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Consolidated Annual Report

March 1, 2024

Southwest Florida
Water Management District

Consolidated Annual Report

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Chapter 3. MFL/Water Quality Grade for Projects .....Jill Qi, Yonas Ghile
Chapter 4. Annual Five-Year Capital Improvements Plan .....Andrea Shamblin
Chapter 5. Alternative Water Supplies Report .....Jospeh Quinn, Seung Park
Chapter 6. Five-Year Water Resource Development Work Program ..... Paige Tara
Chapter 7. Polk Regional Water Cooperative Status Report .....Joseph Quinn
Chapter 8. Florida Forever Work Plan ..... Carmen Sanders, Mike Singer
Chapter 9. Mitigation Donation Annual Report ..... Michelle Hopkins
Chapter 10. 2024-2028 Strategic Plan (updated February 2024) and the
Annual Work Plan Report .....Patrick Doty

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Executive Summary

Section 373.036, F.S. requires the water management districts to prepare a "Consolidated Water Management District Annual Report" consisting of several reporting documents that had historically been submitted separately. The legislation requires the consolidated report to be submitted by March 1 of each year to the Governor, DEP, the President of the Senate and the Speaker of the House of Representatives. In addition, copies must be provided, "… to the chairs of all legislative committees having substantive or fiscal jurisdiction over the districts and the governing body of each county in the district having jurisdiction or deriving any funds for operations of the District. Copies of the consolidated report must be made available to the public, either in printed or electronic format."

This consolidated report is an important communication tool for the District. The report's components were formerly individually distributed at various times of the year. The consolidation results in streamlining the reporting documents in one package. It also allows greater efficiency in comparing different reporting mechanisms.

Descriptions and highlights from the chapters that make up the 2024 Consolidated Annual Report follow:

The Water Management District Performance Measures Annual Report Noteworthy metrics in this report include a continued general decline in uniform gross per capita water use, from 113 gallons per capita per day (gpcd), when first measured in 2008, to 103 gpcd in 2023. Since 2003, a total of 66.4 mgd of water supply has been made available through the water resource development component of the District's Regional Water Supply Plan. The District continues to demonstrate effective maintenance control of exotic species on its managed lakes and rivers. Coverage has generally been less than five percent since the mid-1990s. Since 1994, more than $1.1 billion has been made available for water supply development assistance with an estimated 501 mgd of water supply made available by completed projects. Finally, water quality (nitrate concentration) in District springs remained the same overall compared to last year's report.

The Minimum Flows and Levels Annual Priority List and Schedule (DEP Approval Pending) The District's expenditures for minimum flows and levels (MFLs) and reservation adoption have changed from approximately $1 million in fiscal year 1998 to a peak of $4.9 million in 2009, with nearly $1.2 million expended in FY2023. As of FY2023, District rules included 203 MFLs and two water reservations. In addition to efforts that supported establishment of these rules, 128 reevaluations had been completed to confirm, revise or repeal established MFLs. By the end of 2026, 8 new MFLs are scheduled for adoption, and 15 existing MFLs and 1 reservation are scheduled for reevaluation.

The Minimum Flows and Levels/Water Quality Grade for Projects Report This document satisfies new reporting called for in Section 373.036(7)(b)9, F.S. The report contains grades for each watershed, water body or water segment expected to be impacted by a project listed in the Five-Year Water Resource Development Work Program. Two grades are provided: 1) a grade that reflects the severity of a water quality impairment, and 2) a grade that represents the level of violation of an adopted minimum flow or minimum level. A total of 101 projects from the Work Program are listed with the corresponding impacted watershed, water body or water segment, the water quality impairment grade and the minimum flow or level grade.

The Annual Five-Year Capital Improvements Plan includes projected revenues and expenditures for planned improvements for fiscal year (FY) 2023-24 through FY2027-28. Some of the major highlights for FY2023-24 include:

Research, Data Collection, Analysis and Monitoring:
- $3,742,000 for coring, drilling, testing, and construction of monitor wells at Regional Observation and Monitor-well Program sites and special project sites within the Central Florida Water Initiative region.

Land Acquisition:
- $15,600,000 for potential land acquisition under the Florida Forever program and funded from dollars generated from the sale of land or real estate interests within the state of Florida.

Works:
- $7,250,000 for the replacement of the District's flood control gates and upgrades to their lifting systems. The replacement gates will be stainless steel gates and will not require routine coating, which will reduce future maintenance costs. The existing hydraulic lift systems will be converted to electric drum and cable systems, which are more reliable and will reduce future maintenance costs.

- $3,300,000 for the repair of concrete due to rebar corrosion damage and the installation of cathodic protection systems at District structures S-160 on the Tampa Bypass Canal and S-551 on the Lake Tarpon Outfall Canal. These cathodic protection systems will mitigate corrosion from existing saltwater and extend the useful life of these structures.

The Alternative Water Supplies Annual Report This Legislatively required report describes alternative water supply projects funded as well as the quantity of new water to be created by these projects. The report also accounts for other funding sources, such as grants or the use of District lands or facilities to implement regional water supply plans. For FY2024, the District budgeted more than $75 million for alternative water supply projects, including reclaimed water, brackish desalination, and surface water/stormwater, projected to provide more than 22.5 mgd of water supply. In addition to infrastructure funding, the District continues to participate in studies and research with utilities and entities on alternative water sources in support of the District's mission to find and maintain adequate and ecologically sustainable resources.

The Five-Year Water Resource Development Work Program The Work Program describes the District's implementation strategy for the Water Resource Development component of the District's 2020 Regional Water Supply Plan (RWSP) and the Central Florida Water Initiative 2020 RWSP. This 23rd edition of the Work Program covers the period from FY 2024 to 2028. The Work Program presents the data collection and analyses activities and more narrowly defined "projects" that the District is financially and technically undertaking to enhance the water available to meet projected demands. To meet Subsection 373.536(6), F.S., the Work Program includes the anticipated five-year funding for Water Supply and Water Resource Development Assistance projects that are developed by cooperating water providers and qualify for District financial assistance, and an appendix of projects that help to implement Basin Management Action Plans (BMAPs). The Work Program outlines activities and projects that will make available 95.4 mgd of water supply upon completion, including reuse water and new potable supply. These benefits are associated with approximately $96.4 million budgeted for FY2024.

The Polk Regional Water Cooperative Status Report This annual report provides a status on Polk Regional Water Cooperative projects receiving priority state funding. For the 2022 report, the cooperative and its members identified 48 prioritized projects and requested FY2024 funding by the Florida Legislature, with $8.5 million in funding being received. For this 2023 report, a prioritized list of two Cooperative and 45 local member government projects are being submitted for FY2025 funding consideration by the Florida Legislature. For FY2025, a total of $147.1 million would be required to implement all 47 projects, with $90.6 million committed in local member government funding. A total of $56.5 million for the 47 priority projects is being requested from the state and their implementation is subject to approval of state funding for the FY2025 budget year.

The Florida Forever Work Plan The Florida Forever Act has been a successful land acquisition initiative that has included the Save Our Rivers and Preservation 2000 programs, providing funding to state agencies, water management districts, and local governments. Florida Forever funds allocated to the water management districts are used for land acquisition including acquisition of less-than-fee interests, water resource development, and water body restoration. Over the life of the program, at least 50 percent of the funds allocated to each water management district must have been used for land acquisition.

As required by Section 373.199(7), F.S., the District must submit an annual update of its Florida Forever Work Plan (Work Plan). The Work Plan identifies conservation lands, lands necessary for water resource development projects and waterbody restoration projects that meet acquisition criteria outlined in the Florida Forever Act (Section 259.105, F.S.) as well as sets forth acres owned, managed, and surplused and funds budgeted. Modifications to the 2023 Work Plan include updating land acquisition project maps, acres owned, lands managed, lands surplused and acquisition funds budgeted.

The Mitigation Donation Annual Report This report identifies all cash donations, if any, accepted during the preceding fiscal year for wetland mitigation purposes. Similar to last year, no donations were received.

The 2024 - 2028 Strategic Plan (updated February 2024), and the 2023 Strategic Plan Annual Work Plan The Strategic Plan is the guiding document for the District, identifying targets and how success will be achieved and measured. The plan identifies 12 Districtwide strategic initiatives, including regional water supply planning; alternative water supplies; reclaimed water; water conservation; water quality assessment and planning; water quality maintenance and improvement; minimum flows and levels establishment and monitoring; conservation and restoration; floodplain management; programs, projects, and regulations; flood protection; and emergency flood response and 34 regional priorities/objectives. The plan has a five-year time horizon and is updated on an annual basis. The significant update to the plan made for 2024 was the revision of the *Flood Protection* strategic initiative to better address District Programs and Flood Control structures by breaking out the previous initiative “Flood Protection Maintenance and Improvement into two initiatives: “Programs, Projects, and Regulations” and "Flood Protection Facilities."

The Strategic Plan Annual Work Plan details progress on efforts implementing priorities and objectives of the Strategic Plan. Notable accomplishments for the Northern region in FY2023, the District cooperatively funded three conservation projects with northern utilities through the District’s CFI program. These projects are estimated to conserve a total of 59,555 gpd and have a District investment of $264,250. The regional average unadjusted gross per capita has declined by approximately 5.1 percent to 148 gpcd in 2021. In the Tampa Bay region and the Southern Water Caution Use Area (SWUCA), the District has offset approximately 29.8 mgd of

groundwater through Facilitating Agricultural Resource Management Systems (FARMS) projects that are operational, under construction and/or have contracts pending. Of significant note, in the Tampa Bay, Heartland and Southern regions, a status assessment completed in 2023 indicated that, for the first time, the SWUCA saltwater intrusion minimum aquifer level (SWIMAL) was being met. This success is based on the 13.1 ft Upper Floridan aquifer elevation associated with the SWIMAL being equaled or exceeded for five consecutive years, from 2018 through 2022.

Consolidated Annual Report

March 1, 2024

2023 Water Management District Performance Measures Annual Report

Southwest Florida Water Management District

Chapter 1 Water Management Performance Measures

Government, like any meaningful enterprise, needs to measure the results of its actions to ensure that services provided are effective and efficient. The purpose of any measurement process must be aimed at accomplishing sound resource management while improving accountability. If measures are successfully developed, and communicated, they can be expected to:

- Provide better information for decision making.
- Document to taxpayers their dollars are being spent wisely.
- Spot potential problems before they become crises.
- Coordinate effective resource management among agencies.

The water management districts, and the DEP jointly developed these performance measures. They are organized around the four primary areas of responsibility of the districts: Water Supply, Water Quality, Natural Systems and Flood Protection. Base years, assumptions and data sources for each measure were mutually agreed upon as one means of achieving consistency among districts. The time frames associated with each measure may vary, based upon the availability of data. A number of measures are provided for the areas of responsibility. The concept is that a few key measures for each of the District's responsibilities will be tracked over time to identify trends as they are reported annually. These measures will continue to be refined and coordinated with other agencies and the public, and periodic assessments will be necessary to ensure a measuring system that provides true accountability.

Summary of Water Management Performance Measures

Water Supply Measures

Objective 1: Increase available water supplies and maximize overall water use efficiency to meet identified existing and future needs.

a. Percentage of domestic wastewater reused.
b. Uniform gross per capita water use (Public Supply) by District and water supply planning regions.
c. Uniform residential per capita water use (Public Supply) by District and water supply planning regions.
d. Within each water supply planning region: 1) the estimated amount of water supply to be made available through the water resource development component of the Regional Water Supply Plan; 2) percent of estimated amount under development; and 3) percent of estimated amount of water actually made available.
e. Within each water supply planning region, the estimated additional quantities of water supply are made available through District water supply development assistance.

Objective 2: Prevent contamination of water supplies.

a. Percentage of surface water supply sources for which water quality fully attains the designated use.

Water Quality Measures

Objective 1: Protect and improve surface water quality.

a. Percentage of surface waters with healthy nutrient levels.
b. Percentage of surface waters with healthy biological conditions.

Objective 2: Protect and improve groundwater quality.

a. Improving, degrading and stable trends in nitrate concentrations in springs.

Natural Systems Measures

Objective 1: Maintain the integrity and functions of water resources and related natural systems.

a. Number of MFLs, by water body type, established annually and cumulatively.
b. Percentage of MFLs established in accordance with previous year's schedule.
c. For the previous fiscal year, the total acres of wetlands or other surface waters authorized by Environmental Resource Permit (ERP) to be impacted and the number of acres required to be created, enhanced, restored, and preserved.

Objective 2: Restore degraded water resources and related natural systems to a naturally functioning condition.

a. Acres of invasive nonnative aquatic plants in inventoried public waters.

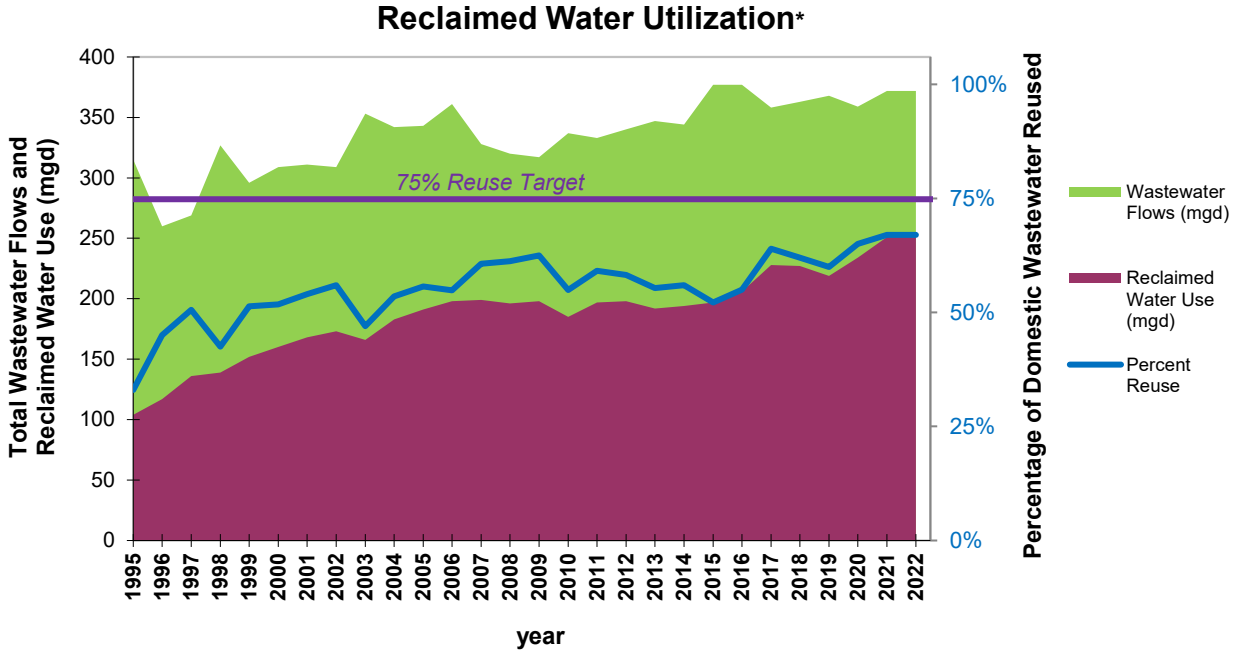
Flood Protection Measures

Objective 1: Minimize damage from flooding.

a. Percentage of District works maintained on schedule.

Water Supply Measure 1a: Percentage of domestic wastewater reused.

The State and the District emphasize the beneficial use of reclaimed water as part of water supply planning strategies. This water resource has become an important alternative for potable quality supplies for such beneficial uses as irrigation, industrial processing, power generation and environmental enhancement. This measure is intended to reflect the quantity of reclaimed water available and reused.



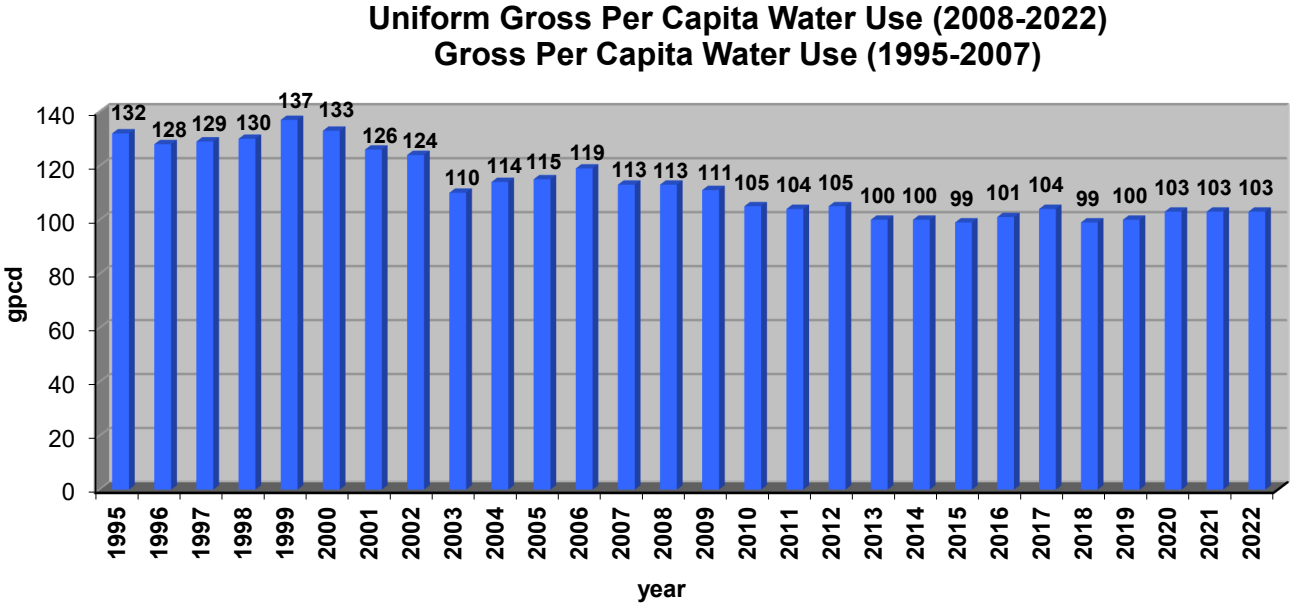
Source: 2021 Reuse Inventory, Florida Department of Environmental Protection, 2022.

The amount of domestic wastewater reused in the District has increased, from 104 million gallons per day (mgd) in 1995 to 251 mgd in 2021, based on available data. The percentage of wastewater reused has also increased, reaching 67 percent in 2021. The data show that there has been relatively stable growth in wastewater plant flows (i.e., reclaimed water available) and the amount of reclaimed water used over the past 27 years. The long-term increase in reclaimed water flows is associated with the increased number of online reclaimed water projects. Newly completed reclaimed water projects resulted in more than ten thousand additional customers connected in 2021. Districtwide, reclaimed water customer numbers now exceed 178,000. This represents an increase in customers of more than 520 percent since 2000.

** The 2021 data has been carried forward, as the DEP's 2022 Reuse Inventory Report was not available at the time of publication. Data reflect the DEP's definition of reclaimed water, which includes rapid infiltration basins (RIBs-18 mgd) at treatment plants (ATP- 14 mgd) and Sprayfields (Spray- 7 mgd). The reduced reuse percentages in some years reflect elevated wastewater treatment plant flows associated with increased infiltration and inflow of stormwater into sanitary sewer systems. The 75 percent reuse target goal by 2040 is based on wastewater flows and is applied Districtwide. District estimates of "beneficial" reuse flows for other planning and tracking exercises may vary based upon regional water supply goals.*

Water Supply Measure 1b: Uniform gross per capita water use (Public Supply) by District and water supply planning regions.

Public supply represents one of the largest water use sectors and is experiencing sustained year-to-year growth. Public supply water use includes the water distributed by most public and private water utilities. This measure is intended to show the trend of such use, recognizing that water conservation can serve as a significant source of "new water" to meet public needs. In 2008, the DEP and the water management districts established uniform statewide methods of measuring per capita for public water supply for the purposes of consistent statewide assessment of water conservation performance, reporting, program evaluation and for public communication. The Uniform Gross Per Capita is defined as utility service area finished water use divided by utility service area residential population and is reported for 2008-2022. Other years (1995-2007) were generated using an earlier methodology for gross per capita public supply use, calculated by dividing the total publicly supplied water used (in gallons per day) by the functional population (includes seasonal and tourist) served.

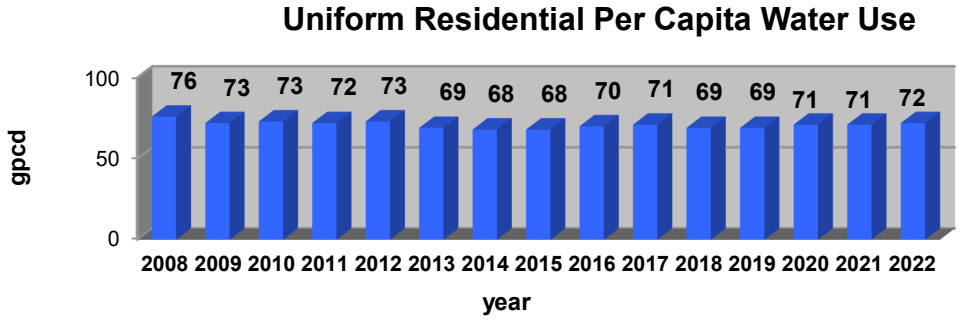


Source: SWFWMD Estimated Water Use Reports, 1995-2021, draft 2022.

The graph reports gross per capita water use for the last 28 years. While it is recognized that many factors influence water use (e.g., rainfall), there has been a clear trend toward reduced per capita rates. This trend can be attributed in part to the increasing availability of reuse systems, water conservation programs, enhanced public awareness and related efforts. The per capita figures for 1999 and 2000 are reflective of the severe drought experienced Districtwide and resulting higher demand levels, in contrast to the per capita reduction in 2001 and 2002 "wet years." Years 2003 to 2007 reflect a general trend toward lower per capita use rates. Years 2008 to 2022, which are based on uniform per capita water use, continue to show a general downward trend. This is credited to the continued increase in non-residential reclaimed water use and the implementation of conservation practices.

Water Supply Measure 1c: Uniform residential per capita water use (Public Supply) by District and water supply planning regions

This measure accounts for the portion of publicly supplied water that is used for residential purposes only. The uniform residential per capita is defined as the utility service area finished water used by dwelling units (not connections) divided by the utility service area residential population. The DEP and the five water management districts agreed on this per capita definition in 2008, and to include the data in the annual progress report. This is the fourteenth reporting year for the residential uniform per capita measure.



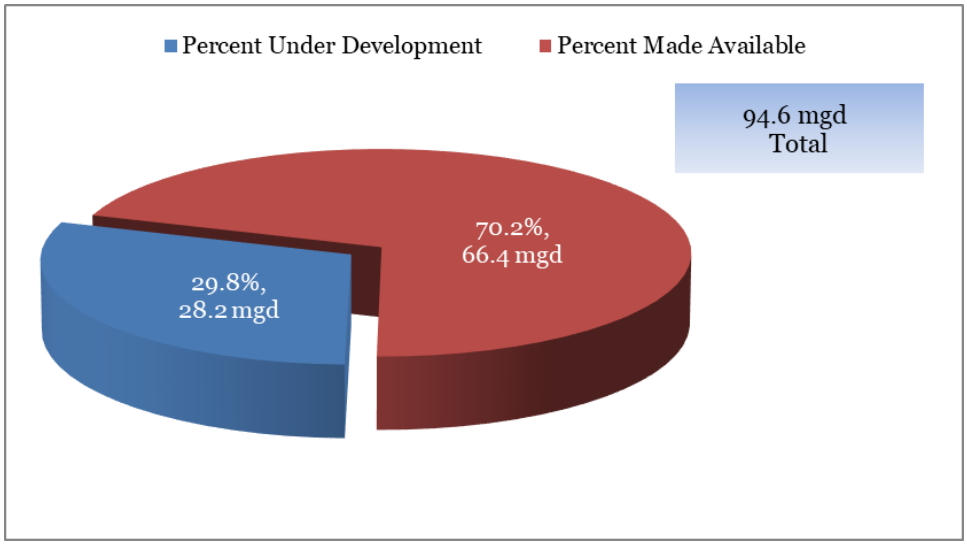
Source: SWFWMD Estimated Water Use Reports, 2008-2021, draft 2022.

