

## Introduction/Purpose

The Water Management Districts are required to prepare a Five-Year Water Resource Development Work Program (Work Program) as a part of their annual budget reporting process. The Work Program describes the District's implementation strategy relating to water resource development (WRD) and water supply development (including alternative water supply development) components over the next five years. The Work Program must be submitted annually to the Governor, the President of the Senate, the Speaker of the House of Representatives, the chairs of all legislative committees and subcommittees having substantive or fiscal jurisdiction over the Districts, the Secretary of the Department of Environmental Protection (DEP), and the governing board of each county. Pursuant to Subsection 373.536(6)(a)4, Florida Statutes (F.S.), the Work Program must:

- Address all the elements of the WRD component in the District's approved Regional Water Supply Plans (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 minimum water 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 report represents the District's 22<sup>nd</sup> Work Program and covers the period from fiscal year (FY) 2023 through FY2027. In the winter of 2020, the DEP provided a guidance document and template spreadsheets to improve the consistency among the Water Management Districts' Work Program submittals. This Work Program is consistent with the planning strategies of the Central Florida Water Initiative 2020 Regional Water Supply Plan (CFWI RWSP) and the District's 2020 Regional Water Supply Plan (RWSP) which can be found at: https://www.swfwmd.state.fl.us/resources/plans-reports/rwsp

The water resource and water supply development components of the District's Work Program are presented in three sections:

- WRD Data Collection and Analysis Activities that include routinely funded programmatic efforts by the District to monitor and support the health of natural systems, evaluate and establish MFLs, conduct watershed management planning, and improve water quality and stormwater storage and conveyance.
- WRD Projects that are undertaken by the District and/or partnering entities for evaluating aquifer storage and recovery feasibility, the Facilitating Agricultural Resource Management Systems (FARMS) projects to reduce groundwater withdrawals and improve natural systems, and environmental restoration efforts including MFL recovery projects.
- Water Supply Development Projects, which are usually led by other entities with District funding assistance, to develop and deliver new alternative potable water supplies, reclaimed water and reuse, aquifer storage and recovery (ASR) and aquifer recharge systems, and numerous conservation projects to help manage water needs.

Also included is an overview of funding mechanisms, a summary of the adequacy of District expenditures to ensure the availability of water for reasonable-beneficial uses and natural systems,

and an appendix listing projects funded by the District to implement projects identified in the Basin Management Action Plans (BMAPs).

## **Water Resource Development**

Water resource development is defined in Section 373.019(24), F.S., as "the formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and 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."

The intent of WRD activities and WRD projects is to enhance the amount of water available for reasonable-beneficial uses and for natural systems. The District is primarily responsible for implementing WRD activities and projects; however, additional funding and technical support may come from state, federal, and local entities.

#### **WRD Data Collection and Analysis Activities**

Data collection and analysis activities are a critical part of the water resource development component implemented by the District. The District has budgeted approximately \$34.3 million in FY2023 to implement and continue activities to collect scientific data necessary to manage water resources and evaluate new water supplies, support the evaluation and establishment of MFLs, conduct watershed management plans, improve groundwater quality, estimate water supply needs using population and demand modeling, and implement best management practices (BMPs) for stormwater storage and conveyance. These activities are summarized in **Table 1**.

Funding for these activities is primarily from the District's Governing Board; in some cases, additional funding that supports these efforts comes from water supply authorities, local governments, and the United States Geological Survey (USGS). Each item was included in the District's Tentative Budget Submission Appendix C and can be referenced by the sub-activity code. Each activity is further described below.

#### Hydrologic Data Collection

The District has a comprehensive monitoring program for hydrologic conditions that includes the assembly of information on key indicators such as rainfall, surface water and groundwater levels, water quality, and stream flows. The program includes data collected by District staff as well as data collected as part of the District's cooperative funding program with the USGS. Data collected allows the District to gage changes in the health of water resources, monitor trends in conditions, identify and analyze existing or potential resource problems, and develop programs to correct existing problems and prevent future problems from occurring. The data collection activities support District flood control structure operations, water use and environmental resource permitting and compliance, MFLs evaluation and status assessments, the Surface Water Improvement and Management (SWIM) program, the Northern Tampa Bay Water Use Caution Area (NTBWUCA), the Southern Water Use Caution Area (SWUCA), the Dover/Plant City Water Use Caution Area (DPCWUCA) recovery strategies, water supply planning in the District and CFWI regions, modeling of surface water and groundwater systems, cooperative and district initiative project development and monitoring, and many resource evaluations and reports.

The categories of hydrologic data that are collected and monitored by District staff are discussed below. In addition to data collection completed or contracted by the District,

- hydrologic data submitted by Water Use Permit (WUP) holders are also considered to assess compliance with permit conditions.
- a) Surface Water Flows and Levels. Funding supports data collection at the District's approximately 800 surface water level gauging sites, and cooperative funding with the USGS for discharge and water-level data collection at 130 river, stream, and canal sites. The USGS data are available to District staff and the public through the District's Environmental Data Portal (EDP) and through the USGS National Water Dashboard.
- b) Geohydrologic Data. The Geohydrologic Data Section (GEO) collects hydrogeologic data and oversees monitor well construction activities for the District. The GEO manages several groundwater monitor well networks that supports various projects throughout the District. The projects include the CFWI, Water Resource Assessment Projects, MFLs, sea level rise, and development of alternative water supplies. The monitoring well networks include the Regional Observation and Monitor-well Program (ROMP), Coastal Groundwater Quality Monitoring Network (CGWQMN), Inland Groundwater Quality Monitoring Network (IGWQMN), and the Upper Floridan Aquifer Nutrient Monitoring Network (UFANMN). The ROMP has been the District's primary source of hydrogeologic data since the program was established in 1974. Lithologic, hydraulic, and water quality data are collected during exploratory coring and testing and during the construction of monitor wells. Data from monitor well sites are used to evaluate seasonal and long-term changes in groundwater levels and quality, as well as the interaction and connectivity between groundwater and surface water bodies.
- c) Meteorologic Data. The meteorologic data monitoring program consists of measuring rainfall totals at 170 rain gauges, all of which provide near real-time data. The funding is for costs associated with measurement of rainfall including sensors, maintenance, repair, and replacement of equipment. Funding allows for the operation of one District evapotranspiration (ET) station for reference near Lake Hancock, and for District participation in a cooperative effort between the USGS and all five Florida water management districts to map statewide potential and reference ET using data measured from the Geostationary Operational Environmental Satellites (GOES). Funding also includes a collaborative effort between the five districts to provide high-resolution gauge adjusted radar rainfall data that are used for hydrologic conditions reporting and modeling purposes.
- d) Water Quality Data. The District's Water Quality Monitoring Program (WQMP) collects data from over 1,100 water quality monitoring stations for springs, streams, lakes, coastal and inland rivers and wells. The Coastal Groundwater Quality Monitoring and Inland Groundwater Monitoring networks, which involve sample collection and analysis from approximately 400 wells across the District, are used to monitor saltwater intrusion and/or the upwelling of mineralized waters into potable aquifers.
- e) Groundwater Levels. The funding provides for the maintenance and support of over 1,500 monitor wells in the data collection network. Data may be collected in 15-minute intervals, hourly, daily, or monthly. The District also uses funding to contract with the USGS to obtain continuous and monthly water levels at 15 sites. These data are available on the District's Environmental Data Portal (EDP) and through the USGS National Water Dashboard.

