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2025 Five-Year Water Resource Development Work Program



St. Johns River Water Management District Palatka, Florida October 2024

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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) 2024–25 through FY 2028–29 and is consistent with the planning strategies of the District's RWSPs. Over the last five years, the District has approved three RWSPs. 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 <u>www.sjrwmd.com/water-supply/planning</u>.

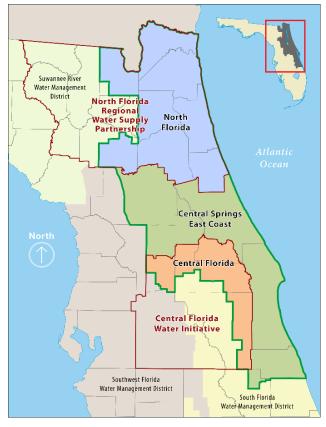
II. Regional Water Supply Planning

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 water supply 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, 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). The CFWI planning area covers all of Orange, Osceola, Seminole, and Polk counties and southern Lake County. The three water management districts approved the first CFWI RWSP in 2015, followed by the 2020 CFWI RWSP in November 2020. The 2025 CFWI RWSP is anticipated to be approved in November 2025.

The Central Springs/East Coast (CSEC) planning region includes all or part of six counties: Marion, Lake, Volusia, Brevard, Indian River, and Okeechobee. The District coordinated with



water users, neighboring water management districts (SFWMD and SWFWMD), and other stakeholders during development of the CSEC RWSP, which was approved by the District's Governing Board in February 2022. In FY 2024–25, the District will begin to work on updates to the CSEC RWSP, which will be completed in 2027.

In the North Florida planning region, the District has been working in partnership with Suwannee River Water Management District, DEP, and other stakeholders on regional water supply planning efforts. The North Florida Regional Water Supply Plan (NFRWSP) planning region includes Alachua, Baker, Bradford, Clay, Columbia, Duval, Flagler, Gilchrist, Hamilton, Nassau, Putnam, St. Johns, Suwannee, and Union counties. The two Districts approved the first NFRWSP in 2017, followed by an update in December 2023. The next RWSP update is anticipated in 2028.

Figure 1: Water supply	planning regions
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Planning Region	Current Water Supply Plan	Next Update
North Florida	2023	2028
Central Florida	2020	2025
Central Springs/East Coast	2022	2027

Through the planning process, the District updates the following 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 127.44 million gallons per day (mgd) of water, including reuse and non-reuse water. These benefits are associated with approximately \$273.7 million budgeted for the five-year Work Program from FY 2024–25 through FY 2028–29.

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 25.5 mgd of reuse and non-reuse water upon completion. Of that, approximately 20.7 mgd of reuse and non-reuse water upon completion benefits a water body with an approved recovery or prevention strategy.

IV. Water Resource and Water Supply Development

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

¹ Section 373.019(24), F.S.

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

The District addresses funding needs and identifies possible sources of funding for WRD, WC and/or AWS projects. Florida water law identifies two types of projects used to help provide the state with adequate water supply or those that ensure natural systems are protected. Water resource development projects are generally the responsibility of the District while WSD projects (AWS and WC) are generally the responsibility of the local entities and/or water suppliers. To support the core mission areas, the District currently manages projects within two historic cost-share programs and two active cost-share programs:

Historic cost-share programs

- Districtwide Cost-share Program
- Rural Economic Development Initiative (REDI) Communities / Innovative Projects Cost-share Program

Active cost-share programs

- Districtwide Agricultural Cost-share Program
- 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 an average of 77 abandoned artesian wells per year. The amount of water conserved through this program is potentially as high as 811 million gallons per day as of 2024. During FY 2023–24, the District abandoned 213 wells.

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 over 1,200 hydrologic

² Section 373.019(26), F.S.

surface and groundwater monitoring stations and cooperatively funds U.S. Geological Survey data collection at 66 locations. More than 14 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, lakes, and wetlands, and 465 wells 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.

Minimum Flows and Levels Program:

- The District continues to implement the Recovery Strategy for the MFLs on Lakes Brooklyn and Geneva. The Black Creek Water Resource Development Project is currently under construction. This project will provide additional recharge water to the Upper Floridan aquifer and will help to achieve the MFLs for these two lakes. The primary focus of the MFLs Program has now shifted to the re-evaluation and establishment of MFLs in central Florida.
- A list of MFLs and Water Reservations currently under development can be found on the District's website at: <u>www.sjrwmd.com/minimumflowsandlevels</u>.