To ensure a sustainable water supply, utilities are tapping alternative sources and emphasizing conservation. Opportunities exist for all public supply users to conserve, including residential users, which make-up a significant portion of the public supply customers. The District has devoted considerable resources to encourage the implementation of water conserving rate structures and indoor/outdoor practices for residential water users. These efforts have resulted in a uniform residential per capita water use decline of four gallons per day since the methodology was implemented in 2008. Additionally, the District has implemented improvements to the reporting process to further ensure data accuracy.

Water Supply Measure 1d: Within each water supply planning region: 1) the estimated amount of water supply to be made available through the water resource development component of the Regional Water Supply Plan (RWSP); 2) percent of estimated amount under development; and 3) percent of estimated amount of water actually made available.

The District is charged with expanding the "water pie" to assure future water supply availability. This can be done, in part, through water resource development. Projects receiving District funding assistance are categorized as either Water Resource Development (WRD) or Water Supply Development assistance. This measure is intended to document progress toward WRD. The District typically has the lead role in identifying and implementing WRD efforts.

Water Resource Development

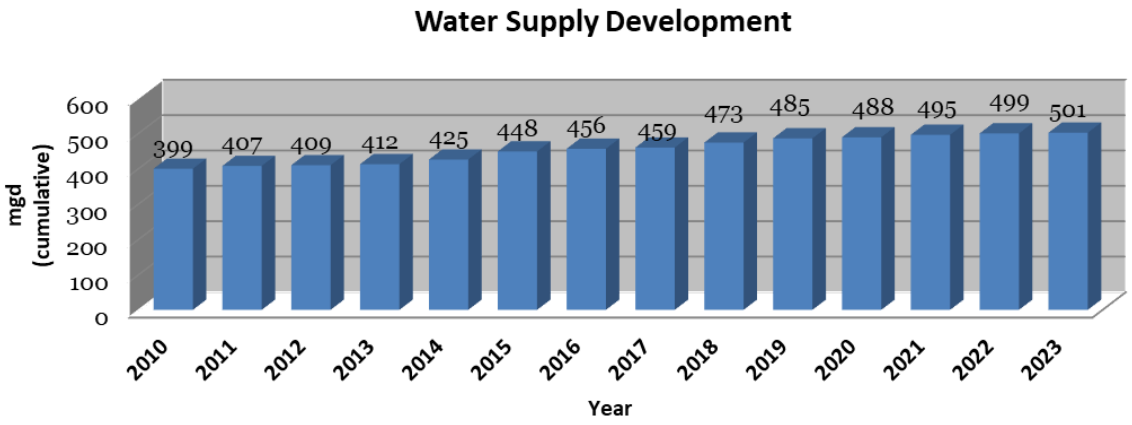


Source: SWFWMD 2024 Proposed Five-Year Water Resource Development Work Program, District Water Resources Staff, 2023

The District's WRD component takes two forms: activities and projects. The WRD "activities" are routine efforts that include hydrologic data collection, the evaluation and establishment of Minimum Flows and Levels (MFLs), watershed management planning, the Quality of Water Improvement Program that plugs abandoned wells to protect water quality, and stormwater storage and conveyance best management practice implementation. The District's WRD "projects" have goals and schedules and are intended to enhance the amount of water available for reasonable-beneficial uses and for natural systems. Current WRD projects include aquifer storage and recovery feasibility and pilot testing projects, agricultural water conservation projects, and MFL recovery projects. The water quantities produced or conserved by many WRD projects are difficult to measure until the projects are completed and the benefits are realized. Based on WRD projects undertaken and quantified since 2003, a total of 66.4 mgd has already been made available.

Water Supply Measure 1e: Within each water supply planning region, the estimated additional quantities of water supply made available through District water supply development assistance.

The Water Supply Development (WSD) component of the District's RWSP identifies water supply options from which regional authorities, local governments, private utilities, and other water users can choose to meet their individual needs. The options are provided as reasonable concepts that water users may pursue for their water supply planning efforts. Water users are primarily responsible for developing these options and are encouraged to apply for funding assistance from the District. Some options are large scale alternative water supply projects that would likely be implemented by a regional water supply authority or a group of users. Other options, such as reclaimed water infrastructure and conservation programs, could be implemented by individual utilities and other users.

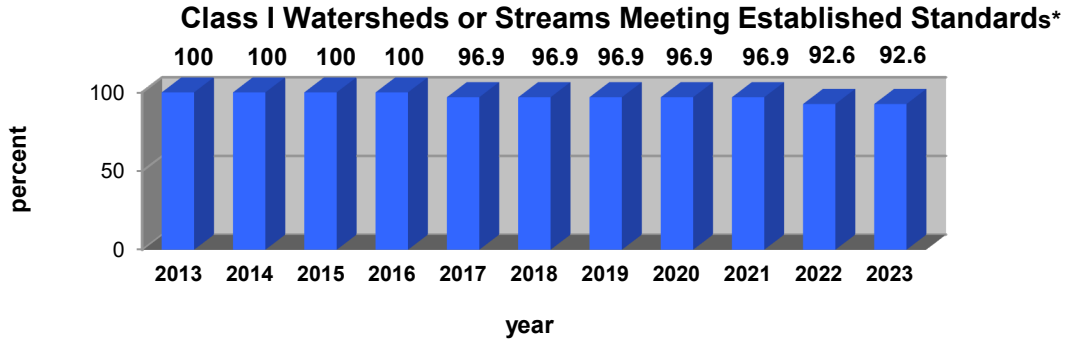


Source: District Water Resources Staff, 2023.

This graphic shows water supply made available or developed on a cumulative basis through WSD funding assistance, according to records from 2010 to present day. An estimated 501 mgd has been made available by completed projects. From 1994 through 2023, the District provided $1.145 billion in project funding to develop and conserve water supplies. District funds are typically matched on a 50/50 cost-share basis with the partnering entity. Major accomplishments of the District's WSD component in FY2023 include the final project close out of the Braden River Utilities reclaimed water transmission line.

Water Supply Measure 2a: Percentage of surface water supply sources for which water quality fully attains the designated use.

Protecting and maintaining high quality water for human use is a critical component of water management. It is essential these sources be monitored and maintained in a high-quality state for future water supply use. Under Florida's water quality monitoring programs, surface water bodies are regularly assessed to determine whether designated uses are being attained.



Source: Florida Department of Environmental Protection, 2013-2023.

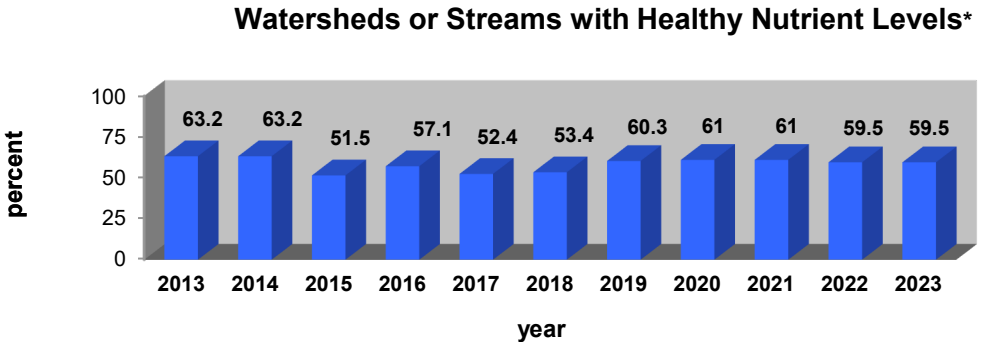
Of the 62 Class I water body identification units (WBIDs) in the District, 25 water bodies were assessed in 2022/2023*. Data indicates that these surface waters are currently meeting their designated use, except for iron impairment in two waterbodies.

Since the 2013 reporting period, the methodologies utilized for determining whether a Class I Water is meeting its designated use have been based on assessment of toxic parameters (metals, pesticides, and chemicals). In 2015, DEP implemented new reporting criteria for this metric. Since the differences between the old and new reporting criteria are minimal, comparisons to prior years can still be made.

**The data provided by DEP in 2021 and 2023 are the same as that provided in the respective prior year (i.e., 2020 and 2022), as DEP adopts new basin assessments on a biennial basis.*

Water Quality Measure 1a: Percent of surface waters with healthy nutrient levels

The District has an abundance of surface waters used for a variety of purposes by the people who live and work here, by those who visit, and by the fish and wildlife that depend on these waters. Excessive nutrient loading remains the largest single threat to these resources. While nutrients are essential to life and ecosystem functions, excessive nutrients can cause nuisance algal and plant growth, oxygen depletion, loss of water clarity, loss of desirable species, loss of biodiversity, flavor effects on drinking water, increased probability of human and animal pathogens and other water quality impairments. This measure documents the percentage of surface waters with healthy nutrient levels.



Source: Florida Department of Environmental Protection, 2013-2023.

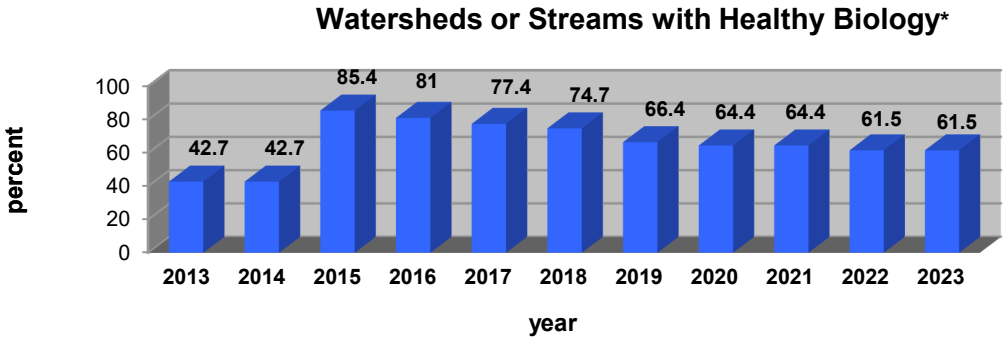
Of the total water bodies with sufficient data to satisfy assessment criteria (679 WBIDS out of 1,438 WBIDS Districtwide), 59.5 percent were determined to be healthy for nutrients in 2022/2023*.

In 2015, DEP implemented new reporting criteria. Under the new reporting criteria, eight nutrient-related parameters are utilized to determine waters with healthy levels of nutrients. For previous assessments, only two nutrient-related parameters (elevated Chlorophyll *a* concentrations or Trophic State Indices) were used. The expansion in the number of parameters evaluated has resulted in an increase in the number of water bodies determined to have unhealthy nutrient levels. Consequently, comparisons to years prior to 2015 can no longer be made.

**The data provided by DEP in 2021 and 2023 are the same as that provided in the respective prior year (i.e., 2020 and 2022), as DEP adopts new basin assessments on a biennial basis. The data provided by DEP in 2014 are the same as that provided in 2013, as DEP was developing new reporting criteria that went into effect in 2015.*

Water Quality Measure 1b: Percentage of surface waters with healthy biological conditions

Biological conditions are included in the broader definition of water quality. These conditions are indicators of water body health, and include investigations of dissolved oxygen, habitat conditions and the health of aquatic insect communities. Most importantly, the conditions provide cumulative information on all activities occurring within the watershed and can be used to establish baseline characteristics, characterize the overall condition of a watershed, identify potential problem pollutants, target more intensive diagnostic sampling and to support land use planning and management. This measure addresses the percentage of assessed watersheds or stream reaches with healthy biological conditions.



Source: Florida Department of Environmental Protection, 2013-2023.

The DEP primarily uses the Stream Condition Index (SCI), stream floral metrics and Lake Vegetation index (LVI) to evaluate the biological conditions in surface waters. Of the 283 watersheds or stream reaches assessed in 2022/2023* within the District, 109 watersheds or stream reaches were determined to be impaired based on biological assessments. The numbers for the previous ten years are as follows: 2020/2021 (250 assessed/89 impaired), 2019 (232 assessed/78 impaired), 2018 (174 assessed/44 impaired), 2017 (159 assessed/36 impaired), 2016 (84 assessed/16 impaired), 2015 (48 assessed/7 impaired), 2014 (157 assessed/90 impaired), 2013 (157 assessed/90 impaired), 2012 (163 assessed/94 impaired).

In 2015, DEP implemented new reporting criteria for this metric. The primary differences between the old and the new reporting criteria include the number and frequency of the water bodies assessed, the basin(s) targeted for the assessment, and the quality of the data being used in the assessment. These changes have resulted in a decrease in the number of water bodies determined to have unhealthy biological conditions. Consequently, comparisons to years prior to 2015 can no longer be made. The difference in the percentage of healthy water bodies during years 2012-2014 is believed to be largely due to the number and frequency of the water bodies assessed, as well as the basin(s) targeted for the assessment.

**The data provided by DEP in 2021 and 2023 are the same as that provided in the respective prior year (i.e., 2020 and 2022), as DEP adopts new basin assessments on a biennial basis. The data provided by DEP in 2014 are the same as that provided in 2013, as DEP was developing new reporting criteria that went into effect in 2015. DEP uses LVI (Lake Vegetation Index) to assess biological health in lakes.*

Water Quality Measure 2a: Improving, degrading and stable observations/conditions for nitrate concentrations in springs.

Increasing levels of nitrate-nitrogen in Upper Floridan aquifer groundwater discharging from springs is a continuing concern in the District and statewide. While not yet posing significant human health impacts, increasing nitrate concentrations stimulate the growth of aquatic vegetation which can alter the ecological function of springs and receiving water bodies. This measure is intended to identify District springs where nitrate concentrations are increasing (degrading), decreasing (improving), or remaining stable.

The table below depicts nitrate trend analyses for 48 selected springs within the District. As in previous years, the 2023 trends are determined using the Wilcoxon Rank-Sum test to compare data from the temporal groups of August 2016-August 2019 (Group 1) and August 2019-August 2023 (Group 2).

Trends in Nitrate* Concentrations in Selected Springs (*Source: District Data Collection Bureau, 2023*)

Spring Group	Spring	Wilcoxon P-Statistic	No. of Samples Group 1	Median Nitrate (mg/L) Group 1	No. of Samples Group 2	Median Nitrate (mg/L) Group 2	Wilcoxon Trend
ARIPEKA	BOBHILL SPRING WQ	0.016795	12	0.635	16	0.525	IMPROVING
ARIPEKA	MAGNOLIA SPRING	0.038788	12	0.562	16	0.524	IMPROVING
CHASSAHOWITZKA	BAIRD SPRING	0.515563	12	0.323	16	0.331	DEGRADING
CHASSAHOWITZKA	BETEEJAY SPRING	0.637222	10	0.464	15	0.487	DEGRADING
CHASSAHOWITZKA	CHASSAHOWITZKA 1 SPRING	0.177852	12	0.653	16	0.660	DEGRADING
CHASSAHOWITZKA	CHASSAHOWITZKA MAIN SPRING	0.045850	12	0.583	16	0.619	DEGRADING
CHASSAHOWITZKA	CRAB CREEK SPRING	0.659150	12	0.657	16	0.655	IMPROVING
CHASSAHOWITZKA	RUTH SPRING	0.826122	12	0.669	15	0.669	STABLE
GULF HAMMOCK	BIG KING SPRING	0.727706	12	2.128	16	2.837	DEGRADING
GULF HAMMOCK	LITTLE KING SPRING	0.561660	12	1.240	16	1.235	IMPROVING
GUM SLOUGH	ALLIGATOR SPRING (GUM SPRING 01A)	0.823924	11	1.690	16	1.675	IMPROVING
GUM SLOUGH	CITRUS-BLUE SPRING	0.125474	12	0.843	16	0.776	IMPROVING
GUM SLOUGH	GUM SPRINGS 1	0.255881	11	1.660	16	1.750	DEGRADING
GUM SLOUGH	GUM SPRINGS 2	0.005419	12	1.535	13	1.680	DEGRADING
GUM SLOUGH	GUM SPRINGS MAIN	0.402784	12	1.652	16	1.670	DEGRADING
GUM SLOUGH	WILSON HEAD SPRING	0.000349	12	0.423	16	0.635	DEGRADING

Spring Group	Spring	Wilcoxon P-Statistic	No. of Samples Group 1	Median Nitrate (mg/L) Group 1	No. of Samples Group 2	Median Nitrate (mg/L) Group 2	Wilcoxon Trend
HIDDEN RIVER	HIDDEN RIVER 2 SPRING	0.000051	12	0.944	13	0.884	IMPROVING
HIDDEN RIVER	HIDDEN RIVER HEAD SPRING	0.000240	12	0.969	13	0.923	IMPROVING
HILLSBOROUGH	HILLSBOROUGH RIVER CRYSTAL SWAMP 1	0.531315	12	2.050	13	1.910	IMPROVING
HOMOSASSA	BLUEBIRD SPRING VENT	0.021856	9	0.672	16	0.744	DEGRADING
HOMOSASSA	HALLS RIVER HEAD MAIN SPRING	0.193280	12	0.477	16	0.432	IMPROVING
HOMOSASSA	HOMOSASSA 1 SPRING	0.000591	12	0.726	16	0.776	DEGRADING
HOMOSASSA	HOMOSASSA 2 SPRING	0.000971	12	0.671	16	0.738	DEGRADING
HOMOSASSA	HOMOSASSA 3 SPRING	0.016810	12	0.738	16	0.794	DEGRADING
HOMOSASSA	TROTTER MAIN	0.063245	12	0.745	16	0.773	DEGRADING
KINGS BAY	CATFISH SPRING	0.001470	12	0.412	16	0.448	DEGRADING
KINGS BAY	GOLFVIEW BOATHOUSE SPRING	0.233038	3	0.278	5	0.254	IMPROVING
KINGS BAY	HOUSE SPRING	0.376759	3	0.545	4	0.557	DEGRADING
KINGS BAY	HUNTERS SPRING	0.268218	10	0.703	16	0.636	IMPROVING
KINGS BAY	MAGNOLIA CIRCLE SPRING	0.780508	12	0.657	16	0.633	IMPROVING
KINGS BAY	PARKER ISLAND SPRING	0.064080	11	0.188	16	0.227	DEGRADING
KINGS BAY	TARPON HOLE COMPOSITE	0.456528	10	0.218	13	0.206	IMPROVING
LITHIA BUCKHORN	BUCKHORN MAIN SPRING	0.028742	12	2.145	16	2.090	IMPROVING
LITHIA BUCKHORN	LITHIA MAIN SPRING	0.000087	12	2.522	16	2.320	IMPROVING
PANASOFFKEE	BELTONS MILLPOND MAINTENANCE SPRING	0.000154	12	0.096	16	0.332	DEGRADING
PANASOFFKEE	CANAL 485A SPRING 1B	0.000022	12	1.990	16	3.400	DEGRADING
PANASOFFKEE	FENNEY SPRING	0.056957	12	0.182	16	0.305	DEGRADING
PINELLAS	HEALTH SPRING	0.275290	12	4.960	16	4.610	IMPROVING

Spring Group	Spring	Wilcoxon P-Statistic	No. of Samples Group 1	Median Nitrate (mg/L) Group 1	No. of Samples Group 2	Median Nitrate (mg/L) Group 2	Wilcoxon Trend
RAINBOW	RAINBOW 1 SPRING	0.094400	12	2.595	16	2.765	DEGRADING
RAINBOW	RAINBOW 4 SPRING	0.002127	12	2.440	16	2.580	DEGRADING
RAINBOW	RAINBOW 6 SPRING	0.284246	12	1.500	16	1.540	DEGRADING
RAINBOW	RAINBOW BRIDGE SEEP NORTH	0.000822	12	1.945	16	2.170	DEGRADING
RAINBOW	RAINBOW BUBBLING SPRING	0.089736	12	2.045	16	2.085	DEGRADING
RAINBOW	RAINBOW SWAMP 3 SPRING	0.448971	12	1.660	15	1.620	IMPROVING
WEEKI WACHEE	JENKINS CREEK SPRING	0.353094	12	0.805	16	0.817	DEGRADING
WEEKI WACHEE	LITTLE WEEKI WACHEE SPRING	0.350201	11	0.829	15	0.795	IMPROVING
WEEKI WACHEE	WEEKI PRESERVE SPRING	0.762839	12	0.281	16	0.248	IMPROVING
WEEKI WACHEE	WEEKI WACHEE SPRINGS NR BROOKSVILLE	0.170842	12	0.887	16	0.901	DEGRADING

*The sum of nitrite and nitrate are used to represent nitrate.

The Wilcoxon Rank-Sum test was used to determine whether there is a significant difference between spring water quality data populations grouped by time periods. It is a non-parametric statistical test that is used to determine whether one independent group of observations tends to contain larger values than another independent group. The Wilcoxon Rank-Sum test calculates a p-value, a significance level obtained by the data. If the calculated p-value is less than 0.05, the 95 percent confidence level, the groups are considered significantly different.

The results indicate that nitrate levels for these 48 selected springs in the District remain similar to last year's report. The trend for 42 springs remained the same, while one changed from improving or stable to degrading and four formerly degrading springs changed to improving. It should be noted that changes in nitrate levels are typically very small from year to year, and the difference in median concentrations between temporal groups ranged from zero (stable) at Ruth Spring, to 1.41 mg/l for Canal 485a Spring 1b, which is a significant change for this small spring. However, just 18 of the 48 springs analyzed exhibited a statistically significant nitrate trend, based on the 95% confidence threshold specified for the test.

Nitrate concentrations in springs may fluctuate based on a variety of factors including land use change, climate, irrigation practices, etc. Various DEP initiatives support funding for investigations and implementation of strategies to improve water quality in Florida's springs, including recognition of the significance of public education. The District continues to support springs conservation and water-quality improvements through cooperative funding initiatives and restoration efforts, such as storm water improvement projects, assisting with agricultural efficiencies, and conversion of onsite septic systems to municipal wastewater collection and treatment systems in spring basins.

Natural Systems Measure 1a: Number of MFLs, by water body type, established annually and cumulatively.

The Florida Water Resources Act of 1972 (Chapter 373, F.S.) directs the District to establish minimum flows or minimum water levels (i.e., MFLs) for priority water bodies as the limit or water level at which further withdrawals would be significantly harmful to the water resources or ecology of the area. Adopted MFLs are incorporated into the District's Water Levels and Rates of Flow rules (Chapter 40D-8, F.A.C.) and used for regulatory and planning purposes. Based on changing environmental conditions and availability of additional information, MFLs are periodically reevaluated and revised, as necessary.

From the 1970s through the early 1990s, the District established regulatory flows and levels, including MFLs, for nearly 400 lakes. In the late 1990s, the District began developing new approaches for MFLs establishment based on statutory changes associated with MFLs. These efforts culminated in reclassification of the nearly 400 previously established MFLs as guidance levels in FY2000 and adoption of 64 new MFLs for several lakes, wetlands, and aquifer sites and a river segment.

By the end of FY2023, District rules included MFLs for 203 water bodies, including those established for 126 lakes, 34 wetlands, 24 freshwater and estuarine river segments, 10 springs or spring groups, and 9 aquifer sites or areas. Establishment of these rules was based on water-body specific, original evaluations and reevaluations completed to confirm, revise or repeal 128 MFLs. The following table lists the number of MFLs that have been developed by the District as new MFLs annually, the resulting cumulative total, and the number of MFLs reevaluated annually during the past 10 fiscal years.

Adopted and Reevaluated Lake/Wetland, River/Stream, Spring, and Aquifer MFLs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Lakes and Wetlands										
Cumulatively	157	161	161	163	168	168	163*	160*	160	160
Annually	0	4	0	2	5	0	2	0	0	0
River/Stream Segments										
Cumulatively	19	19	19	19	22	22	23	23	24	24
Annually	0	0	0	0	3	0	1	0	1	0
Springs										
Cumulatively	7	7	8	8	9	9	10	10	10	10
Annually	0	0	1	0	1	0	1	0	0	0
Aquifers (Wells or Systems)										
Cumulatively	9	9	9	9	9	9	9	9	9	9
Annually	0	0	0	0	0	0	0	0	0	0
Reevalutions (All Types)										
Cumulatively	0	8	0	29	33	40	91	127	128	128
Annually	0	7	0	21	4	7	51	36	1	0

Source: SWFWMD Environmental Flows and Levels Staff, 2023.

