associated with the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY2021–22 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 $2,932,000 in FY 2021–22.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: S-96D Rehabilitation

Type: Infrastructure Renovation

Program Manager: Gretchen Kelley

Physical Location: S-96D is located on L-75 just west of S-3 in the USJRB in Indian River County, approximately 4.75 miles south of the Fellsmere Grade.

Square Footage/Physical Description: S-96D is a single vertical gate and is designed to release water from the BCWMA to the SJWMA through C-65, a canal formed between L-75 and L-76. Maximum flow is 1,000 cfs.

Expected Completion Date: September 2021

Historical Background/Need for Project: S-96D was completed in 1993 and is designed to release water from the BCWMA to the SJWMA. The S-96D gate rehabilitation includes dewatering, concrete repairs, and all ancillary items associated with the structure.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2020–21 Adopted 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 budgeted $1,820,000 in FY 2020–21.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Sawgrass Lake Pump Station — South Rehabilitation

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: The Sawgrass South pump station is located in Brevard County at the west end of the C-1 Canal.

Square Footage/Physical Description: The south pump station consists of five pumps with one pump being an 18-inch axial flow pump with a capacity of 6,000 gpm. The other four pumps are 36-inch axial flow pumps with a capacity of 21,000 gpm.

Expected Completion Date: September 2022

Historical Background/Need for Project: This pump station was constructed to redirect flow from the C-1 Canal that was flowing through the IRL to the SJR. It has been several years since these pumps were fully rehabilitated. The proposed rehabilitation will minimize future repairs and make the system more efficient.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2021–22 Preliminary Budget

Area(s) of Responsibility: Water Supply, Water Quality

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget $200,000 in FY 2021–22.

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: Because the planned work is the rehabilitation of existing structures, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Slipline Piping at Fellsmere Grade

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: In the USJRB in Indian River and Brevard counties.

Square Footage/Physical Description: Several locations on the Fellsmere Grade, west of Babcock Road in Indian River and Brevard counties.

Expected Completion Date: September 2022

Historical Background/Need for Project: Fellsmere Grade is the main access to several properties in the USJRB. Four sets of culverts/pipes under Fellsmere Grade were constructed with the USJRB Project. These culverts convey water from the C-54 canal to farmland located south of Fellsmere Grade. The pipes at Fellsmere Grade are showing signs of deterioration and need to be replaced.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2020–21 Adopted Budget, and FY 2021–22 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 budgeted $225,000 in FY 2020–21 and plans to budget an additional $225,000 in FY 2021–22.

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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Tom Lawton Road Resurfacing

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: In USJRB in Indian River, Brevard, and Osceola counties.

Square Footage/Physical Description: The Tom Lawton Boat Ramp is located in Brevard County at the west end of Malabar Road.

Expected Completion Date: September 2021

Historical Background/Need for Project: Tom Lawton Road was designed originally as a northerly access point to Three Forks Marsh and a public recreation area. There is a large parking area, a boat launch, and picnic tables provided at the recreation area. This access road is heavily used and requires significant maintenance. Rather than continual repair, the access road will be graded and paved to minimize long-term maintenance.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, and FY 2020–21 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 budgeted $125,000 in FY 2020–21.

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: Because the planned work is the rehabilitation of an existing roadway, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Works

Project Title: Walkway / Platforms in Support of Data Collection

Type: Infrastructure Renovation

Program Manager: Rayford McCain

Physical Location: Multiple locations in Orange and Lake counties.

Square Footage/Physical Description: Walkways are typically 3- to 6-foot wide by varying lengths. New walkways are typically constructed with painted or galvanized structural steel or structural aluminum.

Expected Completion Date: The construction of walkways and platforms in support of data collection is an ongoing effort, as needed, to support the District and the public's needs when accessing these structures.

Historical Background/Need for Project: The District has many wooden walkways that are showing signs of deterioration. This project will replace the older wooden walkways at multiple locations with new steel/aluminum walkways.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2020–21 Adopted Budget, and FY 2021–22 Preliminary Budget

Area(s) of Responsibility: Water Supply and Water Quality

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $150,000 in FY 2020–21, plans to budget $150,000 in FY 2021–22 and $100,000 each year from FY 2022–23 through FY 2024–25.

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: Because the planned work is the replacement of existing structures, no additional operating costs are anticipated.

PROGRAM: Operation and Maintenance of Lands and Works
ACTIVITY: Facilities Management

Project Title: District Headquarter Executive Building Roof Replacement

Type: Facilities Renovation

Project Manager: Sam Morris

Physical Location: The project is planned to occur in Putnam County at District Headquarters. The property is located at 4049 Reid Street in Palatka, Florida.

Square Footage/Physical Description: The project will replace approximately 4,000 square feet of roof on the executive building at District Headquarters.

Expected Completion Date: September 2023

Historical Background/Need for Project: The objective of this project is to provide a structurally sound and watertight roof for protection of District staff and property. The roof has reached the end of its lifecycle.

Plan Linkages: None

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection, 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 $450,000 in FY 2022–23.

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: Facilities Management

Project Title: Palm Bay Service Center Fleet Building Roof Replacement

Type: Facilities Renovation

Project Manager: Sam Morris

Physical Location: The project is planned to occur in Brevard County at the Palm Bay Service Center. This property is located at 525 Community College Parkway S.E. in Palm Bay, Florida.

Square Footage/Physical Description: The project will replace approximately 23,000 square feet of roof on the fleet building at the Palm Bay Service Center.

Expected Completion Date: September 2025

Historical Background/Need for Project: The objective of this project is to provide a structurally sound and watertight roof for protection of District staff and property. The roof has reached the end of its lifecycle.

Plan Linkages: None

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection, 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 $275,000 in FY 2024–25.

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: Facilities Management

Project Title: Seal Coating and Striping of Parking Lots

Type: Facilities Renovation

Project Manager: Sam Morris

Physical Location: The project is planned to occur in Putnam County at District Headquarters. The property is located at 4049 Reid Street in Palatka, Florida.

Square Footage/Physical Description: The project will sealcoat and restripe all asphalt paved parking lot areas at District Headquarters.

Expected Completion Date: September 2022

Historical Background/Need for Project: The objective of this project is to protect and extend the lifespan of the District's asphalt resources. Seal coating protects and prolongs the life expectancy of the parking lot areas.

Plan Linkages: FY 2021–22 Preliminary Budget

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection, 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 $95,000 in FY 2021–22.

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: Facilities Management

Project Title: Sunnyhill Blue House Roof Replacement

Type: Facilities Renovation

Project Manager: Sam Morris

Physical Location: The project is planned to occur in Marion County at the Sunnyhill Field Station. This property is located at 19561 S.E. Highway 42 in Umatilla, Florida.

Square Footage/Physical Description: The project will replace approximately 4,000 square feet of roof on the Blue House Building.

Expected Completion Date: September 2021

Historical Background/Need for Project: The objective of this project is to provide a structurally sound and watertight roof for protection of District staff and property. The roof has reached the end of its lifecycle.

Plan Linkages: FY 2020–21 Adopted Budget

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

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted $90,000 in FY 2020–21.

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

V. Appendix A

STANDARD FORMAT PROGRAM DEFINITIONS FOR PROGRAMS AND ACTIVITIES

2.0 Land 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
This activity includes those 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 includes project management, permitting and conceptual, preliminary and detailed engineering for the development and preparation of contract plans and specification for the construction of planned replacement, improvement or repair to the District's administrative and field station facilities.

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 Save Our Rivers, P2000, Florida Forever, 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.

3.3 Facilities Management
The operation and maintenance of District support and administrative facilities.

Fiscal Year 2021 Five-Year Water Resource Development Work Program

4. 2021 Five-Year Water Resource Development Work Program

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I. Introduction

Water management districts are required by Section 373.709, *Florida Statutes* (F.S.), to develop a regional water supply plan (RWSP) if they determine the existing sources of water are 1) inadequate to supply water for all existing and future reasonable-beneficial uses, and/or 2) may not sustain water resources and related natural systems for a 20-year planning period. Regional Water Supply Plans (RWSPs) include analysis of current and future water demands, evaluation of available water sources, and identification of water resource and water supply development projects to meet demands.

The St. Johns River Water Management District (District) is also required to prepare a Five-Year Water Resource Development Work Program (Work Program) as a part of its annual budget reporting process, pursuant to Subsection 373.536(6)(a)4., F.S. The Work Program must describe the District's implementation strategy relating to its water resource development and water supply development (including alternative water supply development) components over the next five years. Further, the Work Program must:

- Address all the elements of the water resource development component in the District's approved RWSPs, as well as the water supply projects proposed for District funding and assistance;
- Identify both anticipated available District funding and additional funding needs for the second through fifth years of the funding plan;
- Identify projects in the Work Program which will provide water;
- Explain how each water resource and water supply project will produce additional water available for consumptive uses;
- Estimate the quantity of water to be produced by each project;
- Provide an assessment of the contribution of the District's RWSPs in supporting the implementation of minimum flows and levels (MFLs) and water reservations; and
- Ensure sufficient water is available to timely meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event and to avoid the adverse effects of competition for water supplies.

This Work Program covers the period from fiscal year (FY) 2020–21 through FY 2024–25 and is consistent with the planning strategies of the District's RWSPs. Over the last five years, the District has amended the 2005 District Water Supply Plan (DWSP) and developed two RWSPs. A third RWSP is under development. The RWSP's are briefly summarized below in Section II and depicted in Figure 1: Water supply planning regions. For additional information about the District's RWSPs, please see *www.sjrwmd.com/watersupply*.

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 divided into three planning regions and is working with other water management districts on water supply planning in most regions. The three planning regions are Central Florida, Central Springs / East Coast (CSEC), and North Florida.

In the Central Florida planning region, the District has been working in partnership with the South Florida Water Management District (SFWMD), Southwest Florida Water Management District (SWFWMD), Florida Department of Environmental Protection (DEP), Florida Department of Agriculture and Consumer Services (FDACS), and other stakeholders through the Central Florida Water Initiative (CFWI). A joint RWSP was approved in 2015 by the three water management districts for the CFWI planning area of Orange, Osceola, Seminole, and Polk counties and southern Lake County. The draft 2020 RWSP should be approved by November 2020.

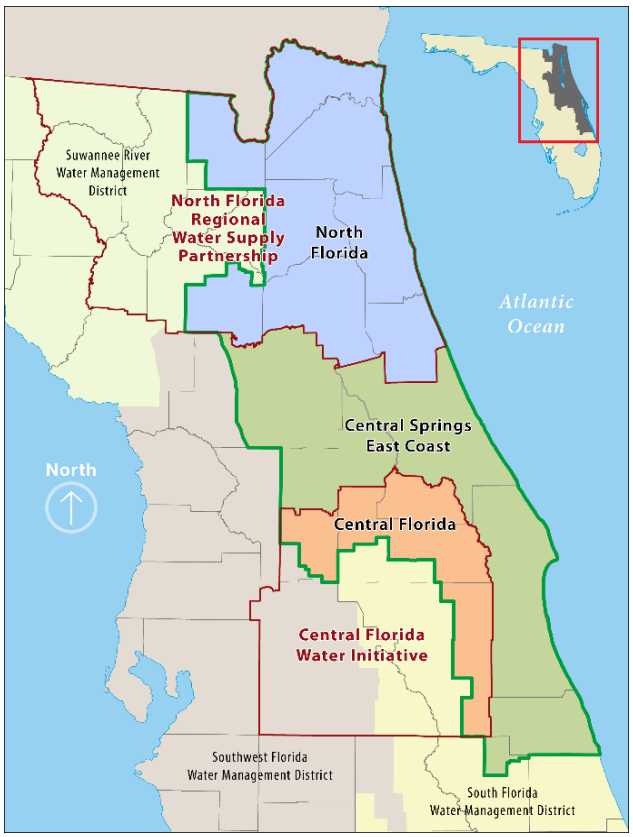

Figure 1: Water supply planning regions

In the CSEC planning region, the District has been coordinating with SFWMD, SWFWMD, and other stakeholders in advance of development of the CSEC RWSP. The planning region encompasses three sub-regions that include a portion of Marion and Lake counties, Volusia County and Brevard, Indian River, and a portion of Okeechobee counties. The District anticipates completing a draft RWSP by the fall of 2020 with approval anticipated in May 2021.

In the North Florida planning region, the District continues to work in partnership with the Suwannee River Water Management District, DEP, and other stakeholders to develop the 2022 plan update. A joint RWSP was approved in January 2017 by the District and SRWMD for the NFRWSP planning area of Alachua, Baker, Bradford, Clay, Columbia, Duval, Flagler, Gilchrist, Hamilton, Nassau, Putnam, St. Johns, Suwannee, and Union counties. Work began early 2020 to update the NFRWSP.

Table 1. Regional water supply plan approval and five-year updates.

Planning Region	Current Water Supply Plan	Next Update
North Florida	January 2017	January 2022
Central Florida	November 2015	November 2020
Central Springs / East Coast	2005 DWSP 5th Addendum, 2017	May 2021

The 2020 Central Springs / East Coast RWSP Update is scheduled for Governing Board approval May 2021.

The District updates the following on an annual basis to keep RWSPs for each of the three water supply planning regions current:

- Population and water demand projections through a 20-year planning horizon
- Groundwater modeling to assess environmental constraints
- Water conservation (WC) potential
- Water supply, alternative water supply (AWS), and water resource development (WRD) project options
- MFL prevention and recovery strategies

III. Work Program Summary

The Work Program presented herein identifies sufficient water sources to meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event and to avoid the adverse effects of competition for water supplies. Over the next five years, this Work Program outlines the District's commitment to identifying projects that provide adequate water supplies for all reasonable-beneficial uses and to maintain the function of natural systems. Additionally, the Work Program illustrates the contributions of the District in support of MFLs and water reservations.

In total, this Work Program outlines projects that, upon completion, will make available approximately 66 million gallons per day (mgd) of water, including reuse and non-reuse water. These benefits are associated with approximately $85 million budgeted for the five-year Work Program from FY 2020–21 through FY 2024–25.

In addition, these projects set forth a commitment to develop projects associated with implementation of MFLs, recovery or prevention strategies and water reservations. The projects benefitting MFLs are anticipated to make available nearly 34 mgd of reuse and non-reuse water upon completion. Of that, approximately 17 mgd of reuse and non-reuse water upon completion benefits a water body with an approved recovery or prevention strategy.

IV. Water Resource and Water Supply Development

Water resource development components are those that involve the *"…formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and nonstructural programs to protect and manage water resources; the development of regional water resource implementation programs; the construction, operation, and maintenance of major public works facilities to provide for flood control, surface and underground water storage, and groundwater recharge augmentation; and related technical assistance to local governments, government-owned and privately owned water utilities, and self-suppliers to the extent assistance to self-suppliers promotes the policies as set forth in s. 373.016."*[1]

[1] Section 373.019(24), F.S.

Water supply development (WSD) components are those that involve: *"… planning, design, construction, operation, and maintenance of public or private facilities for water collection, production, treatment, transmission, or distribution for sale, resale, or end use."*[2]

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 WSD projects (AWS and WC) are generally the responsibility of the local entities and/or water suppliers. Currently, the District provides funding for both WRD and WSD projects. In addition, the District provides funding for WC projects and strategies. To support the core mission areas, the District currently procures four cost-share programs on an annual basis:

1. The Districtwide Cost-share Program
2. The Rural Economic Development Initiative (REDI) Communities / Innovative Projects Cost-share Program
3. The Districtwide Agricultural Cost-share Program
4. Tri-County Agricultural Water Management Partnership Cost-share Program

A list of projects meeting these statutory definitions is provided in Tables 2 through 4.

Programmatic efforts such as abandoned artesian well plugging and hydrologic and water quality data collection, monitoring, and analysis programs are also included as described below.

Abandoned artesian well plugging program:

- 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 more than 70 abandoned artesian wells per year.

Hydrologic and water quality data collection, monitoring and analysis program:

- Data collection and analysis activities are a critical part of the water resource development component implemented by the District. Northeast and east-central Florida rely on groundwater to meet more than 90 percent of the region's 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 regulatory and scientific programs (including data and information for the RWSPs and Work Program). The District operates and maintains nearly 1,200 hydrologic surface and groundwater monitoring stations, cooperatively funds U.S. Geological Survey data collection at 62 locations, and processes data from more than 150 additional sites collected by other agencies. More than 16 million measurements are collected, verified, processed, and stored each year, including an intensive radar rainfall database, composed of hourly data for more than 21,000 gridded locations.

[2] Section 373.019(26), F.S.

- The District's water quality monitoring network is comprised of more than 400 surface water 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 identifies and resolves gaps in groundwater knowledge, through well drilling and hydrogeologic investigations. The program provides hydrogeologic evaluations and data, which enable groundwater modeling, the primary tool for predicting the effects of hydrologic changes on the Floridan aquifer systems.

MFLs under development and included within this Work Program:

- The District is currently re-evaluating MFLs for Lakes Brooklyn and Geneva scheduled for adoption in 2020. Water resource development funding has been approved for the Black Creek Water Resource Development Project that is currently in engineering and design. This project will provide additional recharge water to the Upper Floridan aquifer and will help to achieve the MFLs for these two lakes.

A complete list of all MFL and Water Reservation development activities may be found on the District's website at: *www.sjrwmd.com/minimumflowsandlevels*.

Please refer to the subsequent series of tables for identification of the WRD and WSD (WC and AWS) projects currently underway or anticipated to begin within the five-year planning horizon. For each project, the tables delineate RWSP region supported, primary MFL supported, the quantity of water produced, funding, and project descriptions.