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	•
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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	Lakes Brooklyn and Lake Geneva	7.000		
C-10 Water Management Area	Surface Water	SJR CSEC		8.000		
City of Crescent City Prospect Street Water Main Replacement	PS and CII Conservation	SJR NFRWSP		0.010		
City of DeLand Reclaimed Water Main Extension — Phase 5	Reclaimed Water (for potable offset)	SJR CSEC	Volusia Blue Spring	1.470		
City of Deltona Alexander Avenue Water Resources Facility Phase 4B	Surface Water	SJR CSEC	Volusia Blue Spring			
City of Flagler Beach Wastewater Treatment Facility Upgrade	Other Project Type	SJR NFRWSP	Lakes Brooklyn and Geneva	0.100		
City of Green Cove Springs Harbor Road Water Reclamation Facility Phase 2	Reclaimed Water (for potable offset)	SJR NFRWSP	Lakes Brooklyn and Geneva	1.250		
City of Groveland Lower Floridan Aquifer Well for Reclaimed Water at Sunshine Road	Other Non-Traditional Source	SJR CFWI	North and South Lake Apshawa	2.300		
City of Groveland South Lake County Lower Floridan Wellfield Project — Distributed	Other Non-Traditional Source	SJR CFWI		4.300		
City of Minneola AWS Reclaimed Water Project	Reclaimed Water (for potable offset)	SJR CFWI			0.500	0.070
City of Ocala Lower Floridan Aquifer Conversion (All Phases)	Other Non-Traditional Source	SJR CSEC	Silver Springs	7.500		
City of Orange City Industrial Drive Flood Control and Water Quality Enhancement	Distribution/Transmission Capacity	SJR CSEC	Volusia Blue Spring		0.004	
City of Palatka Water Main Improvements — Madison Street	PS and CII Conservation	SJR NFRWSP	Lakes Brooklyn and Geneva	0.004		

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 Vero Beach Canal to Irrigation Water Project	Surface Water	SJR CSEC		3.000		
Crane Creek / M-1 Canal Flow Restoration	Stormwater	SJR CSEC		7.000		
Crescent Lake Fernery, LLC Irrigation Retrofit	Agricultural Conservation	SJR NFRWSP		0.030		
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	Surface Water	SJR CSEC		18.000		1,372.000
Equity Lifestyles Properties Oak Bend / I-75 Water Quality Improvement	Reclaimed Water (for potable offset)	SJR CSEC	Silver Springs		0.010	
Equity Lifestyles Properties Spanish Oaks Water Quality Improvement	Reclaimed Water (for potable offset)	SJR CSEC	Silver Springs		0.030	
Florida Blue Farms Irrigation Retrofit	Agricultural Conservation	SJR NFRWSP	Lakes Brooklyn and Geneva	0.004		
Gainesville Regional Utilities Water Efficient Toilet Exchange Program	PS and CII Conservation	SJR NFRWSP	Lake Geneva, Lake Brooklyn, Lower Santa Fe River, and Ichetucknee River	0.010		
Island Grove Irrigation Retrofit Phase 2	Agricultural Conservation	SJR NFRWSP	Lakes Brooklyn and Geneva	0.006		
JEA Demand-Side Management Water Conservation Program	Water Resource Management Programs	SJR NFRWSP	Lakes Brooklyn and Geneva	1.500		
JEA H2.0 Purification Demonstration Facility	Other Project Type	SJR NFRWSP	Lakes Brooklyn and Geneva	1.000		
JEA Ozone Pilot Study	Other Project Type	SJR NFRWSP				
Long and Scott Farms Irrigation Conversion	Agricultural Conservation	SJR CSEC		0.050		

Project Name	Project Type	RWSP Region Supported	Primary MFL Supported	Quantity of Water Made Available upon Completion (mgd)	Reuse Flow Made Available upon Project Completion (mgd)	Storage Capacity Created (MG)
Orange County Utilities Cypress Lake Wellfield — Oak Meadows Alternative Water Supply Delivery Enhancements	Brackish Groundwater	SJR CFWI		2.000		
Orange County Utilities Water Conservation with Advanced Targeting Phase 2	PS and CII Conservation	SJR CFWI	Wekiva Basin	0.070		
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 2	Reclaimed Water (for potable offset)	SJR CFWI	Wekiva Basin		0.042	
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 3	Reclaimed Water (for potable offset)	SJR CFWI	Wekiva Basin		0.050	
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 4	Reclaimed Water (for potable offset)	SJR CFWI	Wekiva Basin		0.100	
Orlando Utilities Commission Water Conservation Rebates	PS and CII Conservation	SJR CFWI		0.020		
Seminole County Toilet Rebate Program Phase 2	PS and CII Conservation	SJR CFWI		0.040		
St. Johns County Northwest and Southwest Reuse Storage Tanks	Other Project Type	SJR NFRWSP	Lakes Brooklyn and Geneva	1.330		
St. Johns County State Road 16 and County Road 2209 Reclaimed Water Transmission Main Upsizing	Distribution/Transmission Capacity	SJR NFRWSP	Lakes Brooklyn and Geneva	0.930		2.000
Sunshine Water Services Oranges Lower Floridan Well	Other Non-Traditional Source	SJR CFWI		4.000		
Tater Farms Soil Moisture Sensors	Agricultural Conservation	SJR NFRWSP	Lakes Brooklyn and Geneva	0.380		
Taylor Creek Reservoir Improvements	Surface Water	SJR CFWI		54.000		
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	Other Non-Traditional Source	SJR CSEC		1.000		