** Decreases in the numbers of cumulatively adopted lakes and wetlands MFLs for FY2020 relative to FY2019 and FY2021 relative to FY2020 were associated with repeal of previously established MFLs.*

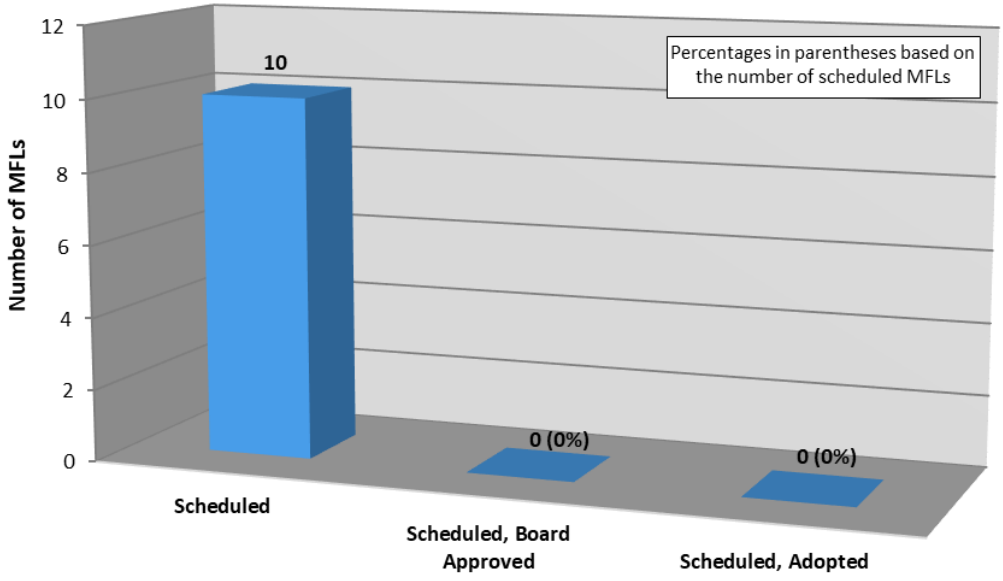
Natural Systems Measure 1b: Percentage of MFLs and Reservations established or reevaluated in accordance with previous year's schedule.

Pursuant to Section 373, F.S., the District maintains and annually updates a "Priority List and Schedule for the Establishment of Minimum Flows, Minimum Water Levels and Reservations" (i.e., a priority list that identifies water bodies for which minimum flows and minimum water levels (MFLs) and reservations are to be established and reevaluated). The priority list is based on the importance of waters to the state or region and other factors, includes waters which are experiencing or may reasonably be expected to experience adverse impacts, and addresses water to be reserved for the protection of fish and wildlife or the public health and safety. The priority list is approved by the Governing Board, submitted to the DEP for approval, and subsequently included in the District's Consolidated Annual Report.

Minimum flows and minimum water levels and reservations are, respectively, adopted into the District's Water Levels and Rates of Flow (Chapter 40D-8, F.A.C.) and Consumptive Use of Water (Chapter 40D-2, F.A.C.) rules, used for water resource regulation and water supply planning, and periodically reevaluated. Technical analyses and scientific review supporting MFLs or reservations development, and rulemaking following Governing Board approval of proposed MFLs or reservations can be lengthy processes that involve numerous opportunities for stakeholder input.

As shown in the following graphic, the 2022 priority list included 10 MFLs scheduled for establishment or reevaluation during calendar years 2022 and 2023. No reservations were included on the priority list.

Scheduled MFLs for 2022 and 2023 Approved and Adopted by Rule



Source: District Environmental Flows and Levels Staff, 2023.

Neither Governing Board approval for initiation of rulemaking nor rule adoption were completed by the end of FY2022 for any of the 10 MFLs scheduled for reevaluation or establishment in 2022 and 2023. Reevaluations for lakes North Wales, Tulane and Verona scheduled for 2022 were delayed based on the need to develop updated lake-level methods and peer review new lake-level criteria. The scheduled establishment of MFLs for the lower and upper segments of the Little Manatee River in 2022 was delayed based on time required for additional analyses identified as part of an independent peer review process that was initiated in FY2022 and completed in FY2023. The scheduled 2022 establishment of MFLs for Charlie Creek and Horse Creek was delayed for completion of peer review, which was initiated in FY2023 and is expected to be completed in early FY2024.

Natural Systems Measure 1c: For the previous fiscal year, the total acres of wetlands or other surface waters authorized by Environmental Resource Permit (ERP) to be impacted and the number of acres required to be created, enhanced, restored, and preserved.

The ERP Program evaluates surface water management systems for impacts to natural systems (surface water and wetlands), water quality, and water quantity (flood protection) from various development projects. Impacts to surface waters and wetlands, unless specifically exempted, must be eliminated or reduced and, if unavoidable, mitigated. The intent of mitigation is to replace the functions of the impacted natural systems, whether involving water quality treatment, flood protection, wildlife habitat or other factors. This measure addresses the extent to which natural systems are impacted, and the extent to which impacted systems are replaced.

Wetlands	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Impacted (temporary & permanent)	535	492	478	594	856	746	760	925	928	1292	727	1197	1113
Created/ Restored	1088	285	127	156	432	206	207	549	77	129	155	133	93
Enhanced	1743	269	293	189	100	251	482	367	345	797	223	395	133
Preserved	3948	4248	1809	2079	1363	2054	4046	4020	4839	1950	1465	449	1958

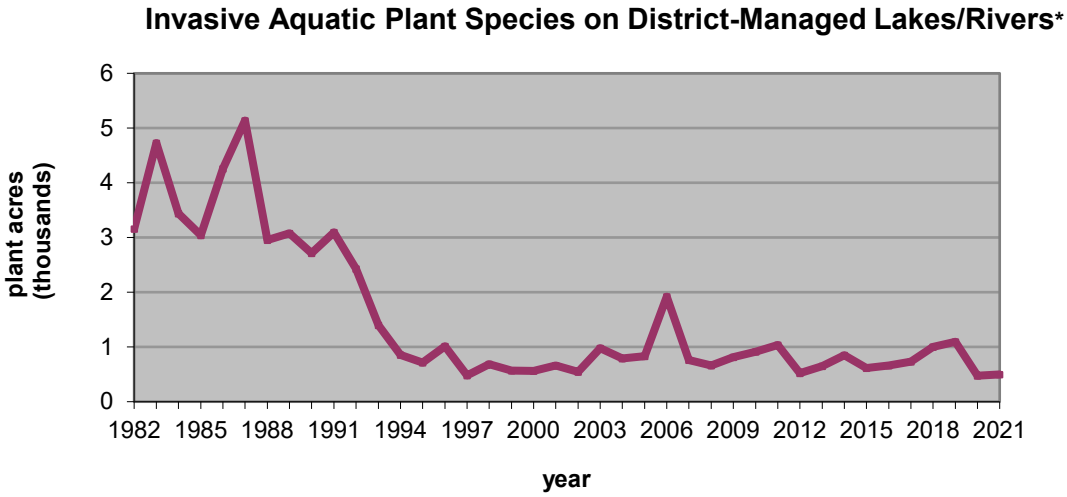
Source: SWFWMD Environmental Resource Permitting Database, October 2023.

The District's ERP Program shows a strong preference for avoiding wetland impacts as the best means to retain the functions of these important systems. Although the replacement requirement for unavoidable wetland impacts is based on functional value, the combination of creating, restoring and enhancing wetlands more than offset acres impacted in years 2011 and 2012.

** Acreages are rounded to whole numbers and have been adjusted from 2014 forward to match the data reported in the DEP Wetland Gain/Loss Report. In FY2012, the methodology for reporting the ERP wetland acres was adjusted to reflect only the UMAM mitigation acres needed to offset the wetland impact functional loss. Prior to FY2012, the data included acres not impacted in the "Preserved" total. The "Preserved" total now only includes acres preserved by a conservation easement that was included as part of the required mitigation. Short form modifications to mitigation banks, which are reported in earlier years, are also now excluded.*

Natural Systems Measure 2a: Acres of invasive nonnative aquatic plants in inventoried public waters.

The protection and management of natural surface waters cannot be accomplished without effectively managing troublesome exotic aquatic plant species that can reduce the abundance and diversity of beneficial native plant populations, negatively impact fish and wildlife habitat, hinder navigation and recreational use, degrade water quality, impede water flow and increase sedimentation rates. Aquatic plant management operations conducted by the District on publicly accessible natural waters are funded by and coordinated with the Florida Fish and Wildlife Conservation Commission (FFWCC) under the Cooperative Aquatic Plant Control Program. This measure is intended to monitor how well the District is managing invasive plant species on public waterways under its jurisdiction.



Source: Florida Fish and Wildlife Conservation Commission Invasive Plant Management Section's Annual Survey Database, 2021.

Populations of the invasive aquatic plant species-hydrilla, water hyacinth and water lettuce-have been managed at maintenance levels on the public waters managed by the District since 1994. These are the most troublesome plants requiring management on an annual basis. In 2021, a total of 498 acres were detected on the 12,771 acres of District-managed lakes and rivers. This represents approximately a four percent coverage of the aforementioned invasive species and reflects a continuation of effective maintenance control. Some variation in plant acreages is expected on a year-to-year basis since ecological conditions, such as water levels or water quality conditions may result in increased or decreased growth potential or affect planned control operations. It is not realistic to expect complete eradication. The goal is "maintenance control" where targeted plants are regularly monitored and maintained at the lowest feasible level.

Additionally, the management philosophy for hydrilla has been evolving since control of the aquatic plant management program was transferred to the FFWCC. On some waters, the FFWCC supports allowing the coverage of hydrilla to increase if it will benefit the primary use of a water body such as waterfowl hunting.

**In 2020, the District returned maintenance responsibility for 11,729 acres of public waterways back to the FFWCC. This reduction in managed acres is reflected in the decreased number of plant acres surveyed compared to previous years.*

Flood Protection Measure 1a: Percentage of District works maintained on schedule.

The District maintains a total of 84 structures, including water conservation structures, salinity barriers, pump stations and flood control structures. It is essential these facilities be maintained to optimally perform the respective functions. Information contained in the Structure Operations Five-Year Maintenance Plan serves as the guideline for scheduling maintenance on District works.

Year	Number of Structures	Percent of Structures Maintained on Schedule*
2019	86	75
2020	86	70
2021	84	70
2022	84	72
2023	84	74

Source: SWFWMD Operations Staff, 2023.

In FY2023, inspections and evaluations were completed for 35.3 percent or six of the District's 17 flood control structures. Inspections were also completed at the Lake Hancock pump station.

Inspections and evaluations of the water conservation structures were either completed in previous years or are no longer needed due to an upcoming replacement or removal. Inspections and evaluation of the remaining flood control structures were not required in FY2023 based on the District's risk-based inspection schedule.

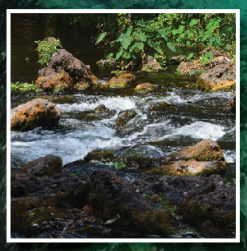
The District uses a five-year plan to address all needed routine and preventative maintenance on District structures, including the necessary budgets to accomplish the work. Funding for necessary repairs/improvements is incorporated into the five-year plan and prioritized based on those most critically needed.

** In FY2019-2023, some structures were not maintained on schedule due to implementation of new inspection and maintenance requirements and staff work associated with hurricanes and other major storm events.*

Consolidated Annual Report
March 1, 2024

2023 Priority List and Schedule

for the Establishment of Minimum Flows, Minimum Water Levels and Reservations



Southwest Florida
Water Management District

Chapter 2 2023 Southwest Florida Water Management District Priority List and Schedule for the Establishment of Minimum Flows, Minimum Water Levels and Reservations

Overview

Pursuant to Sections 373.036(7) and 373.042(3), Florida Statutes (F.S.), the Southwest Florida Water Management District is required to annually update its priority list and schedule for the establishment of minimum flows and minimum water levels, submit the updated list and schedule to the Florida Department of Environmental Protection (DEP) by November 15th for approval, and include the approved list and schedule in the District's Consolidated Annual Report by March 1st. Minimum flows and minimum water levels are rules adopted by the state water management districts or DEP that define the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area. In addition to prioritized minimum flows and minimum water levels, the priority list and schedule must include reservations proposed for establishment. 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.

The District prepared this 2023 priority list and schedule to address all relevant statutory directives, and guidance concerning minimum flow, minimum water level and water reservation prioritization included in Rules 62-40.473, and 62-40.474 within the State Water Resource Implementation Rule (Chapter 62-40, Florida Administrative Code (F.A.C.) and in Rule 62-41.304 within the Regulation of the Consumptive Use of Water Rule (Chapter 62-41, F.A.C.) of the DEP that address the Central Florida Water Initiative Area defined in Section 373.0465(2)(a), F.S.

Established Minimum Flows, Minimum Water Levels and Reservations

As of FY2023, District rules include minimum flows or minimum water levels for 203 water bodies (Chapter 40D-8, F.A.C.) and reservations for 2 water bodies (Chapter 40D-2, F.A.C.). As listed below, minimum flows or water levels are established for 126 lakes, 34 wetlands, 24 freshwater and estuarine river segments, 10 springs or spring groups (including all first magnitude springs and all second magnitude springs within the District that occur within state or federal lands purchased for conservation purposes), 7 Upper Floridan aquifer (UFA) sites in the,k northern Tampa Bay area, an UFA site in the Dover/Plant City area, and the UFA in the Most Impacted Area of the Southern Water Use Caution Area. In addition, 128 minimum flow or level reevaluations have been completed to confirm or support the revision or repeal of established minimum flows or minimum water levels. As also listed below, reservations have been established for Lake Hancock/Lower Saddle Creek and Morris Bridge Sink to support minimum flow recovery in 2 rivers.

Water Bodies with Adopted and Effective Minimum Flow and Minimum Water Level Rules, Including Those That Have Been Reevaluated

- Alafia River (upper segment)
- Alafia River (lower segment)/Lithia-Buckhorn Spring Group
- Anclote River (lower segment)
- Anclote River (upper segment)
- Braden River (upper segment)
- Chassahowitzka River/Chassahowitzka Spring Group (an Outstanding Florida Spring) and Blind Spring (reevaluated)
- Citrus County Lakes – Ft. Cooper, Tsala Apopka – Floral City, Inverness, and Hernando Pools
- Crystal River/Kings Bay Spring Group (an Outstanding Florida Spring)
- Crystal Springs
- Dona Bay/Shakett Creek System
- Dover/Plant City Water Use Caution Area Minimum Aquifer Level
- Gum Slough Spring Run/Group
- Hernando County Lakes – Hunters (reevaluated), Lindsey (reevaluated), Mountain (reevaluated), Neff (reevaluated), Spring, Tooke, Weekiwachee Prairie, Whitehurst
- Highland County Lakes – Angelo, Anoka, Damon, Denton, Jackson (reevaluated), Little Lake Jackson (reevaluated), June-in-Winter, Letta (reevaluated), Lotela (reevaluated), Placid, Tulane, Verona
- Hillsborough County Lakes – Alice (reevaluated), Allen (reevaluated twice), Barbara (reevaluated), Bird (reevaluated twice), Brant (reevaluated twice), Calm (reevaluated), Carroll, Charles (reevaluated), Church (reevaluated), Crenshaw, Crescent, Crystal (reevaluated twice), Cypress (reevaluated), Dan (reevaluated), Deer (reevaluated), Dosson (reevaluated twice), Echo (reevaluated), Ellen (reevaluated), Fairy [Maurine] (reevaluated), Garden, Halfmoon (reevaluated), Hanna (reevaluated), Harvey (reevaluated twice), Helen (reevaluated), Hobbs (reevaluated twice), Hooker, Horse (reevaluated), Jackson (reevaluated), Juanita (reevaluated twice), Keene, Kell, Little Moon (reevaluated), Merrywater (reevaluated twice), Mound, Platt, Pretty, Rainbow (reevaluated), Raleigh, Reinheimer, Rogers, Round (reevaluated), Saddleback (reevaluated twice), Sapphire (reevaluated twice), Starvation, Stemper (reevaluated), Strawberry (reevaluated), Sunset (reevaluated twice), Sunshine (reevaluated twice), Taylor (reevaluated), Virginia (reevaluated twice), Wimauma (reevaluated)
- Hillsborough County Wetlands – Cypress Bridge 32 (reevaluated), Cone Ranch 1 (reevaluated), Cone Ranch 2 (reevaluated), Cone Ranch 3 (reevaluated), Cone Ranch 4 (reevaluated), Cone Ranch 5 (reevaluated), Cone Ranch 6 (reevaluated), Eldridge Wilde 11 (NW-44) (reevaluated), Morris Bridge Clay Gully Cypress (MBR-88) (reevaluated), Morris Bridge Entry Dome (MBR-35) (reevaluated), Morris Bridge Unnamed (MBR-16) (reevaluated), Morris Bridge X-4 (MBR-89) (reevaluated)
- Hillsborough River (lower segment) (reevaluated)
- Hillsborough River (upper segment)
- Homosassa River/Homosassa Spring Group (an Outstanding Florida Spring) (reevaluated)
- Levy County Lake – Marion (reevaluated)
- Marion County Lakes – Bonable, Little Bonable, Tiger
- Myakka River (lower segment)
- Myakka River (upper segment)
- Northern Tampa Bay – 7 Wells – Upper Floridan aquifer/Saltwater Intrusion

- Pasco County Lakes – Bell, Big Fish (reevaluated), Bird, Buddy (reevaluated), Camp (reevaluated), Clear (reevaluated), Crews, Green, Hancock (reevaluated), Iola, Jessamine, King, King [East], Linda, Middle, Moon (reevaluated), Padgett (reevaluated), Parker aka Ann, Pasadena (reevaluated), Pierce (reevaluated), Unnamed #22 aka Loyce
- Pasco County Wetlands – Cross Bar Q-1 (reevaluated), Cross Bar T-3 (reevaluated), Cypress Bridge 4 (reevaluated), Cypress Bridge 16 (reevaluated), Cypress Bridge 25 (reevaluated), Cypress Creek W-56 (G) (reevaluated), Cypress Creek W-11 (reevaluated), Cypress Creek W-12 (reevaluated), Cypress Creek W-17 (reevaluated), North Pasco 3 (reevaluated), North Pasco 21 (reevaluated), South Pasco 2 (NW-49) (reevaluated), South Pasco 6 (NW-50) (reevaluated), South Pasco South Cypress (reevaluated), Starkey Central (reevaluated), Starkey Eastern (S-73) (reevaluated), Starkey M (S-69) (reevaluated), Starkey N (reevaluated), Starkey S-75 (reevaluated), Starkey S-99, Starkey Z (reevaluated)
- Peace River (lower segment) (reevaluated twice)
- Peace River (middle segment)
- Peace River (three upper segments – "low" minimum flows)
- Pinellas County Wetland – Eldridge Wilde 5
- Pithlachascotee River (lower segment)
- Pithlachascotee River (upper segment)
- Polk County Lakes – Annie, Aurora, Bonnie, Clinch (reevaluated), Crooked (reevaluated), Crystal, Dinner, Eagle (reevaluated), Easy, Eva, Hancock, Lee, Lowery, Mabel, McLeod (reevaluated), North Lake Wales, Parker (reevaluated), Starr (reevaluated), Venus, Wailes (reevaluated)
- Rainbow River/Rainbow Spring Group (an Outstanding Florida Spring)
- Shell Creek (lower segment)
- Sulphur Springs
- Sumter County Lakes – Big Gant, Black, Deaton, Miona, Okahumpka, Panasoffkee
- Southern Water Use Caution Area – Upper Floridan aquifer
- Tampa Bypass Canal
- Weeki Wachee River/Weeki Wachee Spring Group (an Outstanding Florida Spring)

Water Bodies with Adopted and Effective Reservation Rules

- Lake Hancock/Lower Saddle Creek (water reserved to contribute to achieving minimum flows adopted for the three upper segments of the Peace River for the protection of fish and wildlife)
- Morris Bridge Sink (water reserved to contribute to achieving or maintaining minimum flows adopted for the lower segment of the Hillsborough River for the protection of fish and wildlife)

Prioritized Water Bodies for Establishment or Reevaluation of Minimum Flows and Minimum Water Levels

Minimum flows and minimum water levels proposed for establishment or reevaluation through 2026 are listed by water body name in tabular form below. The single reservation prioritized for reevaluation during this period is also listed below.

System name is provided for each water body to distinguish waterbodies that may be part of a larger system. All currently prioritized waterbodies are, however, sufficiently distinct so the waterbody name and system name are the same. Water body type, i.e., lake, river, river-estuary, spring, or aquifer is identified along with water body location information. Spring magnitude, based on flow rate is provided for the single prioritized spring system.

District intent regarding completion of voluntary, independent, scientific peer review is also identified for each water body. Voluntary scientific peer review is proposed for minimum flows development or reevaluation for all prioritized river segments and the single prioritized minimum aquifer level reevaluation based on the expected level of complexity of these minimum flows and levels, and the anticipated degree of public concern regarding their development. None of the prioritized lake minimum levels are expected to be subjected to voluntary scientific peer review, based on anticipated use of previously peer-reviewed criteria for their development.

Prioritized water bodies that may be affected by withdrawals occurring in other water management districts, i.e., are potentially subject to cross-boundary impacts, including those specifically associated with withdrawals from within the Central Florida Water Initiative area, are identified to support coordination of regulatory activities among the districts and DEP. Development of minimum flow or water levels by the DEP for any of these water bodies is not, however, currently considered necessary or appropriate.

The status of rulemaking for each prioritized water body is also listed.

Minimum Flows and Minimum Water Levels to be Adopted in 2023.

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name [a]	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent Water Management District?	Latitude	Longitude	Rulemaking Status [b]
Reevaluation (first)	Tulane, Lake	Tulane, Lake	Lake	Highlands	No	Yes [c]	27.5860	-81.5036	N/A
Reevaluation (first)	Verona, Lake	Verona, Lake	Lake	Highlands	No	Yes [c]	27.5978	-81.4969	N/A
New	Charlie Creek	Charlie Creek	River	Hardee, Polk	Yes	No	27.3747	-81.7967	N/A
New	Horse Creek	Horse Creek	River	Hardee, DeSoto	Yes	No	27.1992	-81.9886	N/A
New	Little Manatee River (lower segment)	Little Manatee River (lower segment)	River-Estuary	Hillsborough	Yes	No	27.6708	-82.3528	N/A
New	Little Manatee River (upper segment)	Little Manatee River (upper segment)	River	Hillsborough, Manatee	Yes	No	27.6708	-82.3528	N/A

Minimum Flows and Minimum Water Levels to be Adopted in 2024.

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name [a]	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent Water Management District?	Latitude	Longitude	Rulemaking Status [b]
Reevaluation (first)	Angelo, Lake	Angelo, Lake	Lake	Highlands	No	Yes [c]	27.5861	-81.4665	N/A
Reevaluation (first)	Denton, Lake	Denton, Lake	Lake	Highlands	No	Yes [c]	27.5563	-81.4893	N/A
Reevaluation (second)	Letta, Lake	Letta, Lake	Lake	Highlands	No	Yes [c]	27.5603	-81.4618	N/A

Minimum Flows and Minimum Water Levels to be Adopted in 2025.