Table 1. FY2023 - FY2027 Water Resource Development Data Collection and Analysis Activities

WRD Data Collection and	Budget	FY2023	FY2024	FY2025	FY2026	FY2027	Total	Funding
Analysis Activities	Reference <sup>1</sup>	Costs (\$)	Source <sup>2</sup>					
1) Hydrologic Data Collection	1.2.1, p.64							District,
a) Surface Water Flows & Levels		\$3,709,448	\$3,709,448	\$3,709,448	\$3,709,448	\$3,709,448	\$18,547,240	Local
b) Geologic (includes ROMP)		\$3,115,473	\$3,115,473	\$3,115,473	\$3,115,473	\$3,115,473	\$15,577,365	Cooperators
c) Meteorologic Data		\$274,002	\$274,002	\$274,002	\$274,002	\$274,002	\$1,370,010	
d) Water Quality		\$851,482	\$851,482	\$851,482	\$851,482	\$851,482	\$4,257,410	
e) Groundwater Levels		\$866,356	\$866,356	\$866,356	\$866,356	\$866,356	\$4,331,780	
f) Biologic Data		\$1,178,113	\$1,178,113	\$1,178,113	\$1,178,113	\$1,178,113	\$5,890,565	
g) Data Support		\$3,607,377	\$3,607,377	\$3,607,377	\$3,607,377	\$3,607,377	\$18,036,885	
2) Minimum Flows and Levels Program	1.1.2, p.60							District
a) Technical Support		\$985,886	\$985,886	\$985,886	\$985,886	\$985,886	\$4,929,430	
b) MFL Establishment		\$638,860	\$638,860	\$638,860	\$638,860	\$638,860	\$3,194,300	
3) Watershed Management Planning	1.1.3, p.62	\$7,481,773	\$2,643,113	\$2,265,987	\$2,100,000	\$2,000,000	\$16,490,873	District, Local Cooperators, DEP
Quality of Water Improvement     Program	2.2.3, p.87	\$761,148	\$761,148	\$761,148	\$761,148	\$761,148	\$3,805,740	District
5) Stormwater Improvement- Implementation of Storage and Conveyance BMPs	2.3.1, p.89	\$10,814,791	\$10,611,617	\$3,500,000	\$2,500,000	\$2,500,000	\$29,926,408	District
Totals		\$34,284,709	\$29,242,875	\$21,754,132	\$20,588,145	\$20,488,145	\$126,358,006	

Source: SWFWMD FY2023 Tentative Budget Submission.

<sup>1.</sup> The Program Activity/Sub-Activity and page number in the Tentative Budget Submission is where the WRD Data Collection and Analysis Activities reside. The funding amount within this table are subsets of the referenced Program Activity/Sub-Activity.

<sup>&</sup>lt;sup>2</sup> Acronyms: BMPs - Best Management Practices, DEP - Florida Department of Environmental Protection, MFL - Minimum Flows and Minimum Water Levels, ROMP - District Regional Observation and Monitor-well

- f) Biologic Data. The District monitors ecological conditions as they relate to both potential water use impacts and changes in hydrologic conditions. Funding for biologic data collection includes support for routine monitoring of approximately 150 wetlands annually and a five-year assessment of almost 400 wetlands to document changes in wetland health and assess level of recovery in impacted wetlands. Funding also supports SWIM Program efforts for mapping of seagrasses every two years along the Suncoast (Tampa Bay south to Charlotte Harbor), and every four years along the Springs Coast (Anclote Key to Waccasassa Bay).
- g) <u>Data Support</u>. This item provides administrative and management staff support for the WQMP, hydrologic and geohydrologic as well as the chemistry laboratory, surveying, the District's LoggerNet data acquisition system.

## Minimum Flows and Levels Program

Section 373.042, F.S., requires the state water management districts or the DEP to establish minimum flows and minimum water levels (MFLs) for aquifers, surface watercourses, and other surface water bodies to identify the water level or limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area. Minimum flows for rivers, streams, estuaries, and springs, and minimum water levels for lakes, wetlands and aquifers are adopted into District rules, Chapter 40D-8, Florida Administrative Code (F.A.C.), and are used in the District's water use permitting and water supply planning programs.

Reservations are rules that reserve water from use by permit applications, as necessary for the protection of fish and wildlife or public health and safety. Reservations are adopted into District rules, Chapter 40D-2, F.A.C., pursuant to Section 373.223, F.S., and are also used for water use permitting and water supply planning.

The District's processes for establishing MFLs and reservations include opportunities for interested stakeholders to review and comment on proposed MFLs or reservations and participate in public meetings. A publicly-noticed independent scientific peer review process is used for establishing MFLs for flowing systems, for establishing MFLs for other system types that are based on methods that have not previously been subjected to peer review, and for establishing reservations. Stakeholder input and peer review findings are considered by the Governing Board when deciding whether to adopt proposed MFLs and reservations. District monitoring programs provide data for evaluating compliance with the adopted MFLs and reservations, determining the need for MFLs recovery or prevention strategies and assessing the recovery of water bodies where significant harm has occurred.

As of August 2022, the District has preliminarily planned to monitor and assess the status of 203 adopted MFLs, including MFLs for 24 river segments, 10 springs or spring groups, 126 lakes, 34wetlands, 7 Upper Floridan Aquifer (UFA) wells in the NTBWUCA, and the UFA in the Most Impacted Area (MIA) of the SWUCA and in the DPCWUCA. The District also plans to monitor and assess the status of 2 adopted reservations, including a reservation for water stored in Lake Hancock and released to Lower Saddle Creek for recovery of MFLs adopted for the Upper Peace River, and a reservation for water from Morris Bridge Sink for recovery of MFLs adopted for the Lower Hillsborough River. In addition, the District is scheduling the establishment or reevaluation of 22 MFLs and 1 reservation through FY2025.

The District's annual MFLs Priority List and Schedule and Reservations List and Schedule is approved by the Governing Board in October, submitted to DEP for review in November, and subsequently published in the Consolidated Annual Report. The approved and proposed priority lists and schedules are also posted on the District's Minimum Flows and Levels Documents and Reports webpage at: <a href="https://www.swfwmd.state.fl.us/projects/mfl/documents-and-reports">https://www.swfwmd.state.fl.us/projects/mfl/documents-and-reports</a>.

## Watershed Management Planning

The District addresses flooding problems in existing areas by preparing and implementing Watershed Management Plans (WMPs) in cooperation with local governments. The WMPs define flood conditions, identify flood level of service deficiencies, and evaluate BMPs to address those deficiencies. The WMPs include consideration of the capacity of a watershed to protect, enhance, and restore water quality and natural systems while achieving flood protection. The plans identify effective watershed management strategies and culminate in defining floodplain delineations and constructing selected BMPs.

Local governments and the District combine their resources and exchange watershed data to implement the WMPs. Funding for local elements of the WMPs is provided through local governments' capital improvement plans and the District's Cooperative Funding Initiative. Additionally, flood hazard information generated by the WMPs is used by the Federal Emergency Management Agency (FEMA) to revise Flood Insurance Rate Maps. This helps to better define flood risk and is used extensively for land use planning by local governments and property owners. Since the WMPs may change based on growth and shifting priorities, the District also cooperates with local governments to update the WMPs when necessary, giving decision-makers opportunities throughout the program to determine when and where funds are needed.

## Quality of Water Improvement Program (QWIP)

The QWIP was established in 1974 through Chapter 373, F.S., to restore groundwater conditions altered by well drilling activities for domestic supply, agriculture, and other uses. The program's primary goal is to preserve groundwater and surface water resources through proper well abandonment. Plugging abandoned artesian wells eliminates the waste of water at the surface and prevents mineralized groundwater from contaminating surface water bodies. Thousands of wells constructed prior to current well construction standards were often deficient in casing, which interconnected aquifer zones and enabled poor-quality mineralized water to migrate into zones containing potable-quality water.

Plugging wells involves filling the abandoned well with cement or bentonite. Isolation of the aquifers is reestablished, and the mixing of varying water qualities and free flow is stopped. Prior to plugging an abandoned well, geophysical logging is performed to determine the reimbursement amount, the proper plugging method, and to collect groundwater quality and geologic data for inclusion in the District's database. The emphasis of the QWIP is primarily in the SWUCA where the Upper Floridan aquifer is confined. Historically, the QWIP has proven to be a cost-effective method to prevent waste and contamination of potable ground and surface waters.

## Stormwater Improvements - Implementation of Storage and Conveyance BMPs

The District's WMPs and SWIM programs implement stormwater and conveyance BMPs for preventative flood protection to improve surface water quality, particularly in urban areas, and enhance surface and groundwater resources. The BMPs involve construction of improvements identified and prioritized in the development of watershed management plans. Most of the activities are developed through cooperative funding with a local government entity, DEP, or other state funding. As stormwater is a primary contributor of water quality degradation in older urban areas, the District seeks opportunities to retrofit or improve these systems to reduce impacts to receiving waters. FY2023 funding includes new storage and conveyance projects including one in the Northern region, and four in the Tampa Bay area, as well as several continuing projects.

