

St. Johns River Water Management District

Consolidated Annual Report

March 1, 2022



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EXECUTIVE SUMMARY

The St. Johns River Water Management District's (District) 2022 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. 2022–2026 Strategic Plan



**Strategic Plan Annual Work Plan Report
Fiscal Year 2020–2021**

1. Strategic Plan Annual Work Plan Report

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I. Executive Summary

The St. Johns River Water Management District (District) Governing Board adopted the Fiscal Year (FY) 2020–21 Strategic Plan in September 2020. 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.), this report describes the implementation of the Strategic Plan for the previous fiscal year, addressing success indicators, deliverables, and milestones.

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 supporting activities such as 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 goals, strategies and success indicators. Success indicators measure the overall success of the related goal from a programmatic perspective. This annual work plan report provides a discussion of the success indicators, deliverables, and milestones achieved in FY 2020–21 as they relate to the specific programs that implement the Strategic Plan.

II. Water Supply

Goals:

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

One of the District's core missions 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 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 regional water supply planning areas identified to address local resource concerns are the Central Florida Water Initiative (CFWI) RWSP area, Central Springs / East Coast (CSEC) RWSP area, and the North Florida RWSP 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. In some cases, the District may develop projects as part of water supply plans that

provide regional benefits. These projects are known as water resource development projects. The Black Creek Water Resource Development Project is among several projects identified in the North Florida Regional Water Supply Plan (NFRWSP) to help meet future water supply demands while protecting natural resources. This project, located 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 will divert up to 10 million gallons of water per day from the South Fork of Black Creek during wet weather high-flow periods. The project is also expected to contribute to regional MFLs recovery in lakes Brooklyn and Geneva.

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 StarSM (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 (USJRB). 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, especially on parts of the USJRB. 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), Crane Creek/M-1 Canal Project 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

Summary of Activities:

Develop and implement regional water supply plans

The District is divided into three water supply planning regions and separate RWSPs are developed for each planning region.

In the Central Florida planning region, the District continues to work 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 CFWI. In November 2020, the District approved the 2020 CFWI RWSP, which is an update of the collaboratively developed 2015 CFWI RWSP. Work is continuing on implementation of the RWSP's project options and on preparations for the next RWSP update in 2025.

In the CSEC planning region, the District has been coordinating with SFWMD, SWFWMD, and other stakeholders in the development of the CSEC RWSP. The District completed a draft CSEC RWSP in July 2021 and anticipates approval by early 2022. Once approved, the CSEC RWSP will contain project options for implementation.

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 2023 North Florida RWSP. The District continues the work that began in early 2020 to update the North Florida RWSP and anticipates approval by early 2023. The 2023 North Florida RWSP will be an update of the collaboratively developed 2017 North Florida RWSP. Work is continuing on implementation of the RWSP's project options and on preparation for the next RWSP in early 2023.

The District also implements RWSPs through activities that are identified in other goals in the report. For example, the District provides cooperative cost-share funding for water supply, water resource development, and water conservation projects that assist in implementing project options identified in RWSPs.

Develop and implement MFLs and prevention and recovery strategies

The District is required to annually update its priority list and schedule for the establishment of MFLs. 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, and finalized as part of the District’s 2021 Consolidated Annual Report on February 9, 2021. The 2020 MFLs Priority List and Schedule included plans to adopt MFLs for a total of 15 systems for the planning period 2021–2024. To support MFL development, data were collected at over 330 hydrologic monitoring stations.

Rulemaking and adoption of the MFL and required associated recovery strategy were completed for lakes Brooklyn and Geneva, in Clay and Bradford counties, during the last FY. The Notice of Proposed Rule for lakes Brooklyn and Geneva were approved by the District Governing Board on April 13, 2021, and the rule became effective on September 28, 2021.

The District initiated the development of the Draft 2021 MFLs Priority List and Schedule for this FY during the summer 2021. This included holding public workshops on September 2 and 3, 2021. The Draft 2021 MFLs Priority List and Schedule was then, subsequently, approved by the District’s Governing Board on October 12, 2021. The 2021 MFLs Priority List and Schedule includes plans to adopt MFLs for a total of 13 systems for the planning period 2022–2024, and the following recommended changes to the approved 2020 MFLs Priority List and Schedule:

- Rescheduling to 2022 of Wekiva River at State Road (SR) 46, Wekiwa Springs, Rock Springs and Little Wekiva River to allow for completion of collection of critical environmental data in the Little Wekiva River basin, and surface water model updates to better estimate potential impacts to these systems
- Rescheduling of Sylvan Lake and Lake Apsawa South to 2022, rescheduling of Johns Lake and Lake Prevatt to 2023, and East Crystal Lake to 2024 to allow time for the completion of environmental data collection and surface water modeling and to allow time for the CFWI peer review process; and
- Removal of Lake Apopka; while the District continues to investigate potential water resource benefits by managing water levels in the lake at higher levels. Initial results indicate that Lake Apopka will not be a constraint in the area.

The District continues to provide cooperative cost-share funding for local governmental and non-governmental entities for water supply and water resource development, and water conservation projects that assist in implementing MFLs and prevention and recovery strategies.

Promote water conservation

The District works with stakeholders and partners to find new and innovative ways to conserve water. The District implemented multiple outreach efforts during FY 2020–21.

These efforts included District staff engaging in virtual and in-person presentations on water conservation and other District core missions, reaching 151 teachers and 1,706 students at 33 schools, and 98 civic organizations or other public events within the District, which reached 5,270 individuals. With some groups continuing to hold virtual meetings due to the COVID-19 pandemic, the District offered eight webinars for real-time attendance and later viewing online.

In addition, District staff conducted eight other water conservation webinars and presentations to various conservation-related professional and industry groups (e.g., American Water Resources Association, Florida Green Building Coalition, etc.).

District Governing Board members, in 2019, urged the creation of an in-depth water conservation awareness campaign. As a result of that direction, the District's WaterLess outdoor water conservation campaign recently completed a second successful year in FY 2020–21, disseminating user friendly ideas for reducing water waste at homes and businesses. Using in-house videos, social media posts, highway billboards, webinars, presentations, collaboration with utilities and local governments and the promotion of "WaterLess Heroes" throughout the District's 18-county region, WaterLess sends the message that small changes in individual watering habits can make a big difference for the District's water supply in the future.

The District launched a water conservation coordinator collaboration with utility and local government staff in 2017 to focus on the topic of water conservation and provide networking opportunities to advance efforts and knowledge in water conservation programs. The group continues to meet quarterly, and in FY 2020–21, despite COVID-19, the collaboration met (virtually) four times with expert presenters at each meeting.

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 million in projects to increase irrigation efficiency for approximately 2,690 agricultural acres. Additionally, these projects reduced overall groundwater consumption for these irrigated acres by 0.61 million gallons per day (mgd).

The District's Abandoned Artesian Well Plugging Program (AAWPP) continued implementation of its goal to protect groundwater quality and quantity by plugging free-flowing wells and wells that can impact groundwater quality by cross connecting aquifers. In FY 2020–21, the AAWPP partnered with three cooperating counties: Indian River, Brevard, and Seminole to identify abandoned flowing artesian wells. In addition, 46 wells were plugged, saving a total flow of up to 7.26 mgd. The District anticipates actively expanding resources dedicated to the AAWPP by increasing funding, outreach, and staff resources to accommodate additional well abandonment in the current and upcoming fiscal years.

The FWS program, developed by the District and launched in 2007, became a statewide program in 2010. The program certifies residential and commercial buildings which meet certain criteria that result in measurable water savings. Administration of the FWS program by the Florida Home Builders Association (FHBA) continues to gain traction with builders and has resulted in over 8,000 residential units being certified through October 2021.

FWS's Accredited Professional program, which trains designers and installers of landscapes and irrigation systems, is administered by the Florida Nursery and Landscape Association and has trained more than 1,200 landscape professionals through December 2021. District staff continued collaboration with the University of Florida, Florida-Friendly Landscaping program, to develop a joint certification tier to replace FWS program's Gold Certification in 2022.

Develop alternative water supply and water resource development projects

The District's regional water supply planning work, in coordination with area stakeholders, leads to the development of many projects to help address the need of growing water supply demands, including the development of AWS and water resource development (WRD) projects.

Alternative water supplies (AWS)

The District and its partners address implementation and funding of AWS projects through multiple channels, including the Water Protection and Sustainability Program Trust Fund (WPSPTF) and the District's cost-share program. Since FY 2013–14, the District has awarded over \$107 million from all sources in cost-share funding for 142 AWS projects that will or have resulted in an estimated production of 167 mgd of AWS and created nearly 22 million gallons of storage capacity. To that end, in FY 2020–21, seven AWS projects were completed. In addition, last fiscal year the District awarded nearly \$4 million for six AWS projects that are anticipated to result in the production of more than 8 mgd of alternative water supplies.

Two AWS projects that were recently awarded District funding are the Vero Beach Canal to Irrigation Water Project (Vero Beach CIWP) and Casselberry South Water Treatment Plant Well #1 Modification (Casselberry SWTP). The Vero Beach CIWP, which includes construction of 29,150 linear feet of reclaimed water main to transmit treated canal water for use in irrigation, has an estimated water supply benefit of 3 mgd. The Casselberry SWTP, which includes the conversion of an existing Upper Floridan aquifer (UFA) well to the Lower Floridan aquifer, has an estimated water supply benefit of 1 mgd. In addition, the project's reduction in withdrawal from the UFA will benefit flows in the Wekiwa Spring system.

Five-Year Water Resource Development Work Program (WRDWP)

The District publishes an annual Five-Year WRDWP as part of its yearly Consolidated Annual Report. The WRDWP describes the District's implementation strategy relating to its water resource development and water supply development (including AWS development) components over the next five years. As of September 30, 2021, 11 projects listed in the 2021 WRDWP were completed. The total estimated water made available through these projects is 8 mgd.

Black Creek WRD Project

The NFRWSP (2015–2035) identified a series of WRD projects that included the Black Creek WRD Project. The project will divert up to 10 mgd from the South Fork of Black Creek during wet weather high-flow periods. Diversions will only be made when there is sufficient flow available to ensure the protection of natural resources within the creek. The water will be pumped through a transmission system before eventually discharging into Alligator Creek. Alligator Creek flows into Lake Brooklyn, which will increase recharge to the UFA through the lake bottom. Funding for this project includes contributions from the District, state, and participating consumptive use permit holders.

Land and easements for the project have been acquired. Ninety percent of project design is complete and permitting activities are ongoing. This past year, the District applied to DEP for the National Pollutant Discharge Elimination System permit and is currently preparing responses to a request for additional information. A draft Environmental Resource Permit (ERP) application was also submitted to DEP. A pilot study was conducted to determine full-scale operation cost

and provide value engineering of design that may lower both capital and operation and maintenance costs. Pending completion of the permitting process, construction is anticipated to begin in late 2022.

Grove Land Reservoir and Stormwater Treatment Area (GLRSTA)

The 2020 CFWI RWSP identified a series of water supply and WRD projects that included the GLRSTA project. The GLRSTA is a proposed dispersed water storage / public private partnership project to be built in northern Okeechobee and southern Indian River counties, near the southern boundary between the District and SFWMD. The project proposes converting two citrus grove areas into reservoirs and diverting water away from the IRL and northward to the C-52 Canal for the purpose of environmental benefits to the IRL and alternative water supply. This past year, the District continued coordination with SFWMD on permitting, real estate, modeling, and environmental sciences to assist in the development of the project. The District completed a technical analysis examining the hydrology, possible flood control impacts, environmental criteria and water quality treatment.

St. Johns River / Taylor Creek Reservoir (SJR / TCR) Project

The 2020 CFWI RWSP identified a series of water supply and WRD projects that included the SJR / TCR Project. The SJR / TCR Project is located in Orange and Osceola counties near the St. Johns River and State Road 520. The SJR / TCR project consists of surface water withdrawal from the St. Johns River during high and sustainable flows, as well as levee improvement to TCR (i.e., TCR Improvement Project) to support increased water storage. Planning level documents suggest up to 54 mgd (average annual daily flow) can be made available from the project. Notably, the District has conducted multiple studies to evaluate the potential for additional water supply projects on the river and studies indicate that withdrawals are feasible with minimal to negligible environmental impacts to both surface and groundwater resources.

This year for the TCR Improvement Project the District completed 30% in-house design of the L-73 levee improvements and anticipates completing 60% design before the end of FY 2022.

Plan for statutory funding requirements

The District’s project planning and budgetary processes recognizes the statutory obligations for AWS and Outstanding Florida Springs (OFS).

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, and in accordance with Section 373.707(8)(n), F.S., the District is required to match from District sources the amount of funding appropriated from the WPSPTF. In FY 2020–21, the Governor and Legislature allocated \$40 million to DEP 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.

Legislation passed with the Springs and Aquifer Protection Act of 2016 (i.e., subsection 373.805(4)(b), F.S.) requires all prevention and recovery strategies for OFS to include a minimum of 25% financial assistance from the District for each listed project. Toward that end, the District has utilized its cost-share programs, funding 13 projects in support of the springs protection in FY 2020–21. The funds invested for these projects are \$6,157,460 by the District, \$19,146,062 via DEP, and \$24,865,067 by partners, such as local governments, utilities, and private entities, resulting in a grand total of \$50,168,588 being devoted to springs protection. The estimated benefits include a total nitrogen (TN) load reduction of 4,970 pounds per year (lbs./yr.), a total phosphorus (TP) load reduction of 1,314 lbs./yr., and groundwater offset of nearly 20 mgd.

III. Water Quality

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

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 Ron DeSantis established water quality as a focus of his administration with Executive Order 19-12 “Achieving More Now for Florida’s Environment,” 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 the health of natural systems and for maintaining a high standard of living for our residents. 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 and documents the condition of more pristine waters, such as the St. Marys River. 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 in a manner that minimizes environmental impacts and protects 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; and 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, Beauclair, 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. These projects are based upon comprehensive monitoring of the aquifer systems underlying the District. The District continues to facilitate cost-effective investment of the ongoing allocation by the Florida Legislature of at least \$50 million per year (\$75 million for state FY 2021–2022) 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 2024. Also, future projects on Lake Jesup for nutrient removal and flow enhancement support DEP-adopted BMAPs to address water quality impairments, as does an ongoing innovative intact cellular algae harvesting project. 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

Summary of Activities:

Protect and improve water quality in surface water and groundwater

The District has many ongoing activities to protect and improve water quality and address nutrient pollution throughout the Lower, Middle and Upper St. Johns River basins, Lake Apopka and the Ocklawaha River Basin. These efforts also include projects to address water quality issues in coastal resources, such as the IRL and various Florida Priority Springs within the District.

The District takes a “diet and exercise” approach to addressing water quality. The “diet” is focused on reducing nutrient inputs, which is based upon a monitoring program that identifies the inputs. Then, in coordination with DEP and its existing BMAPs, the data are used to identify and develop specific projects to reduce these nutrient loads. These projects may be District-led or implemented by local governments, at times supported by cost-share from the District and/or DEP. “Exercise” is meant to address the removal or sequestration of excess nutrients already in the water body. Muck dredging is one type of exercise as it removes legacy nutrients. Another type of exercise is the restoration of impacted coastal wetlands so that they more efficiently store or sequester nutrients filtered from coastal waters.

St. Johns River

District scientists documented that increasing land application of Class B biosolids was responsible for observed increases in phosphorus concentrations in portions of the USJRB. The District worked with DEP to refine the permitting framework for land application. In addition, DEP has provided the District funding to further investigate the water quality implications of land application, including potential remediation techniques and land application sites and techniques to capture phosphorus at water reclamation facilities.

Also in the USJRB, the District is collaborating with DEP on its efforts to develop a TMDL for the basin’s impaired water bodies.

Working with funding from DEP, the District began operation of an innovative mobile algal bloom harvesting pilot study on Lake Jesup. The system uses AECOM’s innovative process to isolate and separate algal cells from the lake’s water and return the treated water to the lake.

The District is also designing a project in Lake Jesup that includes a water quality treatment wetland to remove phosphorus from the lake’s water and a project to restore lost connectivity to the St. Johns River.

Also to benefit Lake Jesup, the District and DEP are evaluating techniques to reduce the recycling of phosphorus from Lake Jesup’s sediments. This year’s work will test the chemical amendments recommended in laboratory tests, in in-lake enclosures.

Similarly, the District began operation of an innovative phosphorus removal pilot project on the effluent from the Fleming Island Regional Wastewater Plant. The treated water with reduced phosphorus is distributed to reclaimed water customers for irrigation purposes within the watersheds of Doctors Lake and the St. Johns River.

All along the St. Johns River, the District and DEP, in coordination with the Department of Health, are gathering samples of harmful algal blooms to assess the contributing species and the existence of algal toxins. Sampling results are hosted on DEP's Algal Bloom Dashboard.

Ocklawaha River Basin and Lake Apopka

The majority of the phosphorus load reduction to Lake Apopka has been accomplished through the legislatively directed acquisition and restoration of the former farms on the lake's north shore floodplain wetlands. The District is implementing two large projects to improve our ability to manage water on the North Shore, reducing the treated volume needing to be pumped back to the lake.

1. Zellwood-Duda interconnect began construction in late 2020 and will be completed in early 2022.
2. Duda internal levees and water control structures was completed in 2021.

In addition to reducing nutrient loading, the District is implementing projects to remove nutrients from Lake Apopka. One project is the harvest of rough fish, first started in 1993. Approximately 1 million pounds of fish, and associated phosphorus, are removed annually. Another project is the Lake Apopka Marsh Flow-Way, a 760-acre constructed wetland that filters algae and associated sediments from the lake's water. This system has been undergoing maintenance and is now operating again. A third phosphorus removal project has also been under development in recent years. The District has a pay-for-performance contract with Phosphorus Free Water Technologies to remove phosphorus from the lake's water. All these techniques remove phosphorus from Lake Apopka's water as a means to reach the phosphorus target concentration.

Working with funding from DEP, the District completed an evaluation of Blue Green Water Technologies products to manage cyanobacterial blooms on Lake Minneola. This approach was also utilized by SFWMD to treat cyanobacterial blooms in canals discharging from Lake Okeechobee.

Indian River Lagoon (IRL)

In addition to supporting local government projects via cost-share programs, the District is developing three projects to reduce nutrient, sediment, and freshwater inputs to the IRL as part of its "diet and exercise" approach to addressing water quality in the IRL.

One project is the Crane Creek / M-1 Canal Flow Restoration Project. The District has continued the design and permitting of the project. The objective is to reduce nutrient loading to the IRL by redirecting flows to a stormwater treatment area prior to flowing into the headwaters of the St. Johns River. Upon project completion, approximately 7 mgd of freshwater from the M-1 Canal will be routed back west to the St. Johns River Basin after treatment; thereby reducing annual nitrogen and phosphorus loads to the IRL by 24,000 lbs. and 3,100 lbs., respectively. The diverted water could be available as an AWS for downstream users. This past year, the District completed a feasibility study to identify alternative discharge locations and advanced the design to prepare the project for construction in 2022.

A second project related to the IRL is the Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture (DWS/FJV). The DWS/FJV project is in Indian River

County and will provide environmental benefits to the IRL by using private agricultural lands for water storage and treatment. Coastal waters, such as the IRL, have become impacted due to rising sea levels, discharges of freshwater routed from the St. Johns River watershed, and nutrient loading. To reduce these impacts to the IRL, the District initiated a project involving dispersed water treatment. This is a public / private partnership that will reduce nutrient loads from both urban and agricultural stormwater. FJV has completed 60% design and permitting efforts will begin early in 2022.

A third project is the C-10 Water Management Area (WMA), which consists of a 1,300-acre water management area (WMA), pump station, outfall structure, 4 miles of new levee, and improvements to an existing federal levee. Located northeast of Three Forks Marsh Conservation Area (TFMCA), in western Brevard County, the project will collect water from a series of drainage canals to increase storage of water currently discharging to the IRL and direct flow to its historic drainage way toward the St. Johns River. Operation will be controlled at the inlet and gravity discharge to TFMCA.

Springs

The District conducts monitoring and data analysis activities supporting project development and cost-share evaluation. Biological monitoring is conducted at select OFS and first-magnitude springs within the District. In addition, groundwater quality is monitored at select OFS in coordination with DEP and to support springs BMAPs. The District continues to analyze historical and current data to evaluate spring conditions and develop potential management options. These analyses are captured in three comprehensive reports focusing on specific ecosystem components that will be completed in 2022.

Collect and analyze data to support resource management decisions and restoration initiatives

This work is guided by a water quality monitoring network composed of over 400 surface water stations and 460 wells. This includes continued collaboration with DEP on its status and trends water quality monitoring program. During the past year, the District has upgraded its Aquarius software portal to share continuous water quality data with the public. The District also received a grant from the U.S. Geological Survey (USGS) to provide our groundwater data via the National Ground Water Monitoring Network.

The District maintains an extensive groundwater monitoring network, composed of more than 750 wells, and to collect data at over 330 hydrologic monitoring stations. This monitoring and data support the District’s water supply planning efforts, including MFL development and assessment, and environmental restoration activities. During the past fiscal year, the District secured 15 additional easements and other agreements from both private and public property owners to provide sites for the collection of data on rainfall trends, water level fluctuations and water quality. As of November 12, 2021, the District had 312 easements and other agreements for such data collection purposes.

Develop innovative and cost-effective water quality projects

The District develops and implements various types of water quality improvement projects, including District-led and cost-share projects, and innovative projects that use proven or

emerging technologies. Below are some of the major projects the District worked on in FY 2020–21.

Crane Creek M-1 Canal Flow Restoration Project

The District continued the design and permitting of the 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 stormwater treatment area prior to flowing into the headwaters of the St. Johns River. Upon project completion, up to 7 mgd of freshwater from the M-1 Canal will be routed back west to the St. Johns River basin after treatment; thereby reducing annual nitrogen and phosphorus loads to the IRL by 24,000 lbs. and 3,100 lbs., respectively. The diverted water could be available as an AWS for downstream users. This past year, the District completed a feasibility study to identify alternative discharge locations and advanced the design to prepare the project for construction in 2022.

Dispersed Water Storage (DWS)/ Nutrient Reduction Pilot Project with Fellsmere Joint Venture (FJV)

The DWS/FJV project is in Indian River County and will provide environmental benefits to the IRL by using private agricultural lands for water storage and treatment, and preventing and treating that water from reaching the IRL. Coastal waters, such as the IRL, have become impacted due to rising sea levels, discharges of freshwater routed from the St. Johns River watershed, and nutrient loading. To reduce these impacts to the IRL, the District initiated this project involving dispersed water storage and nutrient treatment. This treated water will be routed west toward the St. Johns River Basin. This is a public / private partnership that will reduce nutrient loads from both urban and agricultural stormwater. FJV has completed 60% design and permitting efforts will begin early in 2022.

C-10 Water Management Area (WMA)

The C-10 WMA project consists of a 1,300-acre WMA, pump station, outfall structure, 4 miles of new levee, and improvements to an existing federal levee. Located northeast of Three Forks Marsh Conservation Area (TFMCA), in western Palm Bay, Brevard County, the project has been designed in-house by District staff and involves the collection of surface water from a series of drainage canals currently discharging to the IRL and storing the water prior to directing flow west to its historic drainage pattern toward the St. Johns River. Operation will be controlled at the WMA inlet before eventually gravity discharging to TFMCA. The WMA available storage can be increased to assist in flood protection. This project was submitted in October 2021 to DEP for funding under the Resilient Florida program and the District was notified in December 2021 that it was awarded \$20 million in funding over multiple years for phased project implementation.