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name [a]	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent Water Management District?	Latitude	Longitude	Rulemaking Status [b]
Reevaluation (first)	Aurora, Lake	Aurora, Lake	Lake	Polk	No	Yes [c]	27.8791	-81.4655	N/A
Reevaluation (first)	Bonnie, Lake	Bonnie, Lake	Lake	Polk	No	Yes [c]	27.9118	-81.557	N/A
Reevaluation (second)	Eagle Lake	Eagle Lake	Lake	Polk	No	No	27.9867	-81.7665	N/A
Reevaluation (first)	Eva, Lake	Eva, Lake	Lake	Polk	No	Yes [c]	28.0952	-81.6281	N/A
Reevaluation (first)	North Lake Wales	North Lake Wales	Lake	Polk	No	Yes [c]	27.9096	-81.5805	N/A
Reevaluation (first)	Peace River (upper segment, U.S. Geological Survey Zolfo Springs gage to U.S. Geological Survey Ft. Meade gage)	Peace River (upper segment, U.S. Geological Survey Zolfo Springs gage to U.S. Geological Survey Ft. Meade gage)	River	Hardee, Polk	Yes	No	27.5042	-81.8011	N/A
Reevaluation (first)	Peace River (upper segment, U.S. Geological Survey Ft. Meade gage to U.S. Geological Survey Bartow gage)	Peace River (upper segment, U.S. Geological Survey Ft. Meade gage to U.S. Geological Survey Bartow gage)	River	Polk	Yes	No	27.7511	-81.7822	N/A
Reevaluation (first)	Peace River (upper segment, upstream of U.S. Geological Survey Bartow gage)	Peace River (upper segment, upstream of U.S. Geological Survey Bartow gage)	River	Polk	Yes	No	27.9019	-81.8175	N/A
New	Withlacoochee River (upper	Withlacoochee River (upper	River	Citrus, Marion, Sumter	Yes	Yes	28.9886	-82.3497	N/A

Minimum Flows and Minimum Water Levels to be Adopted in 2025 Continued.

	segment, U.S. Geological Survey Holder gage to U.S. Geological Survey Wysong gage)	segment, U.S. Geological Survey Holder gage to U.S. Geological Survey Wysong gage)							
New	Withlacoochee River (upper segment, U.S. Geological Survey Wysong gage to U.S. Geological Survey Croom gage)	Withlacoochee River (upper segment, U.S. Geological Survey Wysong gage to U.S. Geological Survey Croom gage)	River	Citrus, Sumter, Hernando	Yes	No	28.8231	-82.1833	N/A
New	Withlacoochee River (upper segment, upstream of U.S. Geological Survey Croom gage)	Withlacoochee River (upper segment, upstream of U.S. Geological Survey Croom gage)	River	Hernando, Sumter, Pasco, Lake, Polk	Yes	No	28.5925	-82.2222	N/A

Minimum Flows and Minimum Water Levels to be Adopted in 2026.

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name [a]	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent Water Management District?	Latitude	Longitude	Rulemaking Status [b]
Reevaluation (first)	Gum Slough Spring Group	Gum Slough Spring Group	Spring (2nd magnitude)	Sumter	Yes	Yes	28.9511	-82.2500	N/A
New	Withlacoochee River (lower segment)	Withlacoochee River (lower segment)	River-Estuary	Citrus, Levy	Yes	Yes	29.0208	-82.6381	N/A
Reevaluation (first)	Southern Water Use Caution Area Saltwater Intrusion Minimum Aquifer Level (SWIMAL)	Southern Water Use Caution Area Saltwater Intrusion Minimum Aquifer Level (SWIMAL)	Aquifer	Hillsborough, Manatee, Sarasota	Yes	No	27.5603	-82.4013	N/A

Reservations Priority List.

Waterbody Name	Waterbody Type	County(s)	Proposed Year	Rulemaking Status [c]
Hancock, Lake/Lower Saddle Creek (reevaluation, first)	Lake, River	Polk	2025	N/A

[a] System name identifies larger system that the water body is associated with for minimum flows or minimum water levels rule development; otherwise, system name is same as waterbody name or compliance point.

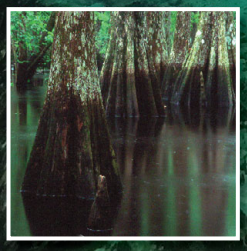
[b] Last rulemaking action taken: Notice of Rule Development published; Notice of Proposed Rule published; Rule challenge pending; Rule adopted, Ratification not required; Rule adopted, Awaiting ratification; Rule adopted, Ratified. N/A indicates formal rulemaking has not been initiated.

[c] Potential cross-boundary withdrawal impacts from adjacent water management district associated with the Central Florida Water Initiative area.

Consolidated Annual Report

March 1, 2024

2023 Minimum Flows and Levels / Water Quality Grade for Projects



Southwest Florida Water Management District

Chapter 3 MFL Water Quality Grade and Projects

Overview

Section 373.036(7)(b)9., F.S., provides that the Consolidated Annual Report shall contain a "grade for each watershed, water body, or water segment in which a project listed under subparagraph 8 is located representing the level of impairment and violations of adopted minimum flow or minimum water level. The grading system must reflect the severity of the impairment of the watershed, water body, or water segment.

Table 1 lists the projects contained within the 2024 Five-Year Water Resource Development Work Program, the watershed, water body, or water segment, the project impacts, and a grade of two items: 1) the water quality level of impairment and 2) the level of violation of a minimum flow or minimum water level.

Level of Impairment Grade

The Level of Impairment grade is represented as follows:

Impaired – High: This grade is assigned if the water body is impaired for one or more parameters other than mercury and based on a consideration of other factors, including the number of impairments, presence of Outstanding Florida Waters, proximity to ongoing or planned restoration activities, ecological priority of the water for threatened and endangered species, environmental justice concerns, the amount of anthropogenic land use, and local aquifer vulnerability.

Impaired: The grade is assigned if the water body is impaired for one or more parameters other than mercury.

Not Impaired: This grade is assigned if the water body is not impaired for any parameters other than mercury.

The DEP provided the impairment grades based upon Total Maximum Daily Loads (TMDL) for each Water Body ID (WBID). Projects that impact specific WBIDs were identified in Table 1 for that WBID. As an example, a project that replaced disposal of treated wastewater in a spray field or Rapid Infiltration Basin (RIB) with beneficial use of reclaimed water utilized the impairment grade associated with the WBID where the spray field or RIB were originally located. It is important to note that projects contained within a Water Resource Development Work Program are focused on water use/conservation with the exception of the projects contained in Appendix A – District Projects for Implementing Basin Management Action Plans.

Level of Violation of Adopted MFL

Each water body with an established MFL not currently being met or projected to not be met within 20 years was evaluated based on the relative magnitude of the MFL violation and rated as close, moderately close, or not close to meeting the MFL. In evaluating this element, the Districts

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

The water body was also evaluated based on the regional significance of the water body and rated as Tier 1, Tier 2 or Tier 3 with Tier 1 being the highest rating for regional significance and Tier 3 being the lowest rating. When evaluating this element, the District considered the water body's size and geographical extent, anticipated timeframe for recovery, ecological importance, recreational uses, navigation, threatened/endangered species, wildlife utilization, aesthetics, and historical and archeological significance.

Level 0: This grade is assigned if the water body is meeting the MFL but is projected to not meet the MFL within 20 years (that is, the water body is in prevention).

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

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

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

The majority of the projects in the Water Resource Development Work Program will directly assist in a recovery strategy for a Water Use Caution Area (WUCA). The projects are anticipated to impact all water bodies that are included within the WUCA. As an example, the Southern Water Use Caution Area covers a 5,100 square mile area over all or parts of eight counties. There are 9 lakes that are not achieving their established minimum flow or level in this region. Because the basis for not meeting these MFLs is due to groundwater withdrawals within the confined Upper Floridan aquifer in the SWUCA, a project within this area is anticipated to impact the entire area. Therefore, all the impacted waterbodies within a WUCA have been included for each project.

Table 1 Water Resource Development Projects

Project Number	Water Resource Development Projects	Watershed, Water Body, Water Segment*	Level of Water Quality Impairment	Level of Violation of Adopted MFL
1) Alternative Water Supply Feasibility Research and Pilot Projects (Programmatic Code 2.2.1.1)				
N287	South Hillsborough Aquifer Recharge Program (SHARP)	SWUCA Water Bodies Hillsborough Bay Upper 1558E Palm River 1536E McKay Bay 1584B	WBID 1558E - Impaired WBID 1536E - Impaired WBID 1584B - Impaired	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
N855	Southern Hillsborough Aquifer Recharge Expansion (SHARE) Phase 1	SWUCA Water Bodies Hillsborough Bay Upper 1558E and 1558D Palm River 1536E McKay Bay 1584B	WBID 1558E - Impaired WBID 1536E - Impaired WBID 1584B - Impaired	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
P280	Hydrogeologic Investigation of LFA in Polk County	MIA	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
P925	Optical Borehole Imaging Data Collection from LFA Wells	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
P926	Sources/Ages of Groundwater in LFA Wells	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
Q050	City of Venice Reclaimed Water Aquifer Storage Recovery	SWUCA Water Bodies Curry Creek 2009 Curry Creek 2009A Sarasota Bay 8053	WBID 2009 - Impaired WBID 2009A - Impaired WBID 8053 - Not impaired	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
Q064	Direct Aquifer Recharge - North Hillsborough Aquifer Recharge Program Phase 2	NTBWUCA Water Bodies Old Tampa Bay 1558I Old Tampa Bay 1558H	WBID 1558I - Impaired WBID 1558H - Impaired	NTBWUCA water bodies Level 2 - 1 water body
Q159	Sarasota County - Bee Ridge Water Reclamation Facility Aquifer Recharge	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies

2) Facilitating Agricultural Resource Management Systems (FARMS) (Programmatic Code 2.2.1.2)				
H791	FARMS - Wauchula Road Duette, LLC - Phase 2	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
H792	FARMS - Rolling Meadow Ranch	SWUCA Water Bodies Catfish Creek 1532 Lake Rosalie Outlet 1573	WBID 1532 - Impaired WBID 1573 - Not Impaired	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
H798	FARMS - P BAR R Sod Company, LLC	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
H802	FARMS - Berry Patch Ridge, LLC	SWUCA Water Bodies CFWI	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
H804	FARMS- FD Berries USA,LLC	SWUCA Water Bodies Yellow Bluff Creek	WBID 1891 - Not Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H805	FARMS- Bay Grove- T&T Environmental Phase 1	SWUCA Water Bodies Howthorn Creek	WBID 1997 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H806	FARMS- Sandhill Native Growers	SWUCA Water Bodies Joshua Creek above Peace River	WBID 1950A - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H807	FARMS- Sizemore Group Automation	DPCWUCA Water Bodies Howell Branch	WBID 1568 - Impaired	DPCWUCA water bodies Level 1 -0 water bodies Level 2 -0 water bodies Level 3 -0 water bodies
H808	FARMS- Sweet Life Acers Phase 1	Lower Hillsbourgh River Two Hole Branch	WBID 1489 - Impaired	NTBWUCA water bodies Level 2 -1 water bodies

H809	FARMS- Shawn Pollard	SWUCA Water Bodies Buckhorn Creek	WBID 1837 -Not Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H810	FARMS- Varner Group	SWUCA Water Bodies Cow Slough	WBID 1964 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H811	FARMS- Hernandez Farm, LLC	SWUCA Water Bodies Little Alafia below Medard Reservoir	WBID 1592 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H812	FARMS - Spanish Trails Farming and Land Company, LLC	SWUCA Water Bodies Cow Slough	WBID 1964 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H813	FARMS- Bayside Sod	SWUCA Water Bodies Parrish Road Creek	WBID 1834 - Not Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H814	FARMS - Bethel Farms, LLLP - Ph 5	SWUCA Water Bodies Buzzard Roost Branch	WBID 1944 - Not Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H815	FARMS - Midway Farms, LLC	SWUCA Water Bodies Old Town Creek	WBID 1776 - Not Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H816	FARMS - Marshall Tree Farm, Inc.	Rainbow River Non-contributing area	WBID 2765 - Not Impaired	None**
H529	Mini-FARMS Program (H529) 3	SWUCA Water Bodies NTBWUCA Water Bodies DPCWUCA Water Bodies Shell Creek Prairie Creek	WBID 2041 - Impaired WBID 1962 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies

H015	FARMS Well Back-Plugging Program (H015) 3	SWUCA Water Bodies Shell Creek Prairie Creek	WBID 2041 - Impaired WBID 1962 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
P429	FARMS Meter Accuracy Support	SWUCA Water Bodies NTBWUCA Water Bodies Shell Creek 2041 Prairie Creek 1962	WBID 2041 - Impaired WBID 1962 - Impaired	SWUCA/NTBWUCA water bodies Level 1 - 0 water bodies Level 2 - 6 water bodies Level 3 - 4 water bodies
3) Environmental Restoration/Minimum Flows and Levels Recovery (Programmatic Code 2.2.1.3)				
H008	MFL Recovery - Lake Hancock Design, Permit, Mitigation to Raise Lake	SWUCA water bodies Upper Peace above Bowlegs 1623J	WBID 1623J - Impaired - High	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H089	MIA Recharge SWIMAL Recovery at Flatford Swamp	SWUCA water bodies Upper Myakka 1877B	WBID 1877B - Not Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
H400	Lower Hillsborough River Recovery Strategy	Lower Hillsborough River 1443E	WBID 1443E - Impaired - High	Level 2 - 1 water body
H404	Pump Stations on Tampa Bypass Canal, Morris Bridge Sink	Lower Hillsborough River 1443E	WBID 1443E - Impaired - High	Level 2 - 1 water body
Surface Water Projects				
Water Supply Development Assistance - Surface Water Projects (Programmatic Budget 2.2.2.1)				
Q272	PRMRWSA - Reservoir No. 3	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies

Regional Potable Interconnects				
Water Supply Development Assistance - Regional Potable Water Interconnects (Programmatic Budget 2.2.2.2)				
Q146	Tampa Bay Water Southern Hillsborough County Booster Pump Station	NTB Water Bodies	None*	NTBWUCA water bodies Level 2 - 1 water body
Q216	PRWC Regional Transmission Southeast Phase 1	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q241	TBW - Southern Hillsborough County Transmission Expansion	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q248	PRMRWA - Regional Acquisition of Project Prairie Pumping and Storage Facilities	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q355	PRMRWSA- Reg Integr Loop Sys Ph 2b	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
***H094 Polk County Partnership dollars have been redistributed to the PRWC Projects ((N882, N905, and N928)				
Reclaimed Water Projects				
Water Supply Development Assistance - Reclaimed Water Projects (Programmatic Budget 2.2.2.3)				
N339	Winter Haven #3 Reclaimed Interconnect, Storage, Pumping	SWUCA Water Bodies Peace Creek Drainage Canal 1539	WBID 1539 - Impaired - High	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
N791	Pasco County Starkey Ranch Reclaimed Water Transmission Phase C	NTBWUCA Water Bodies Magnolia - Aripeka Springs 1391B Direct Runoff to Gulf 1400	WBID 1391B - Impaired - High WBID 1400 - Not Impaired	NTBWUCA water bodies Level 2 - 1 water body

N868	Polk County Utilities NERUSA Ernie Caldwell Blvd Reclaimed Water Transmission	SWUCA Water Bodies Big Creek East Watershed 1406	WBID 1406 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
N898	Haines City Reclaimed Water Tank and Pump Stations Project	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q057	Zephyrhills - Zephyr Lakes and Hospital Reuse	NTBWUCA Water Bodies Zephyhills Airport Run 1448 Hillsborough River 1443A	WBID 1448 - Not Impaired WBID 1443A - Impaired	NTBWUCA water bodies Level 2 - 1 water body
Q066	Polk County Utilities - NERUSA Lake Wilson Road Reuse	SWUCA Water Bodies Big Creek East Watershed 1406	WBID 1406 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q067	Polk County Utilities - NERUSA Southeast Reuse Loop	SWUCA Water Bodies Big Creek East Watershed 1406	WBID 1406 - Impaired	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q105	Citrus County Sugarmill Woods Golf Course Reuse	Chassahowitzka River 1361 Baird Creek 1348D	WBID 1361 - Not Impaired WBID 1348D - Not Impaired	None**
Q113	City of Plant City McIntosh Park Indirect Potable Reuse Feasibility Study	NTBWUCA Water Bodies Mill Creek 1542A East Canal 1518 Itchepackasassa Creek 1495A Blackwater Creek 1482 Hillsborough River 1443D	WBID 1542A - Not impaired WBID 1518 - Impaired WBID 1495A - Impaired WBID 1482 - Impaired - High WBID 1443D - Not Impaired	NTBWUCA water bodies Level 2 - 1 water body
Q139	North Port Direct Potable Reuse Feasibility	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies

Q252	Fort Meade Reclaimed Water Feasibiliy Study	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q268	Braden River Utilities Taylor Road Area Transmission	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q271	Winter Haven Preserve at Lake Ashton Transmision	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q274	Zephyrhills - Zephyr to Pasco Reclaimed Water Interconnect	NTBWUCA Water Bodies	None*	NTBWUCA water bodies Level 2 - 1 water body
Q158	Pasco County River Landing Reclaimed Water Transmission	NTBWUCA Water Bodies	None*	NTBWUCA water bodies Level 2 - 1 water body
Q160	Sarasota County Honore Avenue Reclaimed Water Transmission	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q200	Winter Haven Direct Potable Reuse Feasiblity Study	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q209	Polk County Direct Potable Reuse Feasibility and Pilot Demo	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies

Q353	Pinellas Co- Southcross RW Expan/Surface Aug Study	NTBWUCA Water Bodies	None*	NTBWUCA water bodies Level 2 - 1 water body
Brackish Groundwater Projects				
Water Supply Development Assistance - Brackish Groundwater Development Projects (Programmatic Budget 2.2.2.4)				
Q184	PRWC Southeast Wellfield Implementation	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q294	PRWC Southeast Test Well No. 3	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q308	PRWC- West Polk Wellfield	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q309	PRWC- Test Prod Well #2 West Polk Wellfield	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Aquifer Recharge and Aquifer Storage and Recovery Projects				
Water Supply Development Assistance - Aquifer Recharge & Aquifer Storage and Recovery Projects (Programmatic Budget 2.2.2.5)				
N435	City of Bradenton Surface Water Aquifer Storage Recovery 2	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies

Q142	Pinellas County Chestnut Park Aquifer Storage, Recovery & Recharge	NTBWUCA Water Bodies Lake Tarpon Canal 1541A and 1541B Safety Harbor 1558IA Old Tampa Bay 1558F and G Old Tampa Bay 1558H Old Tampa Bay 1558I	WBID 1541A - Impaired WBID 1541B - Not Impaired WBID 1558IA - Impaired WBID 1558F - Impaired WBID 1558G - Impaired WBID 1558H - Impaired WBID 1558I - Impaired	NTBWUCA water bodies Level 2 - 1 water body
Water Conservation Projects				
Water Supply Development Assistance - Conservation Rebates, Retrofits, Etc. Projects (Programmatic Budget 2.2.2.7)				
B015	Water Incentives Supporting Efficient (WISE) Program	SWUCA Water Bodies NTBWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
N971	PRWC Outdoor Best Management Practices	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
N973	Winter Haven Consumption/Conservation Programs Data Management Software	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
N999	Marion County Toilet Rebate Program Phase 5	Northern District/Springs Coast	None*	None**
Q138	WRWSA - Regional Irrigation System Audit Program Phase 6	Northern District/Springs Coast	None*	None**
Q145	Longboat Key Club - Advanced Irrigation System	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies

Q166	Bartow - Golf Course Advanced Irrigation System	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q185	North Port - Water Distribution Hartsdale/Aldonin/Totem Area Looping	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q187	PRWC - Demand Management Implementation	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q245	Pinellas County AMI Metering Analytics	NTBWUCA Water Bodies	None*	NTBWUCA water bodies Level 2 - 1 water body
Q254	Citrus County Water Conservation Program	Northern District/Springs Coast	None*	None**
Q255	Bay Laurel CCDD - Water Conservation Program	Northern District/Springs Coast	None*	None**
Q256	St. Petersburg - Sensible Sprinkling Program - Phase 10	NTBWUCA Water Bodies	None*	NTBWUCA water bodies Level 2 - 1 water body
Q265	North Port - Water Distribribution Ridgewood/ Lamplighter Area Looping	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q266	Polk County - Florida Water Star Builder Reimbursement Program	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies

Q267	PRWC- Demand Management Implementation	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q193	Crystal RIver - Conservation Phase 1	Northern District/Springs Coast	None*	None**
Q214	Palmetto Toilet Rebate Phase 2	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q215	TBW - Demand Management Program Phase 2	NTBWUCA Water Bodies	None*	NTBWUCA water bodies Level 2 - 1 water body
P964	Water Use Evals for Non-Ag Users	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q304	Venice Toilet Rebate and Retrofit Phase 9	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies
Q306	WRWSA Irrigation Eval Program, phase 7	Northern District/Springs Coast	None*	None**
Q311	Bay Laurel CCDD Water Conservation Program phase 2	Northern District/Springs Coast	None*	None**
Q319	Manatee County Toilet Rebate phase 15	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 -0 water bodies Level 2 -5 water bodies Level 3 - 4 water bodies

Q320	Citrus County Water Conservation Program phase 6	Northern District/Springs Coast	None*	None**
Q371	Polk County Irrigation System Evaluation Program, Phase 8	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
Q387	St. Pete Sensible Sprinkling Program, Phase 11	NTBWUCA Water Bodies	None*	NTBWUCA water bodies Level 2 - 1 water body
Water Supply Planning Projects				
Water Supply Planning (Programmatic Budget 1.1.1)				
Q324	WS Planning - WRWSA - Regional Water Supply Plan 2024 Update	Northern District/Springs Coast	None*	None**
Q257	Sarasota County System-Wide Wellfield Improvements	SWUCA Water Bodies	None*	SWUCA water bodies Level 1 - 0 water bodies Level 2 - 5 water bodies Level 3 - 4 water bodies
Appendix A. District Projects for Implementing Basin Management Action Plans				
Projects for Implementing BMAPs				
W430	Crystal River - Indian Water Septic to Sewer Phase II	Crystal River 1341 Crystal River 1341C Crystal River 1341D Crystal River 1341E Crystai River 1341F Crystal River 1341G Crystal River 1341H	Crystal River 1341 - Impaired - High Crystal River 1341C - Impaired - High Crystal River 1341D - Impaired - High Crystal River 1341E - Not Impaired Crystai River 1341F - Impaired - High Crystal River 1341G - Impaired - High Crystal River 1341H - Impaired - High	None**

W432	Citrus County Cambridge Green Septic to Sewer	Crystal River 1341 Crystal River 1341C Crystal River 1341D Crystal River 1341E Crystai River 1341F Crystal River 1341G Crystal River 1341H	Crystal River 1341 - Impaired - High Crystal River 1341C - Impaired - High Crystal River 1341D - Impaired - High Crystal River 1341E - Not Impaired Crystai River 1341F - Impaired - High Crystal River 1341G - Impaired - High Crystal River 1341H - Impaired - High	None**
W433	Crystal River Hunter Springs Stormwater Modification (W433)	Crystal River 1341 Crystal River 1341C Crystal River 1341D Crystal River 1341E Crystai River 1341F Crystal River 1341G Crystal River 1341H	Crystal River 1341 - Impaired - High Crystal River 1341C - Impaired - High Crystal River 1341D - Impaired - High Crystal River 1341E - Not Impaired Crystai River 1341F - Impaired - High Crystal River 1341G - Impaired - High Crystal River 1341H - Impaired - High	None**
W434	Crystal River Southern Septic to Sewer Project	Crystal River 1341 Crystal River 1341C Crystal River 1341D Crystal River 1341E Crystai River 1341F Crystal River 1341G Crystal River 1341H	Crystal River 1341 - Impaired - High Crystal River 1341C - Impaired - High Crystal River 1341D - Impaired - High Crystal River 1341E - Not Impaired Crystai River 1341F - Impaired - High Crystal River 1341G - Impaired - High Crystal River 1341H - Impaired - High	None**
WH04	Citrus County Old Homosassa West Septic to Sewer Project	Homosassa River 1345 Homosassa Springs Group 1345G	WBID 1345 - Not Impaired WBID 1345G - Impaired - High	None**
Q134	Citrus County Old Homosassa East Septic to Sewer Project	Homosassa River 1345 Homosassa Springs Group 1345G	WBID 1345 - Not Impaired WBID 1345G - Impaired - High	None**
WW09	Hernando County District A, Phase 1a Septic to Sewer	Weeki Wachee Spring Group 1382B Weeki Wachee Spring Run 1382F Weeki Wachee River 1382I	WBID 1382B - Impaired - High WBID 1382F - Impaired - High WBID 1382I - Impaired	None**
WR10	Marion County Rainbow Springs 5th Replat Stormwater Retrofit	Rainbow Springs Group Run 1320B Rainbow River (Blue Run) 1320	WBID 1320B - Impaired - High WBID 1320 - - Impaired	None**

WW05	Hernando County Weeki Wachee Springshed Nitrogen Removal Stormwater Retrofit	Weeki Wachee Spring Group 1382B Weeki Wachee Spring Run 1382F Weeki Wachee River 1382I	WBID 1382B - Impaired - High WBID 1382F - Impaired - High WBID 1382I - Impaired	None**

None* - Project has no water quality impact on a surface water body

None** - Project is in an area with no MFL recovery strategy and is not expected to fall below a minimum flow or level in 20 years

Note that "SWUCA Waterbodies" includes the SWUCA SWIMAL

Consolidated Annual Report

March 1, 2024

Five-Year Capital Improvements Plan

2023-2024 *through* 2027-2028

Southwest Florida
Water Management District

Chapter 4 Five-Year Capital Improvements Plan

Introduction

The Five-Year Capital Improvements Plan (CIP) includes projected revenues and expenditures for capital improvements for FY2023-24 through FY2027-28. As directed by Section 373.536(6)(a)3, Florida Statutes (F.S.), the CIP is presented in a manner comparable to the fixed capital outlay format set forth in Section 216.043, F.S. The format for this report was jointly developed by the Executive Office of the Governor, the Department of Environmental Protection, and the water management districts. Capital improvement projects may be budgeted in three standard program categories. Those programs and their activities and sub-activities are represented below:

1.0 Water Resource Planning and Monitoring
- 1.1 District Water Management Planning
  - 1.1.1 Water Supply Planning
  - 1.1.2 Minimum Flows and Minimum Water Levels
  - 1.1.3 Other Water Resources Planning
- 1.2 Research, Data Collection, Analysis and Monitoring
- 1.3 Technical Assistance
- 1.4 Other Water Resources Planning and Monitoring Activities
- 1.5 Technology and Information Services

2.0 Land Acquisition, Restoration and Public Works
- 2.1 Land Acquisition
- 2.2 Water Source Development
  - 2.2.1 Water Resource Development Projects
  - 2.2.2 Water Supply Development Assistance
  - 2.2.3 Other Water Source Development Activities
- 2.3 Surface Water Projects
- 2.4 Other Cooperative Projects
- 2.5 Facilities Construction and Major Renovations
- 2.6 Other Acquisition and Restoration Activities
- 2.7 Technology and Information Services

3.0 Operation and Maintenance of Works and Lands
- 3.1 Land Management
- 3.2 Works
- 3.3 Facilities
- 3.4 Invasive Plant Control
- 3.5 Other Operation and Maintenance Activities
- 3.6 Fleet Services
- 3.7 Technology and Information Services

The activity under program 1.0 Water Resource Planning and Monitoring that may include capital improvement projects is 1.2 Research, Data Collection, Analysis and Monitoring. The activities and sub-activities under program 2.0 Land Acquisition, Restoration and Public Works that may include capital improvement projects are 2.1 Land Acquisition, 2.2.1 Water Resource Development Projects, 2.2.3 Other

Water Source Development Activities, 2.3 Surface Water Projects, 2.5 Facilities Construction and Major Renovations, and 2.6 Other Acquisition and Restoration Activities. The activities under program 3.0 Operation and Maintenance of Works and Lands that may include capital improvement projects are 3.1 Land Management and 3.2 Works.