# **WRD Projects**

The District has budgeted for 30 WRD projects that have particular goals and schedules. At the start of FY2023 (October 1, 2022), the District has allocated approximately \$8.5 million in the budget for 8 of these projects. If a project received funding in prior years and is still ongoing it remains in the Work Program until completion. District funding for a number of the projects is matched to varying degrees by local cooperators including municipalities, state agencies, private agricultural operations, and others. The total cost of these projects, including the cooperator shares, is approximately \$429 million. It's estimated that approximately 99.3 million gallons per day (mgd) of additional water supply will be produced or conserved. The projects are listed in Table 2 and are consistent with Programmatic Code 2.2.1 in the District's FY2023 budget. The WRD projects are organized into three groups:

#### Aquifer Storage and Recovery Feasibility and Pilot Testing

These projects are research and/or pilot projects designed to further the development of the innovative alternative water sources described in the RWSP. The projects for investigation of the Lower Floridan aquifer are primarily District-led initiatives. The ASR and Aquifer Recharge projects may involve both technical and financial assistance from the District.

#### Facilitating Agricultural Resource Management Systems (FARMS)

The FARMS Program is an agricultural BMP cost-share reimbursement program. The program is a public/private partnership developed by the District and the Florida Department of Agriculture and Consumer Services (FDACS). The program provides incentives to the agricultural community within the District to implement agricultural BMPs that will provide resource benefits including the reduction of groundwater withdrawals from the Upper Floridan aquifer, improvement of ground and surface water quality impacted by groundwater withdrawals, and improvement of natural-system functions within wetlands and priority watersheds.

The FARMS Program operates under District Governing Board Policy to fund projects that provide these benefits while assisting in the implementation of the District's RWSP. This plan identifies strategic initiatives and regional priorities to meet the District's water management goals. These goals are based on improving and/or maintaining the water resource conditions of several regions within the District. Five primary goals for the FARMS Program are to:

- 1. Improve surface water quality which has been impacted by groundwater withdrawals with a priority given to projects in the Shell, Prairie, and Joshua Creek, or Horse Creek watersheds;
- 2. Conserve, restore or augment the water resources and natural systems in the Upper Myakka River Watershed;
- 3. Reduce groundwater use in the SWUCA;
- 4. Reduce groundwater use for Frost/Freeze Protection within the DPCWUCA;
- 5. Reduce Upper Floridan aquifer groundwater use and nutrient loading impacts in the Northern District.

The FARMS projects implement FDACS-approved BMPs that offset groundwater use with surface water and/or increase the overall efficiency of irrigation water use. Many projects have the added benefit of reducing agricultural impacts to surface water features. Properly implemented BMPs protect and conserve water resources and may increase crop production.

### Environmental Restoration and MFL Recovery Projects

These projects include MFL recovery projects for the Hillsborough River Recovery Strategy, and for the upper Peace River, and SWUCA Salt Water Intrusion Minimum Aquifer Level (SWIMAL) in support of the SWUCA Recovery Strategy. The SWIMAL Recovery project has the additional benefit of utilizing excess runoff that has adversely impacted the Flatford Swamp in the upper Myakka River watershed.

At the DEP's guidance, additional project details are available in spreadsheet format. The DEP will present Work Program project data from each of the water management districts on their

website for public review, in accordance with Section 373.536(6)(b), F.S. The detailed spreadsheet includes project descriptions, schedules, cooperator and state funding levels, and the water bodies and planning regions supported. The District's proposed Work Program spreadsheet is available online at:

 $\frac{\text{https://www.swfwmd.state.fl.us/resources/plans-reports/water-resource-development-work-program}{}$ 

Table 2. FY2023 - FY2027 District Funding and Total Project Cost for Water Resource Development Projects

	WRD Projects roject Number) <sup>1</sup>	Total Prior District Funding	FY2023 District Cost	FY2024 District Cost	FY2025 District Cost	FY2026 District Cost	FY2027 District Cost	Total Cost District + Cooperator	Funding Source <sup>12</sup>	Quantity developed or conserved (mgd) <sup>1</sup>
1)A	quifer Storage and Re	covery Feasibili	ty and Pilot Tes	sting (Program	matic Code 2.2	2.1.1)				
a)	South Hillsborough Aquifer Recharge Program (SHARP) (N287)	\$1,382,500	\$0	\$0	\$0	\$0	\$0	\$2,765,000	District, Hillsborough County	2
b)	South Hillsborough Aquifer Recharge Program (SHARP) Phase 2 (N855)	\$4,800,000	\$0	\$0	\$0	\$0		\$9,700,000	District, Hillsborough County	4
c)	Hydrogeologic Investigation of LFA in Polk County (P280)	\$12,000,000	\$0	\$0	\$0	\$0	\$0	\$12,000,000	District	NA
d)	Optical Borehole Imaging Data Collection from LFA Wells (P925)	\$100,200	\$0	\$0	\$0	\$0	\$0	\$167,000	District, USGS	NA
e)	Sources/Ages of Groundwater in LFA Wells (P926)	\$368,300	\$0	\$0	\$0	\$0	\$0	\$736,600	District, USGS	NA
f)	City of Venice Reclaimed Water Aquifer Storage Recovery (Q050)	\$1,332,500	\$1,200,000	\$0	\$212,376	\$0	\$0	\$5,489,762	District, City of Venice	Storage
g)	Direct Aquifer Recharge -North Hillsborough Aquifer Recharge Program Phase 2 (Q064)	\$750,000	\$0	\$0	\$0	\$0	\$0	\$1,500,000	District, Hillsborough County	Study
i)	Sarasota County - Bee Ridge Water Reclamation Facility Aquifer Recharge (Q159)	\$915,511	\$0	\$0	\$0	\$0	\$0	\$1,831,022	District, Sarasota County	5

WRD Projects (Project Number) <sup>1</sup>	Total Prior District Funding	FY2023 District Cost	FY2024 District Cost	FY2025 District Cost	FY2026 District Cost	FY2027 District Cost	Total Cost District + Cooperator	Funding Source <sup>1 2</sup>	Quantity developed or conserved (mgd) <sup>1</sup>
2) Facilitating Agricultura	al Resource Mar	agement Syste	ms (FARMS) (	Programmatic (	Code 2.2.1.2)				
a) FARMS Projects (H017) 3	Annual Request	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$6,000,000	\$30,000,000	Annual Request	40
FARMS - Bickett Holdings, LLC	\$663,000	\$0	\$0	\$0	\$0	\$0	\$915,000	District, Bickett Holdings, LLC	0.14
FARMS - Wauchula Road Duette, LLC - Phase 2	\$62,713	\$0	\$0	\$0	\$0	\$0	\$125,426	District, Wauchula Road Duette, LLC	0.08
FARMS - Rolling Meadow Ranch	\$221,273	\$0	\$0	\$0	\$0	\$0	\$295,030	District, Rolling Meadow Ranch, Inc.	0.05
FARMS - Boyz Properties, LLC	\$631,000	\$0	\$0	\$0	\$0	\$0	\$1,081,000	District, Boyz Properties,LLC	0.17
FARMS - Symons Grove, LLC Phase 2	\$238,112	\$0	\$0	\$0	\$0	\$0	\$317,482	District, Symons Grove, LLC	0.06
FARMS - Bethel Farms, LLLP - Ryals Property	\$279,520	\$0	\$0	\$0	\$0	\$0	\$405,652	District, Bethel Farms, LLLP	0.08
FARMS - Bethel Farms, LLLP - Ph 4	\$250,219	\$0	\$0	\$0	\$0	\$0	\$356,627	District, Bethel Farms, LLLP	0.06
FARMS - P BAR R Sod Company, LLC	\$293,187	\$0	\$0	\$0	\$0	\$0	\$390,916	District, BAR R Sod Company, LLC	0.08
FARMS - Lykes Bros. Inc. Lake Placid Grove Ph 3	\$100,300	\$0	\$0	\$0	\$0	\$0	\$133,733	District, Lykes Bros. Inc.	0.03
FARMS - Farm Road Port Charlotte FL, LLC	\$832,000	\$0	\$0	\$0	\$0	\$0	\$1,170,000	District, Farm Road Port Charlotte FL, LLC	0.19
FARMS - Berry Patch Ridge, LLC	\$241,572	\$0	\$0	\$0	\$0	\$0	\$322,096	District, Berry Patch Ridge, LLC	0.04