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 Southwest Regional Wastewater Reclamation Facility	Reclaimed Water (for potable offset)	SJR CSEC	Volusia Blue Spring	0.390		5.000
Withlacoochee Regional Water Supply Authority Regional Irrigation System Evaluation Program	PS and CII Conservation	SJR CSEC	Silver Springs	0.010		
Totals:				125.23	2.21	1,379.07

Note: Storage capacity created is in million gallons (MG)

Project Name	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28	FY 2028–29	Total*
Black Creek Water Resource Development Project	\$44,784,335.05	\$6,340,000.00	\$2,440,000.00	\$2,440,000.00	\$2,440,000.00	\$58,444,335.05
C-10 Water Management Area	\$1,500,000.00		\$20,000,000.00	\$27,500,000.00	\$17,500,000.00	\$66,500,000.00
City of Crescent City Prospect Street Water Main Replacement	\$1,000,000.00					\$1,000,000.00
City of DeLand Reclaimed Water Main Extension — Phase 5	\$1,367,900.69					\$1,367,900.69
City of Deltona Alexander Avenue Water Resources Facility Phase 4B						
City of Flagler Beach Wastewater Treatment Facility Upgrade						
City of Green Cove Springs Harbor Road Water Reclamation Facility Phase 2	\$92,245.50					\$92,245.50
City of Groveland Lower Floridan Aquifer Well for Reclaimed Water at Sunshine Road	\$788,067.42					\$788,067.42
City of Groveland South Lake County Lower Floridan Wellfield Project — Distributed	\$2,251,240.00					\$2,251,240.00
City of Minneola AWS Reclaimed Water Project	\$1,260,000.00					\$1,260,000.00
City of Ocala Lower Floridan Aquifer Conversion (All Phases)	\$3,205,700.00					\$3,205,700.00
City of Orange City Industrial Drive Flood Control and Water Quality Enhancement	\$1,310,639.75					\$1,310,639.75
City of Palatka Water Main Improvements — Madison Street	\$500,000.00					\$500,000.00
City of Vero Beach Canal to Irrigation Water Project	\$2,189,753.00					\$2,189,753.00

Table 3: Five-Year Work Program / Fund	ing Projections
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Project Name	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28	FY 2028–29	Total*
Crane Creek / M-1 Canal Flow Restoration	\$7,877,648.80	\$125,000.00	\$125,000.00	\$125,000.00	\$125,000.00	\$8,377,648.80
Crescent Lake Fernery, LLC Irrigation Retrofit	\$36,390.00					\$36,390.00
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	\$6,846,987.05	\$768,947.67	\$768,947.67	\$768,947.67	\$768,947.67	\$9,922,777.73
Equity Lifestyles Properties Oak Bend / I-75 Water Quality Improvement	\$1,653,187.49					\$1,653,187.49
Equity Lifestyles Properties Spanish Oaks Water Quality Improvement	\$1,447,662.79					\$1,447,662.79
Florida Blue Farms Irrigation Retrofit	\$41,325.00					\$41,325.00
Gainesville Regional Utilities Water Efficient Toilet Exchange Program	\$52,500.00					\$52,500.00
Island Grove Irrigation Retrofit Phase 2	\$56,175.00					\$56,175.00
JEA Demand-Side Management Water Conservation Program	\$1,638,388.34					\$1,638,388.34
JEA H2.0 Purification Demonstration Facility	\$3,000,000.00					\$3,000,000.00
JEA Ozone Pilot Study	\$3,000,000.00					\$3,000,000.00
Long and Scott Farms Irrigation Conversion	\$93,780.00					\$93,780.00
Orange County Utilities Cypress Lake Wellfield — Oak Meadows Alternative Water Supply Delivery Enhancements	\$734,786.00					\$734,786.00
Orange County Utilities Water Conservation with Advanced Targeting Phase 2	\$110,154.13					\$110,154.13