Lake Apopka Marsh Flow-Way (MFW)

The Lake Apopka MFW is a constructed wetland located along the northwest shore of Lake Apopka, west of the Apopka-Beauclair Canal. The MFW filters algae, suspended sediments, and associated nutrients from Lake Apopka's water, before being returned to the lake. This process returns water to the lake that is clear enough to support the growth of submerged aquatic vegetation. This recirculating system filters about 40 percent of the lake's volume each year. It began operation in November 2003 and maintenance was completed in 2021.

Intact Cellular Algae Harvesting

Lake Jesup in Seminole County has a history of severe water quality and ecological problems which include harmful cyanobacterial algal blooms, high nutrient concentrations, high organic sediment, low submerged aquatic vegetation cover and low game fish productivity. DEP received legislative appropriations in 2020 and announced a Harmful Algal Bloom (HAB) Innovative Technology Project Grant solicitation requesting proposals from government entities to prevent, detect, clean up, or otherwise address HABs. In early 2020, the AECOM pilot project was selected to receive \$1.65 million through DEP's grant.

For this pilot project, AECOM deployed a mobile algal harvesting unit that removes intact cellular algae, suspended solids and associated nutrients directly from the lake's water column using an innovative form of dissolved air flotation technology. The harvesting unit is mounted on a barge and transported around Lake Jesup so algae can be harvested at various locations.

The objective of this pilot project is to collect representative data to evaluate system efficiency and the cost effectiveness of a full-scale system that can achieve the Lake Jesup Total Maximum Daily Load and Basin Management Action Plan goals. AECOM began operating the algae harvesting system in 2021 and will prepare a final report in 2022.

Phosphorus Free Water Technologies (PFWT)

In 2019 the District entered into a pay-for-performance contract with PFWT to remove phosphorus from Lake Apopka's water. PFWT has constructed a facility and ramped up to full capacity in 2021.

Lake Minneola

The District entered into an agreement with Blue Green Water Technologies (BGWT) in early 2020 for an innovative project to fight algal blooms in Lake Minneola. The project would evaluate the potential of its Lake Guard Oxy Technology, a proprietary innovative product that selectively targets cyanobacteria, in preventing and/or controlling algal bloom formation in Lake Minneola. The agreement with BGWT was amended in October 2020 to allow DEP to respond to emergency conditions in the South Florida Water Management District that required water releases from Lake Okeechobee to the St. Lucie Estuary. The amendment ensured that partner water management districts and DEP can take rapid actions by accessing this contract without delay when critical harmful algal bloom (HAB) conditions are present. BGWT, along with Modica and Associates, has completed a six-month treatment and monitoring study on the lake and is currently working on a final report.

Doctors Lake Phosphorus Removal Pilot Project

The Doctors Lake Phosphorus Removal Pilot Project is a full-scale demonstration project that removes dissolved phosphorus from treated wastewater at Clay County Utility Authority's Fleming Island Regional Wastewater Plant before it is reused for irrigation in the Doctors Lake watershed. The project will reduce the phosphorous concentration by 90% and will assist in furthering water quality improvements in Doctors Lake and the Lower St. Johns River Basin. In addition, the District continues to provide cooperative cost-share funding for local governmental and non-governmental entities for water quality improvement projects.

Support the Governor’s and DEP’s restoration efforts

The District continues to facilitate cost-effective investment of the annual funding provided by the Florida Legislature of \$50 million per year for springs protection through District and DEP cost-share programs with local partners. The District also facilitated investment of \$25 million provided by the Florida Legislature in FY 2020–21 for water quality improvement projects that specifically benefit the IRL.

In addition, the District:

- Continued collaboration with DEP on its status and trends water quality monitoring program.
- Continued collaboration with DEP on its harmful algal bloom monitoring and reporting efforts.
- Continued efforts with DEP to develop a TMDL for nutrient-impaired water bodies within the USJRB.
- Continued design work on a project on Lake Jesup which would include a water quality treatment wetland and the creation of a channel to restore flow between the St. Johns River and Lake Jesup.

IV. Natural Systems

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

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, restore 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 612,800 acres of land the District has acquired in fee (full and joint), District staff is responsible for managing approximately 421,000 acres. The remaining approximately 191,800 acres are managed by partners, including the Florida Fish and Wildlife Conservation Commission, Florida Forest Service, and a number of counties. In addition, the District also manages approximately 5,500 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 162,700 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 percent of District land is open for recreation. In addition, the District has 96 active special use authorizations that allow compatible and appropriate uses on District lands. Restoration activities focus on encouraging native vegetation through planting and by managing or removing competitive invasive species. Because conditions change over time, use of an adaptive management approach includes prescribed fire, hydrologic management, invasive species control, and native species planting. 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, such as grazing and apiary leases, that partner the public and private sectors to use public lands for a public good. 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

Summary of Activities:**Maintain District lands for natural resources and people**

The District owns, manages, or has interests in more than 780,000 acres of land, acquired for the purposes of water management, water supply, and the conservation and protection of water resources. This includes significant investment in conservation easements which allow private landowners' management to provide important benefits. District staff manage approximately 425,000 acres of fee simple lands, while the remainder of its fee simple lands are managed by other agencies or local governments. The District's land management goals are contained in land management plans (LMPs), which are updated every 10 years. During the last fiscal year, five LMPs were approved by the Governing Board.

District staff conducted land management review team (MRT) meetings for five areas during the past fiscal year. All five MRTs had positive feedback about the properties' conditions and the District's management activities. It was determined that each area is being managed in compliance with the Governing Board-approved land management plan.

The District continues to maintain a vigorous prescribed burn program as it is recognized that prescribed fire is the most valuable and cost-effective land management tool. The other major tool is vegetation management. Managing of invasive and exotic vegetation is integral to natural resource management as well as providing access to the various user groups that visit District lands.

Management and restoration of District lands includes leases for a variety of resource-backed activities. Uses include 32 cattle grazing leases on approximately 47,000 acres and 10 apiary leases on 58 different sites. In addition to revenues, the leases provide on-site management and security at no cost to the District. All revenues generated by these leases are invested in future land management or restoration activities.

Manage invasive exotic and nuisance vegetation in a protective and sustainable manner

Exotic plants cover thousands of acres of the state's forests, wetlands and waterways. These invasive plants grow quickly, propagate easily without the pressure of the diseases, parasites and other grazers that would help control their growth in their native ecosystems.

The District treated 26,570 acres of invasive plants during the year, including aerial treatment of 9,745 acres of land infested with Old World climbing fern. With the goal of reducing the encroachment of woody vegetation into herbaceous marshes, and about 3,275 acres of willows and shrubs were treated. The ultimate goal is to return these wetlands back to an herbaceous

communities that can be maintained with prescribed fire.

The District is continuing to expand its use of mechanical vegetation management. At FWMA, staff shredded a 103-acre area of tussock/floating vegetation to maintain habitat and vessel access. Two mechanical projects involved the removal of vegetation and associated sediments, both to remove invasive and/or exotic plants, but also to remove nutrients from these impaired water bodies. At the Orange Creek Restoration Area, 33 acres of Cuban bullrush and other invasive species were harvested, while a project at DeBary Bayou removed 12 acres of invasive plants and associated sediment. Staff continued to expand the use of a small aquatic vegetation harvester to maintain canals, boat ramps, and other structures to reduce herbicide use.

The District continues to investigate, develop, and implement of tools to increase the precision of herbicide application, providing effective treatment with less herbicide used. District staff developed a sweeper spray tool that allows better control of individual nozzles for required levee top maintenance. The new tool has reduced both herbicide use and required staff time. Staff also worked with a vendor to start using a precision aerial treatment system that does small remote spot treatments, thus reducing herbicide and providing less overspray for attacking new, small infestations.

Bio-controls agents are another tool to help reduce the District's herbicide footprint. Last year staff released 8,000 triploid grass carp in the Lake Apopka North Shore to reduce the coverage of hydrilla. Staff also worked with the University of Florida's Institute of Food and Agricultural Sciences on a study that involved the evaluation of a new biocontrol agent, a thrip, to control Brazilian pepper at TFMCA.

Provide access and recreational opportunities on District properties

The District buys land in the course of its work to protect and preserve water resources. In addition, these lands protect plant and wildlife habitats while providing areas for public recreation and environmental education. Virtually all District property is open to the public for resource-based recreation 24-hours per day, 365 days per year. Closures of District lands occur due to ongoing construction or restoration projects.

District staff oversaw the maintenance and repair of 116 parking lots/access points, 59 group and primitive campsites, and 450 miles of trails. In addition, the District used publicly donated funds from visitors to the Lake Apopka Wildlife Drive (at its Lake Apopka North Shore property) to fund new shaded pavilions and adjacent raptor perches. Staff also oversaw the completion of levee road improvement projects on multiple properties that enhance water management while also facilitating visitor access. At the popular FWMA, repairs were performed to the Headwaters Lake boat ramp and parking lot. Additionally, significant repairs were made to observation platforms along the loop trail overlooking the Marsh Flow-Way on the Lake Apopka North Shore.

In coordination with the Florida Fish and Wildlife Conservation Commission, a total of 385,626 acres of District-owned lands were open to hunting through 38 wildlife management areas and seven properties that are used for youth and/or Operation Outdoor Freedom hunts.

Special Use Authorizations (SUAs) allow individuals and groups distinct opportunities to use or enjoy the District's natural resources. SUAs allow for many compatible and appropriate uses on District lands. SUAs allow for environmental research, including sampling, collecting, surveying, and planting. In addition, SUAs allow for friendly competitions and other organized events, such as bike rides and runs, wildlife appreciation activities, festivals, and educational opportunities. In addition, SUAs allow for special events or activities, such as conservation hunting for disabled veterans and invasive species population management. The District had 111 active SUAs as of November 12, 2021.

Preserve, protect, and restore natural systems to support their natural hydrologic and ecologic functions

The District set a new record last year for the number of acres (52,720) treated with prescribed fire during the fiscal year. This was done by completing 81 individual burns across the District with the largest burn being 11,000 acres in size.

Native vegetation provides abundant natural resource and public benefits. The District will use prescribed fire to maintain the herbaceous vegetation. Staff planted 22 acres in native groundcover species on Longleaf Flatwoods Reserve and Lake Apopka North Shore to further both upland and wetland restoration goals. Additionally, 171 acres of longleaf and slash pine were planted on District lands last year.

The District reported in the 2021 Annual Wetlands Activity Report a net wetland restoration gained within the District for the year of 48,464 acres. This brings a total wetland restoration and preservation gained since 2020 to 471,622 acres.

The District added 1,588 acres of floodplain marsh within the USJRB. This acquisition involves several land tracts near the District's River Lakes and Three Forks Marsh conservation areas and is anticipated to be complete before December 30, 2021. In the Ocklawaha basin, the District assumed full possession and management of a 2,049-acre life estate addition to the Sunnyhill Restoration Area. It is anticipated that this property will be open to the public in fall 2022.

V. Flood Protection

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

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 today, the District maintains 69 miles of canals in addition to the 115 miles of federal/District 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 continues to emphasize and support resiliency projects that incorporate multiple core missions, especially flood protection and water supply. In FY 2020–21, the District began developing green or nature-based infrastructure resiliency projects and continues to provide technical assistance to local governments that are addressing and planning for sea-level rise, flooding, and water supply issues. Additionally, as in the past, the District will continue to support projects like the FY 2014–15 Brevard County Oyster Reef Living Shorelines which, in addition to annual nutrient load reductions of 639 lbs. of TN and 48 lbs. of TP, provided native habitat restoration and shoreline stabilization; or the city of St. Augustine Davis Shores project that provided flood protection for 380 acres by reducing tidal flooding when king and lunar tides, which occur 12 to 16 times per year, back water up into roadways with the installation of 17 stormwater check valves; and the Riverside Conservancy Living Shoreline, located adjacent to the Mosquito Lagoon Aquatic Preserve in Volusia County, which will promote clean water, healthy habitats, and resilient communities while also creating a model for large-scale shoreline restoration efforts that can be utilized as mitigation for impacts to shorelines in the region.

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. Structural techniques also 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 in addition, the District is responsible for maintaining non-federal, farm/project levees, several 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.

Non-structural flood protection is achieved through stormwater management rules, acquisition and conservation of floodplain wetlands to provide floodwater storage. The District has also purchased full-fee or flowage easements of riverine floodplain that provide non-structural water storage and flood management. The District, in coordination and cooperation with the USGS, also operates a monitoring network that provides critical real-time hydrologic data to other agencies, 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

Summary of Activities:**Minimize flood damage to protect people, property and infrastructure**

One of the District's primary flood protection priorities is to maintain both the federal and non-federal flood management systems. 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 Project, as well as one District-constructed flood management project (FWMA). These projects include approximately 115 miles of levees, 12 major water control structures and approximately 76 minor water control structures. As the local sponsor, the District is responsible for operation and maintenance of these facilities and for the acquisition of lands required for operation and maintenance of the federal projects. In addition to the infrastructure associated with the federal and non-federal flood management systems, the District is also responsible for maintaining nearly 175 miles of non-federal, farm/project levees, several minor water control structures, weirs, navigational locks, and pump stations. The District also maintains more than 69 miles of canals and 1,600 miles of roadways and trails,

In February 2021, the District in coordination with the USACE, completed a System Wide Improvement Framework (SWIF) for all federal levees. This document was formally approved by the USACE in May 2021, and addresses the following: system identification information, a list of identified deficiencies, a plan for rectifying the deficiencies based on risk, a funding plan, interagency collaboration details, interim risk reduction measures, and a schedule with project milestones. The objective of the SWIF is to have a formalized plan to improve maintenance conditions of all flood control levees and structures to acceptable standards, thereby minimizing potential risks.

As a requirement of the SWIF, the District developed and presented a Flood Risk Reduction webinar for local emergency operation center (EOC) personnel and the public in January 2021. This presentation included an overview of the Emergency Action Plans (EAPs) for all federal levee systems. The EAPs were revised in spring 2021 and submitted to each affected county EOC staff in June 2021. District staff then conducted outreach to each agency that received the updated EAPs to answer any questions.

Also, in support of this goal, District staff from the north and south operation regions attended an annual cross-training event at the site of each major water control structure. This training provides District operation and maintenance staff with the continuing knowledge of how to operate a water control structure should power be lost to the structure. These standard operating procedures are also documented step by step in writing and are accessible to all staff. The District also conducted other annual training that included operating all structures in both remote and local conditions, verifying the District's portable pump inventory, verifying staff available for emergency response, and conducting a mock exercise of a major storm event with potential damages.

Operate water management systems to meet flood protection, water resource and future water supply needs

To ensure that all major water control structures continue to meet flood protection, water resource, and future water supply needs, a long-range plan to rehabilitate these structures was created in 2015 and is updated annually. In support of this plan, the District completed several projects this past fiscal year, including rehabilitation of the S-96D water control structure, replacement of the S-157 water control structure's hydraulic lift system with a more reliable drum and cable lift system, and an upgrade of all water control structure's communication system by transitioning from communicating via radio cell tower(s) to a second cellular modem for redundancy.

The District adheres to a strict semi-annual inspection schedule of all of its flood management systems. The results of these inspections are submitted to the USACE for its review and documentation within 90 days of the inspections being completed. In FY 2020–21, the District completed the semi-annual inspections in November 2020 and May 2021. The results of the District's inspections were submitted to the USACE in February 2021 and August 2021. District staff compiled 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, usually due to the cost associated with the repair, are addressed within 12 months of the inspection. Approximately 64% of the unacceptable deficiencies noted during the November 2020 inspection have been rectified. Repair work associated with deficiencies from the May 2021 inspection are ongoing.

Most of the repair work from the November 2020 and May 2021 inspections is levee-related work associated with grading specific areas of erosion, depressions, or rutting, as well as improving sod cover and removal of woody vegetation. However, portions of the federal flood protection levees required major reconstruction in FY 2020–21, including approximately seven miles of levee along the C-231 Canal (Upper Ocklawaha River Basin) and one mile of the L-73, Section 1 levee (USJRB), where the levee was stabilized to prevent and minimize erosion from

wave action. In addition, several miles of the L-73 Section 1, L-73 Section 2B, L-74N, and L-77E levees had significant woody vegetation removed at the toe of slope to reduce concerns associated with piping and seepage, and to allow for future inspections at the toe of slope. The District also slip lined five minor water control structures within the L-75 and L-78 levees and at Fellsmere Grade to ensure their long-term integrity.

The Bureau of Operations and Maintenance (BOM) maintains five-year and 20-year capital improvement plans (CIPs). These CIPs are updated annually. As part of the continuing priority to ensure that infrastructure is refurbished or replaced prior to the end of its useful service life, BOM conducts annual infrastructure inspections and incorporates those findings into the annual CIPs. As part of this overall effort, several additional infrastructure components were improved or refurbished this past fiscal year, including several miles of the L-76 and L-40 levees in the USJRB, three primary flood control pumps associated with the FWMA, two airboat crossovers (L-76 levee and SR-512 Recreational Area), several water quality monitoring platforms in the Lake Apopka Marsh Flow-Way, and two Bailey Bridges in the USJRB.

In addition to the above activities, the District continues to provide cost-share funding for local governmental and non-governmental entities for flood protection projects. Information on these efforts is located in the reports supporting activities section.

Maintain data collection to support federal flood prediction collaboration

The District, in coordination and cooperation with the USGS, operates a monitoring network that provides critical real-time hydrologic data to other agencies, governmental entities and the public for flood management activities throughout the District. These activities 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 rainfall, water level information, and discharge information associated with each major water control structure is presented on the District's website and updated daily.

For FY 2020–21, water bodies were maintained per the regulation schedule and water level data sites were maintained and repaired within acceptable time frames. For consistency, District staff completed a project where all staff gauges associated with the flood protection system were surveyed and the elevations verified relative to NAVD88 datum. This eliminates any discrepancies should a visual reading need to be taken in the event remote communications are down.

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

Strategically acquire and restore floodplains to improve resilience

Acquisitions of floodplains further the District's core mission for natural resource protection and flood protection by maximizing the natural capture and slow-release floodwaters driven by inland flooding, storm surge, tidal influence, and sea-level rise. In addition, acquisition of floodplains along the St. Johns River and various lakes, creeks, and tributaries can help minimize

the impacts of climate change and sea-level rise in areas at high risk for flooding. Further, these lands provide water quality critical habitat to fish and wildlife, including endangered or threatened plant and animal species through conservation or restoration.

Last fiscal year, the District initiated acquisition of nearly 1,588 acres of floodplain marsh within the USJRB, at the main stem of the St. Johns River in Brevard County. This acquisition involved several land tracts near the District's River Lakes and Three Forks Marsh conservation areas and was completed in December 2021.

Coordinate with state and local governments and the public during and after emergency events

The District is an emergency response partner with the state emergency management system as a support agency to the State Emergency Operations Center (SEOC). District resources are available for deployment to assist in the state's mission as directed by Section 252. 352, F.S., or the statewide Mutual Aid Agreement. In addition to maintaining a listing of emergency management partners at the local, state, and federal levels, the District maintains a Comprehensive Emergency Management Plan and a Continuity of Operations Plan to ensure the agency is properly prepared to respond to emergencies. During tropical storms and other events, the District is prepared to provide resources to support local and state partners in its response to the event. In the days before a storm event, District staff work to develop incident response plans, pre-position supplies and equipment to support response efforts, and participate in daily conference calls with the SEOC. Immediately after the storm event, damage assessment teams are sent out to perform inspections and pump crews may be deployed to assist with flooding issues.

The District did not receive any tropical storm-related requests for assistance this past fiscal year. However, District flood control staff did provide a situation report in August 2021 during Tropical Storm Fred regarding the status of each major water control structure.

In addition, the District participated as an emergency response partner for the events associated with the Eastport Terminal Facility incident at Piney Point. On March 25, 2021, phosphogypsum stacks at the facility were reported to have increased flow and measurements that indicated the presence of a leak at the facility's NGS-South compartment. There was concern that the leak may cause catastrophic failure of the levee. On April 3, 2021, DEP through the SEOC requested emergency assistance from the District for a pumping effort. The District responded on April 4, 2021 (Easter Sunday), with the mobilization of a pump strike team that included asset deployment of 6- and 12-inch pumps. The District pump strike team partnered with DEP and the Southwest Florida Water Management District staff to assist in an emergency dewatering effort that lasted for four days.

VI. Supporting Activities

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 strives for constant self-evaluation and improvement in all areas in order to successfully manage and protect our natural resources. The District's 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 and 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, F.S., 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 multiple 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.

The District, at the Governing Board's direction, has continued to grow its communications presence. This includes expanding outreach through social media tools, planning and attending events to celebrate our successes, and continuing to stay in touch with residents and give them a voice to share their priorities and concerns. In addition, the District's award-winning WaterLess campaign has measurably increased awareness of the need for outdoor water conservation with surveyed respondents showing a willingness to reduce water use once equipped with actionable information. This holistic approach to communications allows us to drive messaging at the District and keep leadership well informed about emerging issues and innovative ideas.

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

Summary of Activities:

Strengthen relationships through outreach and communication

The District prioritized building relationships with the communities we serve through consistent outreach and communication, even during the height of the 2020–21 pandemic. A rapid turn to innovative tools such as online webinars offering education on various District initiatives, engagement through monthly online Governing Board proceedings allowing virtual comment, and updates regarding District projects via streamed public meetings guaranteed the public’s continued access to decision-making and information. In addition, stepped up video production provided at-home, water-related lesson ideas for parents with school age children and increased focus on building engagement via the District’s social media channels provided connection with water conservation ideas and the water quality purpose of District-owned public lands. The District’s website (www.sjrwmd.com) continues to be a go-to resource for water quality data and resiliency information, and the Water News weekly newsletter provides subscribers a steady stream of useful expert commentary, contacts for District programs and updates on challenges and opportunities in the realm of water management. In addition, in 2019 the District Governing Board members urged the creation of an in-depth water conservation awareness campaign. As a result, the District’s WaterLess outdoor water conservation campaign recently completed a second successful year in FY 2020–21.

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. These groups included the Florida Cattlemen, Florida Farm Bureau, Association of Florida Conservation Districts and various University of Florida Institute of Food and Agricultural Services groups. This outreach also included an opportunity for members of the District’s Agricultural Advisory Committee and members of the Governing Board to tour two ranches and discuss challenges and opportunities within the industry as it related to natural resources.

The District’s Bureau of Project Management staff maintain strong relationships with cost-share partners, coordinating twice monthly on active projects to assess progress. In addition, prior to the application solicitation period, District project managers participate in pre-application meetings with prospective applicants to inform and guide them on the evaluation process and any refinements approved by our Governing Board. This outreach ensures a quality submittal that will yield tangible benefits aligned with the District’s core missions.

The District Governmental Affairs Program’s intergovernmental coordinators work throughout designated regions to build relationships with local elected officials and key local government staff. The intergovernmental coordinators educate elected officials on District activities and initiatives in their area and work to address issues and constituent concerns. In addition, intergovernmental coordinators actively interact with various regional entities, utility authorities, regional planning councils, regional leagues of cities, transportation planning organizations, and other special districts, all toward the goal of promoting District activities and engaging with local

leaders. Intergovernmental coordinators also coordinate strategic conversations between the District and local leaders, organize tours of key District projects with local leaders and District staff, and work with local partners to issue annual water proclamations promoting water conservation and other water resources issues. Some high important issues and efforts that the program and intergovernmental coordinators recently leveraged contacts and relationships in a positive way on behalf of the District include the Crane Creek / M-1 Flow Restoration project in Brevard County, illegal borrow pits in Lake County, resiliency planning committee in Jacksonville, water supply planning in the CSEC, CFWI, and NFRWSP planning regions, and the multi-agency collaboration regarding impacts to the Little Wekiva River system.