	WRD Projects (Project Number) <sup>1</sup>	Total Prior District Funding	FY2023 District Cost	FY2024 District Cost	FY2025 District Cost	FY2026 District Cost	FY2027 District Cost	Total Cost District + Cooperator	Funding Source <sup>1 2</sup>	Quantity developed or conserved (mgd)¹
	FARMS - Spanish Trails Farming and Land Company, LLC	\$529,000	\$0	\$0	\$0	\$0	\$0	\$759,000	District, Spanish Trails Farming and Land Company, LLC	0.14
b)	Mini-FARMS Program (H529) 3	Annual Request	\$500,000	\$500,000	\$500,000	\$500,000	\$500,000	Annual Request	District	2
c)	FARMS Well Back- Plugging Program (H015) 3	Annual Request	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	Annual Request	District	NA
d)	FARMS Meter Accuracy Support (P429) 3	Annual Request	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500	Annual Request	District	NA
3) N	linimum Flows and M	linimum Water Le	evels Recovery	<sup>4</sup> (Programmat	ic Code 2.2.1.3	3)				
a)	MFL Recovery Lake Hancock Design, Permit, Mitigation to Raise Lake (H008)	\$6,882,240	\$0	\$0	\$0	\$0	\$0	\$6,882,240	District	2.7
b)	MIA Recharge SWIMAL Recovery at Flatford Swamp (H089)	\$6,635,702	\$0	\$0	\$3,350,000	\$3,350,000	\$3,350,000	\$31,000000	District	6
c)	Lower Hillsborough River Recovery Strategy (H400)	\$8,624,842	\$230,000	\$0	\$0	\$0	\$0	\$13,686,099	District, City of Tampa	18.925
d)	Pump Stations on Tampa Bypass Canal, Morris Bridge Sink (H404)	\$661,515	\$135,000	\$165,000	\$155,000	\$135,000	\$135,000	\$1,386,515	District	3.9
e)	Tampa Hillsborough River MFL "PURE" (Q246)	\$60,280	\$0	\$0	\$5,510,973	\$35,528,747	\$0	\$300,000,000	District, City of Tampa	13.7

WRD Projects (Project Number) <sup>1</sup>	Total Prior District Funding	FY2023 District Cost	FY2024 District Cost	FY2025 District Cost	FY2026 District Cost	FY2027 District Cost	Total Cost District + Cooperator	Funding Source <sup>1 2</sup>	Quantity developed or conserved (mgd)¹
f) Haines City Reclaimed Water MFL Recharge & Advanced Treatment Feasibility Study (Q303)	\$253,500	\$402,500	\$1,148,750	\$1,148,750	\$0	\$0	\$5,907,000	District, Haines City	Study
Water Resource Development Project Totals	\$49,108,986	\$8,500,000	\$7,846,250	\$16,909,599	\$45,546,247	\$10,017,500	\$429,323,200		99.34

Acronyms: TBD - to be determined, NA - not applicable, mgd - million gallons per day, MIA - Most Impacted Area of the SWUCA, SWIMAL - Salt Water Intrusion Minimum Aquifer Level, USGS - United States Geological Survey, ASR – Aquifer Storage Recovery, LFA – Lower Floridan Aquifer.
 Future funding budget estimates for which specific time frames are not yet determined are distributed evenly over future years.

<sup>3.</sup> The FARMS lead program (H017) and the subprojects are collectively counted as 40 mgd.

## **Water Supply Development Assistance**

Water supply development is defined as the 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 (Section 373.019(26), F.S). Regional water supply authorities, local governments, and public and privately-owned water utilities typically have the lead role in implementing water supply development projects (Section 373.705, F.S.). The District provides funding assistance to these entities for projects that are consistent with the District's Strategic Plan, Water Management Plans, Surface Water Improvement and Management Plans, and the District and CFWI RWSPs. Final decisions regarding the funding of projects are the exclusive responsibility of the District's Governing Board. The District's primary funding mechanism for water supply development assistance is the Cooperative Funding Initiative (CFI) Program, which is described in the Funding Sources section of this Work Program.

The District has 83 budgeted or ongoing water supply development projects in FY2023, including 3 water supply planning projects that support water supply development. As shown in **Table 3-h**, the District is funding approximately \$15 million in FY2023 for 18 projects that achieve water supply development assistance. The project budgets shown are consistent with the District's Programmatic Budget under activity codes 2.2.2 (water supply development) and 1.1.1 (water supply planning). The water supply projects are listed in **Table 3-a** to **3-g**, grouped by the following budget sub-categories and sorted by project code number:

- Surface Water Projects
- Regional Potable Water Interconnect Projects
- Reclaimed Water Projects
- Brackish Groundwater Development Projects
- ASR and Aquifer Recharge Projects (note: some have reclaimed water components)
- Conservation Projects
- Water Supply Planning Projects

Most water supply development projects are funded within one year, but large projects may have construction budgets over multiple years to coincide with each year's predicted expenses. Since the District budget is adopted on an annual basis, the future funding for ongoing projects is estimated based on projected costs and schedules. Additional future funding will be needed for new projects that aren't yet proposed through the CFI Program. The District anticipates new reclaimed water and conservation projects will require funding levels less than FY2023. The amount needed for new regional interconnects and water treatment facilities can vary greatly from year to year, peaking as large infrastructure projects move from design to construction phases. Significant new funding may be proposed in the FY2024-27 timeframe for expansions of the PRMRWSA Regional Loop System, next phases of the PRWC Southeast Wellfield, Tampa Bay Water's System Configuration, and West Polk Lower Floridan Aquifer Wellfield.

The listed projects that have no FY2023 or future funding are ongoing with prior year funding. Projects are omitted from the Work Program when they are completed, and final reimbursement is provided.

Table 3-a. Surface Water Projects

Project Number	Water Supply Development Assistance - Surface Water Projects (Programmatic Budget 2.2.2.1)	Prior District Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Supply (mgd)
Q133	PRWC - Peace River Study	\$480,550	\$0	\$0	\$0	\$0	\$0	\$961,100	Study
Q272	PRMRWSA - Reservoir No. 3	\$3,625,000	\$0	\$11,000,000	\$42,000,000	\$51,000,000	\$43,750,000	\$337,274,000	NA
	Total Surface Water Projects	\$4,105,550	\$0	\$11,000,000	\$42,000,000	\$51,000,000	\$43,750,000	\$338,235,100	0.000

Table 3-b. Regional Potable Water Interconnect Projects

Project Number	Water Supply Development Assistance - Regional Potable Water Interconnects (Programmatic Budget 2.2.2.2)	Prior District Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Supply (mgd)
N965	TBW Tampa Bypass Canal Gates Automation	\$516,000	\$0	\$0	\$0	\$0	\$0	\$1,032,000	NA
N998	TBW Regional Facility Site Pump Station Expansion	\$1,200,000	\$0	\$0	\$0	\$0	\$0	\$2,400,000	NA
Q146	Tampa Bay Water Southern Hillsborough County Booster Pump Station	\$750,000	\$2,550,000	\$0	\$0	\$0	\$0	\$12,686,049	6.000
Q202	PRMRWSA - Southern Regional Loop Phase 2B and 2C Feasibility and Routing	\$200,000	\$0	\$0	\$0	\$0	\$0	\$400,000	Study
Q205	PRMRWSA Phase 3C Integrated Loop and Routing and Feasibility	\$300,000	\$0	\$0	\$0	\$0	\$0	\$600,000	Study
Q216	PRWC Regional Transmission Southeast Phase 1	\$5,913,487	\$0	\$5,642,189	\$33,783,467	\$30,673,857	\$0	\$156,976,000	NA
Q241	TBW - Southern Hillsborough County Transmission Expansion	\$4,459,207	\$2,900,000	\$1,294,793	\$3,750,000	\$28,150,000	\$44,000,000	\$275,389,586	NA
Q248	PRMRWA - Regional Acquisition of Project Prairie Pumping and Storage Facilities	\$637,500	\$0	\$0	\$0	\$0	\$0	\$1,275,000	NA
Q313	PRMRWSA - Reg Integr Loop Sys Ph 3C	\$0	\$2,500,000	\$2,075,000	\$9,737,500	\$9,737,500	\$0	\$53,100,000	NA
Q355	PRMRWSA - Reg Integr Loop Sys Ph 2b	\$0	\$1,500,000	\$8,778,015	\$12,703,748	\$12,703,748	\$0	\$72,271,000	NA
Total	Regional Potable Water Interconnect Projects	\$13,976,194	\$9,450,000	\$17,789,997	\$59,974,715	\$81,265,105	\$44,000,000	\$576,129,635	6.000