Table 2: Project, RWSP Region and MFL Supported, and Quantity of Water Made Available

Project Name	Project Type	RWSP Region Supported	Primary MFL Supported	Quantity of Water Made Available upon Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)
Black Creek Water Resource Development Project	Groundwater Recharge	SJR NFRWSP	Lake Brooklyn, Lake Geneva	7.000		
City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	Reclaimed Water (for potable offset)	SJR CFWI	Wekiwa and Rock springs		3.500	
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	Reclaimed Water (for potable offset)	SJR CFWI	Wekiwa and Rock springs		8.800	
City of DeLand Reclaimed Water System Expansion, Phase 4A	Reclaimed Water (for potable offset)	SJR Central Springs East Coast	Volusia Blue Spring		0.300	
City of Deltona Alexander Avenue Water Resources Facility, Phase 4B	Surface Water	SJR Central Springs East Coast	Volusia Blue Spring			
City of Deltona West Volusia Water Supply Aquifer Recharge Phase 1	Reclaimed Water (for groundwater recharge or natural system restoration)	SJR Central Springs East Coast	Volusia Blue Spring	0.230		
City of Mascotte State Road (SR) 50 Water Main Replacement Phase 2	Other Project Type	SJR CFWI		0.050		
City of Ocala East Villas Wastewater Plant Decommissioning and Connection to Marion County Facility	Reclaimed Water (for potable offset)	SJR Central Springs East Coast	Silver Springs		0.030	
City of Ocala Lower Floridan Aquifer Conversion Phase 1	Other Non-Traditional Source	SJR Central Springs East Coast	Silver Springs	8.900		
City of Ocoee The Hammocks Reclaimed Water Retrofit	Reclaimed Water (for potable offset)	SJR CFWI	Wekiwa and Rock springs		0.050	
City of Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative Districtwide Program	Reclaimed Water (for potable offset)	SJR Central Springs East Coast			0.160	
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	Reclaimed Water (for potable offset)	SJR NFRWSP	Lake Brooklyn, Lake Geneva		0.750	

Project Name	Project Type	RWSP Region Supported	Primary MFL Supported	Quantity of Water Made Available upon Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)
Clay County Utility Authority Stormwater Mining Project	Stormwater	SJR NFRWSP	Lake Brooklyn, Lake Geneva	0.700		
Clay County Utility Authority Wastewater Treatability Study	Reclaimed Water (for potable offset)	SJR NFRWSP	Lake Brooklyn, Lake Geneva		1.000	
Crane Creek M-1 Canal Flow Restoration	Surface Water	SJR Central Springs East Coast		7.000		
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	Surface Water Storage	SJR Central Springs East Coast		18.000		1,372
Dispersed Water Storage / Nutrient Reduction Pilot Project with Graves Brothers	Surface Water Storage	SJR Central Springs East Coast		5.000		182
Fellsmere Water Management Area	Surface Water Storage	SJR Central Springs East Coast				2,139
Gainesville Regional Utilities Low-Income Water Efficient Toilet Exchange Program	PS and CII Conservation	SJR NFRWSP		0.004		
Hammond Groves, Inc. Surface Water Pump Station	Agricultural Conservation	SJR Central Springs East Coast		0.330		
JEA Low-Income Water Efficient Toilet Exchange Phase 2	PS and CII Conservation	SJR NFRWSP		0.010		
JEA Twin Creeks Reclaimed Water Storage and Delivery	Reclaimed Water (for potable offset)	SJR NFRWSP	Lake Brooklyn, Lake Geneva		1.880	
Lake Apopka Recharge	Groundwater Recharge	SJR CFWI	Wekiwa and Rock springs	1.000		
Little Orange Creek Recharge Well	Groundwater Recharge	SJR Central Springs East Coast		0.500		
Marion County Silver Springs Shores Regional Capacity Improvements and Package Plant Removal	Reclaimed Water (for potable offset)	SJR Central Springs East Coast			0.010	

Project Name	Project Type	RWSP Region Supported	Primary MFL Supported	Quantity of Water Made Available upon Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)
Orange County Utilities Water Wise Neighbor Irrigation for New Construction	PS and CII Conservation	SJR CFWI		0.030		
Southern Grace Berries Sprayer and Irrigation System	Agricultural Conservation	SJR Central Springs East Coast	Silver Springs	0.010		
St. Johns County Marsh Landing Reclaimed Water Main	Reclaimed Water (for potable offset)	SJR NFRWSP	Lake Brooklyn, Lake Geneva		0.060	
Taylor Creek Reservoir Improvements	Data Collection and Evaluation	SJR CFWI				
Volusia Blue Wetland Recharge Project	Data Collection and Evaluation	SJR Central Springs East Coast	Volusia Blue Spring			
Volusia County Wastewater Infrastructure for Blue Spring	Reclaimed Water (for potable offset)	SJR Central Springs East Coast	Volusia Blue Spring		0.100	
Totals:				**48.764**	**16.640**	**3,693**

Table 3: Five-Year Work Program / Funding Projections

Project Name	FY 2020–21	FY 2021–22	FY 2022–23	FY 2023–24	FY 2024–25	Total*
Black Creek Water Resource Development Project	$ 2,622,368	$ 20,540,756	$ 19,198,110	$ 789,499	$ -	$ 43,150,733
City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	1,520,568	-	-	-	-	1,520,568
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	1,500,000	-	-	-	-	1,500,000
City of DeLand Reclaimed Water System Expansion, Phase 4A	1,365,870	-	-	-	-	1,365,870
City of Deltona Alexander Avenue Water Resources Facility, Phase 4B	3,592,868	1,286,132	-	-	-	4,879,000
City of Deltona West Volusia Water Supply Aquifer Recharge Phase 1	138,514	-	-	-	-	138,514
City of Mascotte State Road (SR) 50 Water Main Replacement Phase 2	325,000	-	-	-	-	325,000
City of Ocala East Villas Wastewater Plant Decommissioning and Connection to Marion County Facility	282,323	-	-	-	-	282,323
City of Ocala Lower Floridan Aquifer Conversion Phase 1	708,062	-	-	-	-	708,062
City of Ocoee The Hammocks Reclaimed Water Retrofit	131,238	-	-	-	-	131,238
City of Umatilla Wastewater Interconnection Pipeline - Rural Economic Development Initiative Districtwide Program	1,500,000	-	-	-	-	1,500,000
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	900,570	-	-	-	-	900,570
Clay County Utility Authority Stormwater Mining Project	106,607	-	-	-	-	106,607
Clay County Utility Authority Wastewater Treatability Study	224,392	224,392	-	-	-	448,784

Project Name	FY 2020–21	FY 2021–22	FY 2022–23	FY 2023–24	FY 2024–25	Total*
Crane Creek M-1 Canal Flow Restoration	3,237,923	4,881,056	781,021	-	-	8,900,000
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	1,557,129	4,168,608	1,939,938	1,007,854	730,500	9,404,029
Dispersed Water Storage / Nutrient Reduction Pilot Project with Graves Brothers	584,594	-	-	-	-	584,594
Fellsmere Water Management Area	1,702,381	-	-	-	-	1,702,381
Gainesville Regional Utilities Low-Income Water Efficient Toilet Exchange Program	30,000	-	-	-	-	30,000
Hammond Groves, Inc. Surface Water Pump Station	50,000	-	-	-	-	50,000
JEA Low-Income Water Efficient Toilet Exchange Phase 2	75,000	-	-	-	-	75,000
JEA Twin Creeks Reclaimed Water Storage and Delivery	1,305,000	-	-	-	-	1,305,000
Lake Apopka Recharge	277,000	-	-	-	-	277,000
Little Orange Creek Recharge Well	41,174	-	-	-	-	41,174
Marion County Silver Springs Shores Regional Capacity Improvements and Package Plant Removal	1,743,519	-	-	-	-	1,743,519
Orange County Utilities Water Wise Neighbor Irrigation for New Construction	54,300	-	-	-	-	54,300
Southern Grace Berries Sprayer and Irrigation System	51,676	-	-	-	-	51,676
St. Johns County Marsh Landing Reclaimed Water Main	180,895	-	-	-	-	180,895
Taylor Creek Reservoir Improvements	75,000	-	-	-	-	75,000

Project Name	FY 2020–21	FY 2021–22	FY 2022–23	FY 2023–24	FY 2024–25	Total*
Volusia Blue Wetland Recharge Project	645,103	-	-	-	-	645,103
Volusia County Wastewater Infrastructure for Blue Spring	2,720,250	-	-	-	-	2,720,250
Totals:	**$ 29,249,324**	**$ 31,100,944**	**$ 21,919,069**	**$ 1,797,353**	**$ 730,500**	**$ 84,797,190**

* For budgeting purposes, all funds are allocated in the FY 2020-21 Adopted Budget.

Table 4: Project Descriptions

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
Black Creek Water Resource Development Project	The Black Creek Water Resource Development Project will help to replenish the Upper Floridan aquifer in northeast Florida using flow from Black Creek, in Clay County, during high water periods and flood events. Water will be pumped through a transmission system toward the Keystone Heights area and is expected to contribute to minimum flows and levels recovery in the Lower Santa Fe Basin and may help improve water levels in lakes in the Alligator Creek system, including Lakes Brooklyn and Geneva.	Design	08/2021	10/2023
City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	Conversion of three rectangular clarifiers into secondary anoxic and reaeration treatment basins, and the construction of two 90-foot diameter circular clarifiers and related appurtenances that will result in a more efficient performance and greater overall treatment.	Construction/Underway	04/2020	12/2021
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	The proposed project will provide an additional 8.8 MGD storage capacity for the reclaimed water and 7,900 LF of 30-inch reclaimed water main on the Golden Gem Road in Apopka.	Design	10/2020	10/2022
City of DeLand Reclaimed Water System Expansion, Phase 4A	The project will retrofit existing residential neighborhoods with reclaimed water distribution mains to: 1) implement the adopted prevention and recovery strategy for Blue Spring; and 2) meet one of the city's CUP permit conditions that requires 4.6 MGD of reclaimed expansion projects. The project includes a 17,300-foot reclaimed water main extension on Adelle Avenue to serve new customers in the northwest service area and to support a new 2.0 MG storage tank and pump station in the northwest area.	Design	02/2021	02/2022
City of Deltona Alexander Avenue Water Resources Facility, Phase 4B	Phase 4B Lake Monroe intake, which will include two passive 1/8-inch intake screens with cleaning systems. A 24-inch water transmission main from the Lake Monroe intake will transfer raw water from the pump station to the AAWRF Phase 4A to be treated. This project will enable the city to meet and even exceed its CUP requirement to PAR customers, provide for the expansion of the Alexander Avenue rapid infiltration basins, and benefit the Volusia Blue Spring MFL.	Design	10/2020	03/2022
City of Deltona West Volusia Water Supply Aquifer Recharge Phase 1	This project provides aquifer recharge to the Upper Floridan aquifer (UFA) through construction of a 20-acre Rapid Infiltration Basin (RIB).	Construction/Underway	04/2020	12/2020
City of Mascotte State Road (SR) 50 Water Main Replacement Phase 2	Phase 2 includes approximately 5,500 LF feet of water main replacement, along SR 50 to complete the pipe replacement within the city limits.	Construction/Underway	05/2020	03/2021
City of Ocala East Villas Wastewater Plant Decommissioning and Connection to Marion County Facility	The project plans to decommission the existing WWTF, construct a new pump station and force main, and pump all the untreated wastewater to Marion County Utilities system. The main construction components include the installation of 1,700 feet of force main to connect to the county's existing 6- inch PVC force main along 7th Street NE.	Design	03/2021	01/2022

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
City of Ocala Lower Floridan Aquifer Conversion Phase 1	Construction of three, 24-inch diameter production wells, each with a five MGD capacity at WTP #2.	Construction/Underway	11/2019	09/2021
City of Ocoee The Hammocks Reclaimed Water Retrofit	Extension of reclaimed water lines to the Hammocks, and existing 125 home neighborhood, to replace the current use of potable water for irrigation and non-domestic with reclaimed water.	Construction/Underway	04/2020	12/2020
City of Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative Districtwide Program	The project involves the construction of a wastewater interconnect between the cities of Umatilla and Eustis to allow wastewater generated in Umatilla to be pumped to the City of Eustis for treatment and disposal, and the decommissioning of the aging Umatilla Wastewater Treatment Plant.	Design	10/2020	09/2021
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	The proposed Saratoga Springs project will construct a 750,000-gallon storage and distribution facility that will deliver reclaimed water to more than 2,000 new customers in the new residential developments Cross Creek, Rolling Hills, and Avonlea in the Saratoga Springs Planning Area.	Design	12/2020	09/2022
Clay County Utility Authority Stormwater Mining Project	Installation of approximately 1,000 to 1,200 LF of horizontal well and a wet well with a submersible pump adjacent to FDOT's wet detention stormwater ponds.	Construction/Underway	05/2020	10/2020
Clay County Utility Authority Wastewater Treatability Study	Develop a treatability study to assess the viability of the One Water approach and to expand alternative water supplies within recipient's initiatives.	Design	10/2020	09/2022
Crane Creek M-1 Canal Flow Restoration	This project would restore M-1 Canal baseflows and small stormflows west of Evans Road back to the USJRB by constructing an operable diversion structure in the M-1 Canal to divert and treat flows prior to discharging to the USJRB.	Design	12/2020	12/2022
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	The District is evaluating environmental benefits from using groves and other private lands for retention of stormwater to reduce excess freshwater and nutrients being released to the Indian River Lagoon. The Fellsmere project will create a ~2,000-acre reservoir that should store about 18 MGD on an annual basis. Nutrient reductions should be approximately 24 metric tons (MT) nitrogen and 3 MT phosphorus annually.	Design	07/2021	09/2022
Dispersed Water Storage / Nutrient Reduction Pilot Project with Graves Brothers	The District is evaluating environmental benefits from using groves and other private lands for retention of stormwater to reduce excess freshwater and nutrients being released to the Indian River Lagoon. The Graves Brothers project will create a ~200 acre reservoir that should store about 5 MGD on an annual basis. Nutrient reductions should be approximately 3 MT nitrogen and 1 MT phosphorus annually.	Design	11/2020	09/2021
Fellsmere Water Management Area	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 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.	Construction/Underway	10/2007	04/2021

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
Gainesville Regional Utilities Low-Income Water Efficient Toilet Exchange Program	GRU's Low-Income Energy Efficiency Program (LEEP) assists customers with home improvements that lower their electric bill, improve comfort and reduce energy use free of charge. GRU will expand the program to offer toilet replacements to approximately 40 homes per year, replacing up to 120 toilets during the two-year cost-share project.	Design	10/2020	09/2022
Hammond Groves, Inc. Surface Water Pump Station	Design and install a surface water pump station, design and complete a pond restoration project and purchase and install mesh bags for citrus trees on approximately 400 acres of citrus.	Construction/Underway	01/2020	12/31/2020
JEA Low-Income Water Efficient Toilet Exchange Phase 2	JEA currently operates a low-income Neighborhood Energy Efficiency program that provides low-income homes several electric and water conservation products and installation free of charge. JEA will expand on that program to offer toilet replacements to approximately 200 homes per year, replacing up to 400 toilets with no more than two replacements per home.	Design	10/2020	09/2021
JEA Twin Creeks Reclaimed Water Storage and Delivery	Construct aboveground reclaimed water storage facility and necessary piping to provide reclaimed water to the Twin Creeks subdivision.	Construction/Underway	07/2020	09/2021
Lake Apopka Recharge	Aquifer recharge well to benefit MFLs in the CFWI region. FY 20/21 Includes UIC permit services and construction of exploratory/monitor well for aquifer testing. FY21–22 Construction of recharge well, associated infrastructure and GST for disinfection, if needed.	Design	10/2021	09/2022
Little Orange Creek Recharge Well	The project includes construction of one aquifer recharge well situated near Little Orange Creek. Water will be diverted from the creek toward the recharge well and flow passively (i.e., under gravity) into the UFA only when there is sufficient water available to maintain the environmental needs of natural systems in the creek.	Design	07/2021	07/2022
Marion County Silver Springs Shores Regional Capacity Improvements and Package Plant Removal	Upgrade the nutrient removal capabilities to Marion County AWT standards and expand the capacity at the Silver Springs Shores WWTF by 500,000 gallons per day to provide capacity for additional connections.	Design	10/2019	09/2021
Orange County Utilities Water Wise Neighbor Irrigation for New Construction	This is an expansion to the county's current Water Wise Neighbor Program. This project would provide smart irrigation ET timers, rain sensors, high-efficiency spray nozzles and pressure-regulated spray bodies to participating builders.	Design	10/2020	06/2021
Southern Grace Berries Sprayer and Irrigation System	Purchase of a variable rate hoop boom sprayer and the purchase and installation of a drip tape irrigation system.	Construction/Underway	04/2020	05/2021
St. Johns County Marsh Landing Reclaimed Water Main	The recipient plans to construct approximately 7,200 LF of reclaimed water main from the Marsh Landing WWTF to the Oak Bridge Golf Course and plans to install a pump station at the Marsh Landing WWTF with associated electrical upgrades.	Construction/Underway	06/2020	01/2021
Taylor Creek Reservoir Improvements	The geotechnical information is needed to support the in-house design of the Taylor Creek Reservoir Improvement Project. This project is the initial phase of a project option identified in the 2015 CFWI RWSP.	Design	11/2020	05/2021

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
Volusia Blue Wetland Recharge Project	Consultant shall evaluate the feasibility of using the site for recharge of between 2 to 4 MGD to benefit Volusia Blue Spring while achieving water quality targets at the site prior to recharge. On-site geotechnical monitoring is needed to support the project's feasibility. This field investigations known as load testing will be constructed and administered under this scope of work. Upon completion of the load test and a successful determination of the project's feasibility, site acquisition can commence. Future construction phases of Volusia Blue Wetland Recharge Project will seek funding through the SJRWMD's Districtwide Cost-Share and the DEP Springs Funding grant.	Construction/Underway	01/2020	09/2021
Volusia County Wastewater Infrastructure for Blue Spring	Decommission of the Del North wastewater treatment plant, construction of a master lift station and 3 miles of force main and connect to the Southwest Regional water reclamation facility.	Construction/Underway	06/2020	09/2021

V. Basin Management Action Plan Appendix

Basin Management Action Plans (BMAPs) are the "blueprint" for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load. In 2016, the Florida Legislature amended Section 373.036, F.S., to require the identification of all specific projects that implement a BMAP or a recovery or prevention strategy in the Work Program. The District's Work Program has historically identified water resource development projects that support MFL recovery and prevention but has not included specific descriptions of projects primarily intended to implement BMAPs. Consistent with section 373.036, F.S., and in a manner that has been coordinated with DEP and all five water management districts, the District makes available as part of this Work Program a five-year funding outlook for projects specifically identified in an adopted BMAP.