Provide transparent, efficient, and effective service

The District focuses on providing exceptional and transparent service to taxpayers, businesses, and other government entities. Project and operational progress, along with overall organizational efficiency and effectiveness, are continuously measured and reported. Activities to accomplish these efforts during the last fiscal year include:

- Posting monthly financial reports to the District’s publicly available website within 24 hours after each Governing Board meeting
- Submitting an annual audit to the Florida Department of Financial Services and Auditor General within 45 days after Governing Board acceptance but not later than nine months after end of prior fiscal year
- Completing required distribution of the annual audit within 10 days after Governing Board acceptance and ensure posting on the District’s publicly available website within 10 days of acceptance
- Publishing and distributing the District’s tentative, preliminary, and final budgets and posting these and other financial information on the District’s publicly available website as required
- Providing current and future business opportunities with the District through several websites, including VendorRegistry.com, DemandStar.com, and the state of Florida’s MyFloridaMarketPlace.com
- Submitting quarterly Regulatory Division metric reports to DEP

Utilize regulatory permitting and compliance authority to protect water supplies, water resources and natural systems

The District’s regulatory program works to protect water resources and ensure compliance with permitting requirements, including environmental resource permits (ERPs) and consumptive use permits (CUPs). The regulatory program activities during FY 2020–21 included the following:

- Conducted 1,034 pre-application meetings (666 ERP, 368 CUP)
- Processed 3,324 ERP applications, 422 CUP applications, and 90 CUP administrative approvals (permit transfers)
- Issued 316 Emergency Order permit extensions
- Received 3,335 compliance items and closed and/or resolved 2,794 items.
- Managed 24 enforcement cases

Implement effective cost-share programs that reflect the goals of core missions

Since the beginning of the District’s cost-share programs in FY 2014–15, the District has 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 restoration. From October 1, 2020, through September 30, 2021, the District’s outreach efforts resulted in the receipt of two cost-share applications to the Districtwide Cost-Share (DWCS) Program from first-time applicants: Orange Park and Satellite Beach. For FY 2020–21, 30 contracts were executed for the DWCS Program totaling \$33.5 million. The estimated water resources benefits are:

- Approximate TN nutrient load reduction: 79,600 lbs./yr.
- Approximate TP nutrient load reduction: 5,400 lbs./yr.
- Approximate total water conserved: 0.05 mgd
- Approximate total AWS developed: 20.5 mgd
- Approximate total acres protected from flooding: 420 acres

The District also administers the Rural Economic Development Initiative (REDI) and Innovative Cost-Share Program to assist economically disadvantaged communities, as well as providing opportunity for the funding of innovative technology pilot projects that may demonstrate promise for water resources improvements at full scale. For FY 2020–21, the District provided funding toward construction costs for four projects, totaling of \$2 million. The estimated water resources benefits are:

- Approximate TN nutrient load reduction of 200 lbs./yr.
- Approximate TP nutrient load reduction of 150 lbs./yr.
- Approximate total water conserved: 0.02 mgd
- Approximate total acres protected from flooding: 3 acres

As of September 30, 2021, 16% percent of the allocated funds were expended for the 30 FY 2020–21 DWCS projects under contract. Eighty percent of the funds allocated for the four FY 2020–21 REDI / Innovative cost-share projects were expended.

The District agricultural cost-share program continues to engage with the agricultural community, including farmers, growers, and ranchers, to increase water conservation and utilization of efficient irrigation methods, and to reduce fertilizer runoff. During FY 2020–21, the District provided over \$1.9 million in funding for 21 projects. The estimated water benefits for these projects are:

- Approximate TN annual load reduction: 30,541 lbs./yr.
- Approximate TP nutrient load reduction: 5,713 lbs./yr.
- Approximate total water conserved: 0.53 mgd

Invest in staff development and expertise

The District continued to embrace a multi-faceted career planning approach in FY 2020–21 that aligns development goals with job-specific skills and competencies. Career planning encompassed on-the-job training, coaching, and academic training in addition to educational

reimbursement. These approaches were supported through individual Learning and Development plans, which incorporated technical learning. Leadership and soft skills were supported through online learning tools and classroom style leadership training. Individual learning plans were completed through collaboration between a supervisor and an employee and were also informed by an employee's career aspirations.



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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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 2021 MFLs Priority List and Schedule (2021 Priority List) for establishing MFLs during the planning period 2022–2024. The District's Governing Board approved the 2021 Priority List on October 12, 2021, and it was submitted to FDEP for review and approval on November 5, 2021. FDEP approved the District's 2021 Priority List on December 21, 2021.

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. 2021 MFLs Priority List and Schedule

During the planning period from 2022–2024, the District plans to adopt MFLs for a total of 13 systems. The 2021 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 2021 Priority List; Wekiwa Springs and Rock Springs are re-evaluations, and therefore not listed under springs. The District's 2021 Priority List is presented in Tables 2–1 through 2–3. As noted in Tables 2-1 through 2-3, 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 waterbody (the most constraining) with adopted MFLs , not four.

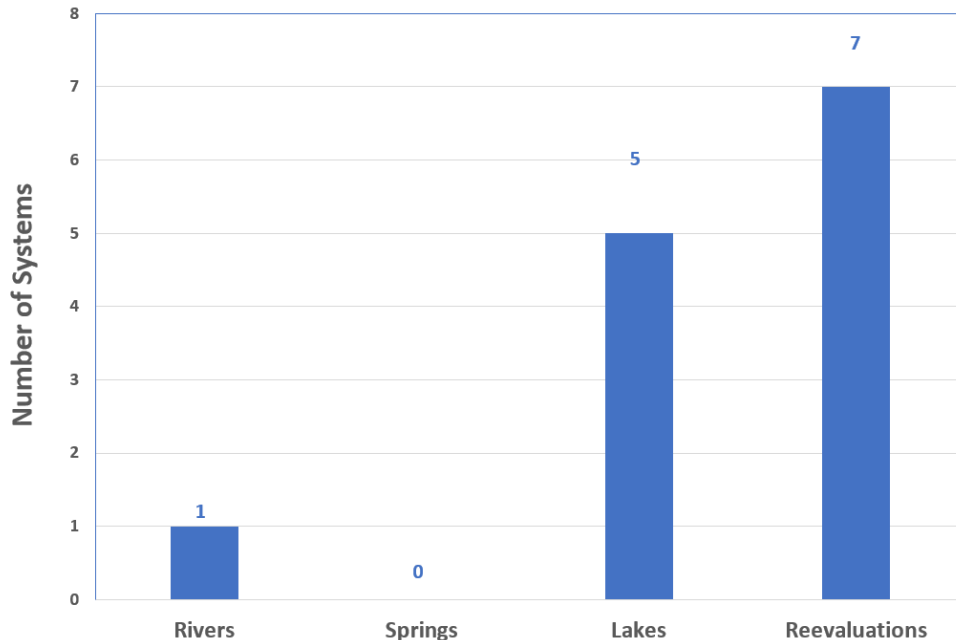


Figure 2-1. Number of systems to be evaluated

The Notices of Proposed Rule for Lakes Brooklyn and Geneva, Clay and Bradford counties, were approved by the District Governing Board on April 13, 2021. These two lakes are re-evaluations, and increase the number of re-evaluated MFLs to 34. Currently, the District has established MFLs for 130 water bodies (103 lakes, 14 springs, six rivers, and seven wetlands), and has re-evaluated 34 MFLs, for a total of 164 evaluations.

The 2021 Priority List includes the following changes to the approved 2020 MFLs Priority List and Schedule:

- Rescheduling to 2022 of Wekiva River at State Road (SR) 46, Wekiwa Springs, Rock Springs and Little Wekiva River to allow for completion of collection of critical environmental data in the Little Wekiva River basin, and surface water model updates to better estimate potential impacts to these systems;
- Rescheduling of Sylvan Lake and Lake Apschawa South to 2022, rescheduling of Johns Lake, and Lake Prevatt to 2023, and East Crystal Lake to 2024 to allow time for the completion of environmental data collection and surface water modeling and to allow time for the Central Florida Water Initiative (CFWI) peer review process; and
- Removal of Lake Apopka; while the District continues to investigate potential water resource benefits by managing water levels in the lake at higher levels. Initial results indicate that Lake Apopka will not be a constraint in the area.

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 2021 Priority List shows the planned year for completion of new MFLs and re-evaluations for the years 2022–2024. As work is completed and MFLs are ready for rulemaking, staff may initiate rulemaking earlier than shown on the 2021 Priority List. FDEP may adopt MFLs within a water management district that have the potential to be substantially affected by withdrawals in an adjacent water management district. At this time, the District is not requesting that FDEP adopt any of the MFLs on the 2021 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 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
<i>New</i>	<i>Redbug*</i>	<i>Redbug*</i>	<i>Lake</i>	<i>Seminole</i>	<i>Yes</i>	<i>Yes</i>	<i>28.6510</i>	<i>-81.2914</i>	<i>N/A</i>
<i>New</i>	<i>Little Wekiva and associated springs †*</i>	<i>Little Wekiva*</i>	<i>River and springs - 3</i>	<i>Seminole/ Orange</i>	<i>Yes</i>	<i>Yes</i>	<i>28.7021</i>	<i>-81.3922</i>	<i>N/A</i>
<i>Re-Evaluation</i>	<i>Wekiva at SR46*</i>	<i>Wekiva*</i>	<i>River</i>	<i>Seminole/ Lake</i>	<i>Yes</i>	<i>Yes</i>	<i>28.8152</i>	<i>-81.4195</i>	<i>N/A</i>
<i>Re-Evaluation</i>	<i>Wekiwa/and associated spring ††*</i>	<i>Wekiwa*</i>	<i>Springs - 2</i>	<i>Seminole/ Orange</i>	<i>Yes</i>	<i>Yes</i>	<i>28.7120</i>	<i>-81.4603</i>	<i>N/A</i>
<i>Re-Evaluation</i>	<i>Rock*</i>	<i>Rock*</i>	<i>Springs - 2</i>	<i>Orange</i>	<i>Yes</i>	<i>Yes</i>	<i>28.7558</i>	<i>-81.4992</i>	<i>N/A</i>
<i>Re-Evaluation</i>	<i>Sylvan*</i>	<i>Sylvan*</i>	<i>Lake</i>	<i>Seminole</i>	<i>Yes</i>	<i>Yes</i>	<i>28.8050</i>	<i>-81.3803</i>	<i>N/A</i>
<i>Re-Evaluation</i>	<i>Apshawa South*</i>	<i>Apshawa South*</i>	<i>Lake</i>	<i>Lake</i>	<i>Yes</i>	<i>Yes</i>	<i>28.6012</i>	<i>-81.7754</i>	<i>N/A</i>

* 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 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
<i>New</i>	<i>Griffin</i>	<i>Griffin</i>	<i>Lake</i>	<i>Lake</i>	<i>Yes</i>	<i>Yes</i>	<i>28.8425</i>	<i>-81.8492</i>	<i>N/A</i>
<i>New</i>	<i>Harris (or other Burrell basin lake)</i>	<i>Burrell basin</i>	<i>Lake</i>	<i>Lake</i>	<i>Yes</i>	<i>Yes</i>	<i>28.7750</i>	<i>-81.8181</i>	<i>N/A</i>
<i>New</i>	<i>Johns*</i>	<i>Johns*</i>	<i>Lake</i>	<i>Lake</i>	<i>Yes</i>	<i>Yes</i>	<i>28.53528</i>	<i>-81.6328</i>	<i>N/A</i>
<i>Re-Evaluation</i>	<i>Prevatt*</i>	<i>Prevatt*</i>	<i>Lake</i>	<i>Orange</i>	<i>Yes</i>	<i>Yes</i>	<i>28.7121</i>	<i>-81.4899</i>	<i>N/A</i>

* 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 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
<i>New</i>	<i>East Crystal*</i>	<i>East Crystal*</i>	<i>Lake</i>	<i>Seminole</i>	<i>Yes</i>	<i>Yes</i>	<i>28.7683</i>	<i>-81.3137</i>	<i>N/A</i>
<i>Re-Evaluation</i>	<i>Weir</i>	<i>Weir</i>	<i>Lake</i>	<i>Marion</i>	<i>Yes</i>	<i>Yes</i>	<i>29.0236</i>	<i>-81.9381</i>	<i>N/A</i>

* 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.).

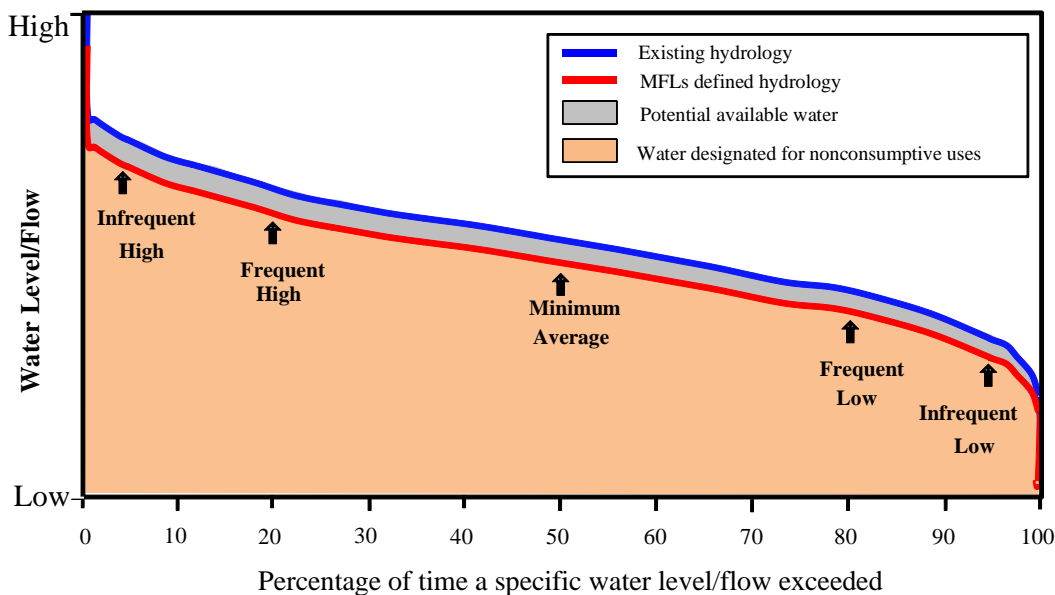


Figure 2-2. Exceedance curves for existing and MFLs defined hydrologic conditions

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 MFLs for 130 water bodies, and has re-evaluated 34 MFLs, for a total of 164 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 2-4 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
2021					2	2	164
Total	103	6	7	14	34	164	164



**Annual Five-Year
Capital Improvements Plan**

3. Annual Five-Year Capital Improvements Plan

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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) 2021–22 through FY 2025–26.

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 2022 CIP covers two standard programs and associated activities shown below:

2.0 Land Acquisition, Restoration, and Public Works

2.1 Land Acquisition

2.2.1 Water Resource Development Projects

2.3 Surface Water Projects

3.0 Operation and Maintenance of Lands and Works

3.1 Land Management

3.2 Works

II. Proposed Capital Projects and Expenditures During the Planning Period

The District proposes to spend \$84.97 million on 43 fixed capital projects during the planning period from FY 2021–22 through FY 2025–26. 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 2021–22 are \$54.8 million, which is a 180.16 percent, or \$35.24 million, increase as compared to the adopted CIP budget for FY 2020–21.

Significant changes in capital expenditures during the planning period are:

- Excluding land acquisitions, the District is planning for nine multimillion-dollar capital projects. One project is in subactivity 2.2.1 for the Black Creek Water Resource Development Project (\$52.8 million). One project is in activity 2.5 for the Building Fund (\$4.06 million). The remaining seven projects are in activity 3.2, which consist of major and minor water control structure rehabilitation projects in the range of \$1–4 million.
- With the exception of the Black Creek Water Resource Development Project, which is funded primarily with State revenues, the District will primarily rely on District revenues (including fund balances and ad valorem revenues) to fund capital projects.

Among the activities and subactivities that have capital expenditures, Water Resource Development Projects accounts for 62.1 percent of the total. Works accounts for 24.4 percent of the total while Land Acquisition ranks third at 5 percent. Facilities Construction and Major Renovations accounts for at 4.8 percent of the total anticipated expenditures. Surface Water Projects accounts for 1.5 percent of the total expenditures during the planning period, which is just slightly more than the next two activities, including Facilities Management (1.1 percent) and Land Management (1.1 percent) (see Figure 3-2).

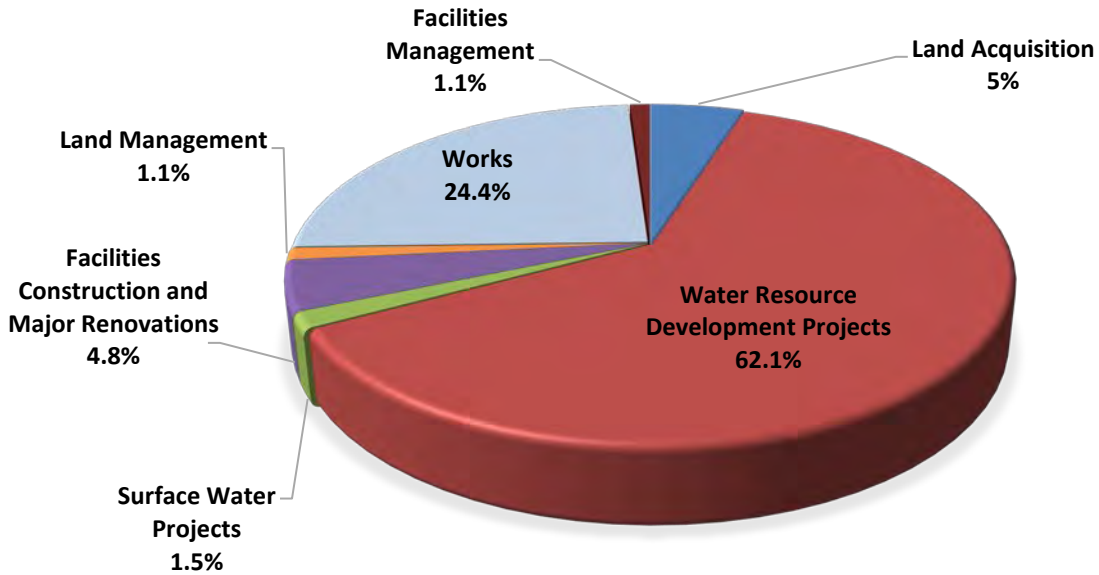


Figure 3-2. Five-year total capital improvement project expenditures by activity

With the exception of the Black Creek Water Resource Development Project, the District’s capital improvement projects are funded primarily by District sources. Figure 3-3 below shows that more than 42 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; however, the almost 45 percent of total revenues shown in the graph below is existing funding provided by the State for the Black Creek Water Resource Development Project.

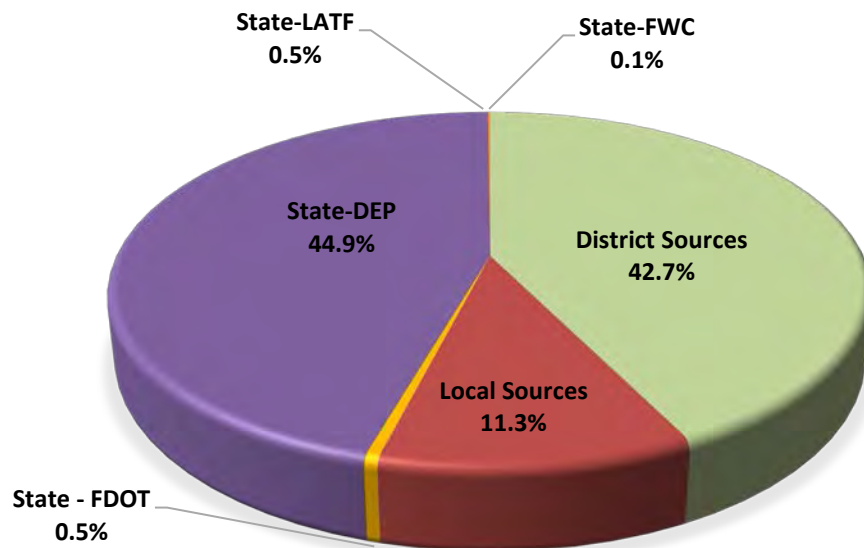


Figure 3-3. Five-year total capital improvement project expenditures by funding source

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 2021–22 Adopted Budget, FY 2022–23 Preliminary Budget, and projected capital improvement projects through FY 2025–26. 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:

- Florida Department of Transportation (FDOT) Annual Mitigation Plan
- Five-Year Infrastructure Management, Operations, and Maintenance Plan
- FY 2021–22 Adopted Budget
- FY 2022–23 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/subactivity (see Table 3-1) followed by project descriptions for each capital improvement project contained in this plan.

Land Acquisition: One project is proposed in this CIP, for potential land acquisitions and acquisition support services.

Water Resource Development Projects: One water resource development project is included in this CIP. The Black Creek Water Resource Development Project will help replenish the Upper Floridan aquifer (UFA) in northeast Florida using flow from the South Fork of 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 the minimum flows and levels (MFLs) recovery in the Lower Santa Fe Basin and may help improve water levels in the lakes in the Alligator Creek system, including lakes Brooklyn and Geneva.

Surface Water Projects: Seven 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: One ongoing project is included under this activity for the Building Fund. The completion of a District-owned service center will result in long-term savings for the District.

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-six projects are included under this activity for rehabilitations and replacements of major and minor water control structures.