Table 3-c. Reclaimed Water Projects

Project Number	Water Supply Development Assistance - Reclaimed Water Projects (Programmatic Budget 2.2.2.3)	Prior District Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Benefit (mgd)
N339	Winter Haven #3 Reclaimed Interconnect, Storage, and Pumping	\$2,750,000	\$0	\$0	\$0	\$0	\$0	\$9,466,000	0.300
N711	Braden River Utilities Reclaimed Water Transmission Line	\$2,300,000	\$0	\$0	\$0	\$0	\$0	\$4,600,000	1.000
N791	Pasco County Starkey Ranch Reclaimed Water Transmission Phase C	\$456,800	\$0	\$0	\$0	\$0	\$0	\$913,600	0.290
N868	Polk County Utilities NERUSA Ernie Caldwell Blvd Reclaimed Water Transmission	\$1,056,500	\$0	\$0	\$0	\$0	\$0	\$2,113,000	0.414
N898	Haines City Reclaimed Water Tank and Pump Stations Project	\$4,620,000	\$0	\$0	\$0	\$0	\$0	\$6,800,000	Storage
Q021	Pasco Co Cypress Preserve RW Transmission Main - Grand Live Oak Blvd	\$206,500	\$0	\$0	\$0	\$0	\$0	\$413,000	0.200

Table 3-c. Reclaimed Water Projects (continued)

Project Number	Water Supply Development Assistance - Reclaimed Water Projects (Programmatic Budget 2.2.2.3)	Prior District Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Benefit (mgd)
Q057	Zephyrhills - Zephyr Lakes & Hospital Reuse	\$710,650	\$0	\$0	\$0	\$0	\$0	\$1,421,300	0.330
Q066	Polk County Utilities- NERUSA Lake Wilson Road Reuse	\$262,750	\$0	\$0	\$0	\$0	\$0	\$525,500	0.180
Q067	Polk County Utilities-NERUSA Southeast Reuse Loop	\$2,186,750	\$0	\$0	\$0	\$0	\$0	\$4,373,500	0.522
Q098	Pasco County Cypress Preserve Reuse Phase 3	\$239,000	\$0	\$0	\$0	\$0	\$0	\$478,000	0.230
Q105	Citrus County Sugarmill Woods Golf Course Reuse	\$1,834,000	\$0	\$0	\$0	\$0	\$0	\$3,918,000	0.500
Q113	City of Plant City McIntosh Park Indirect Potable Reuse Feasibility Study	\$300,000	\$0	\$0	\$0	\$0	\$0	\$600,000	Study
Q139	North Port Direct Potable Reuse Feasibility	\$125,000	\$0	\$0	\$0	\$0	\$0	\$250,000	Study
Q158	Pasco County River Landing Reclaimed Water Transmission	\$1,468,300	\$0	\$0	\$0	\$0	\$0	\$3,386,600	0.465
Q160	Sarasota County Honore Avenue Reclaimed Water Transmission	\$500,000	\$1,000,000	\$0	\$0	\$0	\$0	\$3,000,000	0.533
Q200	Winter Haven Direct Potable Reuse Feasibility Study	\$100,000	\$0	\$0	\$0	\$0	\$0	\$200,000	Study
Q209	Polk County Direct Potable Reuse Feasibility and Pilot Demo	\$795,000	\$0	\$0	\$0	\$0	\$0	\$2,591,582	Study
Q252	Forte Meade Reclaimed Water Feasibility Study	\$168,750	\$0	\$0	\$0	\$0	\$0	\$225,000	Study
Q268	Braden River Utilities Taylor Road Area Transmission	\$1,050,000	\$2,500,000	\$0	\$0	\$0	\$0	\$7,100,000	1.570
Q271	Winter Haven Preserve at Lake Ashton Transmission	\$500,000	\$910,000	\$0	\$0	\$0	\$0	\$2,820,000	0.590
Q274	Zephyrhills - Zephyr to Pasco Reclaimed Water Interconnect	\$880,000	\$0	\$0	\$0	\$0	\$0	\$1,760,000	NA
Q344	Manatee Co- IA Buckeye RW Transmission	\$0	\$564,000	\$1,400,000	\$0	\$0	\$0	\$3,928,000	0.990
Q353	Pinellas Co- Southcross RW Expan/Surface Aug Study	\$0	\$200,000	\$0	\$0	\$0	\$0	\$400,000	Study
	Total Reclaimed Water Projects	\$22,510,000	\$5,174,000	\$1,400,000	\$0	\$0	\$0	\$61,283,082	8.114

**Table 3-d Brackish Groundwater Projects** 

Project Number	Water Supply Development Assistance - Brackish Groundwater Development Projects (Programmatic Budget 2.2.2.4)	Prior District Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Supply (mgd)
N882	PRWC West Polk County Lower Floridan Deep Wells <sup>1</sup>	\$3,970,367	\$0	\$0	\$0	\$0	\$0	\$8,940,734	10.000
N905	PRWC Southeast Wellfield Lower Floridan	\$4,846,958	\$0	\$0	\$0	\$0	\$0	\$11,117,916	Design
Q090	Belleair Brackish Feasibility Study & Testing	\$881,675	\$0	\$0	\$0	\$0	\$0	\$1,763,350	Study
Q184	PRWC Southeast Wellfield Implementation	\$5,374,987	\$0	\$4,934,240	\$41,484,444	\$41,484,444	\$7,092,630	\$228,630,000	12.500
Q294	PRWC Southeast Test Well No. 3	\$2,062,500	\$0	\$0	\$0	\$0	\$0	\$4,125,000	Study
Q308	PRWC - West Polk Wellfield	\$1,064,308	\$0	\$5,731,099	\$6,636,605	\$29,674,958	\$29,174,958	\$214,104,000	10.000
Q309	PRWC - Test Prod Well #2 West Polk Wellfield	\$1,228,000	\$0	\$834,500	\$0	\$0	\$0	\$4,125,000	NA
	Total Brackish Groundwater Projects	\$19,428,795	\$0	\$11,499,839	\$48,121,049	\$71,159,402	\$36,267,588	\$472,806,000	32.500

Table 3-e. Aquifer Storage and Recovery (ASR) and Aquifer Recharge Projects

Project Number	Water Supply Development Assistance - Aquifer Recharge & Aquifer Storage and Recovery Projects (Programmatic Budget 2.2.2.5)	Prior District Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Benefit (mgd)
N435	City of Bradenton Surface Water Aquifer Storage Recovery 2	\$2,350,000	\$0	\$0	\$0	\$0		\$4,700,000	Storage
Q142	Pinellas County Chestnut Park Aquifer Storage, Recovery & Recharge	\$893,500	\$0	\$0	\$ 2,779,875	\$926,625	\$0	\$9,200,000	Storage
	Total Aquifer Recharge/ASR Projects	\$3,243,500	\$0	\$0	\$2,779,875	\$926,625	\$0	\$13,900,000	0.000