The purpose of the CIP is to project future needs and anticipated future funding requirements to meet those needs *(The District uses a pay-as-you-go approach and does not incur bonded debt).* The CIP contains only those projects that will be owned and capitalized as fixed assets by the District.

The CIP includes expenditures for basic construction costs (permits, inspections, communications requirements, utilities, outside building, site development, etc.) and other related capital project costs (land, survey, existing facility acquisition, professional services, etc.).

The District's current capital improvement projects are budgeted under the following program activities: 1.2 Research, Data Collection, Analysis and Monitoring; 2.1 Land Acquisition; 2.3 Surface Water Projects; 2.5 Facilities Construction and Major Renovations; 3.1 Land Management; and 3.2 Works.

Standard definitions for these programs and activities used by all five water management districts for CIP preparation follow:

1.0 Water Resource Planning and Monitoring

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

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

2.0 Land Acquisition, Restoration and Public Works

This program includes the development and construction of all water resource development projects, water supply development assistance, water control projects, support and administrative facilities construction, cooperative projects, land acquisition (i.e., Florida Forever Program), and the restoration of lands and water bodies.

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

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

2.5 Facilities Construction and Major Renovations – The proposed work for the facilities improvement program includes project management, permitting, and conceptual, preliminary, and

detailed engineering for the development and preparation of contract plans; and specifications for the construction of planned replacement, improvement, or repair to the district's administrative and field station facilities.

3.0 Operation and Maintenance of Works and Lands

This program includes all operation and maintenance of facilities, flood control and water supply structures, lands, and other works authorized by Chapter 373, Florida Statutes.

3.1 Land Management – Maintenance, custodial, and restoration efforts for lands acquired through federal, state, and locally sponsored land acquisition programs.

3.2 Works – The maintenance of flood control and water supply system infrastructure, such as canals, levees, and water control structures. This includes electronic communication and control activities.

Southwest Florida Water Management District
Five-Year Capital Improvements Plan Funding Schedule Fiscal Year 2023-24 through Fiscal Year 2027-28

1.0 WATER RESOURCE PLANNING AND MONITORING

1.2 RESEARCH, DATA COLLECTION, ANALYSIS AND MONITORING

REVENUES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Ad Valorem	$3,892,000	$1,010,000	$1,489,000	$1,367,000	$4,019,000
TOTAL	**$3,892,000**	**$1,010,000**	**$1,489,000**	**$1,367,000**	**$4,019,000**

EXPENDITURES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Aquifer Exploration and Monitor Well Drilling Program	$3,742,000	$860,000	$1,339,000	$1,217,000	$3,869,000
Data Collection Site Acquisitions	150,000	150,000	150,000	150,000	150,000
TOTAL	**$3,892,000**	**$1,010,000**	**$1,489,000**	**$1,367,000**	**$4,019,000**

2.0 LAND ACQUISITION, RESTORATION AND PUBLIC WORKS

2.1 LAND ACQUISITION

REVENUES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Balance from Prior Years - District Investment Account	$15,600,000	$0	$0	$0	$0
TOTAL	**$15,600,000**	**$0**	**$0**	**$0**	**$0**

EXPENDITURES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Florida Forever Work Plan Land Purchases	$15,600,000	$0	$0	$0	$0
TOTAL	**$15,600,000**	**$0**	**$0**	**$0**	**$0**

2.3 SURFACE WATER PROJECTS

REVENUES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Ad Valorem	$148,000	$0	$0	$0	$0
TOTAL	**$148,000**	**$0**	**$0**	**$0**	**$0**

EXPENDITURES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Lake Hancock Wetland Treatment System Remote Operation	$148,000	$0	$0	$0	$0
TOTAL	**$148,000**	**$0**	**$0**	**$0**	**$0**

2.5 FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

REVENUES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Ad Valorem	$752,500	$243,000	$0	$0	$0
TOTAL	**$752,500**	**$243,000**	**$0**	**$0**	**$0**

EXPENDITURES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Districtwide HVAC, Pavement and Roof Renovations	$602,500	$243,000	$0	$0	$0
Quick Change Oil Evacuation System	150,000	0	0	0	0
TOTAL	**$752,500**	**$243,000**	**$0**	**$0**	**$0**

3.0 OPERATION AND MAINTENANCE OF WORKS AND LANDS

3.1 LAND MANAGEMENT

REVENUES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Ad Valorem	$76,500	$35,000	$0	$0	$0
TOTAL	**$76,500**	**$35,000**	**$0**	**$0**	**$0**

EXPENDITURES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Pole Barn Construction at Green Swamp East and Green Swamp West	$35,000	$35,000	$0	$0	$0
Establishment of Campground Host Site at Potts Preserve	16,500	0	0	0	0
Hampton Tract Security Site Improvements at Green Swamp East	25,000	0	0	0	0
TOTAL	**$76,500**	**$35,000**	**$0**	**$0**	**$0**

3.2 WORKS

REVENUES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Ad Valorem	$9,600,000	$9,790,000	$4,710,000	$2,410,000	$2,900,000
State Appropriation for Statewide Flooding and Sea Level Rise Resilience Plan	1,200,000	0	0	0	0
TOTAL	**$10,800,000**	**$9,790,000**	**$4,710,000**	**$2,410,000**	**$2,900,000**

EXPENDITURES	FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
Flood Control Structure Gate Replacement and Drum & Cable Conversions	$7,250,000	$7,640,000	$4,710,000	$2,410,000	$2,900,000
S-160 Flood Control Structure Cathodic Protection System	2,500,000	0	0	0	0
S-551 Flood Control Structure Cathodic Protection System	800,000	0	0	0	0
Water Control Structures Control System Replacements	250,000	2,150,000	0	0	0
TOTAL	**$10,800,000**	**$9,790,000**	**$4,710,000**	**$2,410,000**	**$2,900,000**

TOTAL CAPITAL EXPENDITURES	$31,121,000	$11,078,000	$6,199,000	$3,777,000	$6,919,000

Project Descriptions

Program: Water Resource Planning and Monitoring

Activity: Research, Data Collection, Analysis and Monitoring

Project Title: Aquifer Exploration and Monitor Well Drilling Program

Type: Monitor Well Construction and Associated Activities

Physical Location: District's 16-County Region

Square Footage/Physical Description: Monitor Wells

Expected Completion Date: Ongoing

Historical Background/Need for Project: This an ongoing program for coring, drilling, testing, and construction of monitor wells at Regional Observation and Monitor-well Program (ROMP) sites and special project sites including the Central Florida Water Initiative (CFWI) region. The ROMP was established in 1974 to construct a Districtwide network of groundwater monitoring wells to provide key information concerning existing hydrologic conditions of groundwater sources (Section 373.145 Florida Statutes). In recent years, the ROMP has expanded to include the drilling and construction (and associated data collection activities) of numerous wells associated with key special projects such as the Northern Tampa Bay Water Use Caution Area wellfield recovery monitoring, the Northern Water Resources Assessment Project, the Southern Water Use Caution Area, and the CFWI. Exploratory drilling and intensive data collection efforts are performed by District staff and well construction is generally performed under contract with private sector drilling firms. Drilling and testing will be performed at key well sites to characterize the hydrogeology from land surface to the saltwater interface or base of the potable aquifer zone within the Upper Floridan aquifer. Certain sites will also include exploratory data collection activities to characterize the middle confining units and Lower Floridan aquifers. Each well site will have permanent monitor wells installed into the surficial, intermediate, Upper Floridan, and Lower Floridan aquifers, as needed. In addition, most well sites will have temporary observation wells installed for conducting aquifer performance tests. The data collected during construction of the well sites will be used in numerous District projects including models for water supply development, rulemaking for minimum flows and levels, and long-term water level and water quality monitoring.

Plan Linkages: Strategic Plan, CFWI Data Management and Investigations Team (DMIT); Hydrologic Data Section Work Plan, Water Quality Monitoring Program Section Work Plan, and the Geohydrologic Data Section Work Plan.

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

Alternative(s): The monitor wells are currently constructed by private sector well drilling companies. The District would have to purchase well drilling drill rigs to perform the well construction in-house. Without monitor wells, hydrogeologic data necessary for supporting groundwater modeling efforts, monitoring saltwater intrusion, establishing minimum flows and levels will not be collected.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $3,742,000 is budgeted for construction of monitor wells at ROMP sites and special project sites including the CFWI region. Funding for future years pending Governing Board approval through the annual budget process.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): No other project costs associated with this request have been identified.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): FY2023-24: Monitor Well Water Level Instrumentation Initial Cost:

- Equipment and Supplies: $42,185
- Installation Labor: $2,310

Anticipated Additional Operating Costs/Continuing: Monitor Well Water Level Instrumentation Continuing Cost:

- Annual Operation and Maintenance Labor: $3,328

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$3,742,000	**$860,000**	**$1,339,000**	**$1,217,000**	**$3,869,000**

Program: Water Resource Planning and Monitoring

Activity: Research, Data Collection, Analysis and Monitoring

Project Title: Data Collection Site Acquisitions

Type: Land and Interests in Land Acquired for Data Collection Sites

Physical Location: District's 16-County Region

Square Footage/Physical Description: To Be Determined

Expected Completion Date: Ongoing

Historical Background/Need for Project: The District acquires perpetual easements for sites necessary to assess groundwater sustainability and development of water supply solutions and to preserve existing sites necessary to construct a Districtwide network of groundwater monitoring wells. The District relies upon a network of groundwater monitor wells to provide information on water levels and water quality of various aquifer systems. The data obtained from these wells is utilized for a large variety of tasks including potentiometric surface map construction, saltwater intrusion, and other contaminant status reporting site specific project work to establish and modify minimum levels, and assessment of current water supplies. Regulation of Floridan and the intermediate aquifers depends on the data collected from these sites. District computer models also rely heavily on water level information.

Plan Linkages: Strategic Plan; Watershed Management Plans; Southern Water Use Caution Area; Regional Water Supply Plan; Five-Year Water Resource Development Work Program

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

Alternative(s): An alternative to obtaining permanent easement for key well sites that are used for minimum flows and minimum water levels (MFLs) and having an extensive history of data collection critical for performance monitoring of the MFLs program, as well as other District initiatives would be to obtain new sites. The cost to obtain a permanent easement on an existing well site is generally lower than the cost to replace that well site because the new site will still need to have some form of title interest, including well construction costs to replace the wells. In addition, the heterogeneity of the aquifer systems might impact the new well location and not allow for a good comparison of data from a destroyed well site to the new well site.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): The cost of well construction and related activities associated with Upper and Lower Floridan aquifers, wetland, and lake monitoring is budgeted separately under Aquifer Exploration and Monitor Well Drilling Program. It includes contracted well construction of permanent and temporary wells and associated materials such as casings and cement.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): For FY2023-24 $150,000 is budgeted for acquisition of perpetual easements in support of the District's network of groundwater monitoring wells. This includes the purchase of perpetual easements and associated ancillary costs such as surveys, appraisals, title insurance, environmental site assessments, and documentary stamps. It is projected that $150,000 will be required annually from

FY2024-25 through FY2027-28 based on background information that has been acquired for the sites. Funding for future years pending Governing Board approval through the annual budget process.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): District staff time and travel costs associated with this project are to be determined and are excluded from the amounts referenced.

Anticipated Additional Operating Costs/Continuing: There are no additional recurring operating costs anticipated at this time.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$150,000	**$150,000**	**$150,000**	**$150,000**	**$150,000**

Program: Land Acquisition, Restoration and Public Works

Activity: Land Acquisition

Project Title: Florida Forever Work Plan Land Purchases

Type: Lands Acquired through the Florida Forever Program

Physical Location: District's 16-County Region

Square Footage/Physical Description: To Be Determined

Expected Completion Date: Ongoing

Historical Background/Need for Project: The District has recognized land acquisition as one of its primary tools for achieving its statutory responsibilities. Section 373.139, Florida Statutes, authorizes the District to acquire fee simple or less than fee interests to the lands necessary for flood control, water storage, water management, conservation and protection of water resources, aquifer recharge, water resource and water supply development, and preservation of wetlands, streams, and lakes. The District purchases land and interests in land through fee simple land acquisition and acquisition of less than fee simple interests (e.g., conservation easements) under the state's Florida Forever program. This program provides funding for land acquisition and capital improvements to state agencies, water management districts, and local governments.

Plan Linkages: Strategic Plan; Watershed Management Plans; SWIM Plans; Southern Water Use Caution Area

Area(s) of Responsibility: Natural Systems

Alternative(s): The alternatives to purchasing necessary land or interests to achieve statutory responsibilities would be to place additional regulations and restrictions on lands requiring protection. Many of these alternatives are not within the District's authority.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): No construction costs are associated with this request.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): It is projected that the District will have an estimated $15,628,908 available in prior year funds generated from the sale of land or real estate interests.

For FY2023-24, $15,600,000 is budgeted for land to be acquired through the Florida Forever Work Plan. This includes funds for land acquisition and associated ancillary costs such as surveys, appraisals, title insurance, environmental site assessments, and documentary stamps. No funding is currently projected for land acquisition and associated ancillary costs from FY2024-25 through FY2027-28.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): District staff time and travel costs associated with this project are to be determined and are excluded from the amounts referenced.

Anticipated Additional Operating Costs/Continuing: The District acquires real estate interests for projects that would enhance its existing ownership responsibilities or provide management benefits. Depending on the size of the property, location, and interest acquired, the operating costs may increase and are evaluated at the time of acquisition.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$15,600,000	**$0**	**$0**	**$0**	**$0**

Program: Land Acquisition, Restoration and Public Works

Activity: Surface Water Projects

Project Title: Lake Hancock Wetland Treatment System Remote Operation

Type: Facility Enhancement

Physical Location: Lake Hancock Wetland Treatment Facility Cell Structures in Polk County

Square Footage/Physical Description: Five water control structures' operational capabilities upgraded to remote.

Expected Completion Date: 09/2024

Historical Background/Need for Project: Construction of the Lake Hancock Wetland Treatment System was completed in 2014. Water is pumped from Lake Hancock into five wetland treatment cells. The five structures are used to control the flow of water through the wetland treatment cells and control the water that flows out of the cells and eventually into the Peace River. Presently, these structures are operated manually which presents an operational inefficiency due to the location and frequency of operations. The project will provide operational capabilities of the five structures remotely.

Plan Linkages: Strategic Plan

Area(s) of Responsibility: Water Quality

Alternative(s): Without remote capabilities, these structures will continue to be manually operated by staff.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $148,000 is budgeted to upgrade the Lake Hancock Treatment cell structures from manual to remote capabilities.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): There are no other project costs anticipated at this time.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): There are no additional initial operating costs.

Anticipated Additional Operating Costs/Continuing: Future operating costs will include service fees for the IP modems at each structure and the electricity costs. However, there will be an overall reduction in operating costs when compared to the current manual operational processes.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$148,000	**$0**	**$0**	**$0**	**$0**

Program: Land Acquisition, Restoration and Public Works

Activity: Facilities Construction and Major Renovations

Project Title: Districtwide HVAC, Pavement and Roof Renovations

Type: Facility Renovations

Physical Location: Brooksville, Tampa, Sarasota, and Lake Hancock Offices

Square Footage/Physical Description: HVAC, Pavement and Roof Renovations as Required

Expected Completion Date: Ongoing

Historical Background/Need for Project: The District currently owns and maintains three public offices in Brooksville, Tampa, and Sarasota and one field office in Bartow at Lake Hancock. These facilities consist of approximately 70 acres with a total of 265,879 square feet of buildings under roof and over 725,408 square feet of paved parking and driveways. Some of the construction dates back more than 50 years. This ongoing program was created to proactively maintain District assets and provide a safe and healthy environment for staff and the public. Heating, ventilation, and air conditioning systems (HVAC), pavement, and roof renovations are planned and budgeted according to a multi-year schedule that minimizes the opportunity for building damage and loss of staff productivity. Renovations do not change the function of existing facilities; they simply maintain them in the state of their intended use.

Plan Linkages: Strategic Plan

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

Alternative(s): If the Districtwide HVAC, pavement, and roof renovations are not funded, the facilities maintenance costs are expected to increase significantly as additional maintenance activities are required to keep facilities in a safe and operational order. Not funding the projects would allow for degraded and deteriorated conditions requiring extensive restoration, such as moisture damage to buildings and expanded pavement cracks, resulting in higher costs than currently proposed. These projects are prioritized in a proactive effort to avoid damage and unnecessary costs while maximizing the life of the equipment, structures, and grounds.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): Funding for future years pending Governing Board approval through the annual budget process.

FY2023-24
- Brooksville Building 2 Air Handling Unit and Chiller (Replacement): $302,500
- Tampa Building 1 Chiller (Replacement): $300,000

FY2024-25
- Tampa Building 1 Chiller (Replacement): $243,000

A facilities assessment that will be completed in FY2023-24 will provide guidance on projects for FY2025-26 through FY2027-28.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): There are no other project costs anticipated at this time.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): District staff time and travel costs associated with this project are to be determined and are excluded from the amounts referenced.

Anticipated Additional Operating Costs/Continuing: There are unforeseen operating costs and savings that cannot be identified at this time.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$602,500	**$243,000**	**$0**	**$0**	**$0**

Program: Land Acquisition, Restoration and Public Works

Activity: Facilities Construction and Major Renovations

Project Title: Quick Change Oil Evacuation System

Type: Facility Upgrades

Physical Location: Tampa and Brooksville Offices

Square Footage/Physical Description: Two 100-gallon oil recovery tanks and pressurized oil recovery system.

Expected Completion Date: 07/2024

Historical Background/Need for Project: The District provides preventative maintenance services for its fleet of vehicles, heavy equipment, agricultural equipment, boats, and small engines (units). When oil changes are performed, oil is put into the units through a modern pressurized oil pump system, while waste oil is drained, captured, and manually transferred to waste oil containers for later disposal by a vendor. The manual waste oil transfer practice does not allow for elimination or reduction of oil spillage. A modern pressurized oil recovery system reduces the risk of spillage by direct transfer from the units to the waste oil tanks. This allows for safer conditions for oil changes and eliminates the risk of oil leaks due to improper torque of the drain plug. Further, the system modernizes technologies used for fleet management processes. One system will be constructed at the Tampa facility location and the other at the Brooksville location.

Plan Linkages: Strategic Plan

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

Alternative(s): Continue with current business practices and associated risks.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $150,000 is budgeted for the installation of a modern pressurized oil recovery system.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): There are no other project costs anticipated at this time.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): There are no additional initial operating costs with this request.

Anticipated Additional Operating Costs/Continuing: There are no additional recurring operating costs with this request.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$150,000	**$0**	**$0**	**$0**	**$0**

Program: Operation and Maintenance of Works and Lands

Activity: Land Management

Project Title: Pole Barn Construction at Green Swamp East and Green Swamp West

Type: Land Enhancement

Physical Location: Green Swamp East: Adjacent to the wildlife management area check-station. Green Swamp West: Adjacent to the well house on Ranch Road, east of the River Road gate.

Square Footage/Physical Description: Two 40x96x16 (3,840 sqft) open pole barns with (1) 24' Header Truss, 29ga Galvalume roofing, and 8x8x22 posts with rebar.

Expected Completion Date: Green Swamp East: 05/2024; Green Swamp West: 05/2025

Historical Background/Need for Project: Green Swamp East and Green Swamp West tracts combined total over 88,000 acres requiring land management activities. Currently, without coverage, heavy equipment used by District Land Management staff is stored out in the elements. Construction of pole barns will allow for covered storage of heavy equipment when not in use. Each pole barn will have up to seven bays for storage of skidders, tractors, grader, dozer plow units, and transports. Additionally, the barns will provide a necessary under cover area for staff to perform daily maintenance activities, as well as conduct on-site repairs.

Plan Linkages: Strategic Plan

Area(s) of Responsibility: Natural Systems

Alternative(s): If the pole barns are not constructed, the heavy equipment will remain parked out in the elements, and staff will be required to continue performing maintenance and repair of the equipment without coverage from the sun and rain.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $35,000 is budgeted for the construction of a pole barn at the Green Swamp East property. The cost of the pole barn of $9.11 per square foot includes site preparation, materials, and construction.

An additional $35,000 will be requested in FY2024-25 for a pole barn at the Green Swamp West property. Funding for future years pending Governing Board approval through the annual budget process.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): No other project costs associated with this request have been identified.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): There are no additional initial operating costs with this request.

Anticipated Additional Operating Costs/Continuing: There are no additional recurring operating costs with this request.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$35,000	$35,000	$0	$0	$0

Program: Operation and Maintenance of Works and Lands

Activity: Land Management

Project Title: Establishment of Campground Host Site at Potts Preserve

Type: Land Enhancement

Physical Location: Potts Preserve property adjacent to the Dee River Road campground.

Square Footage/Physical Description: Septic tank and drain field to service volunteer campground host site, as well as a 30x35x12 (1,050 sqft) carport with 26ga Galvalume roofing.

Expected Completion Date: 05/2024

Historical Background/Need for Project: As population within the District increases, so does the recreational use of District lands. Having an onsite campground host will provide a presence to help minimize nefarious activities, as well as improve overall appearance of the campgrounds through an improved maintenance schedule without taking staff away from their other land management responsibilities. Installation of a septic system and carport to an existing site that has a concrete slab, a well, and a power meter will create a campground host site for a volunteer to oversee and maintain the campgrounds at Potts Preserve.

Plan Linkages: Strategic Plan

Area(s) of Responsibility: Natural Systems

Alternative(s): There are no alternatives to this request. If this site is not developed, the District will have to continue to operate as is and be a presence in the campgrounds when time permits.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $16,500 is budgeted for the installation of a new septic system and construction of carport. The cost includes all site preparation, materials, and installation/construction.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): There are no other project costs anticipated with this request.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): Permitting and associated staff time to oversee installation of the septic system and construction of the carport.