Project Name	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28	FY 2028–29	Total*
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 2	\$1,040,066.50					\$1,040,066.50
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 3	\$2,550,000.00					\$2,550,000.00
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 4	\$3,000,000.00					\$3,000,000.00
Orlando Utilities Commission Water Conservation Rebates	\$33,900.00					\$33,900.00
Seminole County Toilet Rebate Program Phase 2	\$10,000.00					\$10,000.00
St. Johns County Northwest and Southwest Reuse Storage Tanks						
St. Johns County State Road 16 and County Road 2209 Reclaimed Water Transmission Main Upsizing	\$2,534,678.26					\$2,534,678.26
Sunshine Water Services Oranges Lower Floridan Well	\$433,000.00					\$433,000.00
Tater Farms Soil Moisture Sensors	\$66,825.00					\$66,825.00
Taylor Creek Reservoir Improvements	\$10,216,073.42	\$20,000,000.00	\$35,000,000.00	\$27,670,000.00		\$92,886,073.42
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	\$321,779.35					\$321,779.35
Volusia County Southwest Regional Wastewater Reclamation Facility	\$1,749,596.00					\$1,749,596.00
Withlacoochee Regional Water Supply Authority Regional Irrigation System Evaluation Program	\$15,000.00					\$15,000.00
Totals:	\$108,809,784.54	\$27,233,947.67	\$58,333,947.67	\$58,503,947.67	\$20,833,947.67	\$273,715,575.22

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
Black Creek Water Resource Development Project	The project includes an intake structure on the South Fork of Black Creek to capture water during periods of higher flows, pump station, transmission pipeline, and treatment/recharge system to recharge the Upper Floridan aquifer in northeast Florida.	Construction/Underway	6/01/2022	12/31/2025
C-10 Water Management Area	The project includes the construction of a stormwater pump station and 1,300-acre water management area.	Design	5/17/2027	5/30/2030
City of Crescent City Prospect Street Water Main Replacement	The project includes replacement of approximately 6,900 LF of aged and deteriorated distribution system piping, hydrants, and services on the city's Prospect Street and Florida Avenue.	Construction/Underway	7/31/2024	9/30/2025
City of DeLand Reclaimed Water Main Extension — Phase 5	The project includes the installation of 4,700 linear feet (LF) of reclaimed water main and 13,500 LF of reclaimed distribution main to serve the Cross Creek subdivision and community park.	Construction/Underway	10/16/2023	6/30/2025
City of Deltona Alexander Avenue Water Resources Facility Phase 4B	Construct a pump station and transmission main with associated infrastructure to provide surface water from Lake Monroe to the Alexander Avenue Water Resources Facility for reclaimed water supplementation and recharge projects.	Cancelled		
City of Flagler Beach Wastewater Treatment Facility Upgrade	The project includes infrastructure improvements at the Flagler Beach wastewater treatment facility to advanced wastewater treatment standards.	Design		
City of Green Cove Springs Harbor Road Water Reclamation Facility: Phase 2	The project includes replacement of the existing WWTF with a water reclamation facility (WRF) that includes biological nutrient removal capabilities.	Construction/Underway	3/23/2021	12/27/2024
City of Groveland Lower Floridan Aquifer Well for Reclaimed Water at Sunshine Road	Construction of one LFA production well at Groveland's S. Lake County Wellfield.	Construction/Underway	8/29/2022	12/31/2024
City of Groveland South Lake County Lower Floridan Wellfield Project — Distributed	Construct two Lower Floridan aquifer production wells to provide non- traditional water to meet future demands.	Design	1/01/2025	12/30/2025
City of Minneola AWS Reclaimed Water Project	Construction of reclaimed piping, pumps, and backup source connection.	Construction/Underway	7/01/2024	9/30/2026
City of Ocala Lower Floridan Aquifer Conversion (All Phases)	Construction of three Lower Floridan aquifer wells at Water Treatment Plant #2.	Construction/Underway	1/10/2022	9/30/2025
City of Orange City Industrial Drive Flood Control and Water Quality Enhancement	The project includes construction of approximately 3,200 linear feet of reclaimed water main extension with laterals to serve 44 new customers.	Design	10/31/2024	9/30/2026