**Table 3-f. Conservation Projects** 

Project Number	Water Supply Development Assistance - Conservation Rebates, Retrofits, Etc. Projects (Programmatic Budget 2.2.2.7)	Prior District Funding	FY2022 Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	Total Project Cost	Benefit (mg
B015	Water Incentives Supporting Efficient (WISE) Program	Annual Request	\$225,000	\$225,000	\$225,000	\$225,000	\$225,000	Annual Request	0.050
N948	PRWC Indoor Water Conservation Incentives	\$78,000	\$0	\$0	\$0	\$0	\$0	\$156,000	0.092
N971	PRWC Outdoor Best Management Practices	\$96,250	\$0	\$0	\$0	\$0	\$0	\$192,500	0.113
N973	Winter Haven Consumption/Conservation Programs Data Management Software	\$60,000	\$0	\$0	\$0	\$0	\$0	\$120,000	0.016
N996	Lake Hamilton Distribution System Looping	\$124,610	\$0	\$0	\$0	\$0	\$0	\$492,637	0.020
N999	Marion County Toilet Rebate Program Phase 5	\$32,000	\$0	\$0	\$0	\$0	\$0	\$64,000	0.010
P920	Polk Regional Water Cooperative Outdoor BMPs	\$166,075	\$0	\$0	\$0	\$0	\$0	\$332,150	0.053
Q087	Tampa Bay Water Demand Management	\$549,775	\$0	\$0	\$0	\$0	\$0	\$1,099,550	0.280
Q089	St. Petersburg Sensible Sprinkling Project Phase 3	\$50,000	\$0	\$0	\$0	\$0	\$0	\$100,000	0.056
Q137	Citrus County - Water Sense Irrigation Controller Phase 4	\$30,000	\$0	\$0	\$0	\$0	\$0	\$60,000	0.017
Q138	WRWSA - Regional Irrigation System Audit Program Phase 6	\$60,600	\$0	\$0	\$0	\$0	\$0	\$121,200	0.032
Q145	Longboat Key Club - Advanced Irrigation System	\$508,516	\$0	\$0	\$0	\$0	\$0	\$1,115,000	0.095
Q166	Bartow - Golf Course Advanced Irrigation System	\$250,000	\$0	\$0	\$0	\$0	\$0	\$500,000	0.051
Q168	Manatee County - Toilet Retrofit Phase 14	\$82,500	\$0	\$0	\$0	\$0	\$0	\$165,000	0.026
Q179	Venice - Toilet Rebate and Retrofit Phase 8	\$23,900	\$0	\$0	\$0	\$0	\$0	\$47,800	0.005
Q185	North Port - Water Distribution Hartsdale/Aldonin/Totem Area Looping	\$207,500	\$0	\$0	\$0	\$0	\$0	\$415,000	0.017
Q187	PRWC - Demand Management Implementation	\$42,178	\$0	\$0	\$0	\$0	\$0	\$168,710	0.023
Q193	Crystal River - Conservation Phase 1	\$9,090	\$0	\$0	\$0	\$0	\$0	\$18,180	0.005
Q211	Bay Laurel CCDD -2021 Irrigation Controller & ET Sensor	\$48,750	\$0	\$0	\$0	\$0	\$0	\$97,500	0.022
Q214	Palmetto Toilet Rebate Phase 2	\$13,250	\$0	\$0	\$0	\$0	\$0	\$26,500	0.011
Q215	TBW - Demand Management Program Phase 2	\$1,432,238	\$0	\$0	\$0	\$0	\$0	\$2,864,476	0.680
Q245	Pinellas County AMI Metering Analytics	\$139,414	\$0	\$0	\$0	\$0	\$0	\$278,828	0.111

Table 3-f. Conservation Projects (continued)

Project Number	Water Supply Development Assistance - Conservation Rebates, Retrofits, Etc. Projects (Programmatic Budget 2.2.2.7)	Prior District Funding	FY2022 Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	Total Project Cost	Benefit (mgd)
Q254	Citrus County Water Conservation Program	\$46,600	\$0	\$0	\$0	\$0	\$0	\$93,200	0.017
Q255	Bay Laurel CCDD -Water Conservation Program	\$164,750	\$0	\$0	\$0	\$0	\$0	\$329,500	0.028
Q256	St. Petersburg - Sensible Sprinkling Program - Phase 10	\$50,000	\$0	\$0	\$0	\$0	\$0	\$100,000	0.055
Q259	Tarpon Springs - Water Conservation Program Phase III	\$15,000	\$0	\$0	\$0	\$0	\$0	\$30,000	0.004
Q265	North Port - Water Distribution Ridgewood/ Lamplighter Area Looping	\$173,950	\$0	\$0	\$0	\$0		\$347,900	0.015
Q266	Polk County - Florida Water Star Builder Reimbursement Program	\$20,000	\$0	\$0	\$0	\$0	\$0	\$40,000	0.005
Q267	PRWC - Demand Management Implementation	\$102,679	\$0	\$0	\$0	\$0	\$0	\$205,358	0.013
P964	Water Use Evals for Non-Ag Users	\$0	\$75,000	\$0	\$0	\$0	\$0	\$75,000	0.012
Q304	Venice Toilet Rebate and Retrofit Phase 9	\$0	\$16,500	\$0	\$0	\$0	\$0	\$33,000	0.005
Q306	WRWSA Irrigation Eval Program, phase 7	\$0	\$51,000	\$0	\$0	\$0	\$0	\$102,000	0.025
Q311	Bay Laurel CCDD Water Conservation Program phase 2	\$0	\$191,900	\$0	\$0	\$0	\$0	\$383,800	0.028
Q319	Manatee County Toilet Rebate phase 15	\$0	\$50,000	\$0	\$0	\$0	\$0	\$100,000	0.017
Q320	Citrus County Water Conservation Program phase 6	\$0	\$21,350	\$0	\$0	\$0	\$0	\$42,700	0.006
Q322	Tarpon Springs Water Conservation phase 4	\$0	\$15,000	\$0	\$0	\$0	\$0	\$30,000	0.005
Total Con	servation Rebates, Retrofits, Etc.	\$4,577,625	\$645,750	\$225,000	\$225,000	\$225,000	\$225,000	\$10,347,489	2.021

Table 3-g. Water Supply Planning Projects

Project Number	Water Supply Planning (Programmatic Budget 1.1.1)	Prior District Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Supply (mgd)
N928	PRWC Peace Creek Integrated Water Supply Plan	\$990,125	\$0	\$0	\$0	\$0	\$0	\$1,980,250	Study
Q257	Sarasota County System-Wide Wellfield Improvements	\$75,000	\$0	\$0	\$0	\$0	\$0	\$150,000	NA
Q324	Q324 WRWSA Regional Water Supply Plan 2024 Update		\$175,000	\$0	\$0	\$0	\$0	\$350,000	NA
	Total Planning Projects	\$1,065,125	\$175,000	\$0	\$0	\$0	\$0	\$2,480,250	0.000

Table 3-h. Summary of Funding for Water Supply Development Projects

Water Supply Development Assistance Project Totals (Programmatic Budget 2.2.2 & 1.1.1)	Prior District Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Supply (mgd)
Surface Water Projects	\$4,105,550	\$0	\$11,000,000	\$42,000,000	\$51,000,000	\$43,750,000	\$338,235,100	0.000
Regional Potable Water Interconnect Projects	\$13,976,194	\$9,450,000	\$17,789,997	\$59,974,715	\$81,265,105	\$44,000,000	\$576,129,635	6.000
Reclaimed Water Projects	\$22,510,000	\$5,174,000	\$1,400,000	\$0	\$0	\$0	\$61,283,082	8.114
Brackish Groundwater Development Projects	\$19,428,795	\$0	\$11,499,839	\$48,121,049	\$71,159,402	\$36,267,588	\$472,806,000	32.500

Aquifer Recharge and ASR Projects	\$3,243,500	\$0	\$0	\$2,779,875	\$926,625	\$0	\$13,900,000	0.000
Conservation Rebates, Retrofits, Etc. Projects	\$4,577,625	\$645,750	\$225,000	\$225,000	\$225,000	\$225,000	\$10,347,489	2.021
Water Supply Planning Projects	\$1,065,125	\$175,000	\$0	\$0	\$0	\$0	\$2,480,250	0.000
Total Funding for Water Supply Development Projects	\$68,906,789	\$15,444,750	\$41,914,836	\$153,100,639	\$204,576,132	\$124,242,588	\$1,475,181,556	48.635

Acronyms: ASR - aquifer storage and recovery, BMPs - best management practices, ET - Evapotranspiration, mgd - million gallons per day, NERUSA/NWRUSA - Northeast/Northwest Regional Utility Service Areas of Polk County Utilities, PRMRWSA - Peace River Manasota Regional Water Supply Authority, PRWC - Polk Regional Water Cooperative, WRWSA - Withlacoochee Regional Water Supply Authority,

1 Project N882's current CFI agreement cost is shown in "Total Project Cost" but the total cost is estimated at approximately \$218 (M) with future phases.

## **Funding Sources**

The District provides significant financial assistance for water resource development and water supply development projects through the District's Cooperative Funding Initiative (CFI), and District Initiatives. The financial assistance is provided primarily to governmental entities, but private entities may also participate in these programs. Portions of state funding are allocated to the District through the DEP and legislative appropriations for the Springs Initiative, the Florida Forever Program, the Water Protection and Sustainability Program, and the District's FARMS Program. These sources are described below.