Anticipated Additional Operating Costs/Continuing: Minimal costs are expected with the septic system which will include periodic maintenance. In addition, there will be monthly utility fees associated with the camp host electricity usage, which is expected to be less than $100/month.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$16,500	$0	$0	$0	$0

Program: Operation and Maintenance of Works and Lands

Activity: Land Management

Project Title: Hampton Tract Security Site Improvements at Green Swamp East

Type: Land Enhancement

Physical Location: Green Swamp East

Square Footage/Physical Description: 30x45x14 (1,350 sqft) open pole barn with 29ga Galvalume roofing, as well as a concrete slab.

Expected Completion Date: 09/2024

Historical Background/Need for Project: The purpose of replacing the existing residence with a pole barn is to retain ongoing security services performed by Florida Fish and Wildlife Conservation Commission (FWC) Law Enforcement in Green Swamp East and the surrounding area. This will allow officers with RV trailers to park beneath the pole barn while living onsite, and thus alleviating the District from ongoing maintenance of a residence. The existing residence is at end of useful life and is cost prohibitive to perform large maintenance or repairs. The District receives a greater cost benefit to security services on its lands by having onsite security than through the security contract.

Plan Linkages: Strategic Plan

Area(s) of Responsibility: Natural Systems

Alternative(s): The two alternatives would be to 1.) replacement of the existing residence at a cost of up to $90,000, or 2.) remove the existing trailer and not facilitate a space for a new officer, which would result in the loss of an onsite security officer. Additionally, funds would be required to obtain comparable security services at a minimum of $1,000/month per property covered.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $25,000 is budgeted for the construction of a pole barn at Hampton Tract. The cost of $18.52 per square foot includes site preparation, materials, and construction of the pole barn.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): For FY2023-24, $8,000 is budgeted for the demolition/hauling of the existing residence trailer and is excluded from the funding table below.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): There are no additional initial operating costs anticipated with this request.
Anticipated Additional Operating Costs/Continuing: There are no additional recurring operating costs with this request.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$25,000	$0	$0	$0	$0

Program: Operation and Maintenance of Works and Lands

Activity: Works

Project Title: Flood Control Structure Gate Replacement and Drum & Cable Conversions

Type: Refurbishment/Modification

Physical Location: District's 16-County Region

Square Footage/Physical Description: Structure Gates and Lift Systems

Expected Completion Date: 09/2028

Historical Background/Need for Project: The District owns 15 flood control structures most of which are associated with the Four River Basins Federal project. Five of the owned flood control structures are classified as High Hazard Potential Facilities, meaning that a failure has the potential to result in loss of human life and significant property destruction. A failure of any of these flood control structures has the potential to cause public health and safety, property, financial, environmental, and function impacts.

There are a total of 39 water control gates of various types and sizes associated with the 15 District-owned flood control structures. There are 28 gates with hydraulic lift systems that are aging which are the focus of this project. Fourteen of the 28 gates and hydraulic lift systems are over 50 years old. This project is for the replacement, where needed, of the existing carbon steel gates with stainless steel gates. The stainless-steel gates will not require routine recoating, like carbon steel gates, greatly reducing future maintenance costs. Recoating of a carbon steel gate can cost as much as $400,000 per gate each time it is needed (12 to 15-year cycles). This project also includes converting the existing hydraulic lift systems with electric drum and cable lift systems. These drum and cable systems will require less maintenance and are more reliable than the existing hydraulic systems. While this project will replace existing gates and lift systems that have reached the end of their useful life based on age and condition, it will not change the function of the 15 flood control structures.

Plan Linkages: Strategic Plan

Area(s) of Responsibility: Flood Protection

Alternative(s): If the District does not replace the aging water control gates and associated hydraulic lift systems, maintenance costs will continue to increase, and the reliability of these critical flood control structures will decrease resulting in increased risk of failures.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $7,250,000 is budgeted to start the construction phase of the project. The total cost for engineering and construction services for the gate replacements and lift system conversions is $25,250,000*.

- Total engineering services for design and construction oversight: $1,690,000
- Total construction: $23,560,000

Structure	No. of Gates	Gate Replacements	Lift System Conversions	Total Cost per Structure
S-160	6	$3,300,000	$3,300,000	$6,600,000
S-162	7	$3,710,000	$3,710,000	$7,420,000
S-551	4	$2,190,000	$2,190,000	$4,380,000
S-161	2	$1,130,000	$1,130,000	$2,260,000
S-155	2	N/A	$1,160,000	$1,160,000
S-159u	2	N/A	$1,740,000	$1,740,000

* Funding began in FY2020-21, with a total of $340,000 through FY2022-23. The funding schedule is based on known information at this time. Future funding amounts and timing have the potential to change based on unforeseeable circumstances and are subject to future Governing Board approval.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): There are no other project costs anticipated at this time.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): District staff time and travel costs associated with this project are to be determined and are excluded from the amounts referenced.

Anticipated Additional Operating Costs/Continuing: There are no additional recurring operating costs anticipated at this time.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$7,250,000	**$7,640,000**	**$4,710,000**	**$2,410,000**	**$2,900,000**

Program: Operation and Maintenance of Works and Lands

Activity: Works

Project Title: S-160 Flood Control Structure Cathodic Protection System

Type: Structure Enhancement

Physical Location: On the Tampa Bypass Canal (C-135), about 1,500 feet north of State Road 60 in Hillsborough County

Square Footage/Physical Description: Reinforced concrete, gated, six-bay spillway with ogee weirs. Each bay contains hydraulically-powered hoist machinery that operates a 22-foot-wide by 11.1 foot-high sluice gate installed on the crest of the weir. Each sluice gate is equipped with an independently operated set of 4 weir gates for a total of 24 weir gates.

Expected Completion Date: 06/2025

Historical Background/Need for Project: Structure S-160 is a critical flood control structure that is part of the Tampa Bypass Canal (TBC) system which protects the cities of Tampa and Temple Terrace from river flooding during high rain events such as hurricanes. The TBC, including S-160, protects the cities by diverting water off the Hillsborough River and moves that water safely around the cities and out to McKay Bay. Construction of S-160 was completed in December 1968 and has been in continuous operation since then. Construction was completed prior to the industry practice of utilizing coated rebar in reinforced concrete in saltwater-affected environments. As a result, the structure has experienced corrosion of the structural rebar resulting in damage to the concrete as documented by state-licensed engineers contracted by the District.

According to the United States Department of Agriculture (USDA) Southeast Regional Climate Hub, "Salinization is expected to increase as sea levels continue to rise. Rising sea levels will inundate lands, increase tide and storm surge levels, and push saltwaterfarther inland through ditches and tidal creeks." The sea level rise will present two risks to S-160; (1) expose the structure to a higher salt concentration that is being pushed up tidal creeks like the Palm River, and (2) increases to the wetted area of the structure (more of the structure will be exposed to tide over time) which increases the area impacted by corrosive salt that migrates through the concrete to the steel rebar. This cathodic protection system will help prevent catastrophic failure of a flood control structure that is currently protecting lives and property.

This project will repair existing damage resulting from rebar corrosion in preparation to install a cathodic protection system to help prevent corrosion from the current and future saltwater conditions and extend the useful life of the reinforced concrete portion of this critical structure protecting lives, property, and the environment.

Plan Linkages: Strategic Plan

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

Alternative(s): If the project is not funded, the risks associated with the likelihood of failure would increase which would reduce or negate the flood protection level of service provided to the served communities. The repair costs associated with concrete damage would continue to increase while not

addressing the root cause, rebar corrosion, which is expected to worsen as sea levels rise. This unmitigated corrosion and resulting concrete damage would likely decrease the useful life of the reinforced concrete portion of this structure, maintenance, and repair costs (staff time, materials, and service costs) will continue to increase, and a costly capital project to replace the entire structure will be needed sooner than desired.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $2,500,000 is budgeted for the cost of construction, of which $1,200,000 will be funded by the Department of Environmental Protection from the FY2023-24 state appropriation for Statewide Flooding and Sea Level Rise Resilience Plan.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): In prior years, $233,975 has been budgeted for design and bid/construction, engineering, and inspection services.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): There are no additional initial operating costs anticipated.

Anticipated Additional Operating Costs/Continuing: There are no additional recurring operating costs anticipated at this time.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$2,500,000	**$0**	**$0**	**$0**	**$0**

Program: Operation and Maintenance of Works and Lands

Activity: Works

Project Title: S-551 Flood Control Structure Cathodic Protection System

Type: Structure Enhancement

Physical Location: On Lake Tarpon Outfall Canal (C-531), south end of Lake Tarpon in Pinellas County

Square Footage/Physical Description: Reinforced-concrete, gated, four-bay spillway with ogee weirs. Each bay contains hydraulically-powered hoist machinery that operates a 22-foot-wide by 11.1 foot-high sluice gate installed on the crest of the weir. Each sluice gate is equipped with an independently operated set of 4 weir gates for a total of 16 weir gates.

Expected Completion Date: 06/2025

Historical Background/Need for Project: Structure S-551 is a critical flood control structure on the Lake Tarpon Outfall Canal which provides flood protection benefits to Lake Tarpon and prevents saltwater intrusion into the lake. Construction of S-551 was completed in January 1969 and has been in continuous operation since then. Construction was completed prior to the industry practice of utilizing coated rebar in reinforced concrete in saltwater-affected environments. As a result, the structure has experienced corrosion of the structural rebar resulting in damage to the concrete as documented by state-licensed engineers contracted by the District. According to the United States Department of Agriculture (USDA) Southeast Regional Climate Hub, "Salinization is expected to increase as sea levels continue to rise. Rising sea levels will inundate lands, increase tide and storm surge levels, and push saltwater farther inland through ditches and tidal creeks." The sea level rise will present two risks to S-551: (1) expose the structure to a higher salt concentration that is being pushed up the Lake Tarpon Outfall Canal, and (2) increases to the wetted area of the structure (more of the structure will be exposed to tide over time) which increases the area impacted by corrosive salt that migrates through the concrete to the steel rebar.

This project will repair existing damage resulting from rebar corrosion in preparation to install a cathodic protection system to help prevent corrosion from the current and future saltwater conditions and extend the useful life of the reinforced concrete portion of this critical structure protecting lives, property, and the environment.

Plan Linkages: Strategic Plan

Area(s) of Responsibility: Flood Protection

Alternative(s): If the project is not funded, the risks associated with the likelihood of failure would increase which would reduce or negate the flood protection level of service provided to the served communities. The repair costs associated with concrete damage would continue to increase while not addressing the root cause, rebar corrosion, which is expected to worsen as sea levels rise. This unmitigated corrosion and resulting concrete damage would likely decrease the useful life of the reinforced concrete portion of this structure, maintenance, and repair costs (staff time, materials, and service costs) will continue to increase, and a costly capital project to replace the entire structure will be needed sooner than desired.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $800,000 is budgeted to complete funding for the cost of construction. The total cost is $1,151,725, with $351,725 budgeted in prior years.
Other Project Costs (include land, survey, existing facility acquisition, professional services, other): In prior years, $128,275 has been budgeted for design and bid/construction, engineering, and inspection services.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): There are no additional initial operating costs.

Anticipated Additional Operating Costs/Continuing: There are no additional recurring operating costs anticipated at this time.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$800,000	**$0**	**$0**	**$0**	**$0**

Program: Operation and Maintenance of Works and Lands

Activity: Works

Project Title: Water Control Structure Control System Replacements

Type: Structure Enhancement

Physical Location: District Structures

Square Footage/Physical Description: Up to 43 water control structures

Expected Completion Date: 09/2027

Historical Background/Need for Project: Remote operability was added to structures without standardization of equipment, wiring, and routing, as well as lacking wiring diagrams. In addition, the main components associated with remote operability have reached or exceeded their useful life. Maintaining remote operability of the District's water control structures is critical to protecting life and property within the region. This project will design standardized systems to replace existing equipment with modernized technology and provide diagrams for efficient maintenance and repair.

Plan Linkages: Strategic Plan

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

Alternative(s): If not funded, the remote operability of the District's most critical water control structures would be increasingly unreliable and unexpected failures would increase. These structures protect life and property, so failure presents a significant risk. Additionally, the increasing number of failures will increase maintenance and repair costs.

Basic Construction Costs (include permits, inspections, communications requirements, utilities, outside building, site development, other): For FY2023-24, $250,000 is budgeted for the design to replace the control system of up to 43 of the District's remotely operated structures. Construction planned for FY2024-25 is anticipated to be $2,150,000 with implementation occurring over three years. Funding for future years pending Governing Board approval through the annual budget process.

Other Project Costs (include land, survey, existing facility acquisition, professional services, other): There are no other additional project costs anticipated.

Anticipated Additional Operating Costs/Initial (include salaries, benefits, equipment, furniture, expenses): There are no additional initial operating costs.

Anticipated Additional Operating Costs/Continuing: There are no additional ongoing operating costs.

FY2023-24	FY2024-25	FY2025-26	FY2026-27	FY2027-28
$250,000	$2,150,000	$0	$0	$0

Executive Summary

The Annual *Five-Year Capital Improvements Plan* includes projected revenues and expenditures for planned improvements for fiscal year (FY) 2023-24 through FY2027-28. Some of the major highlights for FY2023-24 include:

Research, Data Collection, Analysis and Monitoring:

- $3,742,000 for coring, drilling, testing, and construction of monitor wells at Regional Observation and Monitor-well Program sites and special project sites within the Central Florida Water Initiative region.

Land Acquisition:

- $15,600,000 for potential land acquisition under the Florida Forever program and funded from dollars generated from the sale of land or real estate interests within the state of Florida.

Works:

- $7,250,000 for the replacement of the District's flood control gates and upgrades to their lifting systems. The replacement gates will be stainless-steel gates and not require routine coating, which will reduce future maintenance costs. The existing hydraulic lift systems will be converted to electric drum and cable systems, which are more reliable and will reduce future maintenance costs.

- $3,300,000 for the repair of concrete due to rebar corrosion damage and the installation of cathodic protection systems at District structures S-160 on the Tampa Bypass Canal and S-551 on the Lake Tarpon Outfall Canal. These cathodic protection systems will mitigate corrosion from existing saltwater and extend the useful life of these structures.

Consolidated Annual Report
March 1, 2024

2024 Alternative Water Supplies Annual Report

Southwest Florida
Water Management District

Chapter 5 Alternative Water Supply

Introduction

Where Water Resource Caution Areas have been designated, Section 373.707(2), Florida Statutes (F.S.), requires the governing boards of the water management districts to include in their annual budgets an amount for the development of alternative water supply systems, including reclaimed water systems. The section, as well as 2005 legislation related to the Water Protection and Sustainability Program Trust Fund (Subsection 373.707(8)(n), F.S.), further requires that each district submit an annual alternative water supply report to the Governor, the President of the Senate, and the Speaker of the House of Representatives by March 1 of each year. This report describes all funded projects and accounts for funds provided through grants, matching grants, revolving loans and the use of Southwest Florida Water Management District (District) lands or facilities. The District has designated Water Resource Caution Areas and has implemented alternate water supply funding pursuant to the Florida Statutes. This report is submitted pursuant to the related statutes (Sections 373.707, 373.036, and 403.890, F.S.). Because of the unique organization of the District and its past accomplishments in the areas of water conservation and alternative water source development, the following is provided as background information.

Background

The District has been providing local funds for regional water resource-related projects since its creation in 1961. Originally, the focus of the District had been on funding flood control projects. In the late 1980s, the priorities began to shift to the identification and funding of projects that focus on water conservation and the development of alternative water sources. Currently, staff and financial resources are focused on issues of water quality, natural systems improvement, flood protection and water supply including water conservation and alternative water source development.

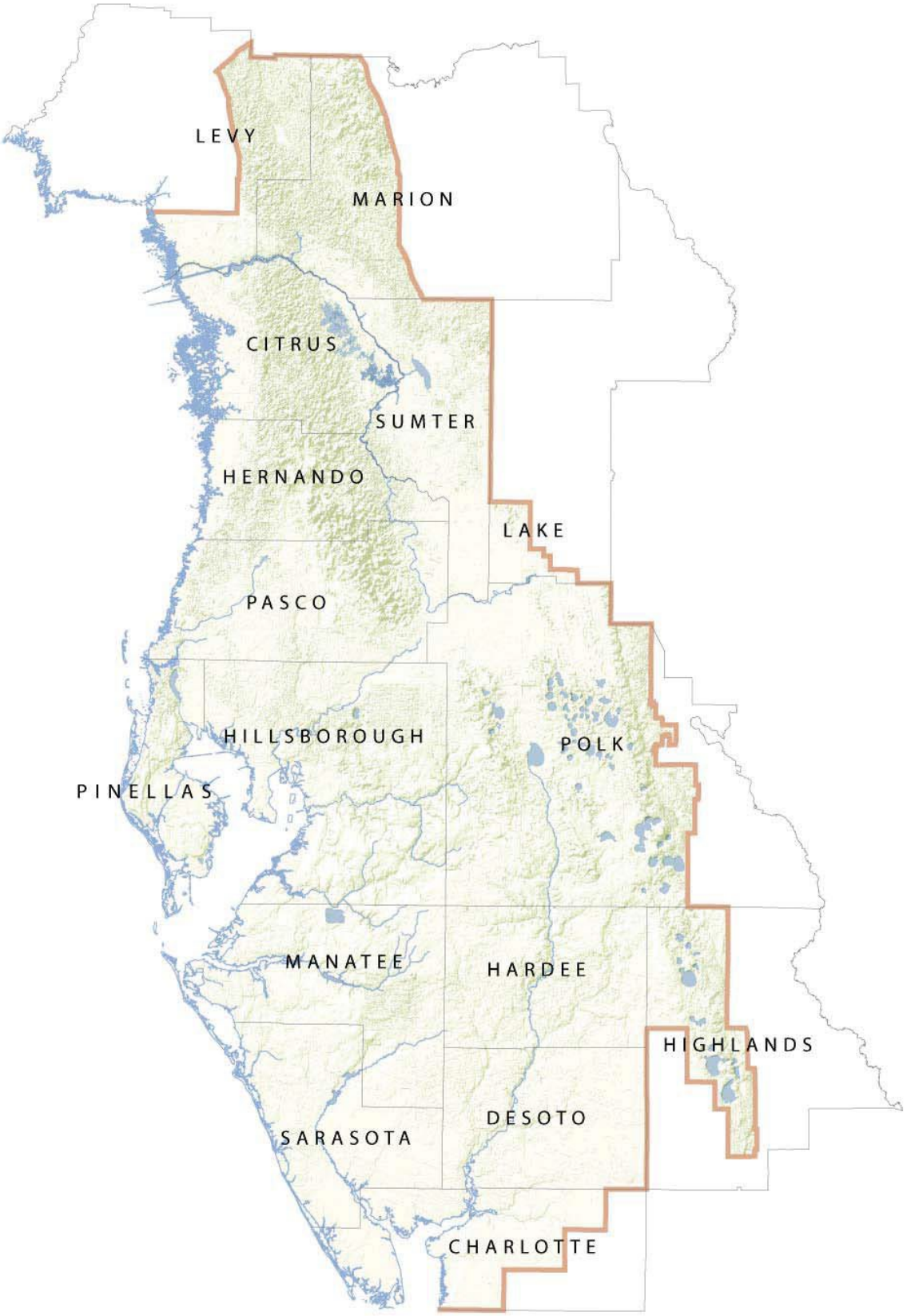
Before the late 1980s, participation in local water resource projects, both financial and staff support, was primarily driven by requests from local governments. Recognizing the ability to support local governments by providing solutions to the growing issues surrounding water supply, the District adopted a more proactive role in addressing local non-regulatory water issues. In response to the need for a set system for receiving project assistance requests and criteria regarding timing, project eligibility, funding and other conditions for participation, the *Cooperative Funding Initiative* was established in recognition of the growing need for a structured approach to maximize the District's effectiveness in choosing and funding water resource projects and budgeting for their completion.

Prior to mid-2011, the District was unique among Florida's water management districts in that, beyond the similar structure of the governing boards, it also had eight Basin Boards with distinct budgets which allocated funding to projects within that basin. The Basin Boards were based upon the eight basins with jurisdictional boundaries encompassing the major watersheds making up the District. Each basin included a Basin Board which allocated funding to projects within that basin. In 2011, the structure of the District was changed to be consistent with the other water management districts, with the Governing Board taking over the responsibilities of the Basin Boards, including the funding of alternative water supply projects. Presently, the Governing Board continues to provide the majority of funding for alternative water supply development through its *Cooperative Funding Initiative (CFI).*

The District is involved in many other programs besides those specifically defined in the statute, which are also saving significant amounts of water. Some program examples are leak detection, drought tolerant landscaping, ultra-low flow toilet rebates, water saving ordinance development, industrial and residential water audits, landscape irrigation system efficiency, the Facilitating Agricultural Resource Management Systems (FARMS) Program, and many others, including major public education efforts.

This Alternative Water Supply Report provides a background summary of the District's current and historical accomplishments in alternative water supply development, as well as a few areas of water conservation that will provide the recipients of this report with an understanding of the effectiveness of the District's programs.

Figure 1. SWFWMD Map



Summary of Reclaimed Water Projects

The District is a national leader in developing reclaimed water as an alternative water supply. The CFI program and other District cost sharing programs have been a key mechanism for promoting the development of reclaimed water infrastructure. Table 1 shows the significant historical financial contributions and alternative water quantities made available as a result of District participation in approximately 390 reclaimed water projects since fiscal year (FY) 1987.

Table 1. Summary of Reclaimed Water Projects

District Funded Reclaimed Water Projects	Reclaimed Water to be Provided (mgd)	Water Resource Benefit (mgd)	Storage Capacity (mg)	Miles of Pipe	Budgeted District Funding (up to FY2024)	Total Project Cost
390	196	148	1,376	1,025	$417,321,966	$1,084,554,775

Sources: Reuse and Conservation Projects Summary Report FY2012 (SWFWMD, 2011), FY2013 through FY2024 District budgets.

Note: Budgeted funding total is per Governing Board and Basin Board annual budgets from FY1987-FY2024 and does not include future funding commitments, State funds, nor funds budgeted for cancelled projects.

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 estimated construction costs exceeding $5 million require completion of 30 percent design and a third-party review to confirm costs, schedules, and ability to meet its resource benefits prior to submission. 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 more than $4 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.

New Water Sources Initiative

In 1993, the District Governing Board recognized the need to accelerate the development of alternative water sources to address the water resource impacts identified in the Southern Water Use Caution Area (SWUCA) and the Northern Tampa Bay Water Use Caution Area. The Governing Board initiated the New Water Sources Initiative (NWSI) program with a $10 million commitment beginning in FY1994. The program solicited requests for large, regionally significant projects that would develop non-traditional (other than groundwater) sources to replace existing use or provide for future growth. This program was in addition to the CFI and continued through FY2007 following the completion of the Tampa Bay Water Partnership Agreement funding obligations.

Eligible NWSI projects generally received 25 percent of their funding from the District's Governing Board, 25 percent from appropriate Basin(s) and the remaining 50 percent from the local cooperator(s). The 22completed projects funded through the NWSI program were administered pursuant to legislative directives to promote and fund alternative source development. The NWSI projects received more than $60 million in District funding to provide as much as 206 million gallons per day (mgd) of water resource benefits, reduce groundwater withdrawals, rehydrate stressed lakes and wetlands, increase groundwater recharge, enhance wildlife habitat, and improve flood control.

Water Supply and Resource Development Projects

As a means to facilitate the implementation options identified in the *District Regional Water Supply Plan* (SWFWMD, 2001) or similar projects, the Governing Board and the previous Basin Boards initiated another funding opportunity in FY2001 to address large-scale water supply and resource development projects with multiple cooperators and regional benefits. The Water Supply and Resource Development (WSRD) projects received funding from the Governing Board, multiple Basins, and local cooperators. Depending upon the size and scope of the project, some WSRD projects also involved additional state and federal funding. The funding shares were reflective of the proportional benefits anticipated to be realized by each of the basins, and the collective Basin Board funding was then matched by the Governing Board. As such, eligible WSRD projects generally received 25 percent of funding from the District's Governing Board, 25 percent from the collective Basin Boards and the remaining 50 percent from local cooperators. Since the dissolution of the Basin Boards in 2011, funding for large-scale WSRD projects continues through the District's CFI program.