BMAP Appendix Table

Project Name	Project Description	Project Type	Project Status	Construction Completion Date	BMAP	Lead Entity	DEP Project Number	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Location	Acres Treated
Lake Apopka Duda Property Water Storage Improvements	Improve roads and berms and add additional internal water management capabilities within Duda to better manage water and retain phosphorus on the Lake Apopka North Shore.	Impoundment	Underway	01/2022	OKLA (Ocklawaha River Basin)	SJRWMD	LAP57	9,670	390	Lake Apopka Basin	2,500
Lake Apopka Innovative TP Removal	The project will utilize an innovative treatment technology and SJRWMD will pay a pre-negotiated rate for each pound of TP removed from Lake Apopka's water column.	Study	Underway	07/2021	OKLA (Ocklawaha River Basin)	SJRWMD	LAP58	N/A	N/A	Lake Apopka Basin	31,000
Lake Apopka Marsh Flow-Way Improvements	Improve the marsh flow-way hydraulic performance to improve efficiencies.	Wetland Treatment	Underway	11/2021	OKLA (Ocklawaha River Basin)	SJRWMD	LAP59	N/A	TBD	Lake Apopka Basin	31,000
Lake Apopka North Shore Infrastructure Improvements	Improve water storage to better meet lake regulation schedule and reduce phosphorus loads entering the lake.	Impoundment	Underway	10/2020	OKLA (Ocklawaha River Basin)	SJRWMD	LAP55	3,546	143	Lake Apopka Basin	2,000

Project Name	Project Description	Project Type	Project Status	Construction Completion Date	BMAP	Lead Entity	DEP Project Number	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Location	Acres Treated
Moorhen Marsh Low Energy Aquatic Plant System (Indian River County Moorhen Marsh LEAPS)	This is a managed aquatic plant system that will remove sediment and suspended solids through settling and filtration by aquatic plant roots. The aquatic plants will be harvested on a regular basis.	Floating Islands/ Managed Aquatic Plant Systems (MAPS)	Cancelled		CIRL (Central Indian River Lagoon)	Indian River County	CIRL-IRC-07				
Septic Removal - NIRL -MIRA (City of Merritt Island Redevelopment Agency Septic Tank Phase Out)	SOIRL - 44. (Removal of 75 septic tanks and provide sewer connections for residential and commercial parcels.)	OSTDS Phase Out	Underway	09/2020	NIRL (North Indian River Lagoon)	Brevard County	BC-88	2,501	822	B (North B)	
WWTF Policy Reductions (Volusia County Wastewater Infrastructure for Protection of Blue Spring)	WWTF Policy Reductions (Decommissioning of Del North WWTF and construction of a master lift station with 3 miles of 12-inch force main to connect to the Southwest Regional WRF.)	Achieved by WWTF policy if implemented BMAP-wide, achieving 3 or 6 mg/L	Underway	09/2021	WEKR (Wekiva River)	Wastewater Utilities	WU-1	6,390	2,065	Inside Springshed	
Totals								**22,107**	**3,420**		**66,500**

BMAP Appendix Table

Project Name	FY 2020–21	FY 2020–22	FY 2022–23	FY 2023–24	FY 2024–25	Total	Total State Funding	Total District Funding	Lead Entity Match	Project Total
Lake Apopka Duda Property Water Storage Improvements	$ 2,650,000	$ -	$ -	$ -	$ -	$ 2,650,000	$ 2,790,000	$ -	$ -	$ 2,790,000
Lake Apopka Innovative TP Removal	920,000	-	-	-	-	920,000	2,000,000	-	-	2,000,000
Lake Apopka Marsh Flow-Way Improvements	1,765,000	-	-	-	-	1,765,000	2,809,680	-	-	2,809,680
Lake Apopka North Shore Infrastructure Improvements	65,526	-	-	-	-	65,526	2,491,060	-	-	2,491,060
Moorhen Marsh Low Energy Aquatic Plant System (Indian River County Moorhen Marsh LEAPS)	-	-	-	-	-	-	-	-	-	8,705,000
Septic Removal - NIRL -MIRA (City of Merritt Island Redevelopment Agency Septic Tank Phase Out)	-	-	-	-	-	-	-	912,255	2,225,843	3,138,098
WWTF Policy Reductions (Volusia County Wastewater Infrastructure for Protection of Blue Spring)	2,720,250	-	-	-	-	2,720,250	1,500,000	1,425,000	3,248,500	6,173,500
Totals	**$ 8,120,776**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 8,120,776**				

Alternative Water Supplies Annual Report

5. Alternative Water Supplies Annual Report

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Tables

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) — created in fiscal year (FY) 2005–06 by the Florida Legislature — and other sources.

Since FY 2005–06, the District has awarded more than $220 million from all sources in cost-share funding for 213 AWS projects that will or have resulted in the production of 322 million gallons per day (mgd) of alternative water supplies.

The WPSPTF was created in FY 2005–06 by the Florida Legislature and provides funding assistance for the construction of AWS and conservation projects that result in quantifiable water savings. Since the establishment of the WPSPTF, the District is required to match from District sources the amount of funding allocated from the WPSPTF. In FY 2020–21, the Governor and Legislature allocated $40 million to the Department of Environmental Protection for the development of water resource and water supply projects to help communities plan for and implement conservation, reuse and other water supply and water resource development projects. Of that $40 million in state funding, $1.8 million was appropriated from the WPSPTF. Through FY 2020–21, the District has received $38.9 million from the WPSPTF and contributed $38.9 million in District funds.

In the fulfillment of its core missions, the District has always supported water conservation and the development of AWS and water resource development projects. From the early 1990s forward, the District solicited local partners for participation in AWS and stormwater cost-share projects. Recognizing the ability to support local governments by providing solutions to the growing issues surrounding water supply and other core missions, the District adopted a more proactive role in its cost-share program in 2015. These programs provide opportunities for the District to partner with local governments, agricultural producers, and other stakeholders to implement projects to accomplish more than could be completed individually.

Table 5-1 provides information on the amount of water produced or recycled by AWS source. Table 5-2 provides information on AWS projects funded by the District through its cost-share programs and associated match from the state. Information on completed projects and their benefits are documented in previous Consolidated Annual Reports.

II. Summary

For FY 2020–21, the District, with state assistance, is contributing to more than $88.6 million in funding on 33 AWS projects that will or have resulted in the production of more than 66.8 mgd of AWS. This work is assisted by approximately $75 million from the state of Florida, of which $450,000 was from the WPSPTF.

Table 5-1. Summary of water produced or recycled by AWS source

AWS Source	Water to be Produced or Recycled (mgd)
Conservation	0.024
Groundwater recharge	7.000
Other non-traditional source	29.820
Reclaimed water (for potable offset)	18.290
Stormwater	0.700
Surface water	11.000
Total	**66.834**

Table 5-2. Summary of AWS projects funded in FY 2020–21

Project Name	Project Type	Quantity of Water Made Available upon Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)	Use of District Lands or Facilities	Total Budgeted Funds FY 2020–21	Project Totals			
							District Funds	State Funds	WPSPTF	Revolving Loans
City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	Reclaimed Water (for potable offset)	-	3.500	-	No	$ 1,210,355	$ 226,091	$ 1,500,000	$ -	$ -
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	Reclaimed Water (for potable offset)	-	3.500	-	No	1,500,000	1,500,000	-	-	-
City of DeLand Reclaimed Water System Expansion, Phase 4A	Reclaimed Water (for potable offset)	-	0.300	-	No	1,365,870	1,365,870	-	-	-
City of Deltona Alexander Avenue Water Resources Facility, Phase 4B	Surface Water	4.000	-	-	No	4,879,000	1,500,000	3,379,000	-	-
City of Ocala East Villas Wastewater Plant Decommissioning and Connection to Marion County Facility	Reclaimed Water (for potable offset)	-	0.030	-	No	282,323	282,323	-	-	-
City of Ocala Lower Floridan Aquifer Conversion Phase 1	Other Non-Traditional Source	8.900	-	-	No	1,117,870	722,812	722,812	-	-
City of Ocoee The Hammocks Reclaimed Water Retrofit	Reclaimed Water (for potable offset)	-	0.050	-	No	123,316	-	131,238	-	-
City of Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative / Innovative Program	Reclaimed Water (for potable offset)	-	0.160	-	No	1,500,000	1,500,000	-	-	-

Project Name	Project Type	Quantity of Water Made Available upon Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)	Use of District Lands or Facilities	Total Budgeted Funds FY 2020–21	Project Totals			
							District Funds	State Funds	WPSPTF	Revolving Loans
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	Reclaimed Water (for potable offset)	-	0.750	-	No	900,570	900,570	-	-	-
Clay County Utility Authority Stormwater Mining Project	Stormwater	0.700	-	-	No	170,359	304,590	-	-	-
Clay County Utility Authority Wastewater Treatability Study	Reclaimed Water (for potable offset)	-	-	-	No	448,784	58,784	390,000	-	-
Crane Creek M-1 Canal Flow Restoration	Surface Water	7.000	-	-	Yes	9,159,474	6,116,056	2,450,000	-	-
JEA Twin Creeks Reclaimed Water Storage and Delivery	Reclaimed Water (for potable offset)	-	1.880	-	No	1,207,351	975,000	-	450,000	-
Marion County Silver Springs Shores Regional Capacity Improvements and Package Plant Removal	Reclaimed Water (for potable offset)	-	0.010	-	No	1,019,213	1,500,000	1,987,038	-	-
St. Johns County Marsh Landing Reclaimed Water Main	Reclaimed Water (for potable offset)	-	0.060	-	No	298,778	542,685	-	-	-
Volusia County Wastewater Infrastructure for Blue Spring	Reclaimed Water (for potable offset)	-	0.100	-	No	2,035,656	1,425,000	1,500,000	-	-
Black Creek Water Resource Development Project	Groundwater Recharge	7.000	-	-	Yes	44,378,784	5,129,258	43,344,978	-	-

Project Name	Project Type	Quantity of Water Made Available upon Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)	Use of District Lands or Facilities	Total Budgeted Funds FY 2020–21	Project Totals			
							District Funds	State Funds	WPSPTF	Revolving Loans
City of Altamonte Springs Reclaimed Water Storage and Recharge Optimization Project	Reclaimed Water (for potable offset)	-	6.500	-	No	3,864,392	364,392	3,500,000	-	-
City of DeLand North West Reclaimed Water Ground Storage Tank and Pump Station	Reclaimed Water (for potable offset)	-	1.000	-	No	1,937,164	182,664	1,754,500	-	-
City of Edgewater Reclaimed Extension to Meadow Lake and Woodbridge Subdivisions	Reclaimed Water (for potable offset)	-	0.200	-	No	424,134	39,994	384,140	-	-
City of Groveland Lower Floridan Reclaimed Well at Sunshine	Other Non-Traditional Source	2.300	-	-	No	545,666	104,112	1,000,000	-	-
City of Groveland South Lake County Lower Floridan Wellfield Project — Distributed	Other Non-Traditional Source	4.320	-	-	No	1,112,592	212,280	2,038,960	-	-
City of Mascotte Lower Floridan Aquifer Wellfield - South Lake County Wellfield Project	Other Non-Traditional Source	2.000	-	-	No	1,909,832	364,392	3,500,000	-	-
City of Orange City Alternative Water Supply Conveyance System — Monastery Road	Other Non-Traditional Source	0.100	-	-	No	178,866	16,866	162,000	-	-
City of Sanford Brackish Reverse Osmosis Water Treatment Plant Pilot	Other Non-Traditional Source	-	-	-	No	1,018,543	96,043	922,500	-	-
City of Sanford North Water Reclamation Facility Reclaimed Water Pump Station and Storage Improvements	Reclaimed Water (for potable offset)	-	-	-	No	3,588,364	338,364	3,250,000	-	-

Project Name	Project Type	Quantity of Water Made Available upon Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)	Use of District Lands or Facilities	Total Budgeted Funds FY 2020–21	Project Totals			
							District Funds	State Funds	WPSPTF	Revolving Loans
City of Winter Springs Tuskawilla Crossing Reclaimed Water Main	Reclaimed Water (for potable offset)	-	0.250	-	No	552,056	52,056	500,000	-	-
Florida Power and Light Company Okeechobee Clean Energy Center — Upper Floridan Aquifer to Avon Park Permeable Zone Conversion	Other Non-Traditional Source	2.200	-	-	No	529,974	49,974	480,000	-	-
Orange County Utilities Cypress Lake Wellfield — Oak Meadows Alternative Water Supply Delivery Enhancements	Other Non-Traditional Source	9.000	-	-	No	734,786	69,286	665,500	-	-
Orlando Utilities Commission Smart Leak Detection Device Rebates	Conservation	0.001	-	-	No	11,041	1,041	10,000	-	-
Orlando Utilities Commission WaterSense Certified Irrigation Controller Rebates	Conservation	0.012	-	-	No	13,801	1,301	12,500	-	-
Orlando Utilities Commission WaterSense Certified Toilet Rebates	Conservation	0.011	-	-	No	33,123	3,123	30,000	-	-
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	Other Non-Traditional Source	1.000	-	-	No	545,666	104,112	1,000,000	-	-
Totals:		**48.544**	**18.290**	**-**		**$ 88,597,703**	**$ 26,049,039**	**$ 74,615,166**	**$ 450,000**	**$ -**

III. Alternative Water Supplies Project Descriptions

Below are descriptions of AWS projects found in Table 5-2.

City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II
Conversion of three rectangular clarifiers into secondary anoxic and reaeration treatment basins, and the construction of two 90-foot diameter circular clarifiers and related appurtenances that will result in a more efficient performance and greater overall treatment.

City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension
The proposed project will provide an additional 3.5 mgd storage capacity for the reclaimed water and 7,900 linear feet (LF) of 30-inch reclaimed water main on the Golden Gem Road in Apopka.

City of DeLand Reclaimed Water System Expansion, Phase 4A
The project will retrofit existing residential neighborhoods with reclaimed water distribution mains to: 1) implement the adopted prevention and recovery strategy for Blue Springs; and 2) meet one of the city's CUP permit conditions that requires 4.6 mgd of reclaimed expansion projects. The project includes a 17,300-foot reclaimed water main extension on Adelle Avenue to serve new customers in the northwest service area and to support a new 2.0 million gallon (MG) storage tank and pump station in the northwest area.

City of Deltona Alexander Avenue Water Resources Facility, Phase 4B
Phase 4B Lake Monroe intake, which will include two passive 1/8-inch intake screens with cleaning systems. A 24-inch water transmission main from the Lake Monroe intake will transfer raw water from the pump station to the Alexander Avenue Water Resources Facility, Phase 4A to be treated. This project will enable the city to meet and even exceed its CUP requirement to PAR customers, provide for the expansion of the Alexander Avenue rapid infiltration basins, and benefit the Volusia Blue Springs MFL.

City of Ocala East Villas Wastewater Plant Decommissioning and Connection to Marion County Facility
The project plans to decommission the existing Wastewater Treatment Facility (WWTF), construct a new pump station and force main, and pump all the untreated wastewater to Marion County Utilities system. The main construction components include the installation of 1,700 feet of force main to connect to the county's existing 6- inch PVC force main along 7th Street NE.

City of Ocala Lower Floridan Aquifer Conversion Phase 1
Construction of three, 24-inch diameter production wells, each with a five mgd capacity at Wastewater Treatment Plant (WTP) #2.

City of Ocoee The Hammocks Reclaimed Water Retrofit
Extension of reclaimed water lines to the Hammocks, and existing 125 home neighborhood, to replace the current use of potable water for irrigation and non-domestic with reclaimed water.

City of Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative / Innovative Program

The project involves the construction of a wastewater interconnect between the cities of Umatilla and Eustis to allow wastewater generated in Umatilla to be pumped to the city of Eustis for treatment and disposal, and the decommissioning of the aging Umatilla WTP.

Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station

The proposed Saratoga Springs project will construct a 750,000-gallon storage and distribution facility that will deliver reclaimed water to more than 2,000 new customers in the new residential developments Cross Creek, Rolling Hills, and Avonlea in the Saratoga Springs Planning Area.

Clay County Utility Authority Stormwater Mining Project

Installation of approximately 1,000 to 1,200 LF of horizontal well and a wet well with a submersible pump adjacent to Florida Department of Transportation's wet detention stormwater ponds.

Clay County Utility Authority Wastewater Treatability Study

Develop a treatability study to assess the viability of the One Water approach and to expand alternative water supplies within recipient's initiatives.

Crane Creek M-1 Canal Flow Restoration

This project would restore M-1 Canal baseflows and small stormflows west of Evans Road back to the Upper St. Johns River Basin (USJRB) by constructing an operable diversion structure in the M-1 Canal to divert and treat flows prior to discharging to the USJRB.

JEA Twin Creeks Reclaimed Water Storage and Delivery

Construct aboveground reclaimed water storage facility and necessary piping to provide reclaimed water to the Twin Creeks subdivision.

Marion County Silver Springs Shores Regional Capacity Improvements and Package Plant Removal

Upgrade the nutrient removal capabilities to Marion County AWT standards and expand the capacity at the Silver Springs Shores WWTF by 500,000 gallons per day to provide capacity for additional connections.

St. Johns County Marsh Landing Reclaimed Water Main

The recipient plans to construct approximately 7,200 LF of reclaimed water main from the Marsh Landing WWTF to the Oak Bridge Golf Course and plans to install a pump station at the Marsh Landing WWTF with associated electrical upgrades.

Volusia County Wastewater Infrastructure for Blue Spring

Decommission of the Del North wastewater treatment plant, construction of a master lift station and 3 miles of force main, and connect to the Southwest Regional water reclamation facility.

Black Creek Water Resource Development Project

The Black Creek Water Resource Development Project will help to replenish the Upper Floridan aquifer in northeast Florida using flow from Black Creek, in Clay County, during high water

periods and flood events. Water will be pumped through a transmission system toward the Keystone Heights area and is expected to contribute to minimum flows and levels recovery in the Lower Santa Fe Basin and may help improve water levels in lakes in the Alligator Creek system, including Lakes Brooklyn and Geneva.

City of Altamonte Springs Reclaimed Water Storage and Recharge Optimization Project
The project includes construction of a lined 6 million gallon (MG) storage pond and a 0.5 million gallons per day (mgd) rapid infiltration basin. The project is anticipated to provide 6 MG alternative water storage, 0.5 mgd aquifer recharge and an estimated nutrient load reduction of 2,433 lbs./yr. total nitrogen (TN) and 811 lbs./yr. total phosphorus (TP).

City of DeLand North West Reclaimed Water Ground Storage Tank and Pump Station
The project includes construction of a 2 MG Ground Storage Tank (GST) and a 6 mgd high service pump station to serve the city's central and northern service areas. The project is anticipated to provide additional storage for 2 MG of alternative water.

City of Edgewater Reclaimed Extension to Meadow Lake and Woodbridge Subdivisions
The project includes construction of reclaimed water main extension for residential irrigation to 188 single family residential properties, including disconnection of current potable supply to irrigation systems. The project is anticipated to provide 0.2 mgd alternative water and an estimated nutrient load reduction of 1,828 lbs./yr. TN and 609 lbs./yr. TP.

City of Groveland Lower Floridan Reclaimed Well at Sunshine
This project will consist of the drilling and development of one production well into the Lower Floridan aquifer to reduce existing and future water demand from the Upper Floridan aquifer. The project is estimated to provide 2.3 mgd alternative water.

City of Groveland South Lake County Lower Floridan Wellfield Project – Distributed
The project consists of drilling of two Lower Floridan aquifer production wells to provide non-traditional water to meet future demands. The project is estimated to provide 4.3 mgd alternative water.

City of Mascotte Lower Floridan Aquifer Wellfield — South Lake County Wellfield Project
This project consists of drilling two Lower Floridan aquifer wells at the existing Upper Floridan aquifer wellfield to shift groundwater withdrawal from the Upper to the Lower Floridan aquifer for the city of Mascotte. The project is estimated to provide 1 mgd alternative water supply.

City of Orange City Alternative Water Supply Conveyance System — Monastery Road
The project includes construction of a reclaimed water main extension and interconnect for the West Volusia Water Suppliers regional system. The project is anticipated to provide 0.3 mgd alternative water.

City of Sanford Brackish Reverse Osmosis Water Treatment Plant Pilot
This is a feasibility study to determine if brackish groundwater can be developed and used as an alternative water supply near Orlando-Sanford International Airport. The initial capacity of the plant will be 1.0 mgd and additional capacity can be added during expansion to meet future demand.