Table 4: Project Descriptions

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
City of Palatka Water Main Improvements — Madison Street	The project includes replacing approximately 1,981 LF of aged and failing cast iron pipe, within Palatka's central downtown area, with PVC to eliminate leaks and line breakage.	Construction/Underway	9/26/2024	3/31/2025
City of Vero Beach Canal to Irrigation Water Project	Construction of 29,150 LF of water main to transmit treated canal water for use in irrigation.	Construction/Underway	6/10/2024	9/30/2025
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.	Construction/Underway	5/01/2023	4/30/2025
Crescent Lake Fernery, LLC Irrigation Retrofit	The recipient plans to perform an irrigation retrofit on 12.2 acres of cut foliage.	Construction/Underway	8/01/2024	12/30/2024
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. Actual construction period is 18 months. Annual performance payments span length of contract which ends in 2034.	Construction/Underway	1/01/2024	9/30/2034
Equity Lifestyles Properties Oak Bend / I-75 Water Quality Improvement	Demolition of an existing private wastewater package plant, then designing, permitting, and constructing a lift station that will connect to a central wastewater collection system.	Construction/Underway	6/14/2024	5/30/2025
Equity Lifestyles Properties Spanish Oaks Water Quality Improvement	Demolition of an existing private wastewater package plant, then designing, permitting, and constructing a lift station that will connect to a central wastewater collection system.	Construction/Underway	5/28/2024	6/30/2025
Florida Blue Farms Irrigation Retrofit	Recipient plans to install an irrigation retrofit on approximately 26 acres of blueberries.	Construction/Underway	3/14/2024	12/30/2024
Gainesville Regional Utilities Water Efficient Toilet Exchange Program	This project includes providing Gainesville Regional Utility (GRU) customers with high-efficient toilets in exchange for older, inefficient toilets through the GRU Water Efficient Toilet Exchange Program. The estimated water conservation benefit is 0.01 mgd.	Design	11/15/2024	12/31/2026
Island Grove Irrigation Retrofit Phase 2	Recipient plans to install an irrigation retrofit on approximately 54 acres of blueberries.	Construction/Underway	3/14/2024	12/30/2024
JEA Demand-Side Management Water Conservation Program	Implementation of a comprehensive Water conservation program that will provide useful benefits to reduce water demand for existing groundwater/reclaimed water.	Construction/Underway	10/01/2022	9/30/2025
JEA H2.0 Purification Demonstration Facility	JEA is constructing a 1 million gallon per day (mgd) water purification demonstration facility to further purify reclaimed water to drinking water quality.	Construction/Underway	11/01/2023	9/30/2025

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
JEA Ozone Pilot Study	An ozone/wetland pilot study at Buckman Water Reclamation Facility (WRF) is being conducted to evaluate the feasibility of constructed wetlands, with and without ozonation pre-treatment, to remove organics, nutrients, and other contaminants of emerging concern from the treated effluent.	Design	8/01/2024	9/30/2026
Long and Scott Farms Irrigation Conversion	This project involves converting from seepage to drip on 90 acres of mixed vegetables.	Construction/Underway	10/01/2023	3/14/2025
Orange County Utilities Cypress Lake Wellfield — Oak Meadows Alternative Water Supply Delivery Enhancements	Installation of variable frequency drives on the pumps at the Oak Meadows Water Supply Facility.	Construction/Underway	11/20/2023	3/31/2025
Orange County Utilities Water Conservation with Advanced Targeting Phase 2	The program includes rebates for irrigation retrofits and toilet replacements and provision of EPA WaterSense® devices for inside the home.	Construction/Underway	6/06/2023	9/30/2024
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 2	Abandonment of 152 septic tanks and connection to central sewer.	Construction/Underway	1/18/2023	12/31/2024
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 3	Abandonment of 213 septic tanks and connection to central sewer.	Construction/Underway	10/31/2023	3/31/2025
Orange County Wekiwa Springs Septic Tank Retrofit Project Phase 4	Abandonment of 352 septic tanks and connection to central sewer.	Design	1/01/2025	9/30/2026
Orlando Utilities Commission Water Conservation Rebates	Rebates for high-efficiency toilets, Energy Star® clothes washers, high-efficiency sprinklers, and rain sensors.	Construction/Underway	3/01/2024	9/30/2025
Seminole County Toilet Rebate Program Phase 2	The program includes a toilet rebate program to incentivize replacement of existing high-volume toilets with low flow toilets.	Construction/Underway	11/01/2023	3/31/2025
St. Johns County Northwest and Southwest Reuse Storage Tanks	The project includes construction of two reclaimed water ground storage tanks and one booster pump station that will supply reclaimed water to new residential customers in the northwest service area.	Design		
St. Johns County State Road 16 and County Road 2209 Reclaimed Water Transmission Main Upsizing	This project includes the upsizing of an existing reclaimed water line from 8-inch to 16-inch and 20-inch running from SR 16 wastewater treatment facility (WWTF) to World Golf Village. A 2 MG Reuse Storage Tank and Pump Station will be constructed	Construction/Underway	2/12/2024	9/30/2025
Sunshine Water Services Oranges Lower Floridan Well	Construction of one LFA well and pump to connect to existing treatment system.	Construction/Underway	10/01/2023	12/31/2024
Tater Farms Soil Moisture Sensors	This project involves purchasing soil moisture sensors for 2,300 acres of sod.	Construction/Underway	8/16/2024	12/30/2024