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 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
District Sources	1,559,500	1,000,000	1,000,000	654,071	-	4,213,571
TOTAL	\$ 1,559,500	\$ 1,000,000	\$ 1,000,000	\$ 654,071	\$ -	\$ 4,213,571
EXPENDITURES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
Land Purchases and Support Services	1,559,500	1,000,000	1,000,000	654,071	-	4,213,571
TOTAL	\$ 1,559,500	\$ 1,000,000	\$ 1,000,000	\$ 654,071	\$ -	\$ 4,213,571
2.2.1 Water Resource Development Projects						
REVENUES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
District Sources	\$ 5,000,000	\$ -	\$ -	\$ -	\$ -	\$ 5,000,000
Local Sources — Other	-	9,600,000	-	-	-	9,600,000
State Sources — Multiple	38,208,004	-	-	-	-	38,208,004
TOTAL	\$ 43,208,004	\$ 9,600,000	\$ -	\$ -	\$ -	\$ 52,808,004
EXPENDITURES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
Black Creek Water Resource Development Project	\$ 43,208,004	\$ 9,600,000	\$ -	\$ -	\$ -	\$ 52,808,004
TOTAL	\$ 43,208,004	\$ 9,600,000	\$ -	\$ -	\$ -	\$ 52,808,004
2.3 Surface Water Projects						
REVENUES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
Upper St. Johns River Basin						
District Sources	\$ 6,000	\$ 6,000	\$ -	\$ -	\$ -	\$ 12,000
UORB/Lake Apopka Basin						
District Sources	4,000	704,000	175,000	-	-	883,000
State-FWC	100,000	-	-	-	-	100,000
District-Other						
State — FDOT	100,625	75,000	75,000	50,000	-	300,625
TOTAL	\$ 210,625	\$ 785,000	\$ 250,000	\$ 50,000	\$ -	\$ 1,295,625
EXPENDITURES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
Upper St. Johns River Basin						
Fellsmere Water Management Area Biomonitoring	\$ 6,000	\$ 6,000	\$ -	\$ -	\$ -	\$ 12,000
UORB/Lake Apopka Basin						
Emeralda Marsh Conservation Area 1 Hydrologic Improvements	104,000	-	-	-	-	104,000
Lake Apopka Beauclair Canal Levee	-	450,000	-	-	-	450,000
Repairs to the Lake Apopka Marsh Flow-Way Structure	-	250,000	-	-	-	250,000
Upper Ocklawaha River Basin Emeralda Marsh Area 3 Reconnection	-	4,000	175,000	-	-	179,000
District-Other						
Coastal Oaks Preserve	58,625	25,000	25,000	25,000	-	133,625
Halfmile Creek Tract	42,000	50,000	50,000	25,000	-	167,000
TOTAL	\$ 210,625	\$ 785,000	\$ 250,000	\$ 50,000	\$ -	\$ 1,295,625
2.5 Facilities Construction and Major Renovations						
REVENUES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
District Sources	\$ 4,057,310	\$ -	\$ -	\$ -	\$ -	\$ 4,057,310
TOTAL	\$ 4,057,310	\$ -	\$ -	\$ -	\$ -	\$ 4,057,310
EXPENDITURES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
Building Fund	\$ 4,057,310	\$ -	\$ -	\$ -	\$ -	\$ 4,057,310
TOTAL	\$ 4,057,310	\$ -	\$ -	\$ -	\$ -	\$ 4,057,310

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS						
3.1 Land Management						
REVENUES	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	FY 2025-26	5-Year Total
District Sources	\$ 79,000	\$ 79,000	\$ 100,000	\$ 100,000	\$ 125,000	\$ 483,000
State — FDOT	38,000	12,000	20,000	20,000	-	90,000
State — LATF	198,700	198,700	-	-	-	397,400
TOTAL	\$ 315,700	\$ 289,700	\$ 120,000	\$ 120,000	\$ 125,000	\$ 970,400
EXPENDITURES	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	FY 2025-26	5-Year Total
Field Activities — Fencing	\$ 50,000	\$ 50,000	\$ 50,000	\$ 50,000	\$ 75,000	\$ 275,000
Field Activities — Public Use Structures	227,700	227,700	50,000	50,000	50,000	605,400
Lake Jesup Conservation Area	38,000	12,000	20,000	20,000	-	90,000
TOTAL	\$ 315,700	\$ 289,700	\$ 120,000	\$ 120,000	\$ 125,000	\$ 970,400
3.2 Works						
REVENUES	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	FY 2025-26	5-Year Total
District Sources	\$ 5,352,000	\$ 5,915,000	\$ 5,447,000	\$ 2,090,000	\$ 1,900,000	\$ 20,704,000
TOTAL	\$ 5,352,000	\$ 5,915,000	\$ 5,447,000	\$ 2,090,000	\$ 1,900,000	\$ 20,704,000
EXPENDITURES	FY 2021-2022	FY 2022-2023	FY 2023-2024	FY 2024-2025	FY 2025-26	5-Year Total
Airboat Crossing Rehabilitation	\$ 80,000	\$ 80,000	\$ 60,000	\$ 60,000	\$ 60,000	\$ 340,000
Infrastructure Rehabilitation and Improvements	200,000	200,000	-	950,000	500,000	1,850,000
Lake Apopka Unit 2 Pump Station Rehabilitation	400,000	-	-	-	-	400,000
Levee Repairs	250,000	150,000	230,000	235,000	550,000	1,415,000
Miscellaneous Infrastructure Improvements	150,000	90,000	415,000	470,000	390,000	1,515,000
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 Harris Bayou Gates	75,000	-	-	-	-	75,000
Remove / Mulch Canal Vegetation	75,000	75,000	75,000	75,000	75,000	375,000
Resurface Fellsmere Grade Recreation Area Parking Lot	150,000	-	-	-	-	150,000
S-157 Rehabilitation	-	3,755,000	-	-	-	3,755,000
S-96 Rehabilitation	2,932,000	-	-	-	-	2,932,000
Sawgrass Lake Pump Station — South Rehabilitation	200,000	-	-	-	-	200,000
Slipline Piping at Fellsmere Grade	200,000	-	-	-	-	200,000
Walkway / Platforms in Support of Data Collection	150,000	100,000	100,000	100,000	100,000	550,000
Lake Apopka Levee Improvements — Wildlife Drive	-	500,000	500,000	200,000	-	1,200,000
Lake Apopka Clay Island Weir Removal	-	50,000	-	-	-	50,000
Lake Apopka Loop Trail Upgrades (Limerock)	-	100,000	-	-	-	100,000
Lake Apopka Refurbish Unit 1 Pump Station	-	60,000	-	-	-	60,000
Refurbish the Lake Washington Airboat Cross-over and Other Infrastructure	-	300,000	-	-	-	300,000
Regrade the Marsh Flow-Way Levee / Access Roads	-	175,000	-	-	225,000	400,000
Remove Dilapidated Structures on District Properties	-	80,000	-	-	-	80,000
Repair the Sweetwater Boat Ramp	-	50,000	-	-	-	50,000
Resurface County Road 512 Recreation Area Parking Lot	-	150,000	-	-	-	150,000
Resurface Tom Lawton Recreation Area Parking Lot	-	-	175,000	-	-	175,000
TOTAL	\$ 5,352,000	\$ 5,915,000	\$ 5,447,000	\$ 2,090,000	\$ 1,900,000	\$ 20,704,000

3.3 Facilities Management						
REVENUES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
District Sources	\$ 95,000	\$ -	\$ 250,000	\$ 275,000	\$ 300,000	\$ 920,000
TOTAL	\$ 95,000	\$ -	\$ 250,000	\$ 275,000	\$ 300,000	\$ 920,000
EXPENDITURES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
District Headquarter Executive Building Roof Replacement	\$ -	\$ -	\$ 250,000	\$ -	\$ -	\$ 250,000
Palm Bay Service Center Fleet Building Roof Replacement	-	-	-	275,000	-	275,000
Seal Coating and Striping of Parking Lots	95,000	-	-	-	-	95,000
District Headquarter Chiller #3 Replacement	-	-	-	-	300,000	300,000
TOTAL	\$ 95,000	\$ -	\$ 250,000	\$ 275,000	\$ 300,000	\$ 920,000
GRAND TOTAL EXPENDITURES	\$ 54,798,139	\$ 17,589,700	\$ 7,067,000	\$ 3,189,071	\$ 2,325,000	\$ 84,968,910
REVENUES	FY 2021–2022	FY 2022–2023	FY 2023–2024	FY 2024–2025	FY 2025–26	5-Year Total
GRAND TOTAL REVENUES	\$ 54,798,139	\$ 17,589,700	\$ 7,067,000	\$ 3,189,071	\$ 2,325,000	\$ 84,968,910

PROGRAM: Land Acquisition, Restoration, and Public Works

ACTIVITY: Land Acquisition

Project Title: Land Purchases and Support Services

Type: Land Purchase

Project Manager: Sheila Theus

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. No Florida Forever Funding has been received since FY 2011–12. The proposed budgets are for potential land purchases, real estate research, and related transactional costs from FY 2021–22 through FY 2025–26.

For FY 2021–22, it is anticipated the District will receive \$8,500,000 as a 50/50 grant match from Resilience Florida for the acquisition of up to 255 acres at Bayard Point in Clay County. The District also anticipates a 50/50 funding partnership with Volusia County's Volusia Forever Program for the acquisition of a conservation easement over 425 acres and the fee acquisition of 856 acres for \$2,900,000 in Volusia County.

In FY 2022–23, it is anticipated the District will pursue the acquisition in fee and less-than-fee properties throughout the District's 18 counties that enhance (i) optimal land management boundaries, (ii) water resource and water quality projects, and (iii) ecosystem resilience in floodplains, river corridors, or coastal wetlands. With the assistance of Florida Forever Trust Fund funds acquisition of lands within in the Florida Wildlife Corridor will also be considered.

Plan Linkages: FY 2021–22 Adopted Budget and FY 2022–23 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 2021–22 and the District plans to budget \$1,000,000 in FY 2022–23 for potential land acquisitions. Budgets from FY 2023–24 through FY 2025–26 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, \$1.25; invasive plant control, \$5; prescribed fire, \$15; security, \$0.80.

PROGRAM: Land Acquisition, Restoration, and Public Works
SUBACTIVITY: Water Resource Development Projects

Project Title: Black Creek Water Resource Development Project

Type: Water Supply

Program Manager: Vincent Seibold

Physical Location: In Southwest Clay County, north of Keystone Heights Florida.

Square Footage/Physical Description: This project will capture up to 10 million gallons per day (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.

Expected Completion Date: September 2024

Historical Background/Need for Project: The project is one of 16 Water Resource Development Project (WRD) options identified in Appendix J of the North Florida Regional Water Supply Plan to help meet future water supply demands while protecting natural resources. The project has the greatest capacity (10 million gallons per day) of the listed WRD projects, and the best option to provide regional water resource benefits in the North Florida Regional Planning Area. 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.

Plan Linkages: FY 2020–21 Carryover Encumbrance (FY 2021–22 Amended Budget) and FY 2022–23 Preliminary Budget

Area(s) of Responsibility: Water Supply

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District expended \$200,000 in FY 2016–17, \$3,193,541 in FY 2017–18, \$2,533,728 in FY 2019–20, and \$1,039,132 in FY 2020–21. In addition, the District carried over \$43,208,004 to FY 2021–22 and plans to budget \$9,600,000 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): Approximately \$1,080,000 a year

Anticipated Additional Operating Costs/Continuing: An annual average of \$1,080,000

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 2021–22 Adopted Budget and FY 2022–23 Preliminary Budget

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

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted \$6,000 in FY 2021–22 and plans to budget \$6,000 in FY 2022–23.

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: Emeraldal Marsh Conservation Area 1 Hydrologic Improvements

Type: Infrastructure Renovation

Program Manager: Paul Cappetta

Physical Location: The project is in Lake County within the Emeraldal Island Marsh Conservation Area (EMCA).

Square Footage/Physical Description: The hydrological reconnection project involves breaching of the levee separating EMCA Area 1 from Lake Griffin.

Expected Completion Date: September 2022

Historical Background/Need for Project: This project will provide direct fish and wildlife habitat benefits with improved water quality for Lake Griffin.

Plan Linkages: FY 2021–22 Adopted Budget

Area(s) of Responsibility: Natural Systems

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District budgeted \$104,000 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: Land Acquisition, Restoration, and Public Works

ACTIVITY: Surface Water Projects

Project Title: Lake Apopka Beauclair Canal Levee

Type: Infrastructure Renovation

Project Manager: Paul Cappetta

Physical Location: The project is planned to occur in the Lake Apopka Beauclair Canal Levee, south of the lock and dam in Lake County.

Square Footage/Physical Description: The Lake Apopka Beauclair Canal Levee is approximately 3.5 miles long, running south of the lock and dam.

Expected Completion Date: September 2023

Historical Background/Need for Project: The Lake Apopka Beauclair Canal Levee was constructed over 100 years ago in conjunction with the excavation of the AB Canal. This levee had multiple penetrations of culverts and pipes. Additionally, there may be unknown penetrations, some intentional (non-visible pipes) and some unintentional (piping through the soils). These penetrations must be addressed in order to manage water levels in the west marsh of the Lake Apopka North Shore for water quality and flood protection.

Plan Linkages: FY 2022–23 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 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: Because the planned work is for the rehabilitation of an existing levee system, no additional operating costs are anticipated.

PROGRAM: Land Acquisition, Restoration, and Public Works

ACTIVITY: Surface Water Projects

Project Title: Repairs to the Lake Apopka Marsh Flow-Way (MFW) Structure

Type: Infrastructure Renovation

Project Manager: Paul Cappetta

Physical Location: This project is located on the Lake Apopka North Shore.

Square Footage/Physical Description: Repair or replace the MFW cell inflow culverts and ancillary structures.

Expected Completion Date: September 2023

Historical Background/Need for Project: The MFW was constructed on former agricultural farm fields within the North Shore of Lake Apopka and began operation in 2003. The MFW is an 800-acre continuous flow through system comprised of four independent wetland treatment cells that provide treatment of water from Lake Apopka. The MFW removes particulate phosphorus and total suspended solids from lake water before returning it to the lake. Hydraulic loading rates and detention times were designed to minimize phosphorus release from the phosphorus-rich sediment while optimizing mass removal for selected constituents. A dye test was performed by the District in 2018 identified leaking inflow culverts. Repair or replacement of cell inflow infrastructure will improve water treatment efficiency and remove more nutrients from Lake Apopka.

Plan Linkages: FY 2022–23 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 \$250,000 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: Because the planned work is the rehabilitation of an existing structure, no additional operating costs are anticipated.

PROGRAM: Land Acquisition, Restoration, and Public Works

ACTIVITY: Surface Water Projects

Project Title: Upper Ocklawaha River Basin Emeralds Marsh Area 3 Reconnection

Type: Infrastructure Renovation

Project Manager: Paul Cappetta

Physical Location: The project is in Lake County within the EMCA.

Square Footage/Physical Description:

Expected Completion Date: FY 2022–23 Preliminary Budget

Historical Background/Need for Project: This project will provide direct fish and wildlife habitat benefits with improved water quality for Lake Griffin.

Plan Linkages: FY 2022–23 Preliminary Budget

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

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget \$4,000 in FY 2022–23 and \$175,000 in FY 2023–24.

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: 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 Indian River Lagoon (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 2021–22 Adopted Budget, and FY 2022–23 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, \$518,069 in FY 2019–20, and \$89,376 in FY 2020–21. In addition, the District budgeted \$58,625 in FY 2021–22, and plans to annually budget \$25,000 from FY 2022–23 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): 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 2021–22 Adopted Budget, and FY 2022–23 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 \$1,509,866, budgeted \$42,000 in FY 2021–22, and plans to budget \$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, \$1.25; invasive plant control, \$5; prescribed fire, \$15; security, \$0.80.

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 Carryover Encumbrance (FY 2021–22 Amended 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, \$617,922 in FY 2019–20, \$2,911,378 in FY 2020–21. The District carried over \$4,057,310 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 \$135,000 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 for new cattle leases, District staff will identify areas requiring fence construction or replacement.

Plan Linkages: Individual Conservation Area Management Plans, FY 2021–22 Adopted Budget, and FY 2022–23 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 2021–22 and plans to budget \$50,000 each year from FY 2022–23 through FY 2024–25, and \$75,000 in FY 2025–26.

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 2021–22 Adopted Budget, and FY 2022–23 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 \$227,700 in FY 2021–22, plans to budget \$227,700 in FY 2022–23 , and \$50,000 each year from FY 2023–24 through FY 2025–26.

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 2021–22 Adopted Budget, and FY 2022–23 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, \$1,962 in FY 2020–21, budgeted \$38,000 in FY 2021–22, plans to budget \$12,000 in FY 2022–23, and \$20,000 each year in FY 2023–24 and FY 2024–25.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): Of the \$65,000 that was budgeted in FY 2020–21 under activity 2.1 for the land purchase associated with this project, \$13,956 was expended and the remaining \$51,044 was carried over from FY 2020–21 to FY 2021–22.

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, \$1.25; invasive plant control, \$5; prescribed fire, \$15; security, \$0.80.

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 Upper St. Johns River Basin (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 2026

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, FY 2021–22 Adopted Budget, and FY 2022–23 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 \$80,000 in FY 2021–22, plans to budget \$80,000 in FY 2022–23, and \$60,000 each year from FY 2023–24 through FY 2025–26.

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: Major water control structures include gated spillways with a concrete ogee weir and vertical lift gates. Minor water control structures include corrugated metal or corrugated aluminum culverts ranging in size from 36-inches (in.) to 84-in. in width and approximately 100 to 200 feet in length.

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 12 major water control structures and 64 federal and 11 non-federal minor water control structures associated with managing the District's flood control system. The District refurbishes the vertical lift gates associated with major water control structures every 7-10 years. The U.S. Army Corps of Engineers (USACE) 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 2021–22 Adopted Budget, and FY 2022–23 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 \$200,000 in FY 2021–22, plans to budget \$200,000 in FY 2022–23, \$950,000 in FY 2024–25, and \$500,000 FY 2025–26. No work is planned 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 existing structures, no additional operating costs are anticipated.

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. This project will also convert the existing diesel power units to electric motors for increased efficiency and effectiveness. 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 Adopted 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 \$400,000 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/District constructed flood control levees and 175 miles of farm/project levees located within the USJRB and the UORB. Periodic and routine inspections by the USACE and District staff of the flood control levees will identify sections of the levees that do not meet current USACE guidelines and require improvements and rehabilitation. Routine inspections by District staff of the farm/project levees identify sections of levees that do not meet District guidelines and will also 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 115 miles of USACE/District constructed flood control 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 2021–22 Adopted Budget, and FY 2022–23 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 \$250,000 in FY 2021–22, plans to budget \$150,000 in FY 2022–23, \$230,000 in FY 2023–24, \$235,000 in FY 2024–25, and \$550,000 in FY 2025–26.

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, pump stations, bridges, weirs, generators, observation towers, weather shelters, boat ramps, etc. that require routine maintenance. These structures are reaching the end of their useful life and require rehabilitation to maintain the long-term viability of the District's infrastructure. These structures are important aspects of the District lands, and they provide flood protection, public and District access, and environmental protections.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan, FY 2021–22 Adopted Budget, and FY 2022–23 Preliminary Budget

Area(s) of Responsibility: Flood Protection, 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 \$150,000 in FY 2021–22, plans to budget \$90,000 in FY 2022–23, \$415,000 in FY 2023–24, \$470,000 in FY 2024–25, and \$390,000 in FY 2025–26.

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: 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 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 \$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 and FY 2021–22 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 \$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 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 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 \$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 2021–22 Adopted Budget, and FY 2022–23 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 \$75,000 in FY 2021–22 and plans to budget \$75,000 each year from FY 2022–23 through FY 2025–26.

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 Adopted 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 budgeted \$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: 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 2023

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 \$3,755,000 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: 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 and FY2021–22 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 \$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: 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 St. Johns River. 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 Adopted 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 \$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 and FY 2021–22 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 \$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 an existing structure, 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 2021–22 Adopted Budget, and FY 2022–23 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 \$150,000 in FY 2021–22 and plans to budget \$100,000 each year from FY 2022–23 through FY 2025–26.

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: Works

Project Title: Lake Apopka Levee Improvements – Wildlife Drive

Type: Infrastructure Renovation

Program Manager: Woody Boynton

Physical Location: Lake Apopka North Shore in Orange County

Square Footage/Physical Description: The Lake Apopka Wildlife Drive is approximately 12 miles long with water on both sides. The top width is approximately 12- to 14- foot wide with side slopes varying from 3:1 to 2:1.

Expected Completion Date: September 2025

Historical Background/Need for Project: The Lake Apopka Wildlife Drive is open to the public every weekend and serves as a primary levee to separate various phases of water within Lake Apopka North Shore for water treatment and storage. Over time, the levee slope has degraded and sloughed into the canal reducing the levee slope to less than 2:1. This work will repair and stabilize the levee slope to a slope greater than 2:1. In addition, the levee driving surface requires additional limerock to be placed to maintain a smooth driving surface.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan and FY 2022–23 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 \$500,000 each year in FY 2022–23 and FY 2023–24, and \$200,000 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: Because the planned work is the rehabilitation of existing levee system, no additional operating costs are anticipated.

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

Project Title: Lake Apopka Clay Island Weir Removal

Type: Infrastructure Renovation

Program Manager: Rayford McCain

Physical Location: West side of Lake Apopka North Shore in Lake County

Square Footage/Physical Description: Approximately 120-feet long consisting of steel H-piles and support framing. An aluminum walkway exists on top of the structure.

Expected Completion Date: September 2023

Historical Background/Need for Project: The Clay Island weir was previously used to control water elevations in this area of the Lake Apopka North Shore. The District no longer utilizes this weir for water quality purposes. The weir is accessible to the public and poses a safety risk as the walkway has deteriorated and has several sections missing.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan and FY 2022–23 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 plans to budget \$50,000 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: Because the planned work is the removal of an existing structure, no additional operating costs are anticipated.

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

Project Title: Lake Apopka Loop Trail Upgrades (Limerock)

Type: Infrastructure Renovation

Program Manager: Woody Boynton

Physical Location: Lake Apopka North Shore in Orange and Lake Counties

Square Footage/Physical Description: The Lake Apopka Loop Trail is approximately 17 miles long. The top width is approximately 12- to 14- foot wide with side slopes varying from 3:1 to 2:1.

Expected Completion Date: September 2023

Historical Background/Need for Project: The Loop Trail is open to the public seven days a week and is a primary hiking, walking, and biking trail from Magnolia Park Trailhead in Orange County to Green Mountain Trailhead in Lake County. In addition, much of the Loop Trail serves as the primary flood protection levee between Lake Apopka and the North Shore. Over time, the traveling surface requires additional limerock to be placed to maintain a smooth driving/riding surface and to maintain a minimum desired elevation to prevent overtopping.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan and FY 2022–23 Preliminary Budget

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

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget \$100,000 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: Because the planned work is the rehabilitation of an existing trail system, no additional operating costs are anticipated.

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

Project Title: Lake Apopka Refurbish Unit 1 Pump Station

Type: Infrastructure Renovation

Program Manager: Rayford McCain

Physical Location: Lake Apopka North Shore in Orange County at the west end of Interceptor Road and discharges into the Sand Farm.

Square Footage/Physical Description: The Unit 1 pump station consists of one electric pump capable of pumping 66 cfs.

Expected Completion Date: September 2023

Historical Background/Need for Project: This pump station is one of the primary pump stations to move high water east of Lake Level Canal Road west to the A/B Canal and off the Lake Apopka North Shore. The pump station has not been refurbished since the District has owned the property. The efficiency of the pump station will be increased and should reduce pump run times.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan and FY 2022–23 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 \$60,000 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: 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 the Lake Washington Airboat Cross-over and Other Infrastructure Improvements

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: The airboat crossing is located approximately 1,900 feet downstream of the north end of Lake Washington within the St. Johns River.

Square Footage/Physical Description: The airboat crossing is approximately 80-feet long and 12-feet wide. The airboat crossing is constructed of wood timber supports, wooden timber decking, and fender walls. The crossing is to facilitate airboats over an existing weir that controls the water elevation within Lake Washington. In addition, a sheet pile wall exists along the north side of the river to keep boaters from bypassing the airboat crossing and minimize water loss into the marsh.

Expected Completion Date: September 2023

Historical Background/Need for Project: The wooden airboat crossing is showing signs of deterioration. This project replaces the older airboat crossings with new wooden timber supports, decking, and fender walls. If not repaired, airboats may incur damage when crossing. If not repaired boaters may look to bypass the crossing. In the past, boaters have bypassed the crossing to the north. This has degraded the berm in this area and created a situation where stored water in Lake Washington drains downstream. In 2006, the District constructed a sheet pile wall to prevent this from occurring. However, it is recommended that this wall be extended 100 feet to further discourage this activity.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan and FY 2022–23 Preliminary Budget

Area(s) of Responsibility: Water Supply

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget \$300,000 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: 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: Regrade the Marsh Flow-Way Levee / Access Roads

Type: Infrastructure Renovation

Program Manager: Rayford McCain

Physical Location: Northwest edge of Lake Apopka North Shore in Lake County

Square Footage/Physical Description: 760 acres of marsh flow-way and contains four independent individual wetland cells, in addition to levees, canals and ditches.

Expected Completion Date: September 2023 and September 2026

Historical Background/Need for Project: The marsh flow-way became operational in 2003 to remove nutrients in the water from Lake Apopka before flowing downstream. Prior to construction, the area had been farmed for decades, during which time many feet of organic soils had been lost. The flow-way is a constructed wetland designed to filter algae, suspended sediments, and nutrients from the lake's water. Most of the cleaner, treated water returns to Lake Apopka, while the remainder flows downstream toward Lake County Water Authority's nutrient removal facility (NuRF) and Lake Beauclair. The access roads/levees around the flow-way have deteriorated and require improvements for safe access to operate and maintain the flow-way as well as monitor the water quality within the flow-way. In addition, every few years the wetland cells need to be re-leveled and interior ditches re-opened to promote sheet flow within the cells.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan and FY 2022–23 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 \$175,000 in FY 2022–23 and \$225,000 in FY 2025–26.