City of Sanford North Water Reclamation Facility Reclaimed Water Pump Station and Storage Improvements
The project includes construction of a 10 MG reclaimed water storage tank and distribution pump station at the Sanford North Water Reclamation Facility adjacent to Lake Monroe. The project is anticipated to provide storage for 10 MG of alternative water and reduce dependence on the Upper Floridan aquifer for irrigation.

City of Winter Springs Tuskawilla Crossing Reclaimed Water Main
The project includes construction of a reclaimed water main for residential irrigation to eliminate the groundwater withdrawal associated with approximately 379 residential parcels. The project is estimated to provide 0.2 mgd alternative water.

Florida Power and Light Company Okeechobee Clean Energy Center – Upper Floridan Aquifer to Avon Park Permeable Zone Conversion
The project includes the conversion of an Upper Floridan aquifer (UFA) well to the deeper brackish Avon Park Permeable Zone (APPZ) well for process water at FPL's Okeechobee Clean Energy Center. This project is estimated to replace 2.2 mgd of withdrawals of higher quality water from the UFA with brackish groundwater of lower quality.

Orange County Utilities (OCU) Cypress Lake Wellfield — Oak Meadows Alternative Water Supply Delivery Enhancements
The project includes the installation of variable frequency drives on the pumps at the Oak Meadows Water Supply Facility to allow for control of discharge and compliance with current consumptive use permit limits. The Cypress Lake facility will ultimately pump treated brackish water from a long-term sustainable water supply to OCU customers as demands increase. The project is estimated to provide 0.1 mgd alternative water.

Orlando Utilities Commission Smart Leak Detection Device Rebates
The program involves providing a rebate for customers who install smart leak detection devices. The estimated water conservation benefit is 0.001 mgd.

Orlando Utilities Commission WaterSense® Certified Irrigation Controller Rebates
The program provides rebates for customers that install WaterSense certified irrigation controllers. The estimated water conservation benefit is 0.01 mgd.

Orlando Utilities Commission WaterSense Certified Toilet Rebates
The program involves providing rebates of up to $100 for the installation of a WaterSense-certified toilet when it replaces a toilet that was made before 1994. The estimated water conservation benefit is 0.01 mgd.

Town of Howey-in-the-Hills Lower Floridan Aquifer Project
The project consists of drilling two Lower Floridan aquifer wells at the existing Upper Floridan aquifer wellfield to shift groundwater withdrawal from the Upper to the Lower Floridan aquifer for the city of Howey-In-The-Hills. The project is estimated to provide 1 mgd alternative water supply.

Florida Forever Work Plan
Annual Report

6. Florida Forever Work Plan Annual Report

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I. Introduction

As required by Section 373.199(7), *Florida Statutes* (F.S.), the St. Johns River Water Management District (District) has completed the 19th 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.

In addition to a summary of the proposed Florida Forever (FF) funding and projects during the planning period, fiscal year (FY) 2020–21 to FY 2024–25, the report presents project status, modifications, and additions to the 2001 plan and consists of water resource development, restoration, and land acquisition subsections. This report also includes land acquisitions and District lands surplused during FY 2019–20.

II. Proposed Florida Forever Funding During the Planning Period

This annual update has been prepared with the assumption that there will be no new FF fund allocations through the planning period from FY 2020–21 to FY 2024–25.

Table 6-1 shows a summary of the past FF expenditures (FY 2000–01 through FY 2012–13), for additional details, see Appendix A. The District fully utilized its total allocation of $233.63 million of FF funding by the end of FY 2012–13. Figure 6-1 shows the shares of lifetime expenditures are 15.8 percent for water resource development (WRD) projects, 12 percent for restoration projects, and 72.2 percent for land acquisitions.

Table 6-1. Past expenditures through FY 2012–13 (in millions)

Expenditure Category	FY	Water Resource Development	Restoration	Land Acquisition	Combined Total	Cumulative Expenditure
Past 13-years Actual Expenditures	2000–01	$ -	$ 0.63	$ -	$ 0.63	$ 0.63
	2001–02	-	2.02	18.76	20.78	21.41
	2002–03	0.31	2.36	8.50	11.17	32.58
	2003–04	1.80	1.28	4.19	7.27	39.85
	2004–05	6.50	0.39	13.84	20.73	60.58
	2005–06	4.32	0.68	1.26	6.26	66.84
	2006–07	9.66	4.43	49.11	63.20	130.04
	2007–08	4.35	9.33	48.23	61.91	191.95
	2008–09	7.54	4.07	17.56	29.17	221.12
	2009–10	2.09	2.47	2.74	7.30	228.42
	2010–11	0.42	0.23	4.42	5.07	233.49
	2011–12	-	-	0.03	0.03	233.52
	2012–13	-	0.11	-	0.11	233.63
Adopted Budget + Projection		-	-	-	-	
FF Lifetime Expenditure		**$ 36.99**	**$ 28.00**	**$ 168.64**	**$ 233.63**	

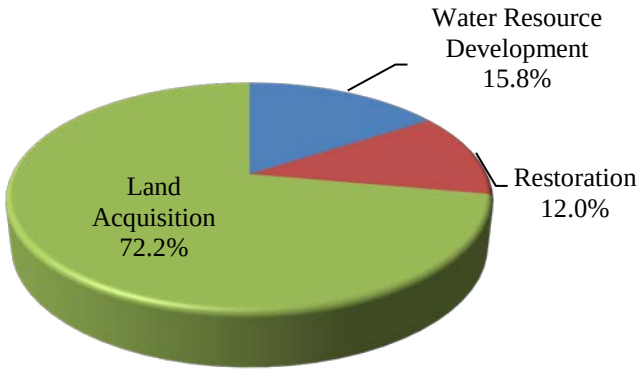


Figure 6-1. Florida Forever program lifetime expenditures by District program

III. 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.

The District does not plan to use any new FF funds for WRD projects during the planning period from FY 2020–21 to FY 2024–25. The program's past expenditures total $36.99 million, accounting for 15.8 percent of the District's total FF expenditures.

Restoration Projects

The District does not plan to use any new FF funds for restoration projects during the planning period from FY 2020–21 to FY 2024–25. The program's past expenditures total $28 million, accounting for 12 percent of the District's total FF expenditures.

Land Acquisitions

The District does not plan to use any new FF funding for land acquisition-related expenses during the planning period from FY 2020–21 to FY 2024–25. The program's past expenditures total $168.64 million, accounting for 72.2 percent of the District's total FF expenditures.

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 125 projects that were ranked and approved as of June 2020 for the 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 6-2 shows the 38 projects that are within the District's boundaries, sorted by category, county, and rank.

Table 6-2. June 2020 FF acquisition priority list for projects within the District

Projects listed by Category	County (in District)	Rank within Category-Work Plan Group
Critical Natural Lands (CNL)		**10 of 37 Total Projects**
Lake Wales Ridge Ecosystem	Lake, Osceola	CNL-2-High
Wekiva-Ocala Greenway	Lake, Orange, Seminole, Volusia	CNL-6-High
Strategic Managed Area Lands List	Alachua, Clay, Marion, Orange, Putnam, St. Johns, Volusia	CNL-8-High
Etoniah Creek/Cross Florida Greenway	Clay, Marion, Putnam	CNL-10-High/Med
Longleaf Pine Ecosystem	Marion, Volusia	CNL-14-Med
Pine Island Slough Ecosystem	Indian River, Osceola	CNL-15-Med
Osceola Pine Savannas	Osceola	CNL-18-Med
Camp Blanding to Raiford Greenway	Baker, Bradford, Clay	CNL-24-Low
Pinhook Swamp	Baker	CNL-25-Low
Southeastern Bat Maternity Caves	Alachua, Marion	CNL-32-Low
Substantially Complete (SC)		**2 of 7 Total Projects**
Lochloosa Wildlife	Alachua	SC-5-MedLow
Spruce Creek	Volusia	SC-7-Low
Critical Historical Resources ("CHR")		**0 of 3 Total Projects**
None		
Climate Change Lands (CC)		**4 of 14 Total Projects**
Northeast Florida Blueway	Duval, Flagler, St. Johns	CC-5-Med/Low
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-14-Low
Less-Than-Fee (LTF)		**8 of 34 Total Projects**
Adams Ranch	Osceola	LTF-2-High
Kissimmee-St. Johns River Connector	Indian River, Okeechobee	LTF-7-Med
Matanzas to Ocala Conservation Corridor	Flagler, St. Johns, Putnam	LTF-13-Med/Low
Big Bend Swamp/Holopaw Ranch	Osceola	LTF-14-Low
Ranch Reserve	Brevard, Indian River, Osceola	LTF-16-Low
Raiford to Osceola Greenway	Baker, Union	LTF-17-Low
Maytown Flatwoods	Brevard	LTF-24-Low
Mill Creek	Marion	LTF-25-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-6-High
Volusia Conservation Corridor	Flagler, Volusia	PR-8-Med
Heather Island/Ocklawaha River	Marion	PR-9-Med
Green Swamp (formerly four projects now combined into one project)	Lake, Polk	PR-12-Med/Low
Flagler County Blueway	Flagler, Volusia	PR-13-Low
Lochloosa Forest	Alachua	PR-14-Low
Lake Santa Fe	Alachua, Bradford	PR-22-Low
Pumpkin Hill Creek	Duval	PR-23-Low
Baldwin Bay/St. Marys River	Duval, Nassau	PR-28-Low
Carr Farm/Price's Scrub	Alachua, Marion	PR-29-Low
Pringle Creek Forest	Flagler	PR-30-Low

IV. Land Acquisitions Completed During FY 2019–20

This section is a summary of land transactions for FY 2019–20, details are included in Table 6-3. The completion of 12 transactions resulted in a net increase of 711 acres of land owned by the District at a District total net purchase price of $530,000. The types of transactions included fee simple acquisitions, including a conservation easement and easements for monitoring wells, utilities, and access. Included in Table 6-3 are six properties, valued at an additional $576,054 which were donated by private parties for mitigation .

Table 6-3. FY 2019–20 Land Transactions

Transaction Date	Parcel Name	LA Number	Transaction Type	County	Total Net Fee or Less than Fee Acres	SJRWMD Portion of Purchase Price or Funds Received	Total Net Purchase Price or Funds Received	Funding Source	Surface Water Basins
10/11/2019	Kemcho Lakes of Canaveral Groves Mitigation Donation	2000-006-P4	Fee	Volusia	27.37	$ -	$ -	Donation	Middle St. Johns River
12/12/2019	Dozier Addition	1995-054-P2	Fee	Brevard	29.26	180,000	180,000	SOR - WMLTF	Upper St. Johns River
01/30/2020	Rideout Point Conservation Easement	2019-030-P1	Less than Fee – Conservation Easement	Clay	578.00	150,000	150,000	Land Acquisition Fund Balance	Lower St. Johns River
03/16/2020	BTIITF Monitoring Site 631 Easement Sharpes Ferry	2015-001-PM	Less than Fee – Other	Marion	0.16	-	-	Donation	Ocklawaha River
05/08/2020	Dike Ventures – Crane Creek/M-1 Project Pump Site	2017-027-P1	Fee	Brevard	1.15	200,000	200,000	Ad Valorem	Upper St. Johns River
05/12/2020	Melbourne Square LLC Perpetual Access Easement – Crane Creek Project	2019-001-P1	Less than Fee – Other	Brevard	0.97	-	-	Donation	Upper St. Johns River
05/12/2020	Turnbaugh Temporary Construction Easement – Crane Creek Project	2017-025-P1	Less than Fee – Other	Brevard	0.89	-	-	Donation	Upper St. Johns River
05/27/2020	Wildwood Trail Mitigation Donation #4 – LJF Acquisitions	2019-026-P1	Fee	Lake	6.67	-	-	Donation	Middle St. Johns River

Transaction Date	Parcel Name	LA Number	Transaction Type	County	Total Net Fee or Less than Fee Acres	SJRWMD Portion of Purchase Price or Funds Received	Total Net Purchase Price or Funds Received	Funding Source	Surface Water Basins
06/17/2020	Wildwood Trail Mitigation Donation #5 – LJF Acquisitions	2019-026-P2	Fee	Seminole	12.35	-	-	Donation	Middle St. Johns River
07/27/2020	USFWS Scrub Jay Mitigation Donation Antigua Bay	2018-030-P6	Fee	Brevard	45.00	-	-	Donation	Upper St. Johns River
07/29/2020	Bull Creek - North (West) aka Belmore	2005-007-P1	Fee	Clay	0.69	-	-	Exchange	Lower St. Johns River
09/15/2020	Wildwood Trail Mitigation Donation #7 – LJF Acquisitions	2020-017-P2	Fee	Seminole	0.93	-	-	Donation	Middle St. Johns River
09/16/2020	Wildwood Trail Mitigation Donation #6 – LJF Acquisitions	2020-017-P1	Fee	Seminole	7.71	-	-	Donation	Middle St. Johns River
Total – District Owned					**711.15**	**$ 530,000**	**$ 530,000**		

V. Surplus Lands During FY 2019–20

In 2012, the Governing Board approved a plan that evaluated every acre of land in the District's inventory and identified parcels where continued ownership no longer met District goals as well as whether the use of any of the properties should be altered. Since 2012, through a continuous internal review of the District's portfolio, or as requests for surplus property are received, parcels that may no longer support the District's mission may be identified as surplus.

During FY 2019–20, the District disposed of 13.01 acres of land in one transaction and received $375,000 in compensation. Table 6-4 provides transaction details.

Table 6-4. Surplus parcels during FY 2019–2020

Transaction Date	Parcel Name	LA Number	Transaction Type	County	Surface Water Basins	Total Net Fee or CE Acres	Compensation
10/10/2019	City of Ocoee/Pine Street Stormwater	2006-015-P1	Fee	Orange	Ocklawaha River	-13.01	$ 375,000
Total						**-13.01**	**$ 375,000**

VI. District Land Management Activities

District Land Management Program

The District is the lead manager for more than 400,000 acres of the approximately 778,663 acres of land that were acquired to advance the District's core missions. Increasing demand for the use of these lands and an expansion of the District's responsibilities requires a uniform approach to land management decisions. The Governing Board-approved land management plan establishes the philosophy and direction for management and use for each property. Legislative directives guide the planning process from acquisition evaluations to the development of land. These plans identify resource needs and compatible uses which are included in Table 6-5.

Table 6-5. Land management status of District lands

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Austin Cary Forest	This property is managed by Univ. of Florida. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / Univ. of Florida	✓	✓	✓	No	✓	✓
Bayard Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	✓	✓	✓
Belmore State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD	No	✓	✓	No	No	✓
Black Creek Ravines Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / Clay Co.	✓	No	✓	✓	✓	✓
Blue Cypress Conservation Area	Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	No	✓	✓	✓
Buck Lake Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC / Brevard Co.	✓	✓	✓	✓	✓	✓
Canaveral Marshes Conservation Area	Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / DEP / Great Outdoors	✓	No	✓	✓	No	✓
Caravelle Ranch Wildlife Management Area	This property is managed by FWC. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FWC / SJRWMD	✓	✓	✓	Canoe/ kayak	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Cary State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD	No	✓	✓	No	✓	✓
Charles H. Bronson State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD / Orange Co.	✓	✓	✓	Canoe/ kayak	✓	✓
Clark Bay Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Volusia Co. / SJRWMD	✓	✓	✓	No	No	✓
Crescent Lake Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	No	No	✓	No	✓	✓
Deep Creek Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / DEP	✓	No	✓	✓	No	✓
Deep Creek Preserve	This property is managed by Volusia Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / Volusia Co.	✓	No	✓	✓	No	✓
Dunns Creek Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	✓	✓	✓
Econlockhatchee Sandhills Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	✓	No	✓	No	No	✓
Emeralda Marsh Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	✓	✓	✓
Faver-Dykes State Park	This property is managed by DEP. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	DEP / SJRWMD	✓	No	✓	✓	✓	✓
Fort Drum Marsh Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	✓	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Four Creeks State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD	✓	✓	✓	✓	No	✓
Gemini Springs Addition	This property is managed by Volusia Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	No	No	✓	No	No	✓
Gemini Springs County Park	This property is managed by Volusia Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Volusia Co. / SJRWMD	✓	No	No	No	No	✓
Gourd Island Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	No	No	✓	No	No	✓
Hal Scott Regional Preserve and Park	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / Orange Co.	✓	No	✓	Canoe/ Kayak	✓	✓
Haw Creek Preserve	This property is managed by Flagler Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Flagler Co. / SJRWMD / FFS	✓	No	✓	✓	✓	✓
Heart Island Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	No	✓	✓
Herky Huffman / Bull Creek Wildlife Management Area	This property is managed by FWC. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FWC / SJRWMD	✓	✓	✓	Canoe/ kayak	✓	✓
Hull Swamp Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	No	No	No	No	No	No
Jennings State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD / FWC	✓	✓	✓	✓	✓	✓
John Bethea State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD	✓	✓	✓	No	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Julington-Durbin Preserve	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / DEP / City of Jacksonville (COJ)	✓	No	✓	✓	No	✓
Lake Apopka North Shore	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / NRCS	No	No	✓	✓	No	✓
Lake George Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC / Volusia Co.	✓	✓	✓	✓	✓	✓
Lake George Forest	This property is managed by Volusia Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Volusia Co. / FWC / SJRWMD	✓	✓	✓	✓	✓	✓
Lake Jesup Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	✓	No	✓	✓	✓	✓
Lake Monroe Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / Seminole Co. / FWC	✓	✓	✓	✓	✓	✓
Lake Norris Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / LCWA	✓	No	✓	Canoe/ kayak	✓	✓
Lake Woodruff National Wildlife Refuge	This property is managed by the USFWS. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	USFWS / SJRWMD	✓	✓	No	✓	No	✓
Little-Big Econ State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD	✓	✓	✓	✓	✓	✓
Lochloosa Wildlife Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	✓	No	✓
Longleaf Flatwoods Reserve	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / Alachua Co.	No	No	✓	No	✓	✓
Longleaf Pine Preserve	This property is managed by Volusia Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Volusia Co. / SJRWMD	✓	No	✓	No	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Matanzas State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD	✓	✓	✓	No	✓	✓
Micco Water Management Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	No	No	✓	No	No	✓
Moses Creek Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	✓	No	✓	✓	✓	✓
Murphy Creek Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	✓	No	✓	✓	✓	✓
Neighborhood Lakes	This property is managed by Lake Co. Land management activities include exotic species control and land security.	Lake Co. / SJRWMD	No	No	✓	No	No	✓
Newnans Lake Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / Alachua Co.	✓	✓	✓	Canoe/ kayak	✓	✓
Ocklawaha Prairie Restoration Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / NRCS	✓	✓	✓	✓	✓	✓
Orange Creek Restoration Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / NRCS	✓	✓	✓	✓	✓	✓
Oslo Riverfront Conservation Area	This property is managed by Indian River Co. Land management activities include natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Indian River Co. / SJRWMD	✓	No	No	✓	No	✓
Palm Bluff Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	✓	No	✓	No	✓	✓
Paynes Prairie Preserve State Park	This property is managed by DEP. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	DEP / SJRWMD	✓	No	✓	✓	✓	✓
Pellicer Creek Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC / Flagler Co.	✓	No	✓	✓	No	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Pine Island Conservation Area	This property is managed by Brevard Co. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Brevard Co / SJRWMD	✓	No	✓	✓	No	✓
Princess Place Preserve	This property is managed by Flagler Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Flagler Co. / SJRWMD	✓	No	✓	✓	✓	✓
Pumpkin Hill Creek Preserve State Park	This property is managed by DEP. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	DEP / SJRWMD	✓	No	✓	✓	No	✓
Ralph E. Simmons Memorial State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD / FWC	✓	✓	✓	✓	✓	✓
River Lakes Conservation Area	Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	✓	✓	✓
Rock Springs Run State Reserve	This property is managed by DEP. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	DEP / SJRWMD / Orange Co.	✓	✓	✓	Canoe/ kayak	✓	✓
Salt Lake Wildlife Management Area	This property is managed by FWC. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FWC / SJRWMD	✓	✓	✓	No	No	✓
Sand Lakes Conservation Area	Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	No	✓	No	No	No	No
Sebastian Stormwater Park		SJRWMD / City of Sebastian	No	No	No	No	No	✓
Seminole Ranch Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	✓	✓	✓
Seminole State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD	✓	✓	✓	✓	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Silver Springs Forest Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	✓	✓	✓	No	No	✓
Spruce Creek Preserve	This property is managed by Volusia Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Volusia Co. / SJRWMD	✓	No	No	✓	No	✓
St. Sebastian River Preserve State Park	This property is managed by DEP. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	DEP / SJRWMD / Indian River Co.	✓	No	✓	✓	✓	✓
Stokes Landing Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	✓	No	✓	✓	✓	✓
Sunnyhill Restoration Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / NRCS	✓	✓	✓	✓	✓	✓
T.M Goodwin Waterfowl Management Area	This property is managed by FWC. Land management activities include prescribed burning, mechanical fuels management, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FWC / SJRWMD	✓	✓	No	✓	No	✓
Thomas Creek Conservation Area	Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / COJ / FWC	✓	✓	✓	✓	No	✓
Three Forks Conservation Area	This property is managed by FWC. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / FWC	✓	✓	✓	✓	✓	✓
Tiger Bay State Forest	This property is managed by FFS. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FFS / SJRWMD / FWC	✓	✓	✓	✓	✓	✓
Triple N Ranch Wildlife Management Area	This property is managed by FWC. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	FWC / SJRWMD	✓	✓	✓	No	✓	✓
Turnbull Hammock Conservation Area	Land management activities include exotic species control, and land security.	SJRWMD	✓	No	No	No	No	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Twelve Mile Swamp Conservation Area	Land management activities on the portion managed by Rayonier include timber management, exotic species control, land security, and road maintenance, and mowing. The land management activities on the parcel managed by SJRWMD include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD / DEP	No	✓	✓	No	No	✓
Wekiva River Buffer Conservation Area	This property is managed by DEP. Land management activities include prescribed burning, mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	SJRWMD	No	No	No	No	No	✓
Wiregrass Prairie Preserve	This property is managed by Volusia Co. Land management activities include prescribed burning, mechanical fuels management, timber management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	Volusia Co. / SJRWMD	✓	No	✓	✓	✓	✓