Project Name	Project Description	Project Status	Construction Beginning Date	Construction Completion Date
Taylor Creek Reservoir Improvements	The project involves raising and improving L-73 Section 1 (L-73) and modifying the operating schedule to help increase alternative water supply availability. Subsequent phases involve the water supply entities constructing water treatment and transmission mains, including a raw water intake.	Design	2/01/2027	1/30/2030
Town of Howey-in-the-Hills Lower Floridan Aquifer Project	Construction of two LFA wells at the existing UFA wellfield to shift groundwater withdrawal.	Construction/Underway	7/20/2023	9/30/2024
Volusia County Southwest Regional Wastewater Reclamation Facility	The project involves the construction of a lift station, 1.5 MG equalization basin, headworks facility, 5.0 MG ground storage tank, high service pumps, and associated piping.	Design	11/01/2024	1/31/2026
Withlacoochee Regional Water Supply Authority Regional Irrigation System Evaluation Program	The project includes irrigation system retrofits for residential customers within the District's portion of the Withlacoochee Regional Water Supply Authority service area.	Construction/Underway	11/30/2023	5/22/2025

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.

Table 5: **BMAP Appendix**

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 Freated
C-1 Canal Baseflow Treatment	Project involves pumping water from C-1 Canal into an innovative media- based treatment system to remove nutrients and then discharging the treated water downstream.	In Waterbody - Biological/ Bacteria Treatment	Cancelled		CIRL	SJRWMD	SJRWMD-14	0	0	A	0
C-10 Water Management Area Project	Construction of a 1,300 acre reservoir with pump station and outfall structure designed to increase the flow restoration to the St. Johns River of the C-1 Rediversion Project to a total of 50% of the average annual flow.	Hydrologic Restoration	Planned	5/30/2030	CIRL	SJRWMD	SJRWMD-05	0	0	A	TBD
Cover Crop in Citrus Middles - Richard Davis	This project involves purchasing equipment for the establishment of cover crop in citrus row middles.	Agricultural BMPs	Completed	9/30/2024	OKLA	SJRWMD	UOB13	201	44	Upper Ocklawaha Basin	25
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 Upper St. Johns River Basin.	Hydrologic Restoration	Construction	4/30/2025	CIRL	SJRWMD	SJRWMD-06	24,000	3,100	A	5,300

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 Freated
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	The District is evaluating use of groves and private lands for retention. Project will create a ~2000-acre reservoir that should store about 18 MGD and reduce ~24 metric tons (MT) TN and 3 MT TP annually. Costs are for 5 years of operations.	Dispersed Water Management (DWM)	Underway	9/30/2034	CIRL	SJRWMD	SJRWMD-07	13,595	7,704	SEB	0
Doctors Lake Advanced Effluent Treatment	A full scale pay-for- performance (ongoing) project to remove TP from the Doctors Lake WWTP effluent. The goal of the project is to demonstrate that nutrient treatment technologies can cost- effectively remove TP from wastewater effluent water.	WWTF Nutrient Reduction	Underway	1/10/2026	LSJM	SJRWMD	SJRWMD-01	0	6,500	Marine	10
Doctors Lake Advanced Effluent Treatment	A full scale pay-for- performance (ongoing) project to remove TP from the Doctors Lake WWTP effluent. The goal of the project is to demonstrate that nutrient treatment technologies can cost- effectively remove TP from wastewater effluent water.	WWTF Nutrient Reduction	Underway	1/10/2026	LSJM	SJRWMD	SJRWMD-01	0	1,447	Freshwater	0

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 Freated
Emeralda Marsh Conservation Area - Area 3 Hydrologic Improvement	Improve hydrologic connection between Lake Griffin and Area 3 of EMCA.	Wetland Restoration	Completed	9/30/2024	OKLA	SJRWMD	GRIF51	0	0	Lake Griffin Basin	500
Emeralda Marsh Conservation Area 5 Peat Removal - Lake Jem Farms	Multi-year lease issued to Florida Potting Soils (FPS) for removal of peat. FPS monitors TP levels and applies treatment, as needed, under the requirements of the TMDLs for Lake Griffin. Anticipate future reconnection to Lake Griffin.	Natural Wetlands as Filters	Underway	9/30/2032	OKLA	SJRWMD	GRIF50	0	0	Lake Griffin Basin	1,320
GPS Fertilizer Equipment - May and Whitaker BB LLC	This project includes the purchase and implementation of GPS rate-controlled fertilizer application equipment on approximately 88 acres of blueberries.	Agricultural BMPs	Completed	2/29/2024	OKLA	SJRWMD	YALE16	871	128	Lake Yale Basin	88
Heather Island /Ocklawaha River Project	Land acquired to date 6,262 acres. SJRWMD (4,465 acres) with surface water improvements underway. Identified as Phase 2 of the Silver Springs Watershed Forest Legacy project. Acreage remaining for purchase is 13,658.	Land Acquisition			SILV	SJRWMD	S117	0	0	Silver Springs Basin	19,920