## **District Funding**

Cooperative Funding Initiative - The District's primary funding mechanism is the CFI, which includes funding for major regional water supply and water resource development projects and localized projects throughout the District's 16-county jurisdiction. The CFI is a matching grant program that enables the Governing Board, through its regional sub-committees, to jointly participate with local governments and other entities to incentivize proper development, use, and protection of the regional water resources of the District. Projects of mutual benefit are generally funded 50 percent by the District and 50 percent by the public or private cooperators. Communities or counties qualifying under the Rural Economic Development Initiative (Section 288.0656, F.S.) may be eligible for greater matching shares. Projects with construction costs exceeding \$5 million will undergo a third-party review to confirm costs, schedules, and ability to meet its resource benefits. Any state and federal funds received for the projects are applied directly against the project costs, with both parties benefitting equally. The District is committed to solving the region's water resource issues through cooperative programs, primarily the CFI which has been in place since 1988. These efforts have been highly successful resulting in a combined investment (District and its cooperators) of approximately \$3.8 billion in incentive-based funding assistance for a variety of water projects addressing its four areas of responsibility: water supply, natural systems, flood protection, and water quality.

**District Initiatives** – Projects implemented through the District Initiatives program are of great importance or a regional priority and, in most cases, are fully funded by the District. Examples of these initiatives include Water Resource Development projects such as: (1) the Quality of Water Improvement Program (QWIP) to plug deteriorated, free-flowing wells that waste water and cause inter-aquifer contamination; (2) the Utilities Services Group to conserve water by assisting utilities in controlling their water loss; (3) data collection and analysis to support major District initiatives such as the MFLs program; (4) the FARMS program and other various agricultural research projects designed to increase the water-use efficiency of agricultural operations; (5) WRD investigations and MFLs Recovery projects which may not have local cooperators; and (6) the WISE (Water Incentives Supporting Efficiency) program launched in 2019 offers cost-share funding for a wide variety of water conservation projects (50 percent match with a maximum of \$20,000 per project) to non-agricultural entities.

#### State Funding

**DEP Springs Initiative-** A new legislative appropriation specific to providing for the protection and restoration of Florida's major springs systems has enabled the DEP to assist local governments in achieving restoration goals through its Springs Initiative program. The District has allocated Springs Initiative funding to implement projects to restore aquatic habitats and reduce groundwater withdrawals and nutrient loading within the first magnitude springsheds, and improve the water quality and quantity of spring discharges. Projects include the reestablishment of aquatic and shoreline vegetation near spring vents, construction of infrastructure necessary to convey wastewater in a priority focus area of Outstanding Florida Springs, currently treated in

septic systems or package plants, to a centralized wastewater treatment facility which may increase reclaimed water production, and implementation of other BMPs within springshed basins. Since FY2014, the District has appropriated approximately \$75.8 million from the DEP for springs restoration. These projects are listed in the Work Program Appendix A - Projects for Implementing BMAPs.

The Florida Forever Program- The Florida Forever Act, as originally passed by the Florida Legislature in 1999, established the 10-year \$3 billion statewide Florida Forever Program. The Program was extended by the Legislature during the 2008 legislative session, allowing the Program to continue for 10 more years at \$300 million annually. The appropriations were limited during the economic recession, and the District hasn't received any new Florida Forever funding since FY2011. Since 1999, the District has allocated \$95 million (\$81.6 million for land acquisition and \$13.4 million for water body restoration) of Florida Forever funding Districtwide in support of water resource development. A "water resource development project" eligible for funding under the Florida Forever program is defined in Section 259.105, F.S., as a project that increases the amount of water available to meet the needs of natural systems and the citizens of the state by enhancing or restoring aquifer recharge, facilitating the capture and storage of excess flows in surface waters, or promoting reuse. Implementation of eligible projects under the Program includes land acquisition, land and water body restoration, aguifer storage and recovery (ASR) facilities, surface water reservoirs, and other capital improvements. Numerous tracts have been acquired in the northern region including Potts and Flying Eagle preserves, Three Sisters Springs, and coastal preserves at Weeki Wachee and Chassahowitzka Rivers. A primary example of how the funds were used by the District for water resource development was the purchase of lands around Lake Hancock within the Peace River watershed, as the first step in restoring minimum flows to the Upper Peace River. In addition, the District Governing Board expended \$35.7 million in ad valorem-based funding to complete the acquisition of lands associated with the Lake Hancock project which were acquired on a voluntary basis and through eminent domain proceedings. The state's Florida Forever Trust Fund (FFTF) holds prior-year funds that are available for potential land acquisitions consistent with the guidance provided by the DEP and subject to DEP approval for release. In FY2022, the District requested the release of the final balance of its prior-year funds held in the FFTF.

Facilitating Agricultural Resource Management Systems (FARMS) Program - The FARMS Program is an agricultural best management practice (BMP) cost-share reimbursement program that involves both water quantity and water quality. This public/private partnership program was developed by the District and the Florida Department of Agriculture and Consumer Services (FDACS) in 2003. The purpose of the FARMS Program is to implement production-scale agricultural BMP projects that will provide water resource benefits including water quality improvement, reduction of Upper Floridan withdrawals, conservation, and restoration or augmentation of the area's water resources and ecology. Since 2003 the District has co-funded \$48.3 million dollars towards \$84.4 million dollars in total project costs for 236 FARMS projects resulting in 31 million gallons per day (mgd) of water resource benefits. Operating under District Governing Board Policy, the FARMS Program utilizes additional state funding when available. Since inception of the program, the District has utilized \$7.3 million in state appropriations and \$1.2 million from the FDACS. No funding has been provided by state appropriations since FY2009.

NRCS Environmental Quality Incentive Program (EQIP) - The EQIP provides technical, educational, and financial assistance to eligible farmers and ranchers to address soil, water, and related natural resource concerns on their lands. The program assists farmers and ranchers in compliance with federal, state of Florida, and tribal environmental laws that encourage environmental enhancement. In addition to the EQIP, the FARMS Program has partnered with NRCS through the Agriculture Water Enhancement Program and the Florida West Coast Resource Conservation and Development Council to bring additional NRCS cost-share funding to the SWUCA. The District's FARMS Program works cooperatively with these programs on both financial and technical levels and has coordinated dual cost-share projects whenever possible. The maximum funding for using both FARMS and EQIP is 75 percent of the total project cost.

Water Protection and Sustainability Program- Large areas of Florida do not have sufficient

traditional water resources to meet the future needs of the state's growing population and the needs of the environment, agriculture, and industry. The state's Water Protection and Sustainability Program Trust Fund (WPSPTF) was created in the 2005 legislative session through Senate Bill 444 to accelerate the development of alternative water sources and later recreated in Chapter 373, F.S., as part of the 2009 legislative session. Legislation focused on encouraging cooperation in the development of alternative water supplies and improving the linkage between local governments' land use plans and water management districts' regional water supply plans. The Program provides matching funds to the District for alternative water supply development assistance. From FY2006 through FY2009, the District was appropriated a total of \$53.75 million by the Legislature through the Program for water supply development projects. Annual WPSPTF appropriations resumed in FY2020 with \$250,000 and another \$450.000 in FY2021 allocated to the District.

Program funds are applied toward a maximum of 20 percent of eligible project construction costs. In addition, the Legislature established a goal for each water management district to annually contribute funding equal to 100 percent of the state funding for alternative water supply development assistance, which the District has exceeded annually. The legislation also requires that a minimum of 80 percent of the WPSPTF funding must be related to projects identified in a district water supply plan. The District's Regional Water Supply Plan (RWSP) is utilized in the identification of the majority of WPSPTF-eligible projects. Projects are evaluated for funding based on consideration of the 14 factors described in Subsections 373.707(8)(f) and (g), F.S., and additional District evaluation factors as appropriate.

Water Supply and Water Resource Development Grant Program- In FY2020 the state appropriated funds in addition to the Water Protection and Sustainability Program to establish a Water Supply and Water Resource Development grant program to maximize the effort of addressing the demands on Florida's water supply to meet the future needs of the state's growing population and the needs of the environment. By identifying and researching all viable alternative water supply resources, the grant program is intended to help communities plan for and implement conservation, reuse, and other water supply and water resource development projects. Projects selected for funding are prioritized by areas of greatest need and greatest benefit, including timeliness of implementation. From FY2020 through FY2023, \$35.7 million has been appropriated to the District by DEP for alternative water supply through this grant program.