District Initiatives

Projects implemented through the District Initiatives program are of great importance or a regional priority and, in some cases, are fully funded by the District. Examples of these initiatives include Water Resource Development (WRD) 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 minimum flows and levels (MFLs) program; (4) the Facilitating Agricultural Resource Management Systems (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

Springs Initiative

A new legislative appropriation 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 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, currently treated in septic systems or package plants to a centralized wastewater treatment facility which may increase reclaimed water production and implementation of other best management practices (BMPs) within springshed basins. Since FY2014, the District has appropriated over $78.4 million from the DEP for springs restoration.

FARMS Program

The **Facilitating Agricultural Resource Management Systems (FARMS)** Program is an agricultural 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 FARMSProgram is to implement production-scale agricultural BMP projects that will provide water resource benefits including water quality improvement; reduction of Upper Floridan aquifer withdrawals; conservation; and restoration or augmentation of the area's water resources and ecology. Since 2003, the District has co-funded $52.2 million dollars towards $88.8 million dollars in total project costs for 247 FARMS projects resulting in 32.0 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.

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. If the Legislature continues to fund the state's Water Protection and Sustainability Program, it could serve as a significant source of matching funds to assist in the development of AWS and regional supply infrastructure in the region.

Partnership Agreements

The Northern Tampa Bay New Water Supply and Groundwater Withdrawal Reduction Agreement (NTB Partnership Agreement) provided for the development of new and alternative water supplies and reduction of pumpage from Tampa Bay Water's Northern Tampa Bay wellfields.

NTB Background

Floridians rely on groundwater, pumped from underground aquifers, as their principal water supply source. In the Tampa Bay region, over-reliance on the groundwater resulted in adverse environmental impacts to lakes, wetlands, and its ecology. This led to years of conflict between water regulators, water suppliers and property owners. Many of these conflicts were aired in administrative hearings and the court systems for years without resolution.

Seeking a cooperative solution to the region's water problems, the District collaborated with Tampa Bay Water (TBW) (formerly known as the West Coast Regional Water Supply Authority), and its six member governments (Hillsborough County, Pinellas County, Pasco County, and the cities of Tampa, St. Petersburg, and New Port Richey) for the development of new water supplies and phased reduction of pumping from the 11 central system wellfields. Discussions of the plan began in 1997. After many months of negotiations, the "Partnership Agreement" was executed by all parties on May 27, 1998.

NTB Partnership Agreement

The Partnership Agreement had four objectives: (1) Develop at least 85 mgd of new water supply by December 31, 2007, of which 38 mgd must be produced by December 31, 2002; (2) Reduce groundwater pumpage at 11 wellfields from 158 mgd to 121 mgd by 2002 and to 90 mgd by 2008; (3) End existing and minimize future litigation; and (4) Provide funding to assist in the development of the new alternative supply.

The Partnership Agreement was completed in 2010 and met the objectives set forth. The Recovery Strategy for Pasco, Hillsborough, and Pinellas counties, which included the Partnership Agreement, required that groundwater withdrawals from TBW's Consolidated Wellfield system would be reduced to rates that could not exceed 90 mgd on a 12-month moving average basis by 2008. To compensate for this reduction in groundwater withdrawals, greater reliance would be placed on using alternative public water supplies, such as surface water and the seawater desalination facility.

In keeping with the intent of the Recovery Strategy, TBW now obtains surface water supplies from the Tampa Bypass Canal, Hillsborough River and Alafia River, maintains an off-stream 15.5-billion-gallon reservoir, and operates a 25 mgd capacity seawater desalination plant on Tampa Bay.

In 2010, the District adopted a second phase of recovery for the Northern Tampa Bay Water Use Caution Area (NTBWUCA), entitled the Comprehensive Environmental Resources Recovery Plan for the NTBWUCA (Rule 40D-80.073, F.A.C.), or the "Comprehensive Plan." Among other actions, the Comprehensive Plan requires TBW to assess the water resources of the area and identify any remaining unacceptable adverse impacts caused by the 90 mgd of groundwater permitted to be withdrawn from their wellfields. The plan also required TBW to develop a plan to address any identified unacceptable adverse impacts by 2020. Several new projects have resulted from this analysis.

The Comprehensive Plan contained a sunset provision, providing that it would be effective through December 31, 2020. Because the Comprehensive Plan is no longer effective and to avoid confusion, initiation of rulemaking to delete the expired Comprehensive Plan from Rule 40D-80.073 and references to the Comprehensive Plan in other District rules was approved by the Governing Board in March 2021 and is ongoing.

Additional Tampa Bay Water Project Agreements

From FY2006-FY2011, the District provided an additional $126 million in grant funding for the $247 million Tampa Bay Water System Configuration II Project, which developed 25 mgd of new surface water supplies.

A Partnership Agreement in Polk County

In 2012, the District began coordinating with Polk County on a Partnership Agreement (H094) that is modeled after the NTB Partnership Agreement. The Polk Partnership Agreement provides for financial assistance, permit coordination, development of new and alternative water supplies and the regionalization of water supplies in Polk County. The goal is to provide an annual average of at least 30 mgd in new alternative water supplies from eligible projects to be used by Polk and its municipalities by December 31, 2041.

FY2024 Annual Report Information

As defined in the Florida Statutes, alternative water supplies are "salt water; brackish surface and groundwater; surface water captured predominately during wet-weather flows; sources made available through the addition of new storage capacity for surface or groundwater; water that has been reclaimed after one or more public supply, municipal, industrial, commercial, or agricultural uses; the downstream augmentation of water bodies with reclaimed water; stormwater; and any other water source that is designated as nontraditional for a water supply planning region in the applicable regional water supply plan." Pursuant to the requirements of the statutes, the following tables and associated narrative identify alternative water supply projects, associated funding, and provide a short description of their benefits.

SWFWMD Budgeted Project Funding

Table 2 summarizes the total annual budgeted District funding for alternative water supply category projects for the past ten fiscal years (FY2015-FY2024). The funding projects requiring large capital investments with construction spanning several years is usually spread out over multiple fiscal years to maximize annual funding availability for multiple regional projects and cooperators. Please note that the funding totals presented in the following sections are based on the FY2024 Adopted Budget and may reflect updates to project costs from previous years. Funding totals are provided per Board approved budgets and do not include District project management expenses.

Notes: The funding amounts shown, as in subsequent tables, represent only District related contributions; equal or exceeding matching funds are provided by the cooperator. Projects included in these tables include only projects related to "water supply" benefits and do not include Natural System Enhancement (i.e. wetland and lake restoration projects).

Funding Classification

Table 3 classifies the FY2015-FY2024 budgeted amounts into funding types. As indicated, the District's funding focus has been on matching programs.

Table 2. District Budgeted Amounts

Alternative Water Supply	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Reclaimed Wastewater	$21,824,760	$19,118,417	$12,075,819	$10,768,312	$7,459,498	$5,375,557	$6,111,675	$3,728,750	$7,424,000	**$212,376**
Surface Water/ Stormwater*	$2,100,000	$1,305,000	$1,920,000	$1,462,947	$7,393,700	$4,160,767	$1,691,000	$9,371,707	$9,450,000	**$44,698,280**
Desalination of Brackish Water	$16,005,355	$10,060,000	$12,713,050	$17,575,000	$14,300,682	$8,530,340	$8,358,204	$5,000,000	$8,090,792	**$30,534,500**
Potable Reuse (Indirect & Direct)	$1,554,000	$8,306,000	$2,617,910	$10,827,500	$2,985,000	$5,644,500	$1,020,000	$0	$0	**$0**
Desalination of Sea Water	$0	$0	$0	$0	$0	$550,000	$950,000	$0	$0	**$0**
District Funding Totals	$41,484,115	$38,789,417	$29,326,779	$40,633,759	$32,138,880	$24,011,164	$18,130,879	$18,100,457	$24,054,792	**$75,445,156**
Allocated WPSTF	$0	$0	$0	$0	$0	$250,000	$450,000	$0	$0	**$0**
District Grand Totals**	**$41,484,115**	**$38,789,417**	**$29,326,779**	**$40,633,759**	**$32,138,880**	**$24,261,164**	**$18,580,879**	**$18,100,457**	**$24,964,792**	**$75,445,156**

Note: Table 2 does not include Natural System Enhancement or Recharge projects that do not have water supply benefits associated.
* Surface Water Projects included in funding totals beginning in FY2017
**District Grand Totals may include WPSPTF, WRAP, SPRINGS, or other funding.

Table 3. Funding Classification

Funding Type	FY2015	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	FY2024
Direct Grants	$0	$994,000	$1,244,550	$1,000,000	$2,385,690	$2,159,467	$3,181,869	$5,000,000	$0	**$0**
Matching Grants	$41,484,115	$37,795,417	$28,082,229	$39,633,759	$29,753,190	$22,101,697	$15,399,010	$13,100,457	$24,964,792	**$75,445,156**
Revolving Loans	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
Use of District Land/ Facilities	$0	$0	$0	$0	$0	$0	$0	$0	$0	**$0**
District Grand Totals*	**$41,484,115**	**$38,789,417**	**$29,326,779**	**$40,633,759**	**$32,138,880**	**$24,261,164**	**$18,580,879**	**$18,100,457**	**$24,964,792**	**$75,445,156**

Note: Table 3 does not include Natural System Enhancement or Recharge projects that do not have water supply benefits associated.
*District Grand Totals may include WPSPTF, WRAP, SPRINGS, or other funding.

Alternative Source Type: Reclaimed Wastewater

Table 4 lists CFI, WSRD and WPSPTF reclaimed water projects that will receive funding in FY2024. The table also identifies District funds allocated in FY2024 by the Governing Board, based on the District's FY2024 Adopted Budget. The total funding commitment represents previous and projected year funding by the District. Funding of projects requiring large capital investments with construction spanning several years is usually spread out over multiple fiscal years. Table 4 also includes the projected alternative supply (gallons per day) provided by the project. The Appendix of this report contains a brief description of the projects identified in Table 4.

Table 4. Alternative Source Type: Reclaimed Wastewater

Project Name	Project Number	FY2024 District Funding	FY2024 WPSPTF	Total FY2024 Funding	Total District Commitment (Multi-Year)**	Total Project Cost	Water Provided* (gpd)
City of Venice Reclaimed Water ASR	Q050	$212,376	$0	212,376	$2,744,876	$5,489,752	Storage
Totals (1)		**$212,376**	**$0**	**$212,376**	**$2,744,876**	**$5,489,752**	**0**

Note: Table 4 does not include Natural System Enhancement or Recharge projects that do not have water supply benefits associated or Potable Reuse projects which are included in Table 7.
*Represents the total water supply delivered upon project completion.
**Total District Commitment represents projects that have been or will be funded over multiple years and may include prior WPSPTF, WRAP, SPRINGS or other funding.

Alternative Source Type: Surface Water and Stormwater

Table 5 identifies the surface water and stormwater supply projects that will receive funding in FY2024. The table also identifies the total funding commitment of the District, including previous funding and projected future funding by the District. As previously stated, funding of projects requiring large capital investments with construction spanning several years is spread out over multiple years. Table 5 also includes the projected alternative water supply (gallons per day) provided by the projects. The Appendix of this report contains a brief description of the projects identified in Table 5.

Table 5. Alternative Source Type: Surface Water and Stormwater

Project Name	Project Number	FY2024 District Funding	FY2024 WPSPTF	Total FY2024 Funding	Total District Commitment (Multi-Year)**	Total Project Cost	Water Provided* (gpd)
Tampa Bay Water Southern Hillsborough Transmission Expansion	Q241	$5,000,000	$0	$5,000,000	$145,054,000	$426,000,000	Trans
PRMRWSA Peace River Regional Reservoir No. 3	Q272	$15,057,867	$0	$15,057,867	$115,700,000	$551,655,000	Storage
PRMRWSA Southern Regional Phase 2B Loop System	Q355	$13,896,094	$0	$13,896,094	$35,750,000	$73,000,000	Trans
PRMRWSA Phase 3C Integrated Loop System	Q313	$10,744,319	$0	$10,744,319	$26,550,000	$67,600,000	Trans
Totals (4)		**$44,698,280**	**$0**	**$44,698,280**	**$323,054,000**	**$1,118,255,000**	**Trans & Storage**

Note: Table 5 does not include Natural System Enhancement or Recharge projects that do not have water supply benefits associated.
* Represents the total water supply delivered upon project completion.
**Total District commitment represents projects that have been or will be funded over multiple years, may include prior WPSPTF, WRAP, SPRINGS or other funding.

Alternative Source Type: Desalination of Brackish Water

Table 6 identifies the desalination of brackish water projects that will receive funding in FY2024. The table also identifies the total funding commitment of the District, including previous funding and projected future funding by the District. The funding of most projects requiring large capital investments with construction spanning several years is spread out over multiple fiscal years. Table 6 also includes the projected alternative water supply (gallons per day) provided by the projects. The Appendix of this report contains a brief description of the projects identified in Table 6.

Table 6. Alternative Source Type: Desalination of Brackish Water

Project Name	Project Number	FY2024 District Funding	FY2024 WPSPTF	Total FY2024 Funding	Total District Commitment (Multi-Year)**	Total Project Cost	Water Provided* (gpd)
Polk Regional Water Cooperative Southeast Wellfield Implementation	Q184	$9,100,000	$0	$9,100,000	$110,940,000	$241,100,000	12,500,000
Polk Regional Water Cooperative Southeast Phase 1	Q216	$9,300,000	$0	$9,300,000	$76,013,000	$170,700,000	Transmission
Polk Regional Water Cooperative West Polk Wellfield Implementation	Q308	$11,300,000	$0	$11,300,000	$107,052,000	$237,400,000	10,000,000
Polk Regional Water Cooperative West Test Well #2	Q309	$834,500	$0	$834,500	$1,448,500	$4,125,000	TBD
Totals (4)		**$30,534,500**	**$0**	**$30,534,500**	**$295,453,500**	**$653,325,000**	**22,500,000**

Note: H094 is a funding source for Polk Regional Water Cooperative water supply projects. The FY2024 District Funding within Table 6 was not included in the FY2024 Adopted Budget. Previously budgeted funds to H094 have been a funding source for Polk Regional Water Cooperative water supply projects for a total of $65,000,000 (FY2015 – FY2023). The funds in Table 6 were transferred during FY2023 from H094. In total since FY2015, $56,182,409 has been transferred to several Polk Regional Water Cooperative water supply projects with $8,817,591 remaining for future project funding.

* Represents the total water supply delivered upon project completion.

**Total District commitment represents projects that have been or will be funded over multiple years, may include prior WPSPTF, WRAP, SPRINGS or other funding.

Alternative Source Type : Potable Reuse (Indirect & Direct)

Table 7 identifies the indirect & direct potable reuse projects that will receive funding in FY2024. The table also identifies the total funding commitment of the District, including previous funding and projected future funding by the District. Similar to the funding of other alternative water projects, the funding of projects requiring large capital investments with construction spanning several years is usually spread out over multiple fiscal years. Table 7 also includes the projected alternative water supply (gallons per day) provided by the projects. The Appendix of this report contains a brief description of the projects identified in Table 7. Although no FY2024 District funding was budgeted for Potable Reuse Projects, the District anticipates significant future funding pending the completion of several ongoing feasibility studies.

Table 7. Alternative Source Type: Potable Reuse (Indirect & Direct)

Project Name	Project Number	FY2024 District Funding	FY2024 WPSPTF	Total FY2024 Funding	Total District Commitment (Multi-Year)**	Total Project Cost	Water Provided* (gpd)
Totals (0) No Potable Reuse Funding Budgeted in FY2024		**$0**	**$0**	**$0**	**$0**	**$0**	**0**

Notes: Table 7 does not include Natural System Enhancement or Recharge projects that do not have water supply benefits associated. Senate Bill 712 was signed into Statute in 2020 directing FDEP to implement rulemaking to enable direct potable reclaimed water development.
* Represents the total water supply delivered upon project completion.
**Total District commitment represents projects that have been or will be funded over multiple years, may include prior WPSPTF, WRAP, SPRINGS or other funding.

Alternative Source Type: Desalination of Sea Water

Table 8 identifies the desalination of sea water projects that will receive funding in FY2024. The table also identifies the total funding commitment of the District, including previous funding and projected future funding by the District. The funding of most projects requiring large capital investments with construction spanning several years is spread out over multiple fiscal years. Table 8 also includes the projected alternative water supply provided by the projects. The Appendix of this report contains a brief description of the project identified in Table 8.

Table 8. Alternative Source Type: Desalination of Sea Water

Project Name	Project Number	FY2024 District Funding	FY2024 WPSPTF	Total FY2024 Funding	Total District Commitment (Multi-Year)**	Total Project Cost	Water Provided* (gpd)
Totals (0) No Sea Water Desal Funding Budgeted in FY2024		**$0**	**$0**	**$0**	**$0**	**$0**	**0**

Notes:
* Represents the total water supply delivered upon project completion.
**Total District commitment represents projects that have been or will be funded over multiple years, may include prior WPSPTF, WRAP, SPRINGS or other funding.

Conclusion

The District has developed an aggressive alternative water supply development program through the efficient utilization of the resources available to its Governing Board and provided by the Florida Legislature. The District is committed to identifying and assisting with effective solutions to the water resource problems by providing technical and financial support in developing alternative water supplies. The District has a long history of commitment to cooperative efforts with state and local governments, private industry, and the public at large through the sponsoring of research, conservation, natural system and water quality improvements and a special emphasis on the development of alternative water supplies. The District is confident in its mission to find and maintain adequate and ecologically sustainable water supplies within its boundaries.

Appendix

Appendix(Projects with FY2024 Funding)

Project Name: FARMS - Facilitating Agricultural Resource Management Systems (H017)
Type of Alternative Supply: Variety of Types
Cooperator: Variety of Cooperators
Locale: District-wide
Project Description: The FARMS program is an agricultural Best Management Practice (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 purpose of the FARMS initiative is to provide an incentive to the agricultural community, within the District, to implement agricultural BMPs that will provide resource benefits that include water quality improvement; reduced Upper Floridan aquifer withdrawals; and/or conserve, restore, or augment the area's water resources and ecology.

Project Name: Polk County Partnership (H094)
Type of Alternative Supply: Brackish
Cooperator: Polk Regional Water Cooperative
Locale: Polk County
Project Description: This project includes support of regional cooperation within Polk County and the development of regional AWS projects that can achieve 30 mgd of base supply. The District Governing Board adopted Resolution No. 15-07 and 18-06 providing timing and guidance for this project. The resolutions tie incentive funding for AWS development to achievement of certain milestones.

Project Name: Venice Reclaimed Water ASR (Q050)
Type of Alternative Supply: Reclaimed Wastewater
Cooperator: City of Venice
Locale: Sarasota County
Project Description: Design, permitting, construction, testing, and independent performance evaluation (IPE) of an Aquifer Storage and Recovery (ASR) system to store and recover at least 25 mg/year of reclaimed water on-site at the City's Water Reclamation Facility. The ASR would enable the storage of excess reclaimed water in the wet season, to be used in the dry season when demand exceeds plant flow.

Project Name: Tampa Bay Water Southern Hillsborough Co. Transmission (Q241)
Type of Alternative Supply: Surface Water
Cooperator: Tampa Bay Water
Locale: Hillsborough County
Project Description: New AWS 26-mile potable water pipeline to supply alternative water from TBW's High Surface Pump Station to Hillsborough County. It is expected to deliver 65 MGD nominal capacity.

Project Name: Peace River Manasota Regional Water Supply Authority – Reservoir No. 3 (Q272)
Type of Alternative Supply: Surface Water
Cooperator: Peace River Manasota Regional Water Supply Authority
Locale: Desoto County
Project Description: The final design, permitting, and construction of Reservoir No. 3 to provide 9.0 billion gallons of regional surface water storage.

Project Name: PRMRWSA Southern Regional Loop Phase 2B (Q355)
Type of Alternative Supply: Surface Water
Cooperator: Peace River Manasota Regional Water Supply Authority
Locale: Charlotte & Sarasota County
Project Description: New transmission, pumping and chemical addition facility and any infrastructure requirements that will enable installation of the southern loop between the Authority's regional transmission system at Serris Boulevard in Charlotte County and the Carlton Water Treatment Facility in Sarasota County.

Project Name: PRMRWSA Phase 3C Integrated Loop System (Q313)
Type of Alternative Supply: Surface Water
Cooperator: Peace River Manasota Regional Water Supply Authority
Locale: Manatee & Sarasota County
Project Description: New transmission pipeline, infrastructure requirements extending regional potable water transmission system from Sarasota County to Manatee County.

Project Name: Polk Regional Water Cooperative Southeast Wellfield Water Treatment Facility (Q184)
Type of Alternative Supply: Brackish Groundwater
Cooperator: Polk Regional Water Cooperative
Locale: Polk County
Project Description: The final design, permitting, and construction of the Southeast Wellfield Water Treatment Facility. It is expected to provide 12.5 mgd of regional water supply.

Project Name: Polk Regional Water Cooperative Regional Transmission Southeast (Q216)
Type of Alternative Supply: Regional Transmission System.
Cooperator: Polk Regional Water Cooperative
Locale: Polk County
Project Description: The final design, permitting, and construction of the Southeast Wellfield's Regional Transmission System. It is expected to interconnect and deliver alternative water supplies from the Southeast Wellfield to 11 municipal and county service areas.

Project Name: Polk Regional Water Cooperative West Polk Wellfield Water Treatment Facility (Q308)
Type of Alternative Supply: Brackish Groundwater
Cooperator: Polk Regional Water Cooperative
Locale: Polk County
Project Description: The final design, permitting, and construction of the West Polk Wellfield Water Treatment Facility. It is expected to provide 10.0 mgd of regional water supply.

Project Name: Polk Regional Water Cooperative Test Production Well #2 West Polk Wellfield (Q309)
Type of Alternative Supply: Brackish Groundwater
Cooperator: Polk Regional Water Cooperative
Locale: Polk County
Project Description: A hydrogeologic investigation to evaluate the development of a brackish groundwater wellfield in the Lower Floridan aquifer if Polk County. The project includes the construction of one exploratory/production well, monitor wells and associated testing.

Consolidated Annual Report

March 1, 2024

2024 Five-Year Water Resource Development Work Program

PROPOSED

Southwest Florida
Water Management District

Chapter 6 Five-Year Water Resource Development Work Program

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 23rd Work Program and covers the period from fiscal year (FY) 2024 through FY2028. In July of 2023 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 $38 million in FY2024 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), and the Dover/Plant City Water Use Caution Area (DPCWUCA), 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 support 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 Floridan Aquifer System Monitoring Network (IFASMN), 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 171 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, Water Use Permit, Inland Florida Aquifer System Monitoring, and Upper Floridan Aquifer Nutrient Monitoring networks, which involve sample collection and analysis from approximately 500 wells across the District, are used to monitor saltwater intrusion, the upwelling of mineralized waters into potable aquifers and/or regional trends of nitrates in groundwater of springs basins.

e) Groundwater Levels. The funding provides for the maintenance and support of over 1,600 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. District data are available on the EDP and the USGS data are available on the USGS National Water Dashboard.

Table 1. FY2024 - FY2028 Water Resource Development Data Collection and Analysis Activities

WRD Data Collection and Analysis Activities	Budget Reference[1]	FY2024 Costs ($)	FY2025 Costs ($)	FY2026 Costs ($)	FY2027 Costs ($)	FY2028 Costs ($)	Total Costs ($)	Funding Source[2]
1) Research, Data Collection, Analysis & Monitoring	1.2.1, p.62							District, Local Cooperators
a) Surface Water Flows & Levels Data		$4,794,473	$4,794,473	$4,794,473	$4,794,473	$4,794,473	$23,972,365	
b) Geologic (includes ROMP) Data		$5,200,022	$5,200,022	$5,200,022	$5,200,022	$5,200,022	$26,000,110	
c) Meteorologic Data		$269,833	$269,833	$269,833	$269,833	$269,833	$1,349,165	
d) Water Quality Data		$740,023	$740,023	$740,023	$740,023	$740,023	$3,700,115	
e) Groundwater Levels Data		$1,220,731	$1,220,731	$1,220,731	$1,220,731	$1,220,731	$6,103,655	
f) Biologic Data		$1,304,676	$1,304,676	$1,304,676	$1,304,676	$1,304,676	$6,523,380	
g) Data Support		$4,272,684	$4,272,684	$4,272,684	$4,272,684	$4,272,684	$21,363,420	
2) Minimum Flows and Levels Program	1.1.2, p.58							District
a) Technical Support		$1,007,529	$1,007,529	$1,007,529	$1,007,529	$1,007,529	$5,037,645	
b) MFL Establishment/ Evaluation		$754,007	$754,007	$754,007	$754,007	$754,007	$3,770,035	
3) Watershed Management Planning	1.1.3.2, p.60	$8,558,263	$2,265,987	$2,000,000	$2,000,000	$2,000,000	$16,824,250	District, Local Cooperators, DEP
4) Quality of Water Improvement Program	2.2.3, p.86	$802,016	$802,016	$802,016	$802,016	$802,016	$4,010,080	District
5) Stormwater Improvement- Implementation of Storage and Conveyance BMPs	2.3.1, p.88	$9,152,521	$3,500,000	$0	$0	$0	$12,652,521	District
Totals		**$38,076,778**	**$26,131,981**	**$22,365,994**	**$22,365,994**	**$22,365,994**	**$131,306,741**	

Source: SWFWMD FY2024 Tentative Budget Submission.