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 Freated
Irrigation Conversion - Long and Scott Farms	This project involves performing an irrigation conversion from seepage to drip on approximately 90 acres of vegetables.	Agricultural BMPs	Underway	3/14/2025	OKLA	SJRWMD	LAP78	490	0	Lake Apopka Basin	90
Irrigation Conversion - Long and Scott Farms	This project involves performing an irrigation conversion from seepage to drip on approximately 90 acres of vegetables.	Agricultural BMPs	Underway	3/14/2025	WEKS	SJRWMD	SJRWMD-03	37	0	Basinwide	90
Irrigation Retrofit 3 - Wild Goose Farms	This project involves performing an irrigation retrofit on approximately 13 acres of blueberries.	Agricultural BMPs	Completed	9/30/2024	OKLA	SJRWMD	EUS40	48	7	Lake Eustis Basin	13
Lake Apopka Innovative TP Removal	Internal load projects are not credited toward modeled loading. The project will utilize an innovative treatment technology, and the SJRWMD will pay a pre-negotiated rate for each pound of TP removed from Lake Apopka's water column. 5,000 lbs/yr TP.	Stormwater System Upgrade	Underway	12/31/2024	OKLA	SJRWMD	LAP58	0	0	Lake Apopka Basin	31,000
Lake Jesup Mesocosm	Experimental mesocosms will contain different amendments to observe which has the highest efficacy of phosphorus water column removal.	Study	Underway	9/30/2024	JESU	SJRWMD	SJRWMD-01	0	0	JESU	0

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 Freated
Lake Jesup Nutrient Reduction Project	Design, construct, and operate a nutrient removal system using biosorption activated media-based technology that cost- effectively removes TN and TP from Lake Jesup. The project will pump raw water from the lake, treat influent, and discharge back to Jesup.	In Waterbody - Biological/ Bacteria Treatment	Underway	9/30/2027	JESU	SJRWMD	SJRWMD-03	0	0	JESU	16,000
Loch Haven Water Quality and Flood Control	Feasibility study followed by design and construction of projects related to water quality improvement and stormwater infrastructure improvement.	Stormwater System Rehabilitation	Planned	TBD	JESU	SJRWMD	SJRWMD-04	0	0	JESU	100
Prairie Creek Diversion Structure Replacement	The current water control structure at Camps Canal regulates flow from Prairie Creek to Paynes Prairie and Orange Lake. Replacement of the structure will allow for open and closures as needed.	Control Structure			ORCR	SJRWMD	OR31	0	0	Orange Lake Basin	0
Precision Fertilizer Application 2 - May and Whitaker Family Partnership	This project involves the purchase and implementation of variable rate fertilizer application equipment on approximately 60 acres of citrus.	Agricultural BMPs	Completed	9/30/2024	OKLA	SJRWMD	YALE19	442	97	Lake Yale Basin	60

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 Гreated
Precision Fertilizer Application Equipment - May and Whitaker Family Partnership	This project involves the purchase and implementation of precision fertilizer application equipment with tree sensing technology on approximately 265 acres of citrus.	Agricultural BMPs	Completed	2/29/2024	OKLA	SJRWMD	YALE17	2,926	640	Lake Yale Basin	265
Removal of Gizzard Shad	Internal load projects are not credited toward modeled loading. Harvest of gizzard shad by commercial fishermen. Reduces recycling of nutrients from sediments and resuspension (TSS). Estimated reductions: 20,927 lbs/yr TN; 7,946 lbs/yr TP.	Fish Harvesting	Underway	9/30/2028	OKLA	SJRWMD	LAP08	0	0	Lake Apopka Basin	0
SJRWMD Submerged Aquatic Vegetation (SAV) and Algae Monitoring	SJRWMD monitors SAV and algae annually on the Silver River between April and June. SJRWMD staff estimate SAV cover by species and algal cover collectively, using 0.25 square-meter quadrats and the Braun-Blanquet cover scale.	Monitoring/D ata Collection	Underway	NA	SILV	SJRWMD	S137	0	0	Silver Springs Basin	0