# **Summary/Conclusions**

The Work Program presented herein is adequate to ensure 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. Over the next five years, this Work Program outlines the District's commitment to ensure the availability of adequate water supplies for all reasonable-beneficial uses and to maintain the function of natural systems. It additionally illustrates the contributions of the District in support of MFLs and water reservations.

This Work Program outlines activities and projects that will make available 147.9 mgd of water upon completion, including reuse water and new potable supply. These benefits are associated with approximately \$58.2 million budgeted for FY2023. The proposed funding for the 5-year Work Program is approximately \$754 million through FY 2023-27. **Table 4** below summarizes the funding categorized in the Work Program as WRD data collection and analysis activities, WRD Projects, and Water Supply Development Projects.

Table 4. Work Program Summary

WRD Data Collection and Analysis Activities	Sum of Current Year District Funding (FY2023)	Sum of Five-Year District Funding (F2023-27)	Sum of Water Made Available (mgd)
Water Resource Development - Data Collection and Analysis Activities (Table 1)	\$34,284,709	\$126,358,006	NA
Water Resource Development - Projects (Table 2)	\$8,500,000	\$88,819,596	99.34
Water Supply Development - Projects (Table 3-h)	\$15,444,750	\$539,278,945	48.6
Totals	\$58,229,459	\$754,456,547	147.9

At the DEP's guidance, specific project details are provided in spreadsheet format. The DEP will present Work Program project data from each of the water management districts on their website for public review, in accordance with Section 373.536(6)(b), F.S. The detailed spreadsheet includes project schedules, cooperator and state funding levels, and the waterbodies and planning regions supported. The District's proposed Work Program projects spreadsheet is available online at: <a href="https://www.swfwmd.state.fl.us/resources/plans-reports/water-resource-development-work-program">https://www.swfwmd.state.fl.us/resources/plans-reports/water-resource-development-work-program</a>

The WRD and water supply projects set forth a commitment to develop projects associated with the implementation MFLs, recovery/prevention strategies, and water reservations. The majority of projects are located within the SWUCA or NTBWUCA and support their recovery strategies by reducing impacts to the Upper Floridan aquifer. The remaining projects are located in the District's Northern Planning Region, where a proactive, preventative approach is taken to optimize available water resources.

The data collection and analysis activities are a critical part of the WRD component implemented by the District. These activities support the District's MFLs programs. At the beginning of FY2023, the District has established and continues to monitor 203 adopted MFLs and has scheduled the establishment or revaluation of 22 MFLs through FY2025. The District's annual MFLs Priority List and Schedule and Reservations List and Schedule is published in the Consolidated Annual Report, and can also be found on the District's webpage at:

https://www.swfwmd.state.fl.us/projects/mfl/documents-and-reports

Other data collection and analysis activities include conducting watershed management planning, the QWIP program to preserve water resources through proper well abandonment, and the Implementation of stormwater storage and conveyance BMPs.

# Appendix A District Projects for Implementing Basin Management Action Plans

Basin Management Action Plans (BMAPs) provide technical direction for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load (TMDL). 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 Work Programs have historically identified water resource development projects that support MFL recovery and prevention but haven't included projects primarily intended to implement BMAPs. Consistent with section 373.036, F.S., and in a manner coordinated with DEP and the five water management Districts, this Appendix A of the Work Program provides a five-year funding outlook for projects specifically identified in an adopted BMAP.

The District budgeted for nineteen BMAP projects, each benefitting the water quality of first-magnitude springs in the District's northern planning region.

## Kings Bay/Crystal River Basin Management Action Plan

- Citrus County Cambridge Greens Septic to Sewer (W432)
- Crystal River Preserve State Park Redfish Hole Restoration (W401)
- Hunters Cove Sediment Removal (W402)
- Three Sisters Canal Shoreline Stabilization (W431)
- Submerged Aquatic Vegetation Mapping (WS01)

#### Chassahowitzka, Homosassa Springs Basin management Action Plan

- Citrus County Old Homosassa West Septic to Sewer Project (WH04)
- Citrus County Old Homosassa East Septic to Sewer project (Q134)
- Citrus County Old Homosassa Downtown North Septic to Sewer (WH06)
- Submerged Aquatic Vegetation Mapping (WS01)
- Chassahowitzka Education Campaign (W466)

#### **Weeki Wachee Springs Basin Management Action Plan**

- Hernando County Weeki Wachee Springshed Nitrogen Removal Stormwater Retrofits (WW05)
- Submerged Aquatic Vegetation Mapping (WS01)
- Weeki Wachee River Channel Restoration (WW04)
- Weeki Wachee Education Campaign (W466)

#### Rainbow Springs Basin Management Action Plan

- Marion County Rainbow Springs 5<sup>th</sup> Replat Stormwater Retrofit (WR10)
- SR 200 Septic to Sewer (WR11)
- Submerged Aguatic Vegetation Mapping (WS01)
- Investigation of Iron Stimulation of Filamentous Algal Growth in Rainbow River (W420)

The projects are categorized under various DistrictProgrammatic Budget activity codes. District funding shares are presented in **Table A-1**. Funding awarded from the DEP is reflected in the funding columns. Additional funding from the local cooperator shares, including state appropriations are reflected under the total project cost. Consistent with the District's CFI policy, projects with construction costs exceeding \$5 million will undergo a third-party review (TPR) at the 30 percent design stage to confirm costs, schedules, and resource benefits. Project details are available in the Work Program BMAP spreadsheet available online at:

Table A-1. Projects for Implementing BMAPs.

BMAPs Projects	Prior Funding	FY2023 Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	Total Project Cost	Funding Sources
Citrus County Cambridge Greens Septic to Sewer (W432)	\$7,200,500	\$0	\$0	\$0	\$0	\$0	\$10,243,000	District, DEP, Citrus County, State
Citrus County Old Homosassa West Septic to Sewer Project (WH04)	\$8,950,800	\$0	\$0	\$0	\$0	\$0	\$10,333,000	District, DEP, Citrus County, State
Citrus County Old Homosassa East Septic to Sewer Project (Q134)	\$14,440,000	\$0	\$0	\$0	\$0	\$0	\$18,190,000	District, DEP, Citrus County, State
Marion County Rainbow Springs 5 <sup>th</sup> Replat Stormwater Retrofit (WR10)	\$424,047	\$0	\$0	\$0	\$0	\$0	\$848,094	District, County
Hernando County Weeki Wachee Springshed Nitrogen Removal Stormwater Retrofits (WW05)	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$2,000,000	District, County
Citrus County Old Homosassa Downtown North Septic to Sewer (WH06)	\$750,000	\$0	\$0	\$0	\$0	\$0	\$14,111,000	District, DEP, Citrus County, State
SR 200 Septic to Sewer (WR11)	\$472,386	\$0	\$0	\$0	\$0	\$0	\$588,306	District, DEP, Marion County

Totals	\$33,237,733	\$1,500,123	\$22,000	\$2,022,000	\$22,000	\$22,000	\$64,823,419	
Submerged Aquatic Vegetation Mapping	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	District
Submerged Aquatic Vegetation Mapping	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	District
Submerged Aquatic Vegetation Mapping	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	District
Submerged Aquatic Vegetation Mapping	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	District
Submerged Aquatic Vegetation Mapping	\$0	\$50,000	\$0	\$0	\$0	\$0	\$50,000	District
Chassahow itzka Education Campaign	Annual Request	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	Annual Request	District
Weeki Wachee Education Campaign	Annual Request	\$12,000	\$12,000	\$12,000	\$12,000	\$12,000	Annual Request	District
Investigatio n of Iron Stimulation of Filamentou s Algal Growth in Rainbow River	\$48,941	\$0	\$0	\$0	\$0	\$0	\$48,941	District
Three Sisters Canal Shoreline Stabilizatio n	\$340,353	\$829,000	\$0	\$0	\$0	\$0	\$1,169,353	District
Hunters Cove Sediment Removal	\$0	\$249,123	\$0	\$0	\$0	\$0	\$249,123	District
Weeki Wachee River Channel Restoration	\$2,000,000	\$0	\$0	\$0	\$0	\$0	\$4,595,000	District, DEP
Crystal River Preserve State Park Redfish Hole Restoration	\$41,601	\$150,000	<b>\$</b> 0	\$2,000,000	<b>\$</b> 0	\$0	\$2,197,601	District