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

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

Project Title: Remove Dilapidated Structures on District Properties

Type: Infrastructure Renovation

Program Manager: Rayford McCain

Physical Location: Various Locations on the North Shore of Lake Apopka

Square Footage/Physical Description: Varies – several old pump stations, walkways, and platforms to be removed

Expected Completion Date: September 2023

Historical Background/Need for Project: Over time, the District has abandoned several old pump stations, monitoring platforms, and walkways that are no longer required to meet the District’s mission. These structures are accessible to the public and are a safety concern given the deteriorated condition of the structures. It is recommended that these structures be removed.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan and FY 2022–23 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 \$80,000 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: Because the planned work is the removal of existing structures, no additional operating costs are anticipated.

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

Project Title: Repair the Sweetwater Boat Ramp

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: At the end of Sweetwater Drive in Brevard County. Sweetwater Drive is approximately 2 miles west of I-95 on U.S. 192.

Square Footage/Physical Description: The concrete boat ramp is approximately 60 feet long and 14- to 16-foot wide.

Expected Completion Date: September 2023

Historical Background/Need for Project: The boat ramp allows for the public to access the St. Johns River and the Three Forks Marsh Conservation Area. The boat ramp has deteriorated over time and the concrete ramp needs to be replaced and the parking area regraded.

Plan Linkages: Five-Year Infrastructure Management, Operations and Maintenance Plan and FY 2022–23 Preliminary Budget

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

Alternative(s): None

Basic Construction Costs: (includes permits, inspections, communications requirements, utilities outside building, site development, other): The District plans to budget \$50,000 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: 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: Resurface County Road 512 Recreation Area Parking Lot

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: The County Road Recreation Area parking lot is in Indian River County approximately 1.5 miles north of SR60 on County Road 512.

Square Footage/Physical Description: The paved parking area is approximately 250-feet by 360-feet and provides parking for recreational users to access the Blue Cypress Water Management Area (BCWMA).

Expected Completion Date: September 2023

Historical Background/Need for Project: This recreational parking area was constructed to allow the public access to the BCWMA. 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 2022–23 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 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 repairing an existing parking lot, no additional operating costs are anticipated.

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

Project Title: Resurface Tom Lawton Recreation Area Parking Lot

Type: Infrastructure Renovation

Program Manager: James Rider

Physical Location: The Tom Lawton Recreation Area parking lot is in Brevard County at the west end of Malabar Road.

Square Footage/Physical Description: The paved parking area is approximately 220-feet by 500-feet and provides parking for recreational users to access the Three Forks Marsh Conservation Area.

Expected Completion Date: September 2024

Historical Background/Need for Project: This recreational parking area was constructed to allow the public access to the Three Forks Marsh Conservation Area. 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

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 \$175,000 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 repairing an existing parking lot, 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 2024

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 \$250,000 in FY 2023–24.

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 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 \$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: District Headquarter Chiller #3 Replacement

Type: Facilities Renovation

Project Manager: Scott Tilton

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 one of the three chillers used to cool the buildings at District Headquarters.

Expected Completion Date: September 2026

Historical Background/Need for Project: The objective of this project is to replace aging chiller plant equipment prior to major malfunctions or breakdowns. This chiller was installed in 2005. The life expectancy of equipment is 20 years.

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 \$300,000 in FY 2025–26.

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.”

2.2.1 Water Resource Development Projects

Regional projects designed to create, from traditional or alternative sources, an identifiable, quantifiable supply of water for existing and/or future reasonable-beneficial uses. These projects do not include the construction of facilities for water supply development, as defined in section 373.019(21), F.S. Such projects may include the construction, operation, and maintenance of major public works facilities that provide for the augmentation of available surface and groundwater supply or that create alternative sources of supply. Water resource development projects are to be identified in water management district regional water supply plans or district water management plans, as applicable.

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

Design, construction, and significant renovation of all district support and administrative 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.



**Fiscal Year 2022 Five-Year Water Resource
Development Work Program**

4. 2022 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.

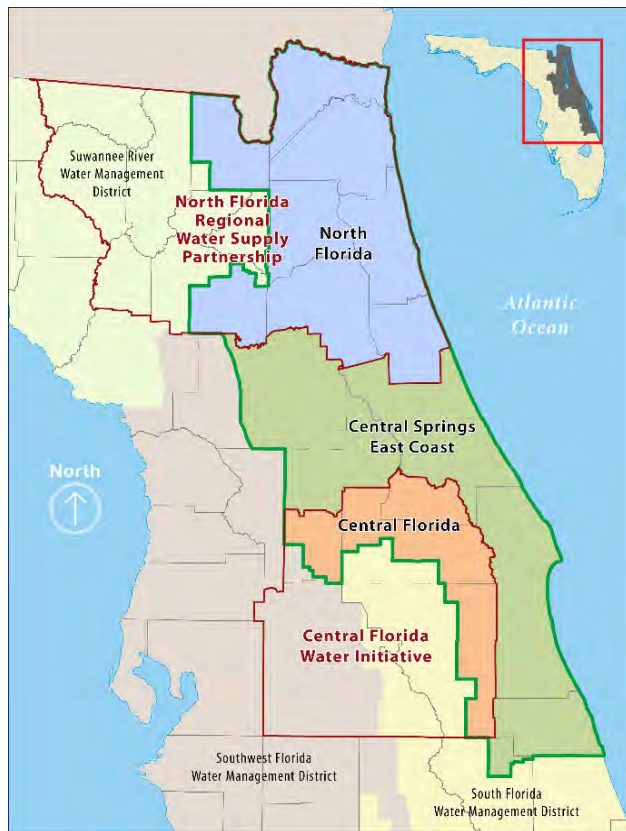
This Work Program covers the period from fiscal year (FY) 2021–22 through FY 2025–26 and is consistent with the planning strategies of the District's RWSPs. Over the last five years, the District has amended the 2005 District Water Supply Plan (DWSP) and developed two RWSPs. A third RWSP is under development. The RWSPs 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 2020 RWSP was approved in November 2020.



In the CSEC planning region, the District has been coordinating with SFWMD, SWFWMD, and other stakeholders during 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 completed a draft RWSP in July 2021 and anticipates approval by early 2022.

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. 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 in early 2020 to update the NFRWSP.

Figure 1: Water supply planning regions

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

Planning Region	Current Water Supply Plan	Next Update
North Florida	2017	2022
Central Florida	2020	2025
Central Springs / East Coast	2005 DWSP 5th Addendum, 2017	early 2022

The 2020 Central Springs / East Coast RWSP Update is scheduled for Governing Board approval by early 2022.

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 82 million gallons per day (mgd) of water, including reuse and non-reuse water. These benefits are associated with approximately \$114 million budgeted for the five-year Work Program from FY 2021–22 through FY 2025–26.

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 42 mgd of reuse and non-reuse water upon completion. Of that, approximately 28 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

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

¹ Section 373.019(24), F.S.

² Section 373.019(26), F.S.

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. The amount of water conserved through this program is potentially as high as 746 million gallons per day as of 2021.

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.

- 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 has recently adopted MFLs for Lakes Brooklyn and Geneva. 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 list of MFLs and Water Reservations currently under development can 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	7.00		
Casselberry South Water Treatment Plant Well #1 Modification	Reclaimed Water (for groundwater recharge or natural system restoration)	SJR CFWI		1.00		
City of Altamonte Springs Reclaimed Water Storage and Recharge Optimization Project	Surface Water Storage	SJR CFWI		.50		6.00
City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	Reclaimed Water (for potable offset)	SJR CFWI			3.50	
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	Reclaimed Water (for potable offset)	SJR CFWI	Wekiwa and Rock Springs		5.80	
City of DeLand Alabama Avenue Reclaimed Water Main Extension	Reclaimed Water (for groundwater recharge or natural system restoration)	SJR Central Springs East Coast		0.18		
City of DeLand Northwest Reclaimed Water Ground Storage Tank and Pump Station	Reclaimed Water (for potable offset)	SJR Central Springs East Coast	Volusia Blue Spring	1.00		
City of DeLand Reclaimed Water System Expansion, Phase 4A	Reclaimed Water (for potable offset)	SJR Central Springs East Coast	Volusia Blue Spring		0.30	
City of Deltona Alexander Avenue Water Resources Facility, Phase 4B	Surface Water	SJR Central Springs East Coast	Volusia Blue Spring	12.00		
City of Edgewater Reclaimed Extension to Meadow Lake and Woodbridge Subdivisions	Reclaimed Water (for potable offset)	SJR Central Springs East Coast		0.20		
City of Groveland Lower Floridan Reclaimed Well at Sunshine	Other Non-Traditional Source	SJR CFWI		2.30		
City of Groveland South Lake County Lower Floridan Wellfield Project – Distributed	Other Non-Traditional Source	SJR CFWI		4.32		

2022 Five-Year Water Resource Development Work Program

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)
City of Mascotte Lower Floridan Aquifer Wellfield — South Lake County Wellfield Project	Other Non-Traditional Source	SJR CFWI		2.00		
City of Ocala Lower Floridan Aquifer Conversion	Other Non-Traditional Source	SJR Central Springs East Coast	Silver Springs	8.90		
City of Orange City Alternative Water Supply Conveyance System — Monastery Road	Reclaimed Water (for potable offset)	SJR Central Springs East Coast		0.10		
City of Sanford Brackish Reverse Osmosis Water Treatment Plant Pilot	Brackish Groundwater	SJR CFWI		1.00		
City of Sanford North Water Reclamation Facility Reclaimed Water Pump Station and Storage Improvements	Reclaimed Water (for potable offset)	SJR CFWI	Monroe			10.00
City of Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative Districtwide Program	Reclaimed Water (for potable offset)	SJR Central Springs East Coast			0.16	
City of Winter Springs Tuskawilla Crossing Reclaimed Water Main	Reclaimed Water (for potable offset)	SJR CFWI		0.25		
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	Reclaimed Water (for potable offset)	SJR NFRWSP	Lake Brooklyn, Lake Geneva		0.75	
Clay County Utility Authority Wastewater Treatability Study	Reclaimed Water (for potable offset)	SJR NFRWSP	Lake Brooklyn, Lake Geneva		1.00	
Crane Creek M-1 Canal Flow Restoration	Surface Water	SJR Central Springs East Coast		7.00		
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	Surface Water	SJR Central Springs East Coast		18.00		1,372.00
Equity Lifestyles Properties Oak Bend / I-75 Water Quality Improvement Project	Reclaimed Water (for potable offset)	SJR Central Springs East Coast		0.01		
Equity Lifestyles Properties Spanish Oaks Water Quality Improvement Project	Reclaimed Water (for potable offset)	SJR Central Springs East Coast		0.03		

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)
Florida Power and Light Company Okeechobee Clean Energy Center – Upper Floridan Aquifer to Avon Park Permeable Zone Conversion	Brackish Groundwater	SJR Central Springs East Coast		2.20		
Gainesville Regional Utilities Low-Income Water-Efficient Toilet Exchange Program	PS and CII Conservation	SJR NFRWSP		0.004		
Groveland Crystal Lake Reclaim System Rehabilitation and Improvement	Surface Water Storage	SJR CFWI		0.08		
JEA Low-Income Water-Efficient Toilet Exchange Phase 2	PS and CII Conservation	SJR NFRWSP		0.01		
JEA Twin Creeks Reclaimed Water Storage and Delivery	Reclaimed Water (for potable offset)	SJR NFRWSP	Lake Brooklyn, Lake Geneva		1.88	
Maitland Village Homeowners Association Irrigation Optimization	PS and CII Conservation	SJR CFWI		0.01		
Orange County Utilities Cypress Lake Wellfield — Oak Meadows Alternative Water Supply Delivery Enhancements	Brackish Groundwater	SJR CFWI		9.00		
Orange County Water Conservation with Advanced Targeting	PS and CII Conservation	SJR CFWI		0.07		
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 2	Reclaimed Water (for potable offset)	SJR CFWI		0.03		
Orlando Utilities Commission Smart Leak Detection Device Rebates	PS and CII Conservation	SJR CFWI		0.0011		
Southlake Utilities Alternative Water Source for Irrigation	Other Non-Traditional Source	SJR CFWI		0.55		
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	Other Non-Traditional Source	SJR Central Springs East Coast		1.00		
Vero Beach Canal to Irrigation Water Project	Reclaimed Water (for potable offset)	SJR Central Springs East Coast		3.00		

2022 Five-Year Water Resource Development Work Program

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)
Volusia County School Board McInnis Elementary School Sewer Improvements	Reclaimed Water (for potable offset)	SJR Central Springs East Coast		0.01		
Totals:				81.7551	13.39	1,388

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	9,770,244	20,276,919	13,188,262			43,235,425
Casselberry South Water Treatment Plant Well #1 Modification	113,750					113,750
City of Altamonte Springs Reclaimed Water Storage and Recharge Optimization Project	2,533,334	1,266,667	64,391			3,864,392
City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	592,925					592,925
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	2,123,306					2,123,306
City of DeLand Alabama Avenue Reclaimed Water Main Extension	215,133					215,133
City of DeLand Northwest Reclaimed Water Ground Storage Tank and Pump Station	1,935,312					1,935,312
City of DeLand Reclaimed Water System Expansion, Phase 4A	2,029,361					2,029,361
City of Deltona Alexander Avenue Water Resources Facility, Phase 4B	3,592,868	1,286,132				4,879,000
City of Edgewater Reclaimed Extension to Meadow Lake and Woodbridge Subdivisions	424,134					424,134
City of Groveland Lower Floridan Reclaimed Well at Sunshine	736,075	368,037				1,104,112
City of Groveland South Lake County Lower Floridan Wellfield Project — Distributed	1,500,827	750,413				2,251,240
City of Mascotte Lower Floridan Aquifer Wellfield — South Lake County Wellfield Project	2,576,260	1,288,132				3,864,392
City of Ocala Lower Floridan Aquifer Conversion	451,622					451,622

2022 Five-Year Water Resource Development Work Program

Project Name	FY 2020–21	FY 2021–22	FY 2022–23	FY 2023–24	FY 2024–25	Total*
City of Orange City Alternative Water Supply Conveyance System — Monastery Road	178,866					178,866
City of Sanford Brackish Reverse Osmosis Water Treatment Plant Pilot	1,018,543					1,018,543
City of Sanford North Water Reclamation Facility Reclaimed Water Pump Station and Storage Improvements	3,588,364					3,588,364
City of Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative Districtwide Program	1,402,124					1,402,124
City of Winter Springs Tuskawilla Crossing Reclaimed Water Main	552,056					552,056
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	700,570	200,000				900,570
Clay County Utility Authority Wastewater Treatability Study	183,218					183,218
Crane Creek M-1 Canal Flow Restoration	554,770	8,949,124	8,639,954			18,143,848
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	4,950,936	2,568,438	1,007,854	730,500	730,500	9,988,228
Equity Lifestyles Properties Oak Bend / I-75 Water Quality Improvement Project	615,902	1,254,767				1,870,669
Equity Lifestyles Properties Spanish Oaks Water Quality Improvement Project	1,586,355					1,586,355
Florida Power and Light Company Okeechobee Clean Energy Center – Upper Floridan Aquifer to Avon Park Permeable Zone Conversion	529,974					529,974
Gainesville Regional Utilities Low-Income Water-Efficient Toilet Exchange Program	30,000					30,000
Groveland Crystal Lake Reclaim System Rehabilitation and Improvement	87,500					87,500

Project Name	FY 2020–21	FY 2021–22	FY 2022–23	FY 2023–24	FY 2024–25	Total*
JEA Low-Income Water-Efficient Toilet Exchange Phase 2	61,908					61,908
JEA Twin Creeks Reclaimed Water Storage and Delivery	765,494					765,494
Maitland Village Homeowners Association Irrigation Optimization	3,455					3,455
Orange County Utilities Cypress Lake Wellfield — Oak Meadows Alternative Water Supply Delivery Enhancements	330,736	404,050				734,786
Orange County Water Conservation with Advanced Targeting	62,800					
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 2	860,892	860,892				1,721,784
Orlando Utilities Commission Smart Leak Detection Device Rebates	11,041					11,041
Southlake Utilities Alternative Water Source for Irrigation	181,551					181,551
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	736,075	368,037				1,104,112
Vero Beach Canal to Irrigation Water Project	729,917	729,917	729,919			2,189,753
Volusia County School Board McInnis Elementary School Sewer Improvements	41,675					41,675
Totals:	\$ 48,359,873	\$ 40,571,525	\$ 23,630,380	\$ 730,500	\$ 730,500	\$ 113,959,978

* For budgeting purposes, all funds are allocated in the FY 2021-22 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 excess 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 for lakes Brooklyn and Geneva and may help improve water levels in lakes in the Alligator Creek system, including lakes Brooklyn and Geneva.	Design	08/2021	10/2023
Casselberry South Water Treatment Plant Well #1 Modification	The project includes the conversion of one of existing Upper Floridan aquifer well at the city's South Water Treatment Plant to the Lower Floridan aquifer.	Design	12/2021	07/2022
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.	Design	10/2021	12/2023
City of Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	Continuing Phase 2 of the advanced wastewater treatment project to provide an additional 3.5 mgd for Altamonte Springs.	Construction/Underway	04/2020	12/2021
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	The project includes construction of a 3 mgd reclaimed water storage tank, repump facility, and approximately 7,900 feet of reclaimed water main extension. The estimated water supply benefit is 5.8 mgd of reclaimed water within the Wekiwa — Rock Springs priority focus area.	Construction/Underway	08/2021	09/2022
City of DeLand Alabama Avenue Reclaimed Water Main Extension	The project includes the installation 4,800 LF of reclaimed water main within Volusia Blue Springs springshed.	Design	11/2021	09/2022
City of DeLand Northwest Reclaimed Water Ground Storage Tank and Pump Station	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	Construction/Underway	06/2021	06/2022
City of DeLand Reclaimed Water System Expansion, Phase 4A	Retrofit neighborhoods with reclaimed water distribution mains to implement adopted prevention and recovery strategy for Blue Springs and to meet CUP permit conditions.	Construction/Underway	06/2021	03/2022
City of Deltona Alexander Avenue Water Resources Facility, Phase 4B	Construct approximately 8,000 feet of transmission main and associated infrastructure to provide surface water from Lake Monroe to the Alexander Avenue Water Resources Facility to allow expansion of treatment capacity.	Design	03/2022	03/2023
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.	Design	11/2021	05/2022
City of Groveland Lower Floridan Reclaimed Well at Sunshine	This project will consist of the drilling/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.	Design	02/2022	09/2023

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
City of Groveland South Lake County Lower Floridan Wellfield Project — Distributed	The project consists of drilling 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.	Design	02/2022	09/2023
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.	Design	2/2022	9/2023
City of Ocala Lower Floridan Aquifer Conversion	Construction of three, 24-inch diameter production wells, each with a 5 mgd capacity at WTP #2.	Construction/Underway	11/2019	12/2028
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 0.1 mgd alternative water.	Construction/Underway	08/2021	09/2022
City of Sanford Brackish Reverse Osmosis Water Treatment Plant Pilot	A feasibility study to determine if brackish groundwater can be developed and used as an alternative water supply near Orlando-Sanford International Airport.	Construction/Underway	04/2021	09/2022
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.	Construction/Underway	05/2021	05/2022
City of Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative Districtwide Program	Decommission aging Umatilla Wastewater Treatment Plant and build and interconnect between the cities of Umatilla and Eustis to all wastewater generated in Umatilla to be pumped to the City of Eustis for treatment and disposal.	Construction/Underway	07/2021	07/2022
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 0.3 mgd alternative water.	Design	12/2021	06/2022
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	Construct a 750,000-gallon storage and distribution facility that will deliver reclaimed water to more than 2,000 new customers.	Design	12/2020	09/2022
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 includes construction of an operable diversion structure in the M-1 Canal; stormwater treatment area; and pump stations to divert and treat flows from the M-1 Canal prior to discharging to the Upper St. Johns River Basin (USJRB).	Design	12/2020	12/2022
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	Create a reservoir for retention of stormwater in the Fellsmere Water Management Area to store up to 18 mgd of water and reduce excess freshwater flows and nutrients from being released to the Indian River Lagoon.	Design	07/2021	09/2030
Equity Lifestyles Properties Oak Bend / I-75 Water Quality Improvement Project	The project includes demolishing an existing private wastewater package plant and connecting the lift station to the Marion County central wastewater collection system. The project is within the Silver Springs springshed.	Design	04/2022	09/2023

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Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
Equity Lifestyles Properties Spanish Oaks Water Quality Improvement Project	The project includes the demolition of an existing private wastewater package plant, then designing, permitting, and constructing a lift station on site. The project is within the Silver Springs Primary Focus Area.	Design	02/2022	12/2022
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.	Design	03/2022	09/2022
Gainesville Regional Utilities Low-Income Water-Efficient Toilet Exchange Program	Offer toilet replacements to approximately 40 homes per year, replacing up to 120 toilets during the two-year cost-share project, free of charge to the customers.	Design	10/2021	09/2022
Groveland Crystal Lake Reclaim System Rehabilitation and Improvement	The project includes rehabilitation of the existing surface water withdrawal system with a new intake structure, pumps, piping, controls, and a new lake weir system to manage storage and control discharge.	Design	01/2022	06/2022
JEA Low-Income Water-Efficient Toilet Exchange Phase 2	JEA will offer toilet replacements to approximately 200 homes per year, replacing up to 400 toilets with no more than two replacements per home, free of charge to low-income customers.	Construction/Underway	10/2020	03/2022
JEA Twin Creeks Reclaimed Water Storage and Delivery	Create a reservoir for retention of stormwater in the Fellsmere Water Management Area to store up to 18 mgd of water and reduce excess freshwater and nutrients being released to the Indian River Lagoon.	Construction/Underway	07/2020	09/2022
Maitland Village Homeowners Association Irrigation Optimization	The project consists of installing smart irrigation controllers, converting conventional mist heads to rotator nozzles, installing pressure-regulating solenoids and converting mist heads to drip line hose.	Design	11/2021	09/2022
Orange County Utilities 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.	Design	4/2022	09/2023
Orange County Water Conservation with Advanced Targeting	The water conservation program will provide indoor Environmental Protection Agency WaterSense devices for inside the home and rebates for irrigation system retrofits.	Design	11/2021	09/2022
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 2	The project is Phase 2 of a septic-to-sewer conversion that involves the installation of sewer laterals, sewer connections, septic tank abandonment, sanitary sewer main, and lift stations for 154 parcels in the Palms 1 and 2 neighborhoods.	Design	6/2022	09/2023
Orlando Utilities Commission Smart Leak Detection Device Rebates	The program involves providing a rebate for customers that install smart leak detection devices. The estimated water conservation benefit is 0.001 mgd.	Design	10/2021	09/2022
Southlake Utilities Alternative Water Source for Irrigation	The project includes converting an Upper Floridan aquifer well to the Lower Floridan aquifer (a lower-quality water source), for irrigation supply.	Design	10/2021	09/2022
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	The project consists of drilling two Lower Floridan aquifer (LFA) wells at the existing Upper Floridan aquifer wellfield to shift groundwater withdrawal from the Upper to the LFA for the city.	Design	02/2022	09/2023

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
Vero Beach Canal to Irrigation Water Project	The project includes construction of 29,150 LF of reclaimed water main to transmit treated canal water for use in irrigation.	Design	04/2022	06/2024
Volusia County School Board McInnis Elementary School Sewer Improvements	The project includes decommissioning and demolishing an existing package plant at McInnis Elementary School, decommissioning two rapid infiltration basins that serve the plant, and constructing a force main to connect to a new master lift station.	Design	03/2022	09/2022