VII. Progress of Funding, Staffing, and Resource Management of Projects

This section provides information on FY 2019–20 budget and expenditures for programs and projects that received funding from FF and WMLTF.

As of September 30, 2020, the District has expended all originally appropriated FF funds. Fund balance accumulated from the sale of surplus lands that were acquired utilizing legislative funding (P-2000, FF, WMLTF) are used within the same guidelines as the original funding source. The fund balance as of September 30, 2020, was $898,621.

In FY 2014–2015, $13.03 million was appropriated by the state from the WMLTF to pay off the District's debt service obligation. The District expended the appropriated funds for the debt service payment. The original reserve for debt service has a fund balance of $3.1 million. These funds are being used in our Land Acquisition program.

VIII. Appendix A — History of Florida Forever Expenditures

The District fully utilized its total allocation of $233.63 million of FF funding by the end of FY 2012–13. Tables 6-6 and 6-7 provide the supporting details.

Table 6-6. History of Florida Forever expenditures by project

	Through FY 2008–09	FY 2009–10	FY 2010–11	FY 2011–12	FY 2012–13	Cumulative Total
Water Resource Development						
Aquifer Storage and Recovery	$ 19,027,353	$ 2,034,422	$ 420,105	$ -	$ -	$ 21,481,880
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	**$ 34,481,059**	**$ 2,093,009**	**$ 420,105**	**$ -**	**$ -**	**$ 36,994,173**
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 and 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
- Sebastian 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	-	-	3,402,925
Sawgrass Water Management Area	2,112,087	-	-	-	-	2,112,087
Turkey Creek Dredging/BV 52 Site Cleanup	1,228,921	-	-	-	-	1,228,921
Fellsmere Water Management Area	2,075,365	195,981	14,350	-	110,564	2,396,260
Restoration Total	**$ 25,189,853**	**$ 2,469,340**	**$ 226,019**	**$ -**	**$ 110,564**	**$ 27,995,776**
Land Acquisition Total (minus fund balance)	**$ 161,449,349**	**$ 2,733,153**	**$ 4,418,030**	**$ 34,519**	**$ -**	**$ 168,635,051**
Grand Total	**$ 221,120,261**	**$ 7,295,502**	**$ 5,064,154**	**$ 34,519**	**$ 110,564**	**$ 233,625,000**
District's Annual Allocation	**$ 232,500,000**	**$ -**	**$ 1,125,000**	**$ -**	**$ -**	**$ 233,625,000**
Allocation Available from Prior Year		11,379,739	4,084,237	145,083		
Remaining Balance Available for Next Year		**$ 4,084,237**	**$ 145,083**	**$ 110,564**		

Table 6-7. 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	Fee	203.48
12/21/2001	2001-032-P2	Edgefield Life Estate	329,000	Life Estate	26.16
3/7/2002	2001-066-P1	Cassel Creek — City of Maitland Fee Reverter	361,600	Fee Reverter	-
3/21/2002	2001-061-P1	Plum Creek — Rice Creek	1,700,000	Fee	4,191.65
6/14/2002	2001-048-P1	Menard	756,357	Joint Fee	1,347.03
6/14/2002	2001-048-P1	Menard	(756,357)	Joint Fee	-
7/1/2002	2001-058-PA	Fellsmere — Sun Ag — former NRCS_WRP parcel	434,561	Fee	3,890.71
7/1/2002	2001-058-PA	Fellsmere — Sun Ag — former NRCS_WRP parcel	(8,000,000)	Fee	-
7/1/2002	2001-058-PA	Fellsmere — Sun Ag — former NRCS_WRP parcel	8,669,700	Fee	-
7/1/2002	2001-058-PB	Fellsmere Water Control District — Sun Ag	690,300	Fee	-
7/1/2002	2001-058-PB	Fellsmere Water Control District — Sun Ag	65,965	Fee	323.19
7/30/2002	1994-046-P7	Plum Creek Volusia (Parcel 5) Cell Tower Site	215	Fee	0.20
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	(2,126,807)	Joint Fee	-
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	8,281,200	Joint Fee	-
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	(27,147)	Joint Fee	-
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	(4,000,620)	Joint Fee	3,750.99
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5&6) and Zemel	(2,126,807)	Joint Fee	-
7/30/2002	1994-046-P4	Volusia-Pineland Conservation Easement-Plum Creek	7,664	Joint Less Than Fee	-
7/30/2002	1994-046-P4	Volusia-Pineland Conservation Easement-Plum Creek	(1,042,064)	Joint Less Than Fee	-
7/30/2002	1994-046-P4	Volusia-Pineland Conservation Easement-Plum Creek	2,068,800	Joint Less Than Fee	-
7/30/2002	1994-046-P4	Volusia-Pineland Conservation Easement-Plum Creek	(1,034,400)	Joint Less Than Fee	6,947.09
7/30/2002	2001-014-P1	Volusia-Hutton Conservation Easement-Plum Creek	2,347,070	Joint Less Than Fee	4,780.44
7/30/2002	2001-014-P1	Volusia-Hutton Conservation Easement-Plum Creek	(1,160,532)	Joint Less Than Fee	-
12/19/2002	1993-006-PB	Keen Ranch — B	171,312	Fee	49.69
2/17/2003	2001-040-PB	Bud Henry	900,000	Fee	584.54
2/28/2003	2001-051-P1	Fore - Marvin Kelley — Conservation Easement	1,202,064	Joint Less Than Fee	-
2/28/2003	2001-051-P1	Fore - Marvin Kelley — Conservation Easement	(17,947)	Joint Less Than Fee	741.92
2/28/2003	2001-049-P1	Fore-Donald Ray (now Double T Ranch FKA Hartford Ranch) Conservation Easement	779,439	Joint Less Than Fee	461.89
2/28/2003	2001-050-P1	WT Ranch - Conservation Easement	497,844	Joint Less Than Fee	-
4/22/2003	2002-012-P1	Redshirt Farms — Thomas Creek C.A.	984,879	Fee	1,205.93
5/16/2003	1997-032-P1	O'Neal	300,000	Fee	373.45
7/2/2003	2003-001-P1	Timberlands Consolidated	587,059	Joint Fee	1,043.66
7/16/2003	2003-004-P1	Smith, Phillip	26,400	Joint Fee	60.00

Original Close Date	LA Number	Parcel Name	Florida Forever Amount	Acquisition Type	Acres
7/31/2003	2001-024-P1	Wolf Creek Ranch Conservation Easement	2,287,429	Less Than Fee - Conservation Easement	3,812.38
10/31/2003	2003-007-PA	Fore-Norman — Conservation Easement	388,970	Joint Less Than Fee	691.50
10/31/2003	2003-007-PB	Fore-Norman Children Conservation Easement	70,069	Joint Less Than Fee	124.57
12/8/2003	2003-021-P1	Lindsey — Banjo Groves — Silver Springs	1,000,000	Fee	298.00
12/8/2003	2003-021-P1	Lindsey — Banjo Groves — Silver Springs	(443,235)	Fee	-
12/9/2003	1996-110-P1	Tashkede	22,000	Fee	24.47
4/15/2004	1986-004-PB	Far Reach Ranch-Tucker — Conservation Easement	206,971	Less Than Fee - Conservation Easement	311.92
4/15/2004	1986-004-PA	Far Reach Ranch-Tucker-Conservation. Easement-NRCS parcel	1,246,818	Less Than Fee - Conservation Easement	3,758.08
5/20/2004	2003-005-PA	LeFils Corporation — Conservation Easement A	534,708	Joint Less Than Fee	1,267.44
5/20/2004	2003-005-PC	LeFils Corporation — Conservation Easement C (SAZ)	305,319	Joint Less Than Fee	361.70
5/20/2004	2003-005-PB	LeFils, Donald and Mary — Conservation Easement B	34,447	Joint Less Than Fee	81.65
6/18/2004	2003-016-P1	Tennyson — Red Bug Road Project — Fee Reverter	600,000	Fee Reverter	-
7/28/2004	2004-001-P1	Rogers — Fee Reverter	2,000,000	Fee Reverter	-
1/12/2005	2004-004-P1	Minter — Solary Canal Project — Fee Reverter	1,820,000	Fee Reverter	-
1/25/2005	2003-030-P1	Relay Tract-South Conservation Easement	4,033,207	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	5,183,029	Less Than Fee - Conservation Easement	474.00
4/27/2005	2001-065-P1	Four Creeks Forest	2,667,080	Joint Fee	10,221.10
4/28/2005	1994-048-P1	Skinner, Bryant Conservation Easement	1,602,387	Less Than Fee - Conservation Easement	1,569.49
6/1/2005	2004-002-P1	Newnans Lake Addition — Rayonier/Alachua	1,619,563	Joint Fee	1,708.20
7/20/2005	2003-026-P1	Rayonier — Thomas Creek — Parcel A — West	728,278	Joint Fee	-
7/20/2005	2003-026-P1	Rayonier — Thomas Creek — Parcel A — West	1,572,132	Joint Fee	2,078.16
7/20/2005	2003-026-P2	Rayonier — Thomas Creek — Parcel B — East	-	Joint Fee	130.18
1/24/2006	2003-022-P1	Jacksonville Stormwater — Lenox Ave. — Fee Reverter	209,274	Fee Reverter	-
3/10/2006	2005-009-P1	Jacksonville Stormwater — Wesconnett — Fee Reverter	82,275	Fee Reverter	-
3/10/2006	2005-008-P1	Jacksonville Stormwater - Grace Lane - Fee Reverter	170,500	Fee Reverter	-
3/10/2006	2004-019-P1	Snag Harbor — The Conservation Fund	32,000	Fee	14.63
6/28/2006	2005-010-P1	West Augustine Fee Reverter	260,403	Fee Reverter	-
6/28/2006	2005-010-P1	West Augustine Fee Reverter	714,597	Fee Reverter	-

Original Close Date	LA Number	Parcel Name	Florida Forever Amount	Acquisition Type	Acres
7/26/2006	2006-012-P1	Holy Cross Evangelical Lutheran Church — Fee Reverter	86,250	Fee Reverter	-
8/28/2006	2006-010-P1	City of Ocala - Ghannam - Fee Reverter	750,000	Fee Reverter	-
3/2/2007	2001-058-PC	Fellsmere - Sun Ag	31,592,195	Fee	6,020.00
3/2/2007	2007-011-P1	Neighborhood Lakes — Orange County parcel	3,606,100	Joint Fee	315.54
3/2/2007	2001-058-PC	Fellsmere - Sun Ag	3,657,805	Fee	-
3/2/2007	2007-011-P2	Neighborhood Lakes — Lake County parcel	5,000,000	Joint Fee	210.58
3/2/2007	2007-011-P2	Neighborhood Lakes — Lake County parcel	(5,000,000)	Joint Fee	-
3/2/2007	2007-011-P1	Neighborhood Lakes — Orange County parcel	125,000	Joint Fee	-
4/5/2007	2006-026-P1	Joshua Creek Conservation Area	(12,491,701)	Joint Fee	2,699.02
4/5/2007	2006-026-P1	Joshua Creek Conservation Area	24,983,401	Joint Fee	-
8/15/2007	2007-008-P1	Hollondel Road Property — Fee Reverter	935,000	Fee Reverter	-
8/24/2007	2007-006-P1	Evergreen Village/Engle/Melbourne — Fee Reverter	1,882,920	Fee Reverter	-
8/30/2007	2005-007-P1	Bull Creek — North (West)	3,291,452	Fee	-
8/30/2007	2005-007-P1	Bull Creek — North (West)	29,835	Fee	3,525.28
8/30/2007	2005-007-P1	Bull Creek — North (West)	468,855	Fee	-
9/14/2007	2005-030-P1	Longbranch Crossing, LLC — Conservation Easement	7,072	Less-Than-Fee - Conservation Easement	2,684.65
9/14/2007	2005-030-P1	Longbranch Crossing, LLC — Conservation Easement	2,919,141	Less-Than-Fee - Conservation Easement	-
9/14/2007	2005-030-P1	Longbranch Crossing, LLC - Conservation Easement	4,787,037	Less-Than-Fee - Conservation Easement	-
12/7/2007	2007-017-P1	Geiger	3,163,200	Fee	395.40
12/14/2007	2007-034-P1	Blue Villa - City of South Daytona - Fee Reverter	1,051,100	Fee Reverter	-
12/14/2007	2006-013-P1	Robert Berner — City of South Daytona Fee Reverter	50,000	Fee Reverter	-
2/4/2008	1991-020-PB	Turkey Creek/Lee Ranch — East/NRCS C.E. Parcel	(18,586,864)	Fee	-
2/4/2008	1991-020-PB	Turkey Creek/Lee Ranch — East/NRCS C.E. Parcel	28,650,700	Fee	2,892.45
2/4/2008	1991-020-PA	Turkey Creek/Lee Ranch — West Parcel	(2,079)	Joint Fee	1,620.58
2/4/2008	1991-020-PA	Turkey Creek/Lee Ranch — West Parcel	1,593,242	Joint Fee	-
2/13/2008	2007-027-P1	Rayonier - River Styx	1,276,703	Joint Fee	1,428.09
2/15/2008	1991-064-P1	Yarborough Ranch — North — Parcels 1 and 2	5,834,375	Fee	3,927.14
2/15/2008	1991-064-P1	Yarborough Ranch — North — Parcels 1 and 2	11,224,336	Fee	-
2/15/2008	1991-064-P4	Yarborough Ranch - South - Parcel 4 - Lamont Pasture	10,107,162	Fee	-
3/12/2008	2007-001-P1	Masters, Lawrence	(2,162,810)	Fee	112.88
3/12/2008	2007-001-P1	Masters, Lawrence	85,288	Fee	-
3/12/2008	2007-001-P1	Masters, Lawrence	3,340,432	Fee	-
3/12/2008	2007-001-P1	Masters, Lawrence	30,776	Fee	-
3/12/2008	2007-001-P1	Masters, Lawrence	214,857	Fee	-
3/14/2008	2006-019-P1	Chain of Lakes Expansion - Fee Reverter	876,034	Fee Reverter	-
8/15/2008	1994-098-P1	Kaufman — Lumbert	556,667	Joint Fee	30.46
8/15/2008	2007-022-P1	Young	100,000	Joint Fee	11.42
9/4/2008	2006-046-P1	ITERA — Putnam Timberland	448,058	Fee	189.18

Original Close Date	LA Number	Parcel Name	Florida Forever Amount	Acquisition Type	Acres
9/26/2008	2006-007-P1	City of Ocala ─ Thompson Bowl ─ Fee Reverter	152,750	Fee Reverter	-
9/26/2008	2006-008-P1	City of Ocala ─ Tuscawilla ─ Fee Reverter	173,740	Fee Reverter	-
9/29/2008	2007-036-P1	Bloom/Frank	152,418	Joint Fee	123.11
10/17/2008	2008-003-P1	Medlock	381,491	Fee	162.14
10/17/2008	2008-004-P1	Motes	739,745	Fee	215.02
12/10/2008	2008-012-P1	Econ Project Addition-Rybolt	(381)	Joint Fee	-
12/10/2008	2008-012-P1	Econ Project Addition-Rybolt	8,118,211	Joint Fee	-
12/10/2008	2008-012-P1	Econ Project Addition-Rybolt	3,129,659	Joint Fee	706.79
12/10/2008	2008-012-P1	Econ Project Addition-Rybolt	(1,000,000)	Joint Fee	-
12/19/2008	2005-033-P1	Arahatchee Conservation Easement	2,360,000	Less-Than-Fee - Conservation Easement	900.01
12/19/2008	2006-006-P1	David Strawn Lands, Inc.	1,247,785	Joint Fee	1,203.43
12/19/2008	2006-006-P1	David Strawn Lands, Inc.	(1,247,785)	Joint Fee	-
12/22/2008	2008-028-P1	Titus	77,520	Fee	8.16
1/21/2009	2008-025-P1	Plum Creek ─ Rice Creek Conservation Area Addition	411,703	Fee	152.13
5/27/2009	2009-011-P1	Golden Gem Road (City of Apopka) - Fee Reverter	4,490,175	Fee Reverter	-
7/9/2009	1998-006-P3	Gladstone Addition (Jonathan)	150,000	Joint Fee	36.00
7/31/2009	2008-015-P1	Edwards	493,653	Joint Fee	-
10/15/2009	2001-040-PA	Evans Conservation Easement	1,023,075	Joint Less Than Fee	680.20
10/15/2009	2001-040-PA	Evans Conservation Easement	182,156	Joint Less Than Fee	-
12/29/2009	2009-021-P1	Maytown Tract	1,557,693	Fee	-
12/29/2009	2009-021-P1	Maytown Tract	3,511	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	Less-Than-Fee - Conservation Easement	4,388.00
5/27/2011	2000-006-P1	Kemcho - formerly American Timberlands	1,600,405	Fee	3,200.00
5/27/2011	2000-006-P1	Kemcho ─ formerly American Timberlands	4,399,595	Fee	-
5/24/2012	2010-006-P2	Morrison Conservation Easement ─ 500-acre subdivision of BJ Bar Ranch (LA2010-006-P1)	-	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	-	Fee	3,108.26
Total			**$ 185,511,867**		

1) The cost to the District in Table 6-7 is different from the total expenditures for land acquisition in Table 6-6. While land acquisition expenditures in Table 6-6 are the total expenditures minus fund balance, the total expenditures for FF funded land acquisitions in Table 6-7 reflect all land acquisitions that have expended FF funds including 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.