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 Freated
SJRWMD Water Resource Information and Data Collection	SJRWMD has core monitoring consisting of discharge monitoring, surface and ground water levels, surface and ground water quality, and biological monitoring.	Monitoring/D ata Collection	Underway	NA	SILV	SJRWMD	S068	0	0	Silver Springs Basin	0
West Marsh Restoration	Improve water quality in the marsh, and subsequently, in Lake Apopka. Reducing phosphorus loading to the lake (diet project) helps Lake Apopka to meet existing TMDLs. Project includes flood control and improved habitat for operation and maintenance and recreational uses.	Wetland Restoration	Planned	12/31/2024	OKLA	SJRWMD	LAP79	0	0	Lake Apopka Basin	2,500
Totals								42,610	14,614		77,281

BMAP Appendix Table										
Project Name	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28	FY 2028–29	Total	Total State Funding	Total District Funding	Lead Entity Match	Project Total
C-1 Canal Baseflow Treatment										
C-10 Water Management Area Project	\$1,500,000.00		\$20,000,000.00	\$27,500,000.00	\$17,500,000.00	\$66,500,000.00	\$20,136,629.00	\$41,000,000.00		\$71,000,000.00
Cover Crop in Citrus Middles - Richard Davis								\$24,281.25	\$8,093.75	\$32,375.00
Crane Creek / M-1 Canal Flow Restoration	\$7,877,648.80	\$125,000.00	\$125,000.00	\$125,000.00	\$125,000.00	\$8,377,648.80	\$2,450,000.00	\$13,907,391.00		\$23,600,000.00
Dispersed Water Storage / Nutrient Reduction Pilot Project with Fellsmere Joint Venture	\$6,846,987.05	\$768,947.67	\$768,947.67	\$768,947.67	\$768,947.67	\$9,922,777.73		\$16,400,000.00		\$16,400,000.00
Doctors Lake Advanced Effluent Treatment	\$1,323,442.30					\$1,323,442.30	\$4,250,000.00	\$825,000.00		\$5,075,000.00
Doctors Lake Advanced Effluent Treatment	\$1,323,442.30					\$1,323,442.30	\$4,250,000.00	\$825,000.00		\$5,075,000.00
Emeralda Marsh Conservation Area - Area 3 Hydrologic Improvement							\$225,000.00			\$225,250.00

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2025 Five-Year Water Resource Development Work Program

Project Name	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28	FY 2028–29	Total	Total State Funding	Total District Funding	Lead Entity Match	Project Total
Emeralda Marsh Conservation Area 5 Peat Removal - Lake Jem Farms										
GPS Fertilizer Equipment - May and Whitaker BB LLC								\$21,451.50	\$7,150.50	\$28,602.00
Heather Island /Ocklawaha River Project										
Irrigation Conversion - Long and Scott Farms	\$93,780.00					\$93,780.00		\$93,780.00	\$31,260.00	\$125,040.00
Irrigation Conversion - Long and Scott Farms	\$93,780.00					\$93,780.00		\$93,780.00	\$31,260.00	\$125,040.00
Irrigation Retrofit 3 - Wild Goose Farms								\$39,266.40	\$13,088.80	\$52,355.20
Lake Apopka Innovative TP Removal	\$85,747.08					\$85,747.08	\$5,650,000.00	\$2,245,000.00		\$7,895,000.00
Lake Jesup Mesocosm							\$280,000.00	\$129,985.00		\$409,985.00
Lake Jesup Nutrient Reduction Project	\$673,981.35					\$673,981.35		\$19,700,576.00		\$19,700,576.00
Loch Haven Water Quality and Flood Control	\$1,350,000.00					\$1,350,000.00	\$1,350,000.00			\$1,350,000.00
Prairie Creek Diversion Structure Replacement										

2025 Five-Year Water Resource Development Work Program

Project Name	FY 2024–25	FY 2025–26	FY 2026–27	FY 2027–28	FY 2028–29	Total	Total State Funding	Total District Funding	Lead Entity Match	Project Total
Precision Fertilizer Application 2 - May and Whitaker Family Partnership								\$4,031.25	\$1,343.75	\$5,375.00
Precision Fertilizer Application Equipment - May and Whitaker Family Partnership								\$41,953.50	\$19,359.50	\$55,938.00
Removal of Gizzard Shad	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00	\$1,500,000.00		\$6,000,000.00		\$7,500,000.00		\$7,500,000.00
SJRWMD Submerged Aquatic Vegetation (SAV) and Algae Monitoring							\$199,664.00			\$199,664.00
SJRWMD Water Resource Information and Data Collection	\$989,608.00	\$991,910.00				\$1,981,518.00		\$989,608.00	\$481,650.00	\$1,471,258.00
West Marsh Restoration	\$232,865.00					\$232,865.00		\$232,865.00		\$232,865.00
Totals	\$22,901,673.88	\$2,393,947.67	\$22,393,947.67	\$29,893,947.67	\$18,393,947.67	\$95,977,464.56				