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
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.	Hydrologic Restoration	Underway	12/2022	CIRL (Central Indian River Lagoon)	SJRWMD	33591	23,000	2,900	A	Not provided
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	Create a reservoir for retention of stormwater in the Fellsmere Water Management Area to store up to 18 mgd of water and reduce excess freshwater and nutrients being released to the Indian River Lagoon.	Dispersed Water Management (DWM)	Underway	09/2022	CIRL (Central Indian River Lagoon)	SJRWMD	SJRWMD-07	TBD	TBD	SEB	Not provided
Lake Apopka Innovative Total Phosphorus Removal	The project will utilize an innovative treatment technology and the District will pay a pre-negotiated rate for each pound of TP removed from Lake Apopka's water column.	Study	Underway	09/2022	OKLA (Ocklawaha River Basin)	SJRWMD	LAP58	17,390 one time reduction		Lake Apopka Basin	31,000

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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 Interconnect Across Lake Level Canal	Design and construct infrastructure to move water between the Duda and Zellwood portions of the Lake Apopka North Shore to better manage water and reduce the nutrient load to Lake Apopka.	Impoundment	Underway	11/2021	OKLA (Ocklawaha River Basin)	SJRWMD	LAP56	N/A	115	Lake Apopka Basin	2,500
Totals								40,390	3,015		33,500

BMAP Appendix Table

Project Name	FY 2020–21	FY 2021–22	FY 2022–23	FY 2023–24	FY 2024–25	Total	Total State Funding	Total District Funding	Lead Entity Match	Project Total
Crane Creek M-1 Canal Flow Restoration	554,770	8,949,124	\$ 8,639,954			\$ 18,143,848	\$6,950,000	\$10,616,056	\$2,033,944	\$19,600,000
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	4,950,936	2,568,438	1,007,854	730,500	730,500	9,988,228		\$16,155,000		\$16,155,000
Lake Apopka Innovative TP Removal	825,000					825,000	\$5,650,000	\$825,000		\$6,475,000
Lake Apopka Interconnect Across Lake Level Canal	854,268					854,268	\$1,990,035			\$1,990,035
Totals	\$7,184,974	\$11,517,562	\$9,647,808	\$730,500	\$730,500	\$29,811,344				



Alternative Water Supplies Annual Report

5. Alternative Water Supplies Annual Report

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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 \$295 million from all sources in cost-share funding for 213 AWS projects that will or have resulted in the production of 369.5 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 appropriated \$40 million to the Florida 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 2021–22, 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 2021–22, the District, with state assistance, is contributing almost \$92.1 million in funding on 23 AWS projects that will or have resulted in the production of almost 53.5 mgd of AWS. These projects, totaling over \$99.4 million, are receiving approximately \$75.3 million from the state of Florida, of which \$450,000 is 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	0.001
Groundwater recharge	7.000
Other non-traditional source	20.920
Reclaimed water (for potable offset)	14.540
Stormwater	0.000
Surface water	11.000
Total	53.461

Table 5-2. Summary of AWS projects funded in FY 2021–22

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 2021–22	Project Totals			
							District Funds	State Funds	WSPSTF	Revolving Loans
City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension	Reclaimed Water (for potable offset)	-	5.800	-	No	\$ 1,497,277	\$ 1,146,038	\$ 1,146,038	\$ -	\$ -
City of DeLand Reclaimed Water System Expansion, Phase 4A	Reclaimed Water (for potable offset)	-	0.300	-	No	1,101,899	1,034,750	1,034,750	-	-
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 Umatilla Wastewater Interconnection Pipeline — Rural Economic Development Initiative / Innovative Program	Reclaimed Water (for potable offset)	-	0.160	-	No	870,485	1,500,000	-	-	-
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 Wastewater Treatability Study	Reclaimed Water (for potable offset)	-	-	-	No	142,569	58,784	390,000	-	-
Crane Creek M-1 Canal Flow Restoration	Surface Water	7.000	-	-	Yes	18,357,718	10,616,056	6,950,000	-	-
JEA Twin Creeks Reclaimed Water Storage and Delivery	Reclaimed Water (for potable offset)	-	1.880	-	No	612,214	975,000	-	450,000	-

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 2021–22	Project Totals			
							District Funds	State Funds	WPSPTF	Revolving Loans
Black Creek Water Resource Development Project	Groundwater Recharge	7.000	-	-	Yes	43,208,004	5,129,258	43,344,978	-	-
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	1,413,472	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	1,104,112	104,112	1,000,000	-	-
City of Groveland South Lake County Lower Floridan Wellfield Project — Distributed	Other Non-Traditional Source	4.320	-	-	No	2,251,240	212,280	2,038,960	-	-
City of Mascotte Lower Floridan Aquifer Wellfield — South Lake County Wellfield Project	Other Non-Traditional Source	2.000	-	-	No	3,864,392	364,392	3,500,000	-	-
City of Orange City Alternative Water Supply Conveyance System — Monastery Road	Other Non-Traditional Source	0.100	-	-	No	61,330	16,866	162,000	-	-
City of Sanford Brackish Reverse Osmosis Water Treatment Plant Pilot	Other Non-Traditional Source	-	-	-	No	1,012,272	96,043	922,500	-	-

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 2021–22	Project Totals			
							District Funds	State Funds	WPSPTF	Revolving Loans
City of Sanford North Water Reclamation Facility Reclaimed Water Pump Station and Storage Improvements	Reclaimed Water (for potable offset)	-	-	-	No	3,561,094	338,364	3,250,000	-	-
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	-	-
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	Other Non-Traditional Source	1.000	-	-	No	1,104,112	104,112	1,000,000	-	-
Totals:		38.921	16.840	-		\$ 92,058,143	\$ 23,684,492	\$ 75,312,366	\$ 450,000	\$ -

III. Alternative Water Supplies Project Descriptions

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

City of Apopka West Reuse Storage Facility and Reclaimed Water System Extension

The proposed project will provide an additional 5.8 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 consumptive use permit (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 minimum flows and levels (MFLs).

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 water treatment plant (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 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.

Black Creek Water Resource Development Project

The Black Creek Water Resource Development Project will help to replenish the Upper Floridan aquifer (UFA) 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 may help improve water levels in the lakes in the Alligator Creek system, including lakes Brooklyn and Geneva, and additionally, may contribute to the MFLs recovery in the Lower Santa Fe Basin. .

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 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 (LFA) to reduce existing and future water demand from the UFA. 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 LFA 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 LFA wells at the existing UFA wellfield to shift groundwater withdrawal from the Upper to the LFA for the city of Mascotte. The project is estimated to provide 2 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 0.1 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 UFA 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 0.25 mgd alternative water.

Florida Power and Light Company (FPL) Okeechobee Clean Energy Center – Upper Floridan Aquifer to Avon Park Permeable Zone Conversion

The project includes the conversion of an 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 9 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.

Town of Howey-in-the-Hills Lower Floridan Aquifer Project

The project consists of drilling two LFA wells at the existing UFA wellfield to shift groundwater withdrawal from the Upper to the LFA 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 20th 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) 2021–22 to FY 2025–26, 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 2020–21.

District Policy 820(2)(b) requires the Governing Board to be provided with an annual summary of all issued Special Use Authorizations (SUAs). This report also includes an inventory of all SUAs that were in effect during FY 2020–21.

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 2021–22 to FY 2025–26.

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	

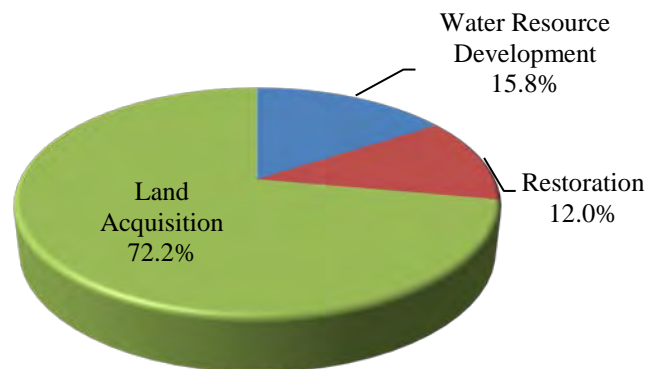


Figure 6-1. Florida Forever program lifetime expenditures by District program

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 2021–22 to FY 2025–26. 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 2021–22 to FY 2025–26. 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 2021–22 to FY 2025–26. 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 May 2021 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 49 projects that are within the District’s boundaries, sorted by category, county, and rank.

Table 6-2. May 2021 Florida Forever 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)		16 of 37 Total Projects
Lake Wales Ridge Ecosystem	Lake, Osceola	CNL-2-High
Wekiva-Ocala Greenway	Lake, Orange, Seminole, Volusia	CNL-3-High
Bombing Range Ridge	Osceola	CNL-4-High
Strategic Managed Area Lands List	Alachua, Clay, Lake, Orange, Putnam, St. Johns, Volusia	CNL-8-High
Etoniah Creek/Cross Florida Greenway	Clay, Marion, Putnam	CNL-10-Med
Longleaf Pine Ecosystem	Marion, Volusia	CNL-11-Med
Triple Diamond	Okeechobee	CNL-14-Med
Pine Island Slough Ecosystem	Osceola	CNL-16-Med
Corrigan Ranch	Okeechobee	CNL-17-Med
Osceola Pine Savannas	Osceola	CNL-18-Med
South Goethe	Marion	CNL-20-Med
Pinhook Swamp	Baker	CNL-24-Low
Camp Blanding to Raiford Greenway	Baker, Bradford, Clay	CNL-25-Low
Bear Hammock	Marion	CNL-27-Low
Lake Hatchineha Watershed	Osceola	CNL-29-Low
Southeastern Bat Maternity Caves	Alachua, Marion	CNL-32-Low
Substantially Complete (SC)		2 of 7 Total Projects
Spruce Creek	Volusia	SC-5-Low
Lochloosa Wildlife	Alachua	SC-6-Low
Critical Historical Resources (CHR)		0 of 3 Total Projects
None		
Climate Change Lands (CC)		4 of 11 Total Projects
Northeast Florida Blueway	Duval, Flagler, St. Johns	CC-3-Med/Low
Archie Carr Sea Turtle Refuge	Brevard, Indian River	CC-5-Low
St. Johns River Blueway	Clay, St. Johns	CC-6-Low
Tiger/Little Tiger Island	Nassau	CC-10-Low
Less-Than-Fee (LTF)		11 of 35 Total Projects
Adams Ranch	Osceola	LTF-2-High
Conlin Lake X	Osceola	LTF-4-High
Kissimmee-St. Johns River Connector	Indian River, Okeechobee	LTF-8-Med
Matanzas to Ocala Conservation Corridor	Flagler, St. Johns, Putnam	LTF-12-Med/Low
Big Bend Swamp/Holopaw Ranch	Osceola	LTF-13-Low
Raiford to Osceola Greenway	Baker	LTF-15-Low
Ranch Reserve	Brevard, Indian River, Osceola	LTF-17-Low
Maytown Flatwoods	Brevard	LTF-24-Low
Mill Creek	Marion	LTF-25-Low
Bluefield to Cow Creek	Okeechobee	LTF-26-Low
San Felasco Conservation Corridor	Alachua	LTF-28-Low
Partnerships and Regional Incentives (PR)		16 of 32 Total Projects
Florida's First Magnitude Springs	Marion	PR-1-High
Northeast Florida Timberlands and Watershed Reserve	Clay, Duval, Nassau	PR-2-High
Indian River Lagoon Blueway	Brevard, Indian River, Volusia	PR-4-High
Volusia Conservation Corridor	Flagler, Volusia	PR-7-High

Projects listed by Category	County (in District)	Rank within Category- Work Plan Group
Brevard Coastal Scrub Ecosystem	Brevard	PR-8-High/Med
Green Swamp	Lake	PR-12-Med/Low
Heather Island/Ocklawaha River	Marion	PR-13-Low
Flagler County Blueway	Flagler	PR-14-Low
Lochloosa Forest	Alachua	PR-15-Low
Rainbow River Corridor	Marion	PR-18-Low
Watermelon Pond	Alachua	PR-19-Low
Lake Santa Fe	Alachua, Bradford	PR-20-Low
Pumpkin Hill Creek	Duval	PR-25-Low
Baldwin Bay/St. Marys River	Duval, Nassau	PR-30-Low
Carr Farm/Price's Scrub	Alachua, Marion	PR-31-Low
Pringle Creek Forest	Flagler	PR-32-Low

IV. Land Acquisitions Completed During FY 2020–21

This section is a summary of land transactions for FY 2020–21, details are included in Table 6-3. The completion of 32 transactions resulted in a net increase of 2,770.64 acres of land owned by the District at a District total net purchase price of \$560,015. The types of transactions included fee simple acquisitions, and easements for monitoring wells, flowage, and access.

Table 6-3. FY 2020–21 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
10/13/2020	Sunnyhill Fire Station Fee Reverter	1988-001-P2	Fee Reverter	Marion	3.10	\$ -	\$ -	Exchange	Ocklawaha River
10/13/2020	CFWI Geneva Wilderness Area Site 1 Monitoring wells and transects easement	2019-027-P1	Less than Fee - Other	Seminole	2.05	-	-	Donation	Middle St. Johns River
10/13/2020	Seminole County BCC CFWI Black Hammock Monitoring Easement	2019-028-P1	Less than Fee - Other	Seminole	3.06	-	-	Donation	Middle St. Johns River
11/02/2020	Still Brooke Donation 1 Koontz Wineman	2019-029-P1	Fee	Lake	10.03	-	-	Mitigation Donation	Middle St. Johns River
11/19/2020	Townsend Access Easement benefiting 1983-021-P1	2020-015-P1	Less than Fee - Other	Brevard	0.11	-	-	Exchange	Upper St. Johns River
11/24/2020	Indian Lake Addition	2019-005-P1	Fee	Marion	101.56	490,000	535,000	Land Acquisition Fund Balance and Alachua Conservation Trust	Ocklawaha River
11/24/2020	Indian Lake Addition Access Easement	2019-005-P2	Less than Fee - Other	Marion	1.90	incl above	incl above		Ocklawaha
12/04/2020	Wildwood Trail Mitigation Donation 8 LJF Acquisitions	2019-026-P3	Fee	Seminole	1.51	-	-	Mitigation Donation	Middle St. Johns River
12/07/2020	Seminole County BCC Monitoring Site 114 Easement Osceola Landfill	2020-002-P1	Less than Fee - Other	Seminole	0.04	-	-	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
12/08/2020	Clay County BCC Monitoring Easement Lake Geneva 225	2020-023-P1	Less than Fee - Other	Clay	0.01	-	-	Donation	Lower St. Johns River
12/15/2020	BTIITF Monitoring Site 7002 Easement Bakersville Fire Tower	2019-003-P1	Less than Fee - Other	St. Johns	0.09	-	-	Donation	Lower St. Johns River
12/15/2020	BTIITF Monitoring Site 2835 Easement Yulee Fire Tower	2019-004-P1	Less than Fee - Other	Nassau	0.04	-	-	Donation	Nassau River
12/15/2020	BTIITF Monitoring Site 744 Easement Hollister Forestry Station Fire Tower	2019-008-P1	Less than Fee - Other	Putnam	0.18	-	-	Donation	Lower St. Johns River
12/15/2020	BTIITF Monitoring Site 3030 Easement Bunnell Fire Tower	2019-009-P1	Less than Fee - Other	Flagler	0.10	-	-	Donation	Northern Coastal
12/15/2020	BTIITF Monitoring Site 229 Easement Penney Farms Forestry Station Fire Tower	2019-010-P1	Less than Fee - Other	Clay	0.03	-	-	Donation	Lower St. Johns River
01/21/2021	Clay County Perpetual Easement for Black Creek WRDP	2017-016-P1	Less than Fee - Other	Clay	1.32 addition	-	-	Donation	Lower St. Johns River
01/26/2021	CFWI BTIITF Lower Wekiva River Preserve Monitoring Easement	2019-022-P1	Less than Fee - Other	Seminole	3.21	-	-	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
03/09/2021	Clay County BCC MFL Monitoring Well Easement Lake Brooklyn 7007	2021-003-P1	Less than Fee – Other	Clay	0.01	-	-	Donation	Lower St. Johns River
03/29/2021	Easement Jax Fire and Rescue Fire Station 45 Monitoring Site ID 3926	2020-021-P1	Less than Fee – Other	Duval	0.01	-	-	Donation	Nassau River
04/08/2021	BTIITF Monitoring Sites Easement Rock Springs Run Sites 3938 3939 3940 3943	2017-014-P1	Less than Fee – Other	Orange	10.08 additional	-	-	Donation	Middle St. Johns River
04/13/2021	CC Ranch Fee Reverter	1989-004-P2	Fee Reverter	Lake	219.06	-	-	Exchange	Ocklawaha River
04/13/2021	CC Ranch Perpetual Flowage Easement	1989-004-P3	Less than Fee – Flowage easement/hold harmless	Lake	219.06	-	-	Exchange	Ocklawaha River
04/13/2021	CC Ranch Perpetual Access Easement	1989-004-P4	Less than Fee – Other	Lake	0.56	-	-	Exchange	Ocklawaha River
04/14/2021	Burrell Lock	2021-008-P1	Fee	Lake	6.23	-	-	Exchange	Ocklawaha River
04/19/2021	Lake Jesup SR46 Bridge Improvement ERP Mitigation Donation	2020-028-P1	Fee	Seminole and Volusia	87.22	-	-	Mitigation Donation	Middle St. Johns River
04/20/2021	Clark Bay Addition Spaz Tax Deed	2011-003-P2	Fee	Volusia	13.67	10,000	10,000	Florida Forever Fund Balance	Lower St. Johns River and Northern Coastal
04/30/2021	Still Brooke Mitigation Donation 2 Windward Hills	2019-029-P3	Fee	Lake	8.06	-	-	Mitigation Donation	Middle St. Johns River
07/01/2021	Kohn Reversion A	2000-020-P4	Fee	Marion	2,032.28	-	-	Exchange	Ocklawaha 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
08/12/2021	CFWI BTIITF Wekiwa Springs SP Sites 1547 and 3006 Monitoring Easement	2020- 004-P1	Less than Fee – Other	Orange	3.00	-	-	Donation	Middle St. Johns River
08/16/2021	Easement Flagler County MFL Monitoring Site 0376 Gore Lake	2021- 006-P1	Less than Fee – Other	Flagler	0.05	-	-	Donation	Northern Coastal
08/25/2021	Weyerhaeuser Bayard Inholding	2020- 016-P1	Fee	Clay	40.01	60,015	60,015	Florida Forever	Lower St. Johns River
08/31/2021	Mark Johnson Donation	2021- 013-P1	Fee	St. Johns	3.00	-	-	Donation	Northern Coastal
Total – District Owned					2,770.64	\$ 560,015	\$ 605,015		

V. Surplus Lands During FY 2020–21

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 2020–21, the District disposed of 2,429.25 acres of land and received \$2,990 and exchanged real estate as compensation. Table 6-4 provides the surplus lands details.

Table 6-4. Surplus parcels during FY 2020–2021

Transaction Date	Parcel Name	LA Number	Transaction Type	County	Surface Water Basins	Total Net Fee or CE Acres	Compensation
10/13/2020	Sunnyhill Farm Equitable Life	1988-001-P1	Fee	Marion	Ocklawaha River	-3.10	Exchange
12/17/2020	Kenneth Hart Marion County	1999-019-P1	Fee	Marion	Ocklawaha River	-0.46	\$ 2,990.00
04/13/2021	CC Ranch Lake Coleman	1989-004-P1	Fee	Lake	Ocklawaha River	-219.06	Exchange
04/14/2021	Jack R. Welling	1990-095-PB	Fee	Lake	Ocklawaha River	-76.63	Exchange
07/01/2021	Kohn Conservation Easement	2000-020-P1	Less than Fee – Conservation Easement	Marion	Ocklawaha River	-2,130.00	Exchange
Total						-2,429.25	\$ 2,990

VI. District Land Management Activities

District Land Management Program

The District is the lead manager for more than 400,000 acres of the approximately 776,362 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 the University of Florida (UF). 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 / UF / Alachua Co.	No	No	No	No	No	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 the Florida Forest Service (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	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Black Creek Ravines Conservation Area	Clay County is lead for security residence agreement, parking lot maintenance, trash pick-up, and annual trail mowing. The District performs natural and cultural resource management as well as trail and campsite maintenance. 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.	Clay Co. / SJRWMD	✓	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 / NRCS	✓	✓	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 / Florida Audubon Society	✓	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	✓	✓
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	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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. / NRCS	✓	✓	✓	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.	SJRWMD / Volusia Co. / FWC	✓	✓	✓	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 County. 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	✓	No	No	✓
Doris Leeper Spruce Creek Preserve	This property is managed by Volusia County. 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	✓	Canoe/kayak	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	✓	✓	✓	✓	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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	✓	✓	✓	✓	No	✓
Fanning Island Preserve	This property is managed by the City of Jacksonville. 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.	City of Jacksonville / SJRWMD	No	No	No	No	No	No
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	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	✓	✓	✓	✓	✓	✓
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	✓	✓	✓	✓	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Gemini Springs Addition	This property is managed by Volusia County. 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	✓
Gemini Springs County Park	This property is managed by Volusia County. 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	✓	✓
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 County. 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	✓	✓	✓	✓
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	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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
Indian Lake 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	✓	✓
Indian River Lagoon Preserve State Park	This property is managed by DEP. Land management activities include mechanical fuels management, natural systems restoration, exotic species control, land security, public use and recreational development / maintenance, road maintenance, and mowing.	DEP / SJRWMD	✓	No	No	✓	Primitive	✓
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 M. 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	✓	✓	✓	Canoe/kayak	✓	✓
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	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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 / Lake Co. / Orange Co.	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 County. 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 Harris Conservation Area	Land management activities include mechanical fuels management, land security, road maintenance, and mowing.	SJRWMD	No	No	No	No	No	No
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 /DEP	✓	✓	✓	✓	✓	✓
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	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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 County. 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	✓	✓
Marjorie Harris Carr Cross Florida Greenway	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	✓	✓	✓	✓	✓	✓

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	✓	✓	✓	Canoe/ kayak	✓	✓
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	✓
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	✓	✓	✓	✓
Mosquito Lagoon Aquatic Preserve	This property is managed by DEP. Land management activities include natural systems restoration and exotic species control.	SJRWMD / DEP	✓	✓	No	✓	✓	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 County. 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. / FWC	✓	✓	✓	✓	✓	✓
North Sebastian 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.	Indian River Co. / SJRWMD	✓	No	✓	No	No	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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 / FWC	✓	✓	✓	✓	✓	✓
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 / FWC	✓	✓	✓	✓	✓	✓
Oslo Riverfront Conservation Area	This property is managed by Indian River County. 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	✓	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	✓	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	✓	✓	✓	✓
Pine Island Conservation Area	This property is managed by Brevard County. 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	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
Princess Place Preserve	This property is managed by Flagler County. 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	✓	✓	✓	✓	✓	✓
Rice 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 / Florida Trail Association	No	✓	✓	No	✓	✓
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 / NRCS	✓	✓	✓	✓	✓	✓
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. / FWC	✓	✓	✓	Canoe/ kayak	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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	✓
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 / Indian River Co. / FWC	No	✓	No	No	No	No
Sebastian Stormwater 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 / 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	✓	✓	✓	✓	✓	✓
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 / FWC	✓	✓	✓	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	✓	No	✓	✓	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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	✓	✓	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	✓	No	✓	✓	✓	✓
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 / NRCS	✓	✓	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	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.	FWC / SJRWMD	✓	✓	No	✓	✓	✓
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	✓	✓	✓	✓	✓	✓
Tosohatchee 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	✓	✓	✓	✓	✓	✓

Management Area	Land Management Activities	Cooperative Management Agreement	Public Recreational Opportunities					
			Fish	Hunt	Horse	Boat	Camp	Hike
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	✓
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. Rayonier management will end in 2025. 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	No	No	✓	No	No	✓
Wekiva River Buffer 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	✓
Wiregrass Prairie Preserve	This property is managed by Volusia County. 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	✓	✓

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

This section provides information on FY 2020–21 budget and expenditures for programs and projects that received funding from FF and Water Management Lands Trust Fund (WMLTF).