IX. Appendix B — 2020 Land Acquisition Map

The 2020 Land Acquisition Plan Map indicates the general location and type of District-owned lands and identifies areas of "Potential Acquisition." District-owned lands are separated into different subcategories, 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 percent 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.

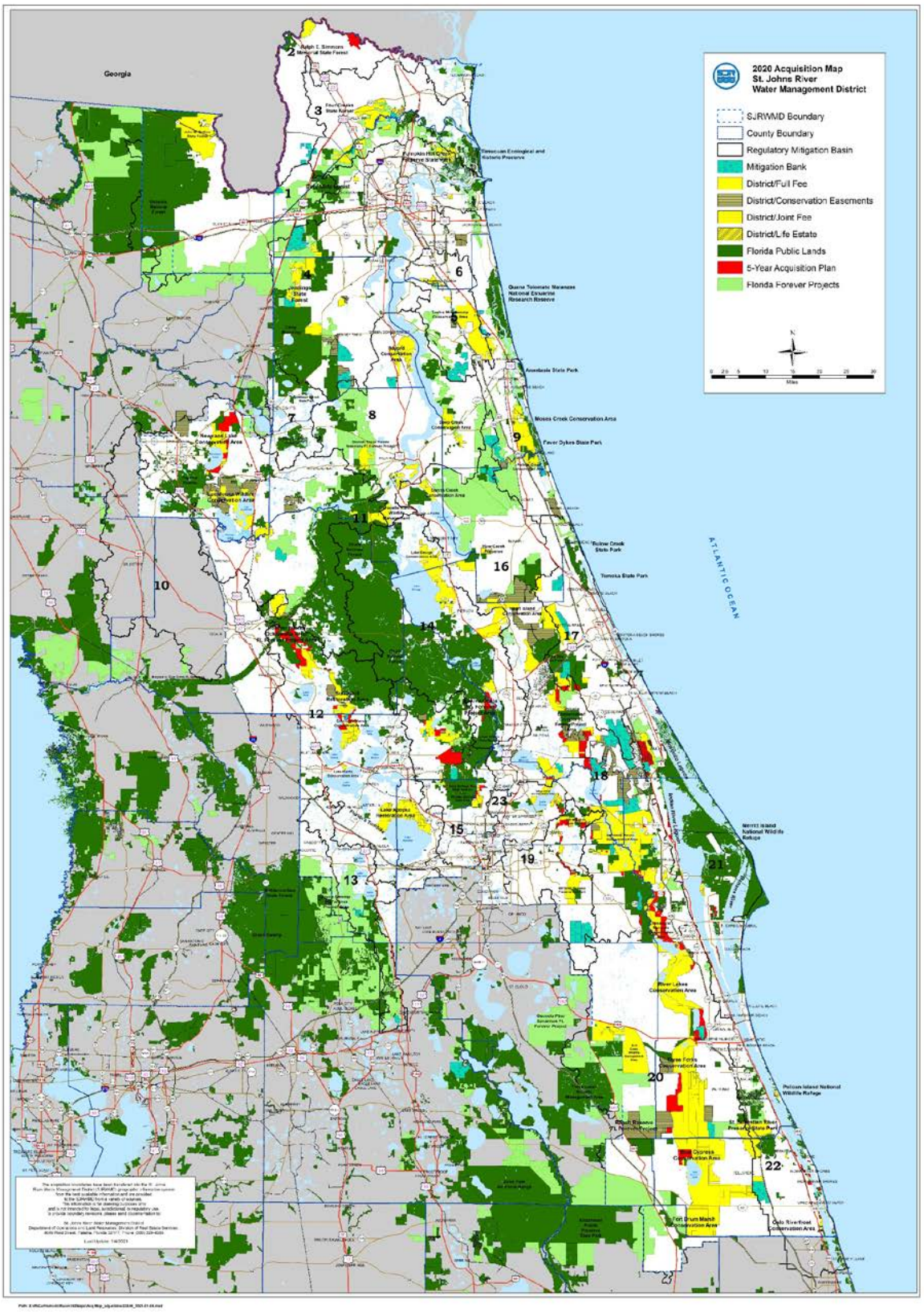
(4) The "Mitigation Banks" category indicates permitted mitigation banks on private property for which one or more conservation easements have been recorded in favor of the District through the regulatory or permitting process. Mitigation Banks are not included in any of the acreage totals for District-owned 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 most District acquisitions, the District may seek to acquire land in any of the four subcategories 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, such as government property designated for military purposes.

There have been no additions to the "Potential Acquisition" layer of the map since 2009 and the number of acres remains at 115,760 acres. Figure 6-2 shows the potential acquisition layer, current District interests, other public lands, and other Florida Forever projects.

Figure 6-2. 2020 Land Acquisition Map



Mitigation Donation Annual Report

7. Mitigation Donation Annual Report

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I. INTRODUCTION

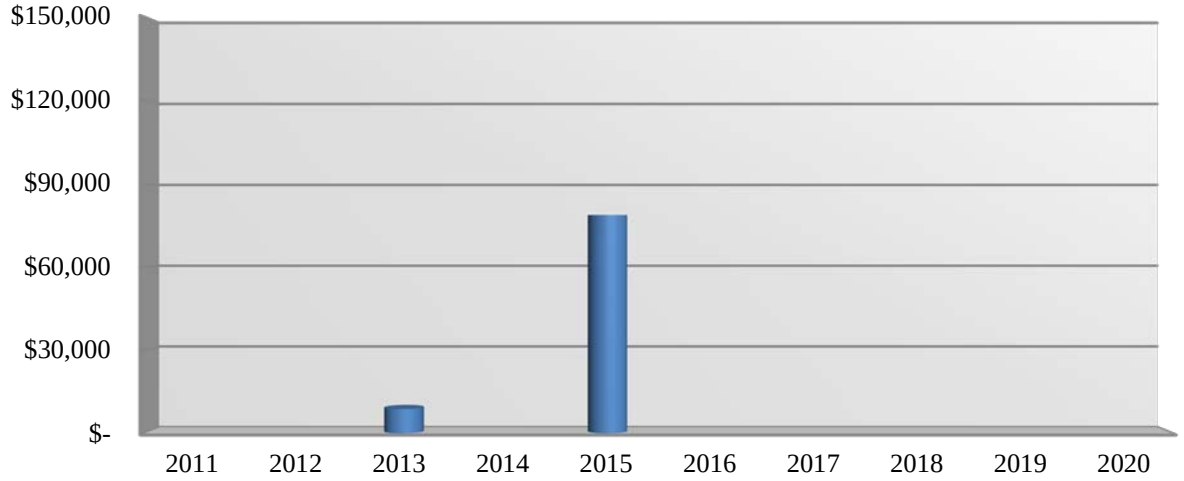
Subsection 373.414(1)(b)2, *Florida Statutes* (F.S.) requires that "…each water management district shall report by March 1 of each year, as part of the consolidated annual report required by s. 373.036(7), all cash donations accepted under subparagraph 1 during the preceding water management district 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 (DEP)-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.

II. CASH DONATIONS RECEIVED DURING FY 2019–2020

During FY 2019–2020, the District did not receive any cash donations for wetland mitigation purposes. The last time the District received cash donations for wetland mitigation was in 2015.



Water Quality and Water Quantity Grading Report

8. Water Quality and Water Quantity Grading Report

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Tables

I. Introduction

Section 373.036(7)(b)9., *Florida Statutes* (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 8-1 lists the projects contained within the 2020 Five-year Water Resource Development Work Program, 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 (MFL).

Level of Impairment Grade:

The water quality level of impairment grade is represented as follows:

> **Impaired-High:** This grade is assigned if the water body 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 water body is impaired for one or more parameters other than mercury.
>
> **Not impaired:** This grade is assigned if the water body is not impaired for any parameters other than mercury.

The Florida Department of Environmental Protection (DEP) provided the impairment grades based upon Total Maximum Daily Loads (TMDLs) based Water body IDs (WBIDs). Projects that impact a specific WBID were identified in Table 8-1 for that WBID. As an example, a project that replaced disposal of treated wastewater 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 and conservation with the exception of the projects contained in Section V – Basin Management Action Plan (BMAP) Appendix.

The level of violation of adopted MFLs is represented as follows:

The water body 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 District considered the magnitude of the variance from the MFL, the magnitude of the ecological impact, the time frame for recovery, and the time frame for completion of the projects.

The water body 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 St. Johns River Water Management District (District) considered the water body'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 water body is meeting the MFL, but is projected to not meet the MFL within 20 years (that is, the water body is in prevention).

Level I: This grade is assigned if the water body is close to meeting the MFL and the water body is rated as a Tier 3 or Tier 2 for regional significance; or the water body is moderately close to meeting the MFL and the water body is rated a Tier 3 for regional significance.

Level II: This grade is assigned if the water body is close to meeting the MFL and the water body is rated a Tier 1 for regional significance; or the water body is moderately close to meeting the MFL and the water body is rated a Tier 2 for regional significance; or the water body is not close to meeting the MFL and the water body is rated a Tier 3 for regional significance.

Level III: This grade is assigned if the water body is moderately close to meeting the MFL and the water body is rated a Tier 1 for regional significance; or the water body is not close to meeting the MFL and the water body 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 MFL water bodies within a Water Use Caution Area (WUCA) or Prevention and Recovery (PR) strategy. Those projects are anticipated to impact all water bodies that are included within the WUCA or PR area. As an example, the Central Florida Water Initiative (CFWI) WUCA within the District covers all or parts of Orange, Seminole, and Lake counties. Within the CFWI, there are six water bodies (four springs, one river segment, and one lake) that are not achieving or projected to not achieve their established MFL in this region. Because the basis for not meeting these MFLs is due to groundwater withdrawals within the confined Upper Floridan aquifer, a project within this area is anticipated to impact the entire area. Therefore, all the impacted water bodies within a WUCA have been included for each project.

Table 8-1. Projects contained within the 2020 Five-year Water Resource Development Work Program, including grades for water quality, level of impairment, and the level of violation of MFLs

Project Name	Project Type	Quantity of Water Made Available upon Project Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)	Water Body	WBID	Basin / BMAP	Level of Water Quality Impairment	Level of Adopted MFL Violation
Black Creek Water Resource Development Project	Groundwater Recharge	7.000			Lakes Brooklyn and Geneva, Lower Santa Fe, Ichetucknee	2509	Etoniah Chain of Lakes and Black Creek / LSJ Mainstem	Impaired	Level 2 — Lakes Brooklyn and Geneva
City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	Reclaimed Water (for potable offset)		3.500		Wekiva	2956X	Sweet Water Creek/ Wekiva River, Rock Springs and Little Wekiva River Canal	Impaired	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	Reclaimed Water (for potable offset)		8.800		Ocklawaha	2967	Ocklawaha / Wekiwa Spring and Rock Springs	Impaired	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of DeLand Reclaimed Water System Expansion, Phase 4A	Reclaimed Water (for potable offset)		0.300		Blue Springs	28933, 28933A	Middle St. Johns River / Volusia Blue Springshed (Pending)	Impaired	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of Deltona Alexander Avenue Water Resources Facility, Phase 4B	Surface Water	4.000			Blue Springs	28933 2933A	Middle St. Johns River/Volusia Blue Springshed (Pending)	Impaired	Volusia PR**, Level 0 – 4 water bodies Level 2 – 1 water body
City of Deltona West Volusia Water Supply Aquifer Recharge Phase 1	Reclaimed Water (for groundwater recharge or natural system restoration)	0.230			Blue Springs	28933 2933A	Middle St. Johns River/Volusia Blue Springshed (Pending)	Impaired	Volusia PR**, Level 0 – 4 water bodies Level 2 – 1 water body
City of Mascotte State Road (SR) 50 Water Main Replacement Phase 2	Other Project Type	0.050			NA	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of Ocala East Villas Wastewater Plant Decommissioning and Connection to Marion County Facility	Reclaimed Water (for potable offset)		0.030		Silver Springs	2772A	Ocklawaha/ Silver River and Springs (Pending)	Impaired	Level 0 — Silver Springs
City of Ocala Lower Floridan Aquifer Conversion Phase 1	Other Non-Traditional Source	8.900			Silver Springs	NA	NA	NA	Level 0 — Silver Springs
City of Ocoee The Hammocks Reclaimed Water Retrofit	Reclaimed Water (for potable offset)		0.050		NA	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative Districtwide Program	Reclaimed Water (for potable offset)		0.160		Lake Yale	2807A	Ocklawaha / Upper Ocklawaha River	Impaired	NA
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	Reclaimed Water (for potable offset)		0.750		Peters Creek	2444	Peters Creek/ LSJR Mainstem	Impaired	Level 2 — Lakes Brooklyn and Geneva
Clay County Utility Authority Stormwater Mining Project	Stormwater	0.700			Keystone Heights lakes, Floridan aquifer; Double Branch (South Prong)	2388	Bid Branch/ LSJR Mainstem	Impaired	Level 2 - Lakes Brooklyn and Geneva

Project Name	Project Type	Quantity of Water Made Available upon Project Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)	Water Body	WBID	Basin / BMAP	Level of Water Quality Impairment	Level of Adopted MFL Violation
Clay County Utility Authority Wastewater Treatability Study	Reclaimed Water (for potable offset)		1.000		Lakes Brooklyn and Geneva	2509I 2509	Lake Brooklyn/ LSJR Mainstem	Impaired	Level 2 — Lakes Brooklyn and Geneva
Crane Creek M-1 Canal Flow Restoration	Surface Water	7.000			UFA—Brevard County; SJR; Indian River Lagoon	3085A	Crane Creek/IRL Central	Impaired	NA
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	Surface Water Storage	18.000		1,372	Indian River Lagoon	3138A	Indian River Lagoon/IRL Central	Impaired	NA
Fellsmere Water Management Area	Surface Water Storage			2,139	Indian River Lagoon	3135A	Indian River Lagoon/IRL Central	Impaired	NA
Gainesville Regional Utilities Low-Income Water Efficient Toilet Exchange Program	PS and CII Conservation	0.004			NA	NA	NA	NA	NA
Hammond Groves, Inc. Surface Water Pump Station	Agricultural Conservation	0.330			Upper St. Johns	3129-B2	Sabastian River above IRL/IRL Central	Not Impaired	NA
JEA Low-Income Water Efficient Toilet Exchange Phase 2	PS and CII Conservation	0.010			NA	NA	Lower St. Johns River/LSJR Mainstem	NA	NA
JEA Twin Creeks Reclaimed Water Storage and Delivery	Reclaimed Water (for potable offset)		1.880		NA	NA	Lower St. Johns River/LSJR Mainstem	NA	Level 1 — Lakes Brooklyn and Geneva
Lake Apopka Recharge	Groundwater Recharge	1.000			Lake Apopka, Wekiwa and Rock Springs	NA	NA	NA	CFWI WUCA* Level 0 — 4 water bodies Level 1 – 2 water bodies
Little Orange Creek Recharge Well	Groundwater Recharge	0.500			Silver Springs	NA	NA	NA	Level 0 — Silver Springs
Marion County Silver Springs Shores Regional Capacity Improvements and Package Plant Removal	Reclaimed Water (for potable offset)		0.010		Silver Springs	2772A 2772C 2772E	Ocklawaha/ Silver River and Springs (Pending)	Impaired	Level 0 — Silver Springs
Orange County Utilities Water Wise Neighbor Irrigation for New Construction	PS and CII Conservation	0.030			NA	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Southern Grace Berries Sprayer and Irrigation System	Agricultural Conservation	0.010			Silver Springs	2749B	Orange Creek/ Orange Creek	Impaired	Level 0 — Silver Springs
St. Johns County Marsh Landing Reclaimed Water Main	Reclaimed Water (for potable offset)		0.060		Intracoastal Waterway	2205C	ICWW/LSJR Mainstem	Impaired	Level 1 - Lakes Brooklyn & Geneva
Taylor Creek Reservoir Improvements	Data Collection and Evaluation				Lake Poinsett	2893K	Lake Poinsett/ NA	Not Impaired	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies

Project Name	Project Type	Quantity of Water Made Available upon Project Completion (MGD)	Reuse Flow Made Available upon Project Completion (MGD)	Storage Capacity Created (MG)	Water Body	WBID	Basin / BMAP	Level of Water Quality Impairment	Level of Adopted MFL Violation
Volusia Blue Wetland Recharge Project	Data Collection and Evaluation				Middle St. Johns River	28933A	Middle St. Johns River/Volusia Blue Springshed (Pending)	Impaired	Volusia PR**, Level 0 – 4 water bodies Level 2 – 1 water body
Volusia County Wastewater Infrastructure for Blue Spring	Reclaimed Water (for potable offset)		0.100		Middle St. Johns River	28933A	Middle St. Johns River/Volusia Blue Springshed (Pending)	Impaired	Volusia PR**, Level 0 – 4 water bodies Level 2 – 1 water body
Totals:		**52.8**	**16.6**	**3,511**					

Footnotes

CFWI WUCA* — St. Johns River Water Management District (SJRWMD) projects within the CFWI Water Use Caution Area (WUCA) are anticipated to benefit all SJRWMD water bodies included within the WUCA. There are two water bodies currently not meeting their MFLs and another four water bodies 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 water bodies within the WUCA have been included for each project.

Level 0: Lake Prevatt, Wekiwa Springs, Rock Springs, and Wekiva River at State Road 46.

Level 1: Palm Springs and Starbuck Spring

Volusia PR** — SJRWMD projects within the Volusia Prevention and Recovery (PR) area are anticipated to impact all SJRWMD water bodies included within the Volusia PR. There is one water body not meeting its MFLs and another four water bodies that are projected to not meet the MFL within 20 years (Lake Butler was added as the fourth water body in prevention in August 2020; all projects in the Lake Butler Prevention Strategy were extracted from the existing project list in the Volusia PR). Because the basis for not meeting these MFLs 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 water bodies within the Volusia PR have been included for each project.

Level 0: Lake Butler, Indian Lake, Scoggin Lake and Shaw Lake

Level 2: Blue Spring

Basin Management Action Plan

Basin Management Action Plans (BMAPs) are the “blueprint” for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load. In 2016, the Florida Legislature amended Section 373.036, F.S., to require the identification of all specific projects that implement a BMAP or a recovery or prevention strategy in the Work Program. The District’s Work Program has historically identified water resource development projects that support MFL recovery and prevention but has not included specific descriptions of projects primarily intended to implement BMAPs. Consistent with section 373.036, F.S., and in a manner that has been coordinated with DEP and all five water management districts, the District makes available as part of this Work Program a five-year funding outlook for projects specifically identified in an adopted BMAP.

Table 8-2. BMAP Table

Project Name	Project Description	Project Type	Project Status	Construction Completion Date	BMAP	Level of Water Quality Impairment	Lead Entity	DEP Project Number	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Location	Acres Treated
Lake Apopka Duda Property Water Storage Improvements	Improve roads and berms and add additional internal water management capabilities within Duda to better manage water and retain phosphorus on the Lake Apopka North Shore.	Impoundment	Underway	01/2022	Upper Ocklawaha River Basin	Impaired	SJRWMD	LAP57	9,670	390	Lake Apopka Basin	2,500
Lake Apopka Innovative TP Removal	The project will utilize an innovative treatment technology and SJRWMD will pay a pre-negotiated rate for each pound of TP removed from Lake Apopka's water column.	Study	Underway	07/2021	Upper Ocklawaha River Basin	Impaired	SJRWMD	LAP58	NA	NA	Lake Apopka Basin	31,000
Lake Apopka Marsh Flow-Way Improvements	Improve the marsh flow-way hydraulic performance to improve efficiencies.	Wetland Treatment	Underway	11/2021	Upper Ocklawaha River Basin	Impaired	SJRWMD	LAP59	NA	TBD	Lake Apopka Basin	31,000
Lake Apopka North Shore Infrastructure Improvements	Improve water storage to better meet lake regulation schedule and reduce phosphorus loads entering the lake.	Impoundment	Underway	10/2020	Ocklawaha River Basin	Impaired	SJRWMD	LAP55	3,546	143	Lake Apopka Basin	2,000
Moorhen Marsh Low Energy Aquatic Plant System (Indian River County Moorhen Marsh LEAPS)	This is a managed aquatic plant system that will remove sediment and suspended solids through settling and filtration by aquatic plant roots. The aquatic plants will be harvested on a regular basis.	Floating Islands/ Managed Aquatic Plant Systems (MAPS)	Cancelled		Central Indian River Lagoon	Impaired	Indian River County	CIRL-IRC-07				
Septic Removal — NIRL — MIRA (City of Merritt Island Redevelopment Agency Septic Tank Phase Out)	SOIRL - 44. (Removal of 75 septic tanks and provide sewer connections for residential and commercial parcels.)	OSTDS Phase Out	Underway	09/2020	North Indian River Lagoon	Impaired	Brevard County	BC-88	2,501	822	B (North B)	
WWTF Policy Reductions (Volusia County Wastewater Infrastructure for Protection of Blue Spring)	WWTF Policy Reductions (Decommissioning of Del North WWTF and construction of a master lift station with 3 miles of 12-inch force main to connect to the Southwest Regional WRF.)	Achieved by WWTF policy if implemented BMAP-wide, achieving 3 or 6 mg/L	Underway	09/2021	Volusia Blue Springshed (Pending)	Impaired	Wastewater Utilities	WU-1	6,390	2,065	Inside Spring-shed	
Totals									**22,107**	**3,420**		**66,500**

2021–2025 Strategic Plan

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

2021–2025 STRATEGIC PLAN

September 2020

Douglas Burnett, Chairman

Governing Board Members

- **Douglas Burnett**
  Chairman, St. Augustine
- **Ron Howse**
  Treasurer, Cocoa
- **Rob Bradley**
  Fleming Island
- **Susan Dolan**
  Sanford
- **Janet Price**
  Fernandina Beach

- **Executive Director**
  Ann B. Shortelle, Ph.D.

Message from the Chair

The St. Johns River Water Management District is focused on ensuring a long-term supply of water for drinking, water for agricultural use, and other community requirements for water. Another prioriity for the District is protecting the health of water bodies in the District's 18 counties in northeast and east-central Florida. I am proud to present the 2021 Strategic Plan on behalf of my fellow Governing Board members and the SJRWMD executive leadership and staff.

The District takes its stated mission to heart every day as we work to protect our natural resources and support Florida's growth by ensuring the sustainable use of Florida's water.

With the support of Governor DeSantis, the Secretary of the Department of Environmental Protection, and the Legislature; we continue to effectively allocate resources and funding in four core areas: water supply, water quality, natural systems and flood protection.

It is also important to point out that while the District is supporting an unprecedented number of projects, we have also reduced our tax rate for the eighth year in a row. It is important that our mission is both efficient and effective.

My fellow Governing Board members and I recognize that we can achieve more for the benefit of Florida's environment and citizens by joining with local governments, the agricultural community and business leadership as together we ensure water supply and water quality meet these demanding requirements . These important partnerships and coordinated cost-share investments continue to advance the use of alternative water supplies and water conservation technology, promote innovative programs to protect our natural systems, and help support flood protection resiliency initiatives in our District's coastal communities.

Many thanks in advance to the dedicated and skilled staff at the District who will expertly carry out the work needed to reach the goals my fellow Governing Board members and I have set forth in this Strategic Plan.

AGENCY OVERVIEW

In Florida, water is a resource of the state, owned by no one individual, with the use of water overseen by water management districts acting in the public interest. Florida law recognizes the importance of balancing human needs for water with those of Florida's natural systems.

The five regional water management districts, established by the Legislature and recognized in the Florida Constitution, are set up largely on hydrologic boundaries. The St. Johns River Water Management District includes about 21 percent of the state's total area. The District encompasses all or part* of 18 counties in northeast and east-central Florida, as further illustrated in Figure 1 below.

Counties in the St. Johns River Water Management District

- Alachua*
- Baker*
- Bradford*
- Brevard
- Clay
- Duval
- Flagler
- Indian River
- Lake*
- Marion*
- Nassau
- Okeechobee*
- Orange*
- Osceola*
- Putnam*
- St. Johns
- Seminole
- Volusia

The District has jurisdiction over 12,283 square miles, which is approximately 21 percent of the state's land area, and includes the entire St. Johns River watershed (including the Ocklawaha River), the northern two thirds of the Indian River Lagoon, and the Florida portion of the St. Marys River Basin. The District is also home to eight "Outstanding Florida Springs" (OFS) — Silver Springs, Silver Glen Springs, Alexander Springs, Blue Spring, DeLeon Springs, Wekiwa Springs, Rock Springs, and Gemini Springs. In 2019, an estimated 5,546,449 people resided within the District's boundaries, a population that is projected to reach approximately 6,600,000 by the year 2040.

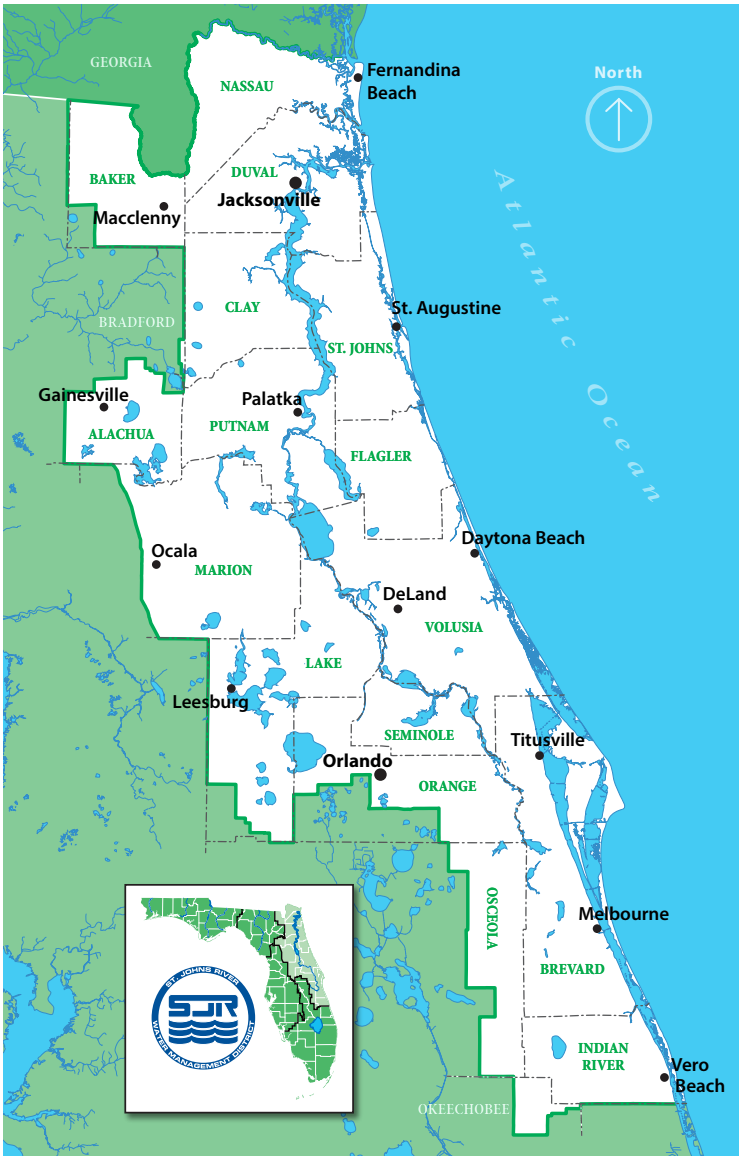
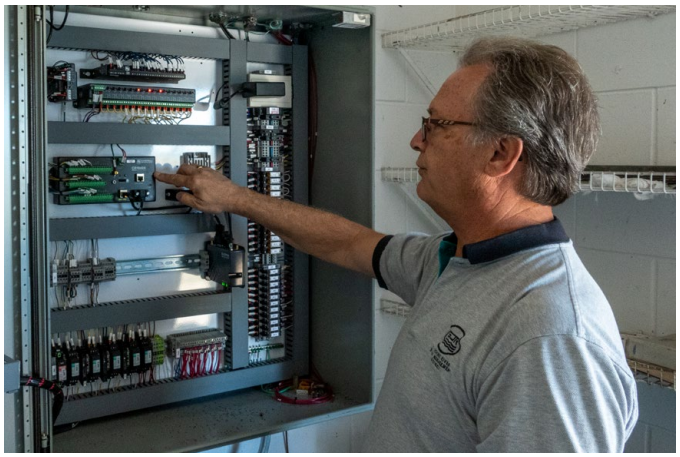


Figure 1 — St. Johns River Water Management District

The District's original focus on flood control was expanded to include water resource development, water supply planning, water quality protection, and natural systems conservation and restoration. To meet these challenges, the District utilizes a variety of actions, including land acquisition, land management and restoration, water use permitting, wetland and stormwater permitting, water supply planning (including the development of minimum flows and levels), and funding cost-share projects and District-led water resource development projects.

Water management districts are funded by ad valorem taxes normally reserved for local governments using taxing authority which emanates from a constitutional amendment passed by Floridians in 1976. The water management districts are governed regionally by boards appointed by the Governor and confirmed by the Senate. There is also general oversight at the state level by the Florida Department of Environmental Protection (DEP). The District is governed by a nine-member Governing Board, each with a four-year term. Under the direction of its Governing Board, the District's organization is structured by divisions, offices, and bureaus, which manage and implement District programs, projects, and activities.

The District maintains 116 miles of U.S. Army Corps of Engineers (USACE) constructed/flood control levees, 175 miles of farm/project levees, 12 major flood control structures, 76 minor water control structures, 15 weirs, and 11 pump stations. The District maintains 69 miles of canals, more than 1,600 miles of roadways and trails, and three navigational locks. The District owns an interest in approximately 774,831 acres of land (through transfers, donations, fee-simple purchases, and less-than-fee acquisitions). The District is projected to fund 531 full-time equivalent positions (FTEs) in Fiscal Year (FY) 2020–21. The District's staff includes biologists, geologists, hydrologists, engineers, planners, financial officers, information technology specialists, land managers, laboratory technicians, and others from scientific and nonscientific fields.



(Top) Technology helps District staff monitor and operate some water control structures remotely. (Bottom) District work takes staff into the field and to numerous water bodies.

Many staff have advanced academic degrees and years of experience in their fields, both in the private and public sectors. In addition, many have been recognized for their work in the state, nationally and internationally. The FTEs work out of multiple locations, which include the headquarters facility in Palatka, service centers in Palm Bay, Jacksonville, and Maitland, and various field stations.

Goals

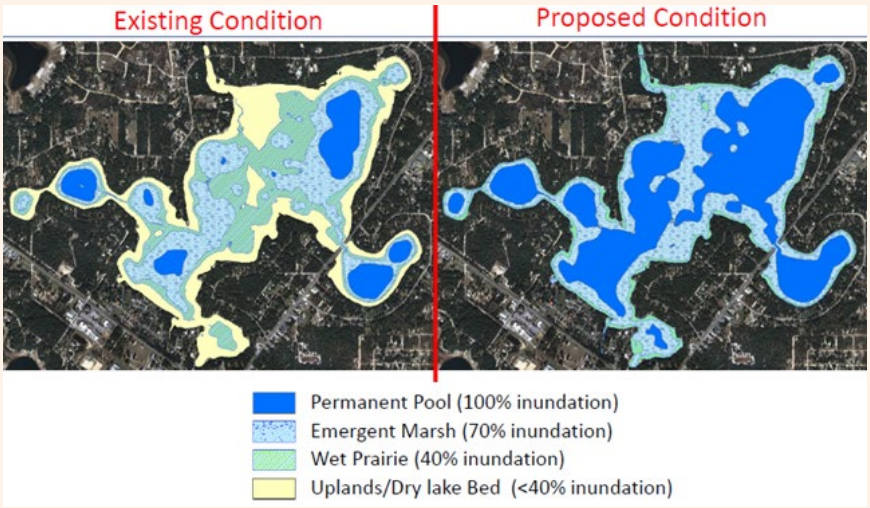
- Develop and implement regional water supply plans
- Develop and implement MFLs and prevention and recovery strategies
- Promote water conservation
- Develop alternative water supply and water resource development projects
- Plan for statutory funding requirements

WATER SUPPLY

Protect water supplies for users and the environment

One of the core missions of the St. Johns River Water Management District is to implement regional strategies to provide sufficient water for both people and the environment. For most of us, our main source of water comes from underground aquifers, primarily the Floridan aquifer, and that source of water is limited.

Water managers recognize the need to have water resources available for people, homes, businesses, agriculture and other users, while at the same time ensuring that enough water is available to meet environmental needs. Pumping too much groundwater from the aquifer can result in unacceptable impacts, such as drying out wetlands, reducing spring flows, lowering lake levels and degrading groundwater quality from saltwater intrusion. That's why water supply planning is so important. While the District's regulatory program works to ensure these types of impacts do not occur from permitted



The Black Creek Water Resource Development Project is among several identified in the North Florida Regional Water Supply Plan (NFRWSP) to help meet future water supply demands while protecting natural resources. This project in southwest Clay County focuses on providing recharge to the Upper Floridan aquifer in the Keystone Heights region and Lower Santa Fe Basin. The project is expected to contribute to regional minimum flows and levels (MFLs) recovery and may help improve water levels in lakes Brooklyn and Geneva.

water withdrawals, the water supply planning program works to determine how much water we will need during a 20-year planning horizon and develop options for alternative water supplies (AWS) to meet these future demands while ensuring the environment is protected.

In accordance with Chapters 163 and 373 of the Florida Statutes, the District conducts water supply planning for those regions where it determines that existing sources of water are not adequate to meet all existing and future reasonable beneficial uses and to sustain the water resources and related natural systems through the planning period. The District's water supply planning approach is comprised of three regional water supply plans (RWSPs) that will be updated at a minimum of once every five years, or as needed. RWSPs identify future water supply needs for at least a 20-year planning horizon and list projects and programs to ensure sustainable water supplies for all reasonable beneficial uses. The three planning regions identified to address local resource concerns are Central Florida Water Initiative (CFWI) Area, Central Springs / East Coast (CSEC) Area, and the North Florida Regional Water Supply Partnership Area.

As a part of fulfilling its mission and statutory responsibilities and to aid the water supply planning and regulatory programs, the District establishes minimum flows and levels (MFLs) for priority water bodies within its boundaries. MFLs define the limits at which further water withdrawals would be significantly harmful to the water resources or ecology of an area. The District is also responsible for development of prevention and recovery strategies when a water body does not currently meet or is projected not to meet the adopted MFL for that water body. The District must develop a prevention and recovery strategy that identifies technically sound, science-based solutions to ensure availability of sufficient water for future uses and achieve the MFLs for those affected water bodies.

The District's planning process is ongoing and plans are continually updated to reflect current and projected conditions, such as changes in anticipated population growth or decline that may result in changes to how much water a region will need and where the water may come from to meet those needs. Water conservation is a key component of ensuring an adequate water supply.

Water conservation is the cornerstone of the sustainability of Florida's water supply, whether it be belowground in the aquifer systems or aboveground in our rivers, lakes and streams. Water conservation continues to be a primary tool to meet the District's future water needs. While significant conservation efforts have already been implemented in the

A District staff member conducts a vegetation inventory field visit as part of a minimum flows and levels evaluation.

Blue School Grant students learn about the District's work from Executive Director Dr. Ann Shortelle (right).

Fellsmere Water Management Area

District, additional conservation is critical. The District currently has many active and ongoing water conservation programs, including outreach efforts, cost-share projects, and the Blue School Grant Program. In addition, the District participates in the statewide Florida Water Star℠ program.

The use of reservoirs can be another tool to meet water supply needs by storing excess water on the landscape for future use. Reservoirs are currently an integral part of management of the Upper St. Johns River Basin. These projects are intended to protect the coastal estuaries that are affected by changing salinity and increased nutrients (phosphorus and nitrogen) and sediments from runoff. Several District projects have been built with a partnership between USACE and the District, which has allowed the District to move forward on several additional reservoirs. In addition to conventional reservoirs, the District is evaluating the concept of dispersed water storage on private property as an innovative approach to assist in achieving both water supply and water quality goals. These pilot programs will provide storage for flood management, as an alternative source of irrigation and reduce nutrient loads to downstream water bodies. The dispersed water storage program incentivizes private property owners to retain water on their land for beneficial purposes.