As of September 30, 2021, the District has expended all originally appropriated FF funds. Fund balance accumulated from the sale of surplus lands that were acquired utilizing legislative funding (Preservation 2000, FF, WMLTF) are used within the same guidelines as the original funding source. The fund balance as of September 30, 2021, was \$255,634.

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 Management and 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 and 6) and Zemel	(2,126,807)	Joint Fee	-
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5 and 6) and Zemel	8,281,200	Joint Fee	-
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5 and 6) and Zemel	(27,147)	Joint Fee	-
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5 and 6) and Zemel	(4,000,620)	Joint Fee	3,750.99
7/30/2002	1994-046-P6	Plum Creek Volusia (Parcels 5 and 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 Avenue — 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 — Lambert	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 — Tusawilla — 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 — Special Use Authorizations

A total of 99 Special Use Authorizations were in effect during the FY 2020–21 for activities ranging from scientific research to feral hog trapping, to miscellaneous recreational activities. (See Table 6-8 for more details.)

Table 6-8. Inventory of special use authorizations

Agreement Name	Management Area	Purpose
Al Roberts Operation Outdoor Freedom Wounded Warrior Alligator Hunt	Ocklawaha Prairie Restoration Area	Recreational Event
Anne Zimmer Horse Drawn Buggy	Hal Scott Regional Preserve and Park	Special Use
Antonio Cruz	Lake George Conservation Area	Special Use
Audubon Florida	Julington-Durbin Preserve	Research
Avian Research and Conservation Institute, Inc.	Canaveral Marshes Conservation Area	Research
Barrett	Deep Creek Conservation Area	Hog Trapping/Removal
Benjamin S. Williams	Rice Creek Conservation Area	Hog Trapping/Removal
Bill Baylor	Crescent Lake Conservation Area	Hog Trapping/Removal
Brevard County Airboat Association, Inc.	Three Forks Conservation Area	Special Use
Brevard County Airboat Association, Inc., trim willows	Three Forks Conservation Area	Special Use
Brevard Zoo (Scrub Jays)	Buck Lake Conservation Area	Survey
BSTR Inc. Off-Road Event	Lochloosa Wildlife Conservation Area	Recreational Event
Cabin Maintenance — Cliff Rogge	Three Forks Conservation Area	Management Designation
Cabin Maintenance — Reynolds	Three Forks Conservation Area	Management Designation
Carr-Miless Access	Newnans Lake Conservation Area	Other
Chad Brunner	Twelve Mile Swamp Conservation Area	Hog Trapping/Removal
Chelsea Whitaker	Econlockhatchee Sandhills Conservation Area	Hog Trapping/Removal
Christine Wiese — University of Florida	Lake Jesup Conservation Area	Research
City of Apopka	Lake Apopka North Shore	Research
Clary & Associates, Inc. Greg Clary	Bayard Conservation Area	Special Use
Clay County Development Authority	Bayard Conservation Area, Black Creek Ravines Conservation Area	Special Use

Agreement Name	Management Area	Purpose
Cribb Philbeck Weaver Group, Inc.	Econlockhatchee Sandhills Conservation Area	Research
D. Steve Dennis	Moses Creek Conservation Area	Research
Danny Bales RCW Monitoring/Photography	Hal Scott Regional Preserve and Park	Other
Darwin Rutz	Sunnyhill Restoration Area	Special Use
David Baldwin	Thomas Creek Conservation Area	Hog Trapping/Removal
David Hunt, Florida Forest Service	Orange Creek Restoration Area	Research
David Kaplan, University of Florida Upland Restoration Study	Longleaf Flatwoods Reserve	Research
David Simpson Breeding Birds Survey USJRB	Blue Cypress, Fort Drum Marsh, River Lakes, Three Forks	Survey
DB Aster LLC Joe Steinheiser	Thomas Creek Conservation Area	Special Use
Dean A. Black	Thomas Creek Conservation Area	Hog Trapping/Removal
East Flagler Mosquito Control	Pellicer Creek Conservation Area	Research
Eco Treks By Rod	Three Forks Conservation Area	Recreational Event
Epic Sports Marketing LLC Felix Hernandez	Lake Apopka North Shore	Recreational Event
Eric Meade	Pellicer Creek Conservation Area	Hog Trapping/Removal
Flagler County Hog Trapper at Princess Place	Pellicer Creek Conservation Area	Hog Trapping/Removal
Florida Forest Service	Newnans Lake Conservation Area, Rice Creek Conservation Area	Recreational Event
Florida Native Plant Society Plant Surveys	Lake Apopka North Shore	Research
FWC	Longleaf Flatwoods Reserve, Newnans Lake Conservation Area	Recreational Event
FWC	Sand Lakes Conservation Area	Recreational Event
FWC	Sunnyhill Restoration Area	Special Use
FWC Songbird Survey	Moses Creek Conservation Area	Survey
FWC Turkey Research	Lochloosa, Longleaf Flatwoods, Newnans Lake	Research
FWC, Boat Storage	Palm Bay Service Center	Other
FWC, Habitat Enhancement	Orange Creek Restoration Area	Other
Gregg Klowden, University of Central Florida	Econlockhatchee Sandhills Conservation Area	Research
Handex Consulting & Remediation Northeast LLC	Lake Apopka North Shore	Research
Hayward Construction Group LLC	Thomas Creek Conservation Area	Special Use
Horse Drawn Buggy	Longleaf Flatwoods Reserve, Newnans Lake Conservation Area	Special Use

Agreement Name	Management Area	Purpose
Island Grove, LLC, Permissive Use Agreement	Orange Creek Restoration Area	Other
James Garrison	Bayard Conservation Area	Research
James Watson	Buck Lake Conservation Area	Hog Trapping/Removal
Janet Ho, University of Central Florida	Fellsmere Water Management Area, River Lakes Conservation Area	Research
Jason Ferrell, University of Florida	Heart Island, Longleaf Flatwoods, Rice Creek	Research
Jason Lynn, DEP	Moses Creek Conservation Area	Research
Jason Maurer, Marion County Parks and Recreation	Emeralda Marsh, Ocklawaha Prairie, Orange Creek, Silver Springs Forest, Sunnyhill	Special Use
Jay Hinchman Care of Mo Brangus	Lake Norris Conservation Area	Hog Trapping/Removal
Jebbie, FL, LLC Ed Lassiter C-54 Discharge Withdraw Water	C-54	Special Use
Jeff Adams	Murphy Creek Conservation Area	Hog Trapping/Removal
Jeff Barton	Seminole Ranch Conservation Area	Hog Trapping/Removal
Jeff Caswell	Hal Scott Regional Preserve and Park	Hog Trapping/Removal
Jesse Borden, University of Florida		
Jesse C. Black	Gemini Springs Addition, Lake Jesup Conservation Area	Hog Trapping/Removal
Joey Froehlich	Crescent Lake Conservation Area	Other
John Chris Anderson	Deep Creek Conservation Area	Hog Trapping/Removal
John Lang-Vegetation Mgmt.	Canaveral Marshes Conservation Area	Other
Jon Mays, FWC	Newnans Lake Conservation Area, Rice Creek Conservation Area	Research
Joshua Williams	Dunns Creek Conservation Area	Hog Trapping/Removal
K-9 Search Dog Training	Heart Island, Lake Apopka, Lake Monroe, Lake Norris, Seminole Ranch, Wekiva	Special Use
Ken Willis	Bull Creek Wildlife Management Area, Three Forks Conservation Area	Hog Trapping/Removal
Kevin Oxenrider, FWC Bat Survey	Newnans Lake Conservation Area	Research
Lawrence and Fran Fleckinger	Canaveral Marshes Conservation Area	Hog Trapping/Removal

Agreement Name	Management Area	Purpose
Lester Frank Smith	Thomas Creek Conservation Area	Other
Linda Hunter	Sunnyhill Restoration Area	Special Use
Lorna Imler, Sparkman Cemetery Access	Newnans Lake Conservation Area	Other
Margaret M. and Martin Smith, access route	Newnans Lake Conservation Area	Other
Maris Ramsey, Horse/Buggy	Sunnyhill Restoration Area	Recreational Event
Mike Monroe	Fellsmere Water Management Area	Hog Trapping/Removal
Myrna Brown Horse Drawn Cart	Ocklawaha Prairie Restoration Area, Sunnyhill Restoration Area	Special Use
National Wild Turkey Federation, Inc. Gator Gobbler Chapter	Longleaf Flatwoods Reserve	Recreational Event
Norman Huggins (disabled) Econlockhatchee Bridge Fishing	Hal Scott Regional Preserve and Park	Recreational Event
Norman Huggins Fishing at Hal Scott Disabled	Hal Scott Regional Preserve and Park	Recreational Event
North Carolina Outward Bound School Inc	Buck Lake, Crescent Lake, Hal Scott, Lake Monroe, Palm Bluff, Seminole Ranch	Camping
North Carolina Outward Bound School Inc., Ropes	Seminole Ranch Conservation Area	Camping
North Florida Boy Scouts of America	Palm Bluff Conservation Area	Special Use
Orange Audubon Society, Inc.	Lake Apopka North Shore	Research
Paul Faircloth PFG Corp. DBA Mosquito Creek Outdoors	Lake Apopka North Shore	Recreational Event
Paul Washko, Access	Pellicer Creek Conservation Area	Special Use
Peace River Electric Cooperative, Inc.	Fort Drum Marsh Conservation Area	Special Use
Pelican Island Audubon Society	Fellsmere, Fort Drum, Three Forks	Research
Peter Johnson, University of Florida Herbarium Collection	Julington-Durbin Preserve	Special Use
Philip Schadegg, University of Central Florida	Econlockhatchee Sandhills Conservation Area	Research
PIMCORP LLC Half Marathon	Lake Apopka North Shore	Recreational Event
Power of 2, Inc.	Newnans Lake Conservation Area	Recreational Event
Frank Smith Hunting Access	Thomas Creek Conservation Area	Other
Anna Farmer Frogloggers	Longleaf Flatwoods Reserve – Alachua County, Lochloosa Wildlife Conservation Area, Newnans Lake Conservation Area	Research

Agreement Name	Management Area	Purpose
Philbeck Weaver Group Inc	Econlockhatchee Sandhills Conservation Area	Research
Darwin Rutz Access for adjacent land	Sunnyhill Restoration Area	Special Use
Marion County Parks and Recreation Jason Maurer	Emeralda Marsh Conservation Area, Ocklawaha Prairie Restoration Area, Orange Creek Restoration Area, Sunnyhill Restoration Area, Silver Springs Forest Conservation Area	Recreational Event
United States Air Force – 301 Rescue Squadron	River Lakes Conservation Area, Three Forks Conservation Area, Bull Creek Wildlife Management Area	Special Use
Rotary of Green Cove Keating Stop Point	Bayard Conservation Area	Recreational Event
Brevard County Airboat Association Inc Cabin	Three Forks Conservation Area	Special Use
St Johns County Tree Trimming	Twelve Mile Swamp Conservation Area	Intergovernmental
Steve Dennis Robber Fly	Moses Creek Conservation Area	Research
Benjamin S. Williams Hog Removal	Rice Creek Conservation Area	Hog Trapping/Removal
John Chris Anderson Hog Removal	Deep Creek Conservation Area	Hog Trapping/Removal
Beau Bass Hog Removal	Thomas Creek Conservation Area	Hog Trapping/Removal
Thea Beth Thorne and Michael Thorne OPDMD	Buck Lake Conservation Area	Recreational Event
Avian Reconditioning Center, Inc.	Lake Apopka North Shore	Special Use
UCF Gregg Klowden Vertebrate Survey and Gopher Tortoise Tracking	Econlockhatchee Sandhills Conservation Area	Research
Eric Heribacka vehicular access to adjoining property	Canaveral Marshes Conservation Area	Special Use
Ralph Viviano OPDMD	Three Forks Conservation Area	Recreational Event
DEP Pamela Marcum sea level rise surveys	Moses Creek Conservation Area, Pellicer Creek Conservation Area	Research
UCF, Jennifer Stewart, Harvester Ants Study	Lake Monroe Conservation Area, Buck Lake Conservation Area, Econlockhatchee Sandhills Conservation Area	Research
UF, Michael Belitz, Moth Research	Longleaf Flatwoods Reserve – Alachua County	Research

Agreement Name	Management Area	Purpose
UF, Raelene Crandall, Wiregrass Research	Lochloosa Wildlife Conservation Area	Research
Duke University, Crowl and Manos blueberry research	Julington-Durbin Preserve, Moses Creek Conservation Area	Research
Florida Geological Survey, drilling and soil sampling	Fellsmere Water Management Area, Blue Cypress Conservation Area, Three Forks Conservation Area, Fellsmere Grade	Sampling
North Carolina Outward Bound School, Inc.	Seminole Ranch Conservation Area	Recreational Event
Nate Ingram investigating airplane crash site	Seminole Ranch Conservation Area	Research
Marion County Supervisor of Elections	Sunnyhill Restoration Area	Other
Tim Towles Bird Survey	Fort Drum Marsh Conservation Area	Research
Weyerhaeuser Access for Timber Cruise	Bayard Conservation Area	Other
Norman Huggins OPDMD	Hal Scott Regional Preserve and Park	Recreational Event
FWC, Lisa Smith, Weasel Research	Longleaf Flatwoods Reserve – Alachua County, Lochloosa Wildlife Conservation Area, Newnans Lake Conservation Area, Orange Creek Restoration Area, Rice Creek Conservation Area, Sunnyhill Restoration Area, Dunns Creek Conservation Area	Research
Boy Scout Troop 404, Cleaning	Heart Island Conservation Area	Other
Karen Van Matre, Antique Boat Group Picnics	Burrell Lock and Dam	Recreational Event
Orange Audubon Society, Birding Festival	Emeralda Marsh Conservation Area, Lake Apopka North Shore	Recreational Event
Kevin Guilfoyle, Snail Collecting	Hal Scott Regional Preserve and Park, Lake Apopka North Shore, Seminole Ranch Conservation Area, Econlockhatchee Sandhills Conservation Area, Canaveral Marshes Conservation Area	Research
UF, Tick Collecting	Longleaf Flatwoods Reserve – Alachua County, Newnans Lake Conservation Area	Research
National Audubon, Christmas Bird Count	Lake Apopka North Shore	Recreational Event

Agreement Name	Management Area	Purpose
Cathy Lail, Eagle Nests Observation	Hal Scott Regional Preserve and Park, Lake Jesup Conservation Area, Lake Monroe Conservation Area, Seminole Ranch Conservation Area, Turnbull Hammock Conservation Area, Buck Lake Conservation Area, Econlockhatchee Sandhills Conservation Area, Canaveral Marshes Conservation Area, Palm Bluff Conservation Area	Other
UF Dept. of Entomology and Nematology Anderson	Longleaf Flatwoods Reserve – Alachua County, Lochloosa Wildlife Conservation Area	Research
Skystorm Productions, Bird Filming	Lake Apopka North Shore	Other
Richard Franz, Photography	Rice Creek Conservation Area	Recreational Event
Gone Riding Corp.	Three Forks Conservation Area	Recreational Event
AR Premier Events, Bike Race	Pellicer Creek Conservation Area	Recreational Event
National Wild Turkey Federation, Hog and Turkey Hunting	Longleaf Flatwoods Reserve – Alachua County, Newnans Lake Conservation Area	Recreational Event
Florida Gas Transmission Co. LLC	South Central Region Mitigation Archipelago	Special Use
Brevard County Sheriff Office for Training	River Lakes Conservation Area	Special Use
FFS, Turkey Hunt	Heart Island Conservation Area, Clark Bay Conservation Area	Recreational Event
Runner’s High Timing and Race Management LLC. Foot Race	Palm Bluff Conservation Area	Recreational Event
Florida Extreme Adventures Stopover 5K Foot Race	Julington-Durbin Preserve	Recreational Event
UF, Jaret Daniels Research	Lake Norris Conservation Area	Research
UF, Bird Recording	Longleaf Flatwoods Reserve – Alachua County	Research
Barry Unger. Carolina Willow Tree Harvesting	Lochloosa Wildlife Conservation Area	Harvesting
FFS, Tree Measuring	Moses Creek Conservation Area	Research
FSU, FNAI Alexander Sampling	Bayard Conservation Area	Research
FSU FNAI Herring Surveying	Bayard Conservation Area, Black Creek Ravines Conservation Area	Research
FSU, FNAI Rosner-Katz Vegetation Sampling	Gourd Island Conservation Area, Twelve Mile Swamp Conservation Area, Deep Creek Conservation Area	Sampling
FFS, Ross Gator Hunt	Ocklawaha Prairie Restoration Area	Recreational Event

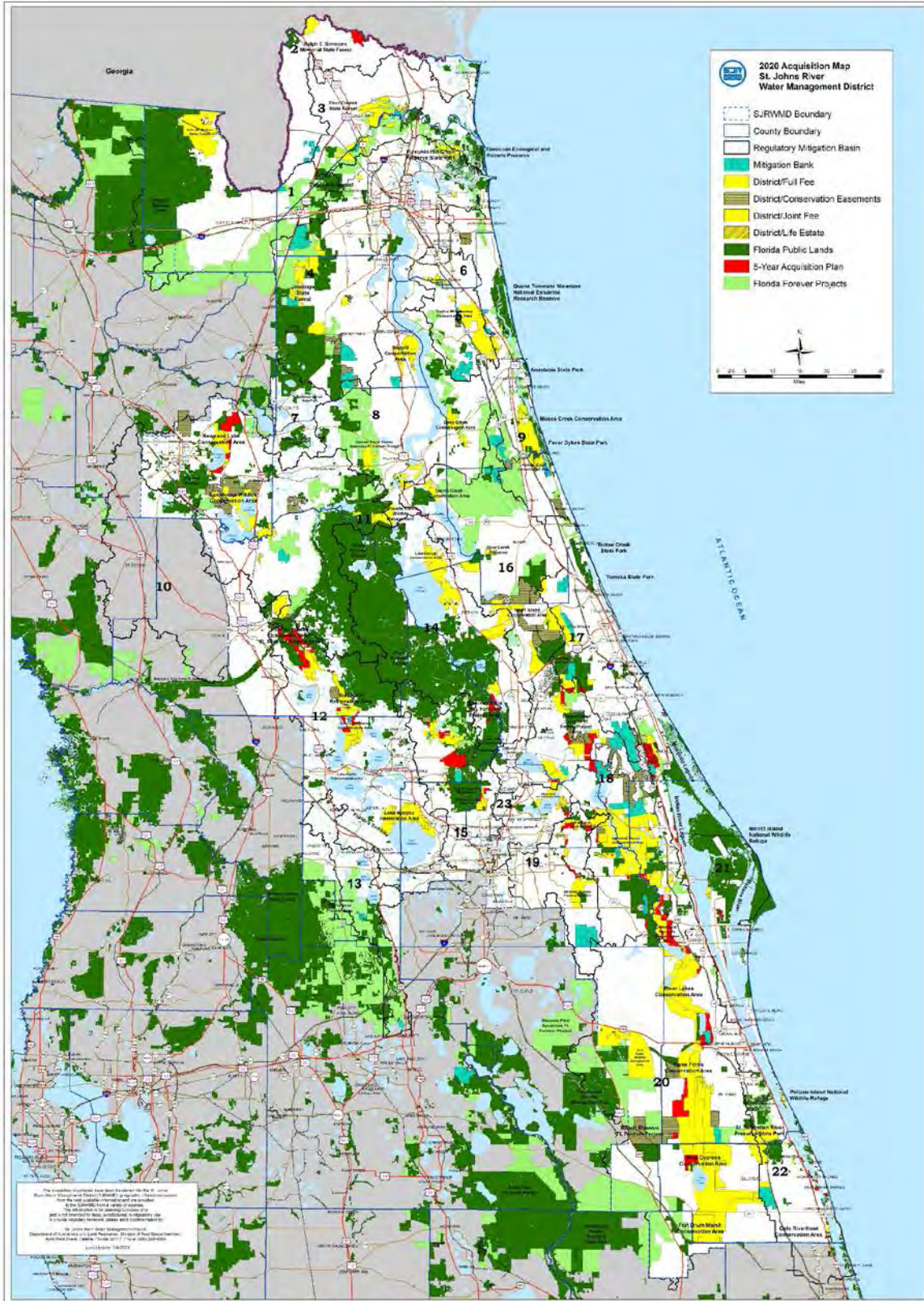
X. Appendix C — 2021 Land Acquisition Map

The 2021 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. Figure 6-2 shows the potential acquisition layer, current District interests, other public lands, and other Florida Forever projects.