The District is also using reservoirs as another water conservation tool to store water on the landscape as integral parts of the Upper St. Johns River Basin. These projects are intended to protect the coastal estuaries that are affected by changing salinity and increased nutrients and sediments from runoff via east-west canals dredged to drain inland areas to the coast decades ago. One type of project seeks to reroute those canal's freshwater back to inland areas, where, after treatment, it can supply the St. Johns River. The Fellsmere Water Management Area (FWMA) and future C-10 reservoir are examples of projects which capture and treat such flows, benefiting both the Indian River Lagoon (IRL) and St. Johns River.

Success indicators

- Develop and implement regional water supply plans to meet projected demand
- Establish MFLs and prevention and recovery strategies
- Provide funding for at least 25% of project construction costs in applicable Outstanding Florida Springs prevention or recovery strategies approved after June 30, 2016
- Increase awareness of the importance of water conservation and support local water conservation efforts
- Develop and implement water resource development projects
- Partner with local entities to provide alternative water supplies

Goals

- Protect and improve water quality in surface water and groundwater
- Collect and analyze data to support resource management decisions and restoration initiatives
- Develop innovative and cost-effective water quality projects
- Support the Governor's and DEP's restoration efforts

WATER QUALITY

Protect and improve the waters of the District

The quality of our water in Florida is vitally important not only to the flora and fauna that live in and around the water, but also to our economy and wellbeing of our residents. Governor DeSantis established water quality as a focus of his administration with Executive Order 19-12, which outlined his environmental priorities. The District, along with the Governor, recognizes that where water quality goals are not being met, it is common to see negative impacts to natural systems, decreased recreational value, increased water treatment costs and impacts to property values.

Assessing and managing programs to protect and restore water quality is a critical component of water resource governance and a primary mission of the District. Water quality is essential to maintaining a high standard of living for our residents and for the health of natural systems. Strategies to achieve these water quality goals include a commitment to comprehensive monitoring of the condition of water resources and, where water quality is impaired, working with our partners to design and implement projects to improve water quality and beneficial ecosystem functions. The District's Bureau of Water Resource Information operates the districtwide water quantity and quality

District staff collect water samples at springs as part of the District's monitoring network.

monitoring network. Monitoring provides a wealth of information that enables the District to make resource decisions based on accurate and timely information. In addition, the public can use the data to acquire a basic knowledge of groundwater, springs and water bodies in which they have an interest.

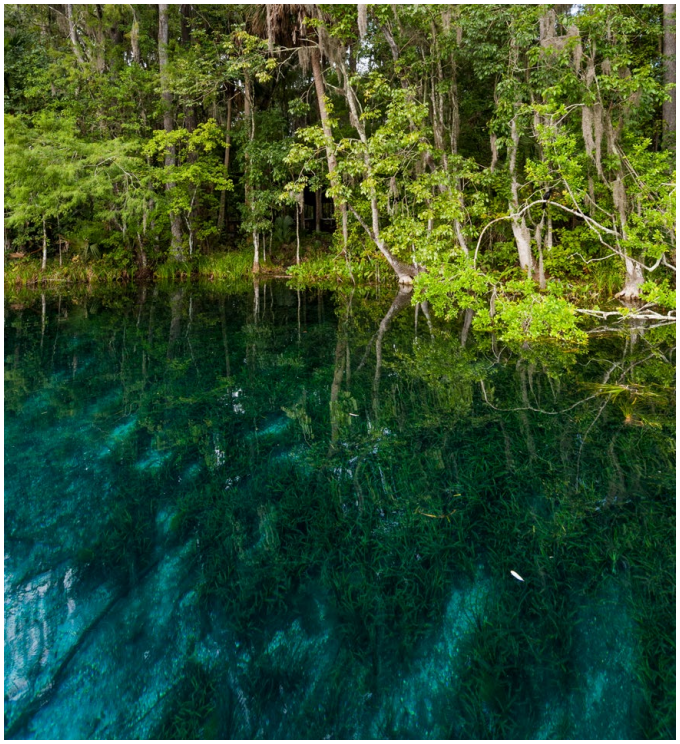
The District also protects water quality and natural systems by implementation of environmental resource protection permits for activities that affect wetlands and/or runoff. In this way development occurs that minimizes environmental impacts and protect water quality.

The District works to address water quality issues through a variety of activities, including cost-share projects with local governments, aquatic systems restoration and protection projects; permitting; land acquisition and management activities. In the Ocklawaha River Basin, the District's acquisition and restoration to wetlands of former muck farms has contributed to water quality and habitat improvements in lakes Apopka, Dora, Eustis and Griffin. The District partners with anglers and bait processors to harvest rough fish from certain lakes each year. This public private partnership results in the most cost-effective phosphorus removal tool available to the District, while at the same time supporting anglers and local fish processors. Strategies to protect and restore water quality include a commitment to comprehensive monitoring to guide impairment determinations, manage restoration projects and evaluate effectiveness. These efforts are closely coordinated with many partners, including DEP's total maximum daily load (TMDL) and basin management action plan (BMAP) programs.

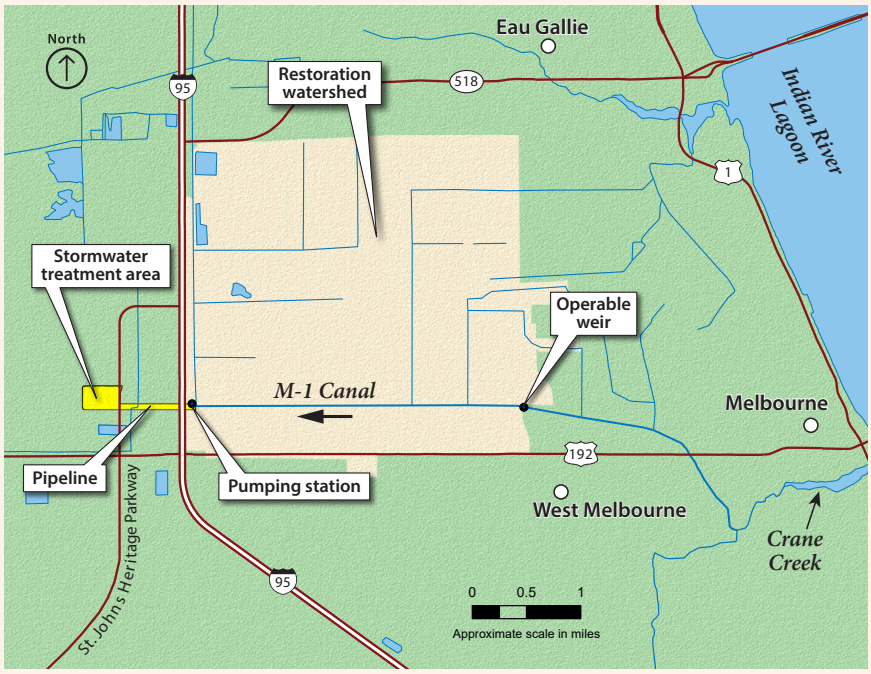
Springs provide natural, recreational and economic benefits for Florida's residents and visitors and ultimately reflect the health of the Floridan aquifer, the source of drinking water for a majority of the District's population. To ensure the aquifer is protected, the District is focused on generating scientifically sound approaches and projects to reduce or eliminate pollution-related problems.

The District continues to facilitate cost-effective investment of the ongoing allocation by the Florida Legislature of $50 million per year for springs protection through District and DEP cost-share programs with local partners.

The District collaborates in the management and restoration of two major coastal systems, the IRL and the Northern Coastal Basins (NCB). The District's commitment to these basins is exemplified by its ongoing support for the IRL National Estuary Program (NEP) and completion of applied research into water quality problems within the IRL, including algal blooms and losses of seagrass. These coastal waters yield substantial social, economic and ecological benefits, and their health reveals the efficacy of collective management throughout their watersheds because they integrate the influences of stressors delivered by their tributaries. Management focuses on reducing undesirable loads of freshwater, sediments, nutrients and toxicants, revitalizing altered habitats, tracking key indicators of ecosystem health, and expanding our understanding of



Silver Springs is among the eight Outstanding Florida Springs in the District.



The Crane Creek / M-1 Canal Project will substantially reduce nutrients flowing, or "loading," to the Indian River Lagoon. Construction of the project will result in re-routing water in the M-1 Canal westward for treatment in a constructed stormwater treatment area prior to discharging to the St. Johns River Basin. Nutrient reductions to the lagoon are estimated to be: total nitrogen 24,000 lb./yr. and total phosphorus 3,100 lb./yr.

existing and future threats to these complex estuarine systems. Through this applied research, District staff have the information to identify more effective management actions.

The St. Johns River and its tributaries is comprised of the Lower, Middle and Upper St. Johns River basins, Lake Apopka and the Ocklawaha River Basin. There are ongoing efforts to improve water quality throughout these basins, primarily to address nutrient pollution. The District's investigation into the land application of biosolids is supporting DEP's efforts to better manage this source of phosphorus to the environment. The District is also dedicated to continuing to fund major water quality projects, such as the Crane Creek/M-1 Canal Project, which is expected to be completed in 2022. These efforts support DEP-approved BMAPs to address water quality impairments. Nutrient load reductions are the focus of many efforts due to their role in stimulating excessive algal growth and bloom frequency and intensity, which harm both native communities and human water uses.

Success indicators

- Implement projects that improve water quality
- Reduce nutrient loading into waters within the District through District projects
- Collect and analyze data to assess ambient conditions and projects efficacy
- Publish water quality data on District's website
- Identify, fund and implement innovative water quality improvement projects
- Assist DEP's TMDL and BMAP efforts with monitoring, modeling and water quality improvement projects
- Coordinate with DEP on water quality data collection and projects

NATURAL SYSTEMS

Protect and improve ecosystems

The District's stewardship duties toward natural systems are split between lands in which the District has acquired a legal interest (fee or less-than-fee acquisitions) and the general natural lands and waters within the District. Aquatic natural systems are enhanced through efforts to improve water quality, restored hydrology, planting native species and management of invasive and/or exotic species. Most of the natural systems benefits to the lands not owned by the District are derived through effective permitting, water quality improvement projects, MFL adoption, water supply planning and cost-share projects. While these efforts all protect and conserve natural systems, they are tracked in other areas within this plan.

Goals

- Maintain District lands for natural resources and people
- Manage invasive exotic and nuisance vegetation in a protective and sustainable manner
- Provide access and recreational opportunities on District properties
- Preserve, protect and restore natural systems to support their natural hydrologic and ecologic functions

Of the approximately 626,642 acres of land the District has acquired in fee (full and joint), District staff is responsible for managing 425,425 acres. The remaining 201,217 acres are managed by partner agencies, including the Florida Fish and Wildlife Conservation Commission, Florida Forest Service, and a number of counties. In addition, the District also manages 6,077 acres owned by partner agencies. The District's investment in land has focused on wetlands because of the many water resource values and services they provide, such as water quality treatment, flood water storage and habitat for important species. The District has purchased conservation or flowage easements over approximately 158,000 acres of land. These lands are inspected to ensure the private landowner is managing within the easements' requirements. While

Staff conduct a "bio blitz" as part of the land management plan development process to document natural resources (plants and animals) found on public lands.

"Headwaters Lake boat ramp is the latest example of our agency's long history of providing recreational opportunities whenever possible when we buy land for water resource protection, flood control or water quality improvement projects," said St. Johns River Water Management District Executive Director Dr. Ann Shortelle.

performing the inspections, District staff also assist landowners with land management issues they may encounter such as how to manage the newest invasive species.

Providing the right balance between public access, outdoor recreation and restoration activities can prove challenging at times, but currently more than 98 percent of District land is open for recreation. In addition, the District has 125 active special use authorizations which allow compatible and appropriate uses on District lands. Examples include use for research, trail running competitions, special opportunity hunts for disabled veterans, and outdoor wildlife appreciation festivals. Ongoing management activities, such as prescribed burning and invasive plant management, are key to the protection of the natural systems' condition. Restoration activities focus on encouraging native vegetation through planting and by managing or removing competitive invasive species. Because conditions change over time, a system of adaptive management of prescribed fire, hydrologic management, invasive control and native species planting is used. Sound adaptive management requires an effective monitoring system to evaluate how past treatments have worked, if new treatments are needed and when actions should be taken. Managing the lands and restoring them can also include leases for a variety of resource-backed activities that partner the public and private sectors to use public lands for a public good. Uses include 31 grazing leases on approximately 51,500 acres and seven apiary leases on 54 different sites. All revenues generated by these leases are invested in future land acquisition, restoration or management.

Success indicators

- Develop and implement District land management plans
- Conserve and restore native communities
- Implement prescribed fire program
- Maintain public access points to District lands
- Report on no-net-loss of hunting lands
- Report on no-net-loss of wetlands inventory

Goals

- Minimize flood damage to protect people, property and infrastructure
- Operate water management systems to meet flood protection, water resource and future water supply needs
- Maintain data collection to support federal flood prediction collaboration
- Strategically acquire and restore floodplains to improve resilience
- Coordinate with state and local governments and the public during and after emergency events

FLOOD PROTECTION

Protect people, property and infrastructure

Florida has long been susceptible to flooding from natural disasters. Extreme rainfall can cause rivers and streams — such as the north-flowing, 310-mile-long St. Johns River — to surge beyond their banks, damaging homes and businesses. Since the 1920s, state and federal agencies have funded enormous projects to protect homes and families from the dangers of flooding. When the decision was made to form the District in 1972, the Legislature decided one of the four core missions must be flood protection. As of 2018, the District maintains 69 miles of canals in addition to the 116 miles of federal flood protection levees. Working with state, federal and regional partners, the District's flood control structures not only provide flood protection that will support local communities, but also support the core missions of water supply, water quality, and natural systems.

The District employs both structural and non-structural techniques to provide flood protection. The District operates flood-control structures in the Upper Ocklawaha River Basin — the Apopka-Beauclair Lock and Dam, Burrell Lock and Dam and Moss Bluff Lock and Dam. Non-structural flood protection is achieved through stormwater management rules, acquisition and conservation of floodplain wetlands to provide floodwater storage and the collection and dissemination of real-time hydrologic data to guide flood preparedness and responses.

Structural techniques include federal and non-federal flood control structures and levees. The District is the local sponsor of two USACE federal flood

Boaters head upstream through the Burrell lock and dam.

The District is responsible for operation and maintenance of the portion of the federal flood control project within the District. As required by the U.S. Army Corps of Engineers (USACE), District staff perform formal inspections of these works every six months, then prepare a report that is sent to USACE. These inspections and reports are key for the District to effectively operate and maintain these critical flood control structures and conveyances that protect life and property.

management projects: The Upper St. Johns River Basin Project and the Ocklawaha River Basin portion of the Four River Basins, Florida Project. These projects include approximately 116 miles of levees, 12 major water control structures and approximately 76 minor water control structures. The District is responsible for operation and maintenance of these facilities. As the local sponsor, the District is responsible for acquisition of lands required for operation and maintenance of the federal projects.

The District is also responsible for maintaining nearly 18 miles of non-federal levees, several major and minor water control structures, weirs, navigational locks and pump stations. In addition to the federal works, the District has projects that provide additional flood protection benefits, such as the FWMA and the Harris Bayou water control structure. The District maintains more than 69 miles of canals and 1,600 miles of roadways and trails. The District has also purchased full fee or flowage easements of river floodplain that provide non-structural water storage and flood protection. The District, in coordination and cooperation with the U.S. Geological Survey, operates a monitoring network that provides critical hydrologic data to other agencies and governmental entities and the public for flood management activities throughout the District.

Success indicators

- Maintain and operate flood control structures and conveyances
- Perform semi-annual infrastructure inspections
- Evaluate structural and management modifications for hydrologic enhancement
- Collect water elevation data and publish on District's and partners' websites
- Inspect, calibrate and maintain flood management water level data sites
- Maintain coordination with emergency operation centers and respond to requests for need
- Implement District's emergency plan

SUPPORTING ACTIVITIES

Provide exceptional service

The District strives for constant self-evaluation and improvement in all areas in order to successfully manage and protect our natural resources. The District focus is on providing exceptional service to taxpayers, businesses and other government entities through communication, fiscal efficiency and implementation of core missions. Project and operational progress, along with overall organizational efficiency and effectiveness, are continuously measured and reported. A highly skilled, motivated work force is the key to achieving the goals set out in this strategic plan. As such, the District is committed to investing in and empowering District employees so that they can develop personally, professionally and provide high-quality service.

Goals

- Strengthen relationships through outreach and communication
- Provide transparent, efficient and effective service
- Utilize regulatory permitting and compliance authority to protect water supplies, water resources and natural systems
- Implement effective cost-share programs that reflect the goals of core missions
- Invest in staff development and expertise

The District recognizes that it cannot support each core mission without reaching out to local stakeholders and businesses within the District. In accordance with Chapter 373, *Florida Statutes*, the Governing Board may participate and cooperate with county governments, municipalities, water supply authorities, and other interested public and private entities in water management programs and projects of mutual benefit. These programs and

Dr. Ann Shortelle, Scott Laidlaw and Hawthorne City Manager Ellen Vause (right) looking at well drilling core samples.

Since the 2013–2014 fiscal year, the District has awarded more than $209 million in cost-share funding toward projects with total construction costs of $512 million. Through these projects, estimated benefits include 166 mgd of alternative water supply developed, 20 mgd of water conserved, 2.1 million lbs/yr total nitrogen reduction; more than 400,000 lbs/yr reduction in total phosphorus, and over 5,400 acres protected from flooding.

We are proud to partner with the communities throughout the District and the 272 projects that have been completed since Oct. 1, 2016.

projects must be consistent with the District's statutory authority and ensure proper development, utilization and conservation of water resources and ecology within the jurisdictional boundaries of the District. The District currently funds three cost-share programs on an annual basis to support the core mission areas; these are the Districtwide Program, Rural Economic Development Initiative (REDI) Communities/Innovative Projects Program and the Agricultural Program.

Success indicators

- Coordinate permit preapplication meetings to enhance complete application submittals
- Share success stories and educational materials with stakeholders
- Report regulatory metrics
- Provide access to regulatory data and information on the District's website
- Report on cost-share projects and estimated benefits
- Prioritize AWS projects
- Provide staff access to professional development opportunities

Mission/vision statement

To protect our natural resources and support Florida's growth by ensuring the sustainable use of Florida's water for the benefit of the people of the District and the state.

Our Values

Trust	Partnership	Accountability	Results
What we say is what we do	We can achieve more together.	We care about the work we do and how we do it.	We provide effective solutions

Strategic Plan Annual Work Plan Report FY 2019–2020

The Strategic Plan Annual Work Plan Report for FY 2019–2020, a "report card" of how well the District achieved its FY 2019-2020 milestones/deliverables and success indicators, will be available in the Consolidated Annual Report (CAR). Once published, the CAR can be found at:

www.sjrwmd.com/static/plans/2021-SJRWMD-Consolidated-Annual-Report.pdf

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