Figure 6-2. 2021 Land Acquisition Map





Mitigation Donation Annual Report

7. Mitigation Donation Annual Report

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I. INTRODUCTION

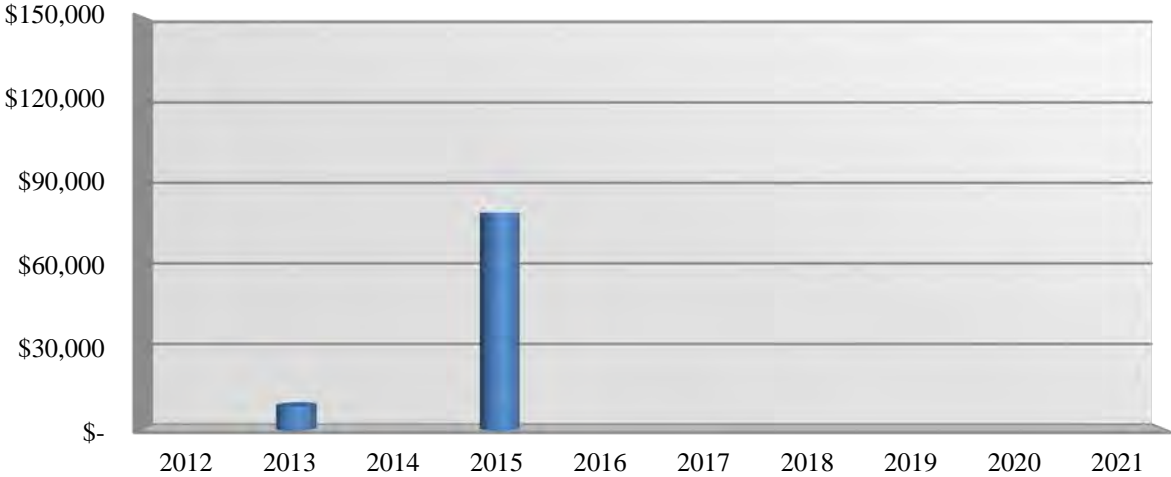
Subsection 373.414(1)(b)2, *Florida Statutes* (F.S.) requires that “...each water management district shall report by March 1 of each year, as part of the consolidated annual report required by s. 373.036(7), all cash donations accepted under subparagraph 1 during the preceding water management district 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 2020–2021

During FY 2020–2021, 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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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 2022 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 St. Johns River Water Management District (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 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 2022 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	7.0000			Lakes Brooklyn and Geneva, Lower Santa Fe, Ichetucknee	2509	Etoniah Chain of Lakes and Black Creek / Lower St. Johns River (LSJR) Mainstem	Impaired	Level 2 — Lakes Brooklyn and Geneva
Casselberry South Water Treatment Plant Well #1 Modification	Reclaimed Water (for groundwater recharge or natural system restoration)	1.0000			Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of Altamonte Springs Reclaimed Water Storage and Recharge Optimization Project	Surface Water Storage	0.5000		6.0000	Ocklawaha and Wekiva	2967, 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 Altamonte Springs Regional Water Reclamation Facility Improvements Phase II	Reclaimed Water (for potable offset)		3.5000		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)		5.8000		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)		0.3000		Blue Springs	28933, 28933A	Middle St. Johns River (MSJR) / Volusia Blue Springshed (Pending)	Impaired	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of DeLand Alabama Avenue Reclaimed Water Main Extension	Reclaimed Water (for groundwater recharge or natural system restoration)	0.1800			Blue Springs	28933, 28933A	MSJR/ Volusia Blue Springshed (Pending)	Impaired	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of DeLand Northwest Reclaimed Water Ground Storage Tank and Pump Station	Reclaimed Water (for potable offset)	1.0000			Blue Springs	28933, 28933A	MSJR / 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	12.0000			Blue Springs	28933 2933A	MSJR / Volusia Blue Springshed (Pending)	Impaired	Volusia PR**, Level 0 – 4 water bodies Level 2 – 1 water body
City of Edgewater Reclaimed Extension to Meadow Lake and Woodbridge Subdivisions	Reclaimed Water (for potable offset)	0.2000			Indian River Lagoon — Mosquito Lagoon segment	2924B1	Mosquito Lagoon Reasonable Assurance Plan (ML RAP)	Impaired	NA
City of Groveland Lower Floridan Reclaimed Well at Sunshine	Other Non-Traditional Source	2.3000			Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of Groveland South Lake County Lower Floridan Wellfield Project – Distributed	Other Non-Traditional Source	4.3200			Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of Mascotte Lower Floridan Aquifer Wellfield — South Lake County Wellfield Project	Other Non-Traditional Source	2.0000			Floridan aquifer	NA	NA	NA	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
City of Ocala Lower Floridan Aquifer Conversion Phase 1	Other Non-Traditional Source	8.9000			Silver Springs	NA	NA	NA	Level 0 — Silver Springs
City of Orange City Alternative Water Supply Conveyance System — Monastery Road	Reclaimed Water (for potable offset)	0.1000			Blue Springs	28933A	Blue Spring	Impaired	Volusia PR**, Level 0 – 4 water bodies Level 2 – 1 water body
City of Sanford Brackish Reverse Osmosis Water Treatment Plant Pilot	Brackish Groundwater	1.0000			Lake Monroe	2893D2	Lake Monroe / MSJR	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
City of Sanford North Water Reclamation Facility Reclaimed Water Pump Station and Storage Improvements	Reclaimed Water (for potable offset)			10.0000	Lake Monroe	2893D2	Lake Monroe / MSJR	Impaired	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)		0.1600		Lake Yale	2807A	Ocklawaha / Upper Ocklawaha River	Impaired	NA
City of Winter Springs Tuskawilla Crossing Reclaimed Water Main	Reclaimed Water (for potable offset)	0.2500			Upper Floridan aquifer / Lake Jessup	2981	Lake Jessup / MSJR	Impaired	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Clay County Utility Authority Saratoga Springs Reclaimed Water Storage and Pumping Station	Reclaimed Water (for potable offset)		0.7500		Peters Creek	2444	Peters Creek / LSJR Mainstem	Impaired	Level 2 — Lakes Brooklyn and Geneva
Clay County Utility Authority Wastewater Treatability Study	Reclaimed Water (for potable offset)		1.0000		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	7.0000			UFA—Brevard County; SJR; Indian River Lagoon	3085A	Crane Creek / Indian River Lagoon (IRL) Central	Impaired	NA
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	Surface Water Storage	18.0000		1,372	Indian River Lagoon	3138A	Indian River Lagoon/IRL Central	Impaired	NA
Equity Lifestyles Properties Oak Bend / I-75 Water Quality Improvement Project	Reclaimed Water (for potable offset)	0.0100			Silver River and springs	2772A / 2772C	Silver River and springs	Impaired	Level 0 — Silver Springs
Equity Lifestyles Properties Spanish Oaks Water Quality Improvement Project	Reclaimed Water (for potable offset)	0.0300			Silver River and springs	2772A / 2772C	Silver River and springs	Impaired	Level 0 — Silver Springs
Florida Power and Light Company Okeechobee Clean Energy Center – Upper Floridan Aquifer to Avon Park Permeable Zone Conversion	Brackish Groundwater	2.2000			Upper Floridan aquifer; Upper St. Johns River	2893	Upper Floridan Aquifer; Upper St. Johns River	Impaired	NA
Gainesville Regional Utilities Low-Income Water Efficient Toilet Exchange Program	PS and CII Conservation	0.0040			Lakes Brooklyn and Geneva	2509I 2509	Lake Brooklyn / LSJR Mainstem	Impaired	Level 2 — Lakes Brooklyn and Geneva
Groveland Crystal Lake Reclaim System Rehabilitation and Improvement	Surface Water Storage	0.0800			Floridan aquifer	NA	NA	NA	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
JEA Low-Income Water Efficient Toilet Exchange Phase 2	PS and CII Conservation	0.0100			Lakes Brooklyn and Geneva	2509I 2509	Lake Brooklyn / LSJR Mainstem	Impaired	Level 2 — Lakes Brooklyn and Geneva
JEA Twin Creeks Reclaimed Water Storage and Delivery	Reclaimed Water (for potable offset)		1.880		Lakes Brooklyn and Geneva	2509I 2509	Lake Brooklyn / LSJR Mainstem	Impaired	Level 2 — Lakes Brooklyn and Geneva
Maitland Village Homeowners Association Irrigation Optimization	PS and CII Conservation	0.0100			Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Orange County Utilities Cypress Lake Wellfield — Oak Meadows Alternative Water Supply Delivery Enhancements	Brackish Groundwater	9.0000			Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Orange County Water Conservation with Advanced Targeting	PS and CII Conservation	0.0700			Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 2	Reclaimed Water (for potable offset)	0.0300			Wekiwa Springs	2956	Wekiwa Springs / MSJR	Impaired	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Orlando Utilities Commission Smart Leak Detection Device Rebates	PS and CII Conservation	0.0011			Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Southlake Utilities Alternative Water Source for Irrigation	Other Non-Traditional Source	0.5500			Ocklawaha / Upper Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	Other Non-Traditional Source	1.0000			Ocklawaha / Upper Floridan aquifer	NA	NA	NA	CFWI WUCA*, Level 0 – 4 water bodies Level 1 – 2 water bodies
Vero Beach Canal to Irrigation Water Project	Reclaimed Water (for potable offset)	3.000			Indian River Lagoon	NA	Indian River Lagoon	Impaired	NA
Volusia County School Board McInnis Elementary School Sewer Improvements	Reclaimed Water (for potable offset)	0.0100			DeLeon Spring/MSJR	2921A	De Leon Spring / MSJR	Impaired	Volusia PR**, Level 0 – 4 water bodies Level 2 – 1 water body
Totals:		81.7551	13.3900	1,388					

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 Floridan 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 Floridan 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
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 M1 Canal to divert and treat flows prior to discharging to the USJRB	Hydrologic Restoration	Underway	12/2022	CIRL (Central Indian River Lagoon)	Impaired	SJRWMD	33591	23,000	2,900	A	Not provided
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	Create a reservoir for retention of stormwater in the Fellsmere Water Management Area to store up to 18 mgd of water and reduce excess freshwater and nutrients being released to the Indian River Lagoon	Dispersed Water Management	Underway	09/2022	CIRL (Central Indian River Lagoon)	Impaired	SJRWMD	SJRWMD07	TBD	TBD	SEB	Not provided
Lake Apopka Innovative Total Phosphorus 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	09/2022	Upper Ocklawaha River Basin	Impaired	SJRWMD	LAP58	17,390 one-time reduction	-	Lake Apopka Basin	31,000
Lake Apopka Interconnect Across Lake Level Canal	Design and construct infrastructure to move water between the Duda and Zellwood portions of the Lake Apopka North Shore to better manage water and reduce the nutrient load to Lake Apopka	Impoundment	Underway	11/2021	Upper Ocklawaha River Basin	Impaired	SJRWMD	LAP56	NA	115	Lake Apopka Basin	2,500
Totals									40,390	3,015		33,500



Appendix A: 2022–2026 Strategic Plan

ST. JOHNS RIVER WATER MANAGEMENT DISTRICT



2022–2026 STRATEGIC PLAN



September 2021

Message from the Chair

I am proud to present the 2022 Strategic Plan on behalf of my fellow St. Johns River Water Management District Governing Board members and the 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. The District is focused on ensuring a long-term supply of water for drinking, water for agricultural use, and other community requirements for water. Another District priority is protecting the health of water bodies in the District's 18 counties in northeast and east-central Florida.

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

My fellow Governing Board members and I recognize that we can achieve more for the benefit of Florida's environment and residents 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.



Douglas Burnett, Chairman

It is also important to point out that while the District is supporting an unprecedented number of projects, it is crucial that our mission continues to be both efficient and effective.

We are thankful 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.

Governing Board Members

- **Douglas Burnett**
Chairman, St. Augustine
- **Rob Bradley**
Vice Chairman, Fleming Island
- **Ron Howse**
Treasurer, Cocoa
- **Ryan Atwood**
Mount Dora
- **Doug Bournique**
Vero Beach
- **Maryam Ghyabi-White**
Ormond Beach
- **Cole Oliver**
Merritt Island
- **J. Chris Peterson**
Winter Park
- **Janet Price**
Fernandina Beach

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 2020, an estimated 5,656,395 people resided within the District’s boundaries, a population that is projected to reach approximately 6,600,000 by the year 2040.

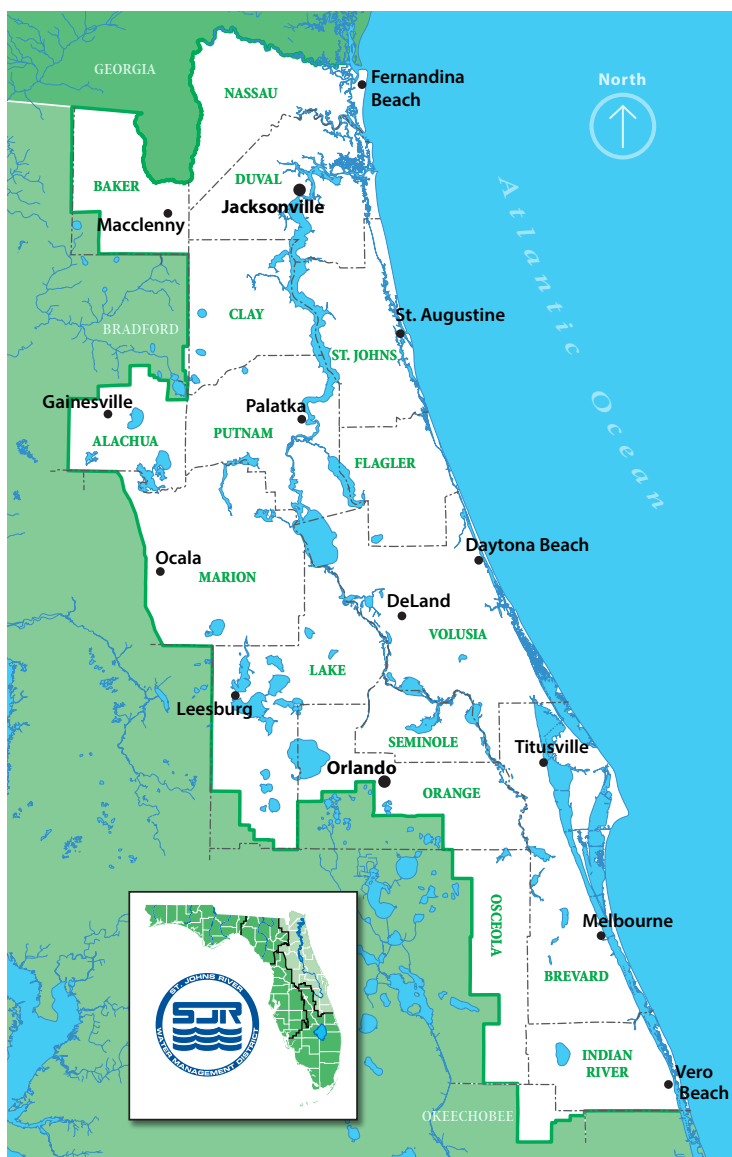


Figure 1 — St. Johns River Water Management District



District Governing Board members declared April 2021 as Water Conservation Month. Left to right are Governing Board members J. Chris Peterson, Doug Bournique, Susan Dolan, Gen. Douglas Burnett (chairman) and Rob Bradley; District Executive Director Dr. Ann Shortelle; District General Counsel Mary Ellen Winkler; and Board members Janet Price and Cole Oliver (Not pictured: Board member Ron Howse)

The District's original focus on flood control has been 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 115 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 12 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 783,332 acres of land (through transfers, donations, fee-simple purchases, and less-than-fee acquisitions). The District is projected to fund 529 full-time equivalent positions (FTEs) in Fiscal Year (FY) 2021–22. 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. 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 Apopka (temporarily at University of Florida's Institute of Food and Agricultural Sciences), and various field stations.



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.

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 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 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.



Water jugs demonstrate the success of filtering tannins from the water of Black Creek during a March 26, 2021, event that provided an update on the Black Creek Water Resource Development project.

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 regional water supply planning areas identified to address local resource concerns are the Central Florida Water Initiative (CFWI) RWSP area, Central Springs / East Coast (CSEC) RWSP area, and the North Florida RWSP 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. In some cases, the District may develop projects as part of water supply plans that provide regional benefits. These projects are known as water resource development projects. The Black Creek Water Resource Development Project is among several projects identified in the North Florida Regional Water Supply Plan (NFRWSP) to help meet future water supply demands while protecting natural resources. This project, located 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 will divert up to 10 million gallons of water per day from the South Fork of Black Creek during wet weather high-flow periods. The project is also expected to contribute to regional MFLs recovery in lakes Brooklyn and Geneva.

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 StarSM 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



District staff work with students from Vanguard High School on a field trip to Silver Springs as part of the District's Blue School Grants Program.



As part of our ongoing work with the Central Florida Water Initiative, we're installing wetland monitoring wells and collecting soil samples, which help scientists better understand the connection between groundwater and wetlands.

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, especially on 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), Crane Creek/M-1 Canal Project 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



WATER QUALITY

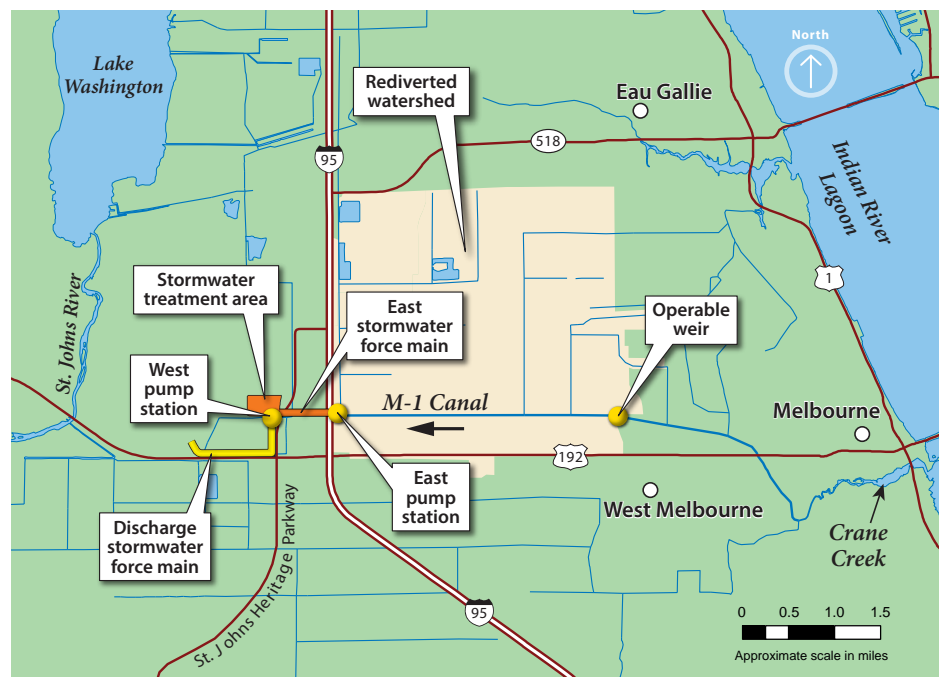
Protect and improve the waters of the District

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

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 “Achieving More Now for Florida’s Environment,” 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



Crane Creek project map

quality monitoring network. Monitoring provides a wealth of information that enables the District to make resource decisions based on accurate and timely information and documents the condition of more pristine waters, such as the St. Marys River. 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 protects 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; and 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, Beauclair, 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



A District environmental scientist collects a water sample at Rock Spring in Orange County.

scientifically sound approaches and projects to reduce or eliminate pollution-related problems. These projects are based upon comprehensive monitoring of the aquifer systems underlying the District. The District continues to facilitate cost-effective investment of the ongoing allocation by the Florida Legislature of at least \$50 million per year (\$75 million for State FY 2021–2022) 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



Officials with BlueGreen Water Technologies Ltd. demonstrate an innovative process to remediate blue-green algae during a pilot project at Lake Minneola.

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 2024. Also, future projects on Lake Jesup for nutrient removal and flow enhancement support DEP-adopted BMAPs to address water quality impairments, as does an ongoing innovative intact cellular algae harvesting project. 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 the 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



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

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.

Of the approximately 612,800 acres of land the District has acquired in fee (full and joint), District staff is responsible for managing approximately 421,000 acres. The remaining approximately 191,800 acres are managed by partners, including the Florida Fish and Wildlife Conservation Commission, Florida Forest Service, and a number of counties. In addition, the District also manages approximately 5,500 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



A District contractor with Aquatech Eco Consultants tosses native eelgrass into Lake Apopka as part of the District's replanting efforts to continue water quality recovery and to provide habitat for fish and wildlife.



The District's Lake Apopka North Shore includes a popular 11-mile wildlife drive, visited by more than 200,000 people annually.

has purchased conservation or flowage easements over approximately 162,700 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 percent of District land is open for recreation. In addition, the District has 96 active special use authorizations that 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, use of an adaptive management approach includes prescribed fire, hydrologic management, invasive species control, and native species planting. 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 32 grazing leases on approximately 46,175 acres and nine apiary leases on 58 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



FLOOD PROTECTION

Protect people, property and infrastructure

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

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 today, the District maintains 69 miles of canals in addition to the 115 miles of federal/District 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 continues to emphasize and support resiliency projects that incorporate multiple core missions, especially flood protection and water supply. In FY 2020–21, the District began developing green or nature-based infrastructure resiliency projects and continues to provide technical assistance to local governments that are addressing and planning for sea-level rise, flooding, and water supply issues. Additionally, as in the past, the District will continue to support projects like the FY 2014–15 Brevard County Oyster Reef Living Shorelines which, in addition to annual nutrient load reductions of 639 pounds (lbs.) of total nitrogen (TN) and 48 lbs. of total phosphorus (TP), provided native habitat restoration and shoreline stabilization; or the city of St. Augustine Davis Shores project that provided flood protection for 380 acres by reducing tidal flooding when king and lunar tides, which occur 12 to 16 times per year, back water up into roadways with the installation of 17 stormwater check valves; and the Riverside Conservancy Living Shoreline, located adjacent to the Mosquito Lagoon Aquatic Preserve in Volusia County, which will promote clean water, healthy habitats, and resilient communities while also creating a model for large-scale shoreline restoration efforts that can be utilized as mitigation for impacts to shorelines in the region.

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. The District has also



Flood control structures like the S-96D structure are among the semi-structural components of the Upper St. Johns River Basin Project.

purchased full-fee or flowage easements of riverine floodplain that provide non-structural water storage and flood management.

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 115 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.

In addition, the District is responsible for maintaining nearly 175 miles of non-federal, farm/project levees, several 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 also, in coordination and cooperation with the U.S. Geological Survey, operates a monitoring network that provides critical real-time hydrologic data to other agencies, 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 the 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 the District's emergency plan



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

SUPPORTING ACTIVITIES

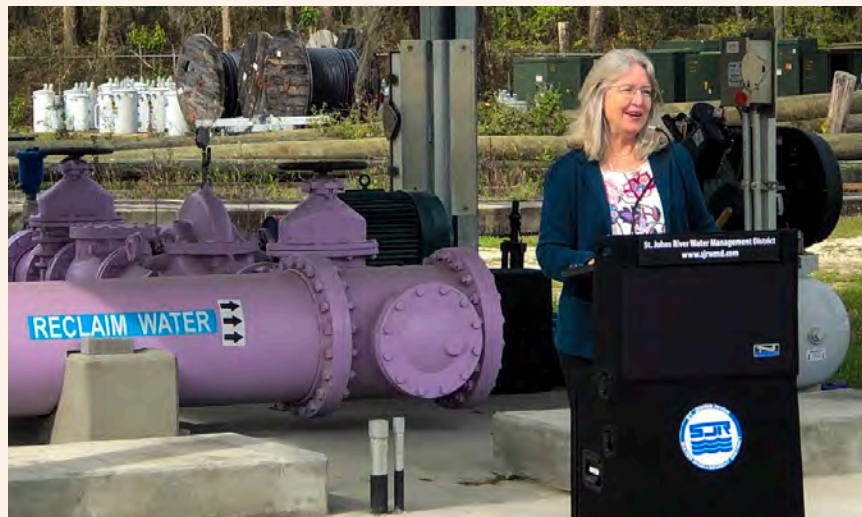
Provide exceptional service

The District strives for constant self-evaluation and improvement in all areas in order to successfully manage and protect our natural resources. The District’s 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 and 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 multiple cost-share programs on an annual basis to support the core mission areas; these are the Districtwide Program, Rural Economic



The District’s Water Less irrigation campaign includes two billboards along high-traffic roadways to help spread the water conservation message.



District Executive Director Dr. Ann Shortelle speaks at a groundbreaking ceremony in Green Cove Springs for a cost-share project to expand the city's wastewater treatment system, thereby improving water quality.

Development Initiative (REDI) Communities/Innovative Projects Program and the Agricultural Program.

The District, at the Governing Board's direction, has continued to grow its communications presence. This includes expanding outreach through social media tools, planning and attending events to celebrate our successes, and continuing to stay in touch with residents and give them a voice to share their priorities and concerns. In addition, the District's award-winning Water Less campaign has measurably increased awareness of the need for outdoor water conservation with surveyed respondents showing a willingness to reduce water use once equipped with actionable information. This holistic approach to communications allows us to drive messaging at the District and keep leadership well informed about emerging issues and innovative ideas.

Since the 2013–2014 fiscal year, the District has awarded more than \$284 million in cost-share funding toward projects with total construction costs of nearly \$732 million. Through these projects, estimated benefits include 192 mgd of alternative water supply developed, 22 mgd of water conserved, 2.3 million lbs./yr. total nitrogen reduction; more than 425,000 lbs./yr. reduction in total phosphorus, and over 5,100 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.

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

What we say is what we do

Partnership

We can achieve more together.

Accountability

We care about the work we do and how we do it.

Results

We provide effective solutions

Strategic Plan Annual Work Plan Report FY 2020–2021

The Strategic Plan Annual Work Plan Report for FY 2020–2021, a “report card” of how well the District achieved its FY 2020–2021 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/2022-SJRWMD-Consolidated-Annual-Report.pdf



St. Johns River Water Management District

Division of Strategic Planning and Initiatives

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