1. 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.
2. 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) Data Support. This item provides administrative and management staff support for the WQMP, hydrologic and geohydrologic as well as the chemistry laboratory, surveying, and 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 the District's Water Levels and Rates of Flow 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 the District Consumptive Use of Water 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 to support establishment of MFLs for flowing systems and aquifers, 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, assessing the recovery of water bodies where significant harm has occurred, and also support MFL's and reservation reevaluations.

As of August 2023, 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, 34 wetlands, 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 23 MFLs and 1 reservation through the calendar year 2026.

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 published in the Consolidated Annual Report the following March. The currently approved and proposed priority lists and schedules are also posted on the District's Minimum Flows and Levels Documents and Reports webpage at: https://www.swfwmd.state.fl.us/projects/mfl/documents-and-reports.

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 by reimbursing landowners for the cost to properly plug abandoned or deteriorating artesian wells on their property. Thousands of wells constructed prior to current well construction standards were often deficient in casing, which interconnected aquifers and enabled poor-quality mineralized water to migrate into aquifers containing potable-quality water. Plugging abandoned artesian wells eliminates the waste of water at the surface and prevents mineralized groundwater from contaminating other aquifers and surface water bodies. Historically, the Program has proven to be a cost-effective method to promote the plugging of such wells.

The region of emphasis for the Program is the Southern Water Use Caution Area (SWUCA) where the Upper Floridan aquifer is confined. Plugging abandoned wells, which involves filling them from the bottom to the top with cement and/or bentonite, re-establishes the natural isolation between aquifers, preventing the mixing of varying water qualities and the free flow of water at the surface. Before an abandoned well is plugged, QWIP staff collect geophysical logs that measure several hydrologic and geologic properties for inclusion in the District's database. While this is done primarily to determine the eligible reimbursement, the data can also be utilized to ensure the appropriate amount of material is used to properly plug the well. The Program benefits landowners, water well contractors, and the water resources of the District.

Stormwater Improvements - Implementation of Storage an Conveyance BMPs

The District's WMP's and SWIM programs implement stormwater and conveyance BMPs for preventative flood protection and to improve surface water quality, particularly in urban areas, and to 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. FY2024 funding includes five continuing storage and conveyance projects in the Tampa Bay Region.

WRD Projects

The District has budgeted for 35 WRD projects that are ongoing. At the start of FY2024 (October 1, 2023), the District allocated approximately $4.9 million in the budget for 7 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 $55.7 million. It’s estimated that approximately 59.6 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 FY2024 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 Saltwater Intrusion Minimum Aquifer Level (SWIMAL) in support of the SWUCA Recovery Strategy.

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:
https://www.swfwmd.state.fl.us/resources/plans-reports/water-resource-development-work- program

Table 2. FY2024 - FY2028 District Funding and Total Project Cost for Water Resource

Project Number	WRD Projects [1]	Total Prior District Funding	FY2024 District Cost	FY2025 District Cost	FY2026 District Cost	FY2027 District Cost	FY2028 District Cost	Total Cost District + Cooperator	Funding Source [2]	Quantity developed or conserved[1]
1) Aquifer Storage and Recovery Feasibility and Pilot Testing (Programmatic Code 2.2.1.1)										
N287	South Hillsborough Aquifer Recharge Program (SHARP)	$1,382,500	$0	$0	$0	$0	$0	$2,765,000	District, Hillsborough County	2.0
N855	Southern Hillsborough Aquifer Recharge Program (SHARP) Phase 2	$4,800,000	$0	$0	$0	$0	$0	$9,700,000	District, Hillsborough County	4.0
P280	Hydrogeologic Investigation of LFA in Polk County	$12,000,000	$0	$0	$0	$0	$0	$12,000,000	District	NA
P925	Optical Borehole Imaging Data Collection from LFA Wells	$100,200	$0	$0	$0	$0	$0	$167,000	District, USGS	NA
P926	Sources/Ages of Groundwater in LFA Wells	$368,300	$0	$0	$0	$0	$0	$736,600	District, USGS	NA
Q050	City of Venice Reclaimed Water Aquifer Storage Recovery	$2,532,500	$212,376	$0	$0	$0	$0	$5,489,752	District, City of Venice	Storage
Q064	Direct Aquifer Recharge -North Hillsborough Aquifer Recharge Program Phase 2	$750,000	$0	$0	$0	$0	$0	$1,500,000	District, Hillsborough County	Study
Q159	Sarasota County - Bee Ridge Water Reclamation Facility Aquifer Recharge	$915,511	$0	$0	$0	$0	$0	$1,831,022	District, Sarasota County	5.0
2) Facilitating Agricultural Resource Management Systems (FARMS) (Programmatic Code 2.2.1.2)										
H017	FARMS Projects (H017) 3	Annual Request	$4,000,000	$4,000,000	$4,000,000	$4,000,000	$4,000,000	Annual Request	District	40.0
H791	FARMS - Wauchula Road Duette, LLC - Phase 2	$62,713	$0	$0	$0	$0	$0	$125,426	District, Wauchula Road Duette, LLC	0.08
H792	FARMS - Rolling Meadow Ranch	$221,273	$0	$0	$0	$0	$0	$295,030	District, Rolling Meadow Ranch, Inc.	0.05

H798	FARMS - P BAR R Sod Company, LLC	$293,187	$0	$0	$0	$0	$0	$390,916	District, BAR R Sod Company, LLC	0.08
H802	FARMS - Berry Patch Ridge, LLC	$241,572	$0	$0	$0	$0	$0	$322,096	District, Berry Patch Ridge, LLC	0.04
Project Number	**WRD Projects [1]**	**Total Prior District Funding**	**FY2024 District Cost**	**FY2025 District Cost**	**FY2026 District Cost**	**FY2027 District Cost**	**FY2028 District Cost**	**Total Cost District + Cooperator**	**Funding Source [2]**	**Quantity developed or conserved[1]**
H804	FARMS- FD Berries USA,LLC	$112,611	$0	$0	$0	$0	$0	$150,149	District, FD Berries USA,LLC	0.225
H805	FARMS- Bay Grove- T&T Environmental Phase 1	$773,364	$0	$0	$0	$0	$0	$1,138,792	District, Bay Grove- T&T Environmental	0.12
H806	FARMS- Sandhill Native Growers	$303,507	$0	$0	$0	$0	$0	$404,677	District, Sandhill Native Growers	0.08
H807	FARMS- Sizemore Group Automation	$182,857	$0	$0	$0	$0	$0	$243,809	District, Sizemore Group Automation	0.0307
H808	FARMS- Sweet Life Acers Phase 1	$294,658	$0	$0	$0	$0	$0	$392,877	District, Sweet Life Acers	0.06
H809	FARMS- Shawn Pollard	$34,125	$0	$0	$0	$0	$0	$66,366	District, Shawn Pollard	0.017
H810	FARMS- Varner Group	$212,000	$0	$0	$0	$0	$0	$295,200	District, Varner Group	0.079
H811	FARMS- Hernandez Farm, LLC	$203,343	$0	$0	$0	$0	$0	$271,125	District, Hernandez Farm, LLC	0.055
H812	FARMS - Spanish Trails Farming and Land Company, LLC	$529,000	$0	$0	$0	$0	$0	$758,706	District, Spanish Trails Farming and Land Company, LLC	0.14
H813	FARMS- Bayside Sod	$378,829	$0	$0	$0	$0	$0	$528,210	District, Bayside Sod	0.085
H814	FARMS - Bethel Farms, LLLP - Ph 5	$296,023	$0	$0	$0	$0	$0	$479,494	District, Bethel Farms, LLLP -	0.073
H815	FARMS - Midway Farms, LLC	$234,019	$0	$0	$0	$0	$0	$312,025	District, Midway Farms	0.1
H816	FARMS - Marshall Tree Farm, Inc.	$31,707	$0	$0	$0	$0	$0	$63,414	District, Marshall Tree Farm, Inc.	0.0902
H529	Mini-FARMS Program 3	Annual Request	$500,000	$500,000	$500,000	$500,000	$500,000	Annual Request	District	2.0
H015	FARMS Well Back-Plugging Program 3	Annual Request	$20,000	$20,000	$20,000	$20,000	$20,000	Annual Request	District	NA

P429	FARMS Meter Accuracy Support 3	Annual Request	$12,500	$12,500	$12,500	$12,500	$12,500	Annual Request	District	NA

Project Number	WRD Projects [1]	Total Prior District Funding	FY2024 District Cost	FY2025 District Cost	FY2026 District Cost	FY2027 District Cost	FY2028 District Cost	Total Cost District + Cooperator	Funding Source [2]	Quantity developed or conserved[1]
3) Minimum Flows and Minimum Water Levels Recovery [4] (Programmatic Code 2.2.1.3)										
H008	MFL Recovery Lake Hancock Design, Permit, Mitigation to Raise Lake	$6,882,240	$0	$0	$0	$0	$0	$6,882,240	District	2.7
H089	MIA Recharge SWIMAL Recovery at Flatford Swamp	$6,635,702	$0	$0	$0	$0	$0	$6,635,702	District	2.0
H404-1	Lower Hillsborough River Recovery Strategy Morris Bridge Sink	$1,087,809	$165,000	$155,000	$135,000	$135,000	$135,000	$1,812,809	District	3.90
H400-7	Third Five-Year Assessment of the Lower Hillsborough River Recovery Strategy	$234,068	$0	$0	$0	$0	$0	$0	District	NA
H400-10	Biological Data Collection Fall 2021 and CY2023	$140,797	$0	$0	$0	$0	$0	$0	District	NA
H400-12	Biological Data Collection 2024	$0	$40,000	$0	$0	$0	$0	$0	District	NA
Water Resource Development Project Totals		**$42,234,415**	**$4,949,876**	**$4,687,500**	**$4,667,500**	**$4,667,500**	**$4,667,500**	**$55,758,436**		**59.60**

1. 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.

2. Future funding budget estimates for which specific time frames are not yet determined are distributed evenly over future years.

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

4. H400 and H404 consist of many sub projects. In the FY24 WRDWP Update only represents ongoing efforts to align with STAR reporting.

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 60 budgeted or ongoing water supply development projects in FY2024, including 2 water supply planning projects that support water supply development. As shown in **Table 3-h**, the District is funding approximately $54.3 million in FY2024 for 9 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 (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
- 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 previous years. 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 has been proposed in the FY2024-28 timeframe for expansions of the PRMRWSA Regional Loop System, next phases of the PRWC's Southeast and West Polk Lower Floridan Aquifer Wellfields, and Tampa Bay Water's Southern Hillsborough County Transmission Expansion.

The listed projects that have no FY2024 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	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 Funding	Total Project Cost	Supply (mgd)
Q272	PRMRWSA - Reservoir No. 3	$3,625,000	$15,057,867	$14,000,000	$14,000,000	$14,000,000	$14,000,000	$358,250,000	NA
Total Surface Water Projects		**$3,625,000**	**$15,057,867**	**$14,000,000**	**$14,000,000**	**$14,000,000**	**$14,000,000**	**$358,250,000**	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	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 Funding	Total Project Cost	Supply (mgd)
Q146	Tampa Bay Water Southern Hillsborough County Booster Pump Station	$1,775,000	$0	$0	$0	$0	$0	$12,686,049	6
Q216	PRWC Regional Transmission Southeast Phase 1	$5,913,487	$9,300,000	$18,540,875	$27,811,312	$9,270,437	$3,457,645	$170,700,000	NA
Q241	TBW - Southern Hillsborough County Transmission Expansion	$7,359,207	$5,000,000	$33,173,699	$33,173,698	$33,173,698	$33,173,698	$426,000,000	NA
Q248	PRMRWA - Regional Acquisition of Project Prairie Pumping and Storage Facilities	$637,500	$0	$0	$0	$0	$0	$2,030,032	NA
Q313	PRMRWSA- Regional Integrated Loop System Ph 3C	$2,500,000	$10,744,319	$13,305,681	$0	$0	0	$67,600,000	NA
Q355	PRMRWSA- Regional Integrated Loop System Ph 2b	$1,500,000	$13,896,094	$10,176,953	$10,176,953	$0	0	$73,000,000	NA
Total Regional Potable Water Interconnect Projects		**$19,685,194**	**$38,940,413**	**$75,197,208**	**$71,161,963**	**$42,444,135**	**$36,631,343**	**$752,016,081**	6

Table 3-c. Reclaimed Water Projects

Project Number	Water Supply Development Assistance - Reclaimed Water Projects (Programmatic Budget 2.2.2.3)	Prior District Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 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	0.3
N791	Pasco County Starkey Ranch Reclaimed Water Transmission Phase C	$456,800	$0	$0	$0	$0	$0	$913,600	0.29
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
Q057	Zephyrhills - Zephyr Lakes & Hospital Reuse	$710,650	$0	$0	$0	$0	$0	$1,421,300	0.33
Q066	Polk County Utilities- NERUSA Lake Wilson Road Reuse	$262,750	$0	$0	$0	$0	$0	$525,500	0.18
Q067	Polk County Utilities-NERUSA Southeast Reuse Loop	$2,186,750	$0	$0	$0	$0	$0	$4,373,500	0.522
Q105	Citrus County Sugarmill Woods Golf Course Reuse	$1,834,000	$0	$0	$0	$0	$0	$3,918,000	0.5

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	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 Funding	Total Project Cost	Benefit (mgd)
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	$1,500,000	$0	$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	Fort Meade Reclaimed Water Feasibility Study	$168,750	$0	$0	$0	$0	$0	$225,000	Study
Q268	Braden River Utilities Taylor Road Area Transmission	$3,550,000	$0	$0	$0	$0	$0	$7,100,000	1.57
Q271	Winter Haven Preserve at Lake Ashton Transmission	$1,410,000	$0	$0	$0	$0	$0	$2,820,000	0.59
Q274	Zephyrhills - Zephyr to Pasco Reclaimed Water Interconnect	$880,000	$0	$0	$0	$0	$0	$1,760,000	NA
Q353	Pinellas Co- Southcross RW Expansion /Surface Augmentation Study	$200,000	$0	$0	$0	$0	$0	$400,000	Study
Total Reclaimed Water Projects		**$24,374,500**	**$0**	**$0**	**$0**	**$0**	**$0**	**$51,864,082**	**5.694**

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	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 Funding	Total Project Cost	Supply (mgd)
Q184	PRWC Southeast Wellfield Implementation	$14,474,987	$0	$14,500,000	$14,500,000	$14,500,000	$14,500,000	$241,1000,000	12.5
Q294	PRWC Southeast Test Well No. 3	$2,062,500	$0	$0	$0	$0	$0	$4,125,000	Study
Q308	PRWC- West Polk Wellfield	$12,364,308	$0	$651,190	$10,000,000	$10,000,000	$10,000,000	$237,400,000	10
Q309	PRWC- Test Prod Well #2 West Polk Wellfield	$1,448,500	$0	$0	$0	$0	$0	$4,125,000	Study
Total Brackish Groundwater Projects		**$30,350,295**	**$0**	**$15,151,190**	**$24,500,000**	**$24,500,000**	**$24,500,000**	**$486,750,000**	**22.5**

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

Project Number	Water Supply Development Assistance - Aquifer Recharge/ Storage and Recovery Projects (Programmatic Budget 2.2.2.5)	Prior District Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 Funding	Total Project Cost	Benefit (mgd)
N435	City of Bradenton Surface Water Aquifer Storage Recovery 2	$2,350,000	$0	$0	$0	$0	$0	$4,700,000	Storage
Q142	Pinellas County Chestnut Park Aquifer Storage, Recovery & Recharge	$893,500	$0	$2,779,875	$926,625	$0	$0	$9,200,000	Storage
Total Aquifer Recharge/ASR Projects		**$3,243,500**	**$0**	**$2,779,875**	**$926,625**	**$0**	**$0**	**$13,900,000**	**0**

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	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 Funding	Total Project Cost	Benefit (mgd)
B015	Water Incentives Supporting Efficient (WISE) Program	Annual Request	$225,000	$225,000	$225,000	$225,000	$225,000	Annual Request	0.17
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
N999	Marion County Toilet Rebate Program Phase 5	$32,000	$0	$0	$0	$0	$0	$64,000	0.01
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
Q185	North Port - Water Distribution Hartsdale/Aldonin/Totem Area Looping	$207,500	$0	$0	$0	$0	$0	$415,000	0.017
Q193	Crystal River - Conservation Phase 1	$9,090	$0	$0	$0	$0	$0	$18,180	0.005
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	0.68
Q245	Pinellas County AMI Metering Analytics	$139,414	$0	$0	$0	$0	$0	$278,828	0.111
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
Q265	North Port - Water Distribution Ridgewood/ Lamplighter Area Looping	$173,950	$0	$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	0.064

Table 3-f. Conservation Projects (Continued)

P964	Water Use Evals for Non-Ag Users	$75,000	$28,400	$0	$0	$0	$0	$103,400	0.011
Q304	Venice Toilet Rebate and Retrofit Phase 9	$16,500	$0	$0	$0	$0	$0	$33,000	0.005
Q306	WRWSA Irrigation Eval Program, Phase 7	$51,000	$0	$0	$0	$0	$0	$102,000	0.025
Q311	Bay Laurel CCDD Water Conservation Program Phase 2	$191,900	$0	$0	$0	$0	$0	$383,800	0.028
Q319	Manatee County Toilet Rebate Phase 15	$50,000	$0	$0	$0	$0	$0	$100,000	0.017
Q320	Citrus County Water Conservation Program Phase 6	$21,350	$0	$0	$0	$0	$0	$42,700	0.006
Q371	Polk County Irrigation System Evaluation Program, Phase 8	$0	$72,500	$0	$0	$0	$0	$178,750	0.053
Q387	St. Pete Sensible Sprinkling Program, Phase 11	$0	$50,000	$0	$0	$0	$0	$100,000	0.005
Total Conservation Rebates, Retrofits, Etc.		**$3,772,587**	**$375,900**	**$225,000**	**$225,000**	**$225,000**	**$225,000**	**$7,875,292**	**1.645**

Table 3-g. Water Supply Planning Projects

Project Number	Water Supply Planning (Programmatic Budget 1.1.1)	Prior District Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 Funding	Total Project Cost	Supply (mgd)
Q257	Sarasota County System-Wide Wellfield Improvements	$75,000	$0	$0	$0	$0	$0	$150,000	NA
Q324	WRWSA Regional Water Supply Plan 2024 Update	$175,000	$0	$0	$0	$0	$0	$350,000	NA
Total Planning Projects		**$250,000**	**$0**	**$0**	**$0**	**$0**	**$0**	**$500,000**	**0**

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	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2026 Funding	FY2028 Funding	Total Project Cost	Supply (mgd)
Surface Water Projects	$3,625,000	$15,057,867	$14,000,000	$14,000,000	$14,000,000	$14,000,000	$338,235,100	0
Regional Potable Water Interconnect Projects	$19,685,194	$38,940,413	$75,197,208	$71,161,963	$42,444,135	$36,631,343	$752,016,081	6
Reclaimed Water Projects	$24,374,500	$0	$0	$0	$0	$0	$51,864,082	5.7
Brackish Groundwater Development Projects	$30,350,295	$0	$15,151,190	$24,500,000	$24,500,000	$24,500,000	$486,750,000	22.5
Aquifer Storage and Recovery (ASR) and Aquifer Recharge Projects	$3,243,500	$0	$2,779,875	$926,625	$0	$0	$13,900,000	0
Conservation Projects	$3,772,587	$375,900	$225,000	$225,000	$225,000	$225,000	$7,875,292	1.6
Water Supply Planning Projects	$250,000	$0	$0	$0	$0	$0	$500,000	0
Total Funding for Water Supply Development Projects	$85,301,076	$54,374,180	$107,353,273	$110,813,588	$81,169,135	$75,356,343	$1,651,140,555	35.8

Acronyms: ASR - aquifer storage & recovery, BMPs - best management practices, ET - Evapotranspiration, mgd - million gallons/day, NERUSA/NWRUSA - NE/NW Regional Utility Service Areas of Polk Co. Utilities, PRMRWSA - Peace River Manasota Regional Water Supply Authority, PRWC - Polk Regional Water Cooperative, WRWSA - Withlacoochee Regional Water Supply Auth.

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. 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 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. Typically, any state and federal funds received for the projects are applied directly against the project costs, with both parties benefiting 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 $4 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 (WRD) 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 more than $78.4 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, aquifer 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. In FY2023, the District expended the final balance of its prior-year funds held in the state's Florida Forever Trust Fund.

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 $51.3 million dollars towards $88.5 million dollars in total project costs for 245 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. The District's FARMS Program works cooperatively with the NRCS 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 WPSPTF for water supply development projects. An additional $700,000 in appropriations were allocated to the District between FY2020 and FY2021.

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 Wate Protection and Sustainability Program through the establishment of a Water Supply and Water Resource Development grant program in order 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, $27.2 million has been appropriated to the District by DEP for alternative water supply through this grant program with an additional $20 million anticipated in FY2024.

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 95.4 mgd of water upon completion, including reuse water and new potable supply. These benefits are associated with approximately $96.4 million budgeted for FY2024. The proposed funding for the 5-year Work Program is approximately $584 million through FY 2024-28. **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 (FY2024)	Sum of Five-Year District Funding (F2024-28)	Sum of Water Made Available (mgd)
Water Resource Development - Data Collection and Analysis Activities (Table 1)	$38,076,778	$131,306,741	NA
Water Resource Development - Projects (Table 2)	$4,949,876	$23,639,876	59.6
Water Supply Development - Projects (Table 3-h)	$53,374,180	$429,066,519	35.8
Totals	**$96,400,834**	**$584,013,136**	**95.4**

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:
https://www.swfwmd.state.fl.us/resources/plans-reports/water-resource-development-work-program

The WRD and water supply projects set forth a commitment to develop projects associated with the implementation of 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 FY2024, the District has established and continues to monitor 203 adopted MFLs and has scheduled the establishment or revaluation of 23 MFLs through FY2026. 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 sixteen BMAP projects, each benefiting 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)
- Submerged Aquatic Vegetation Mapping – Chassahowitzka (WS01)
- Submerged Aquatic Vegetation Mapping – Homosassa (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 5th Replat Stormwater Retrofit (WR10)
- Submerged Aquatic Vegetation Mapping (WS01)

The projects are categorized under various District Programmatic 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:

https://www.swfwmd.state.fl.us/resources/plans-reports/water-resource-development-work-program

Table A-1. Projects for Implementing BMAPs.

BMAPs Projects	Prior Funding	FY2024 Funding	FY2025 Funding	FY2026 Funding	FY2027 Funding	FY2028 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 5th 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

Crystal River Preserve State Park Redfish Hole Restoration (W401)	$197,601	$0	$0	$2,000,000	$0	$0	$2,197,601	District
Weeki Wachee River Channel Restoration (WW04)	$2,000,000	$0	$0	$0	$0	$0	$4,595,000	District, DEP
Hunters Cove Sediment Removal (W402)	$249,123	$0	$0	$0	$0	$0	$249,123	District
Three Sisters Canal Shoreline Stabilization (W431)	$1,105,562	$0	$0	$0	$0	$0	$1,105,562	District
Weeki Wachee Education Campaign (W466)	Annual Request	$12,000	$12,000	$12,000	$12,000	$12,000	Annual Request	District
Chassahowitzka Education Campaign (W466)	Annual Request	$10,000	$10,000	$10,000	$10,000	$10,000	Annual Request	District
Submerged Aquatic Vegetation Mapping (WS01)	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	Annual Request	District
Submerged Aquatic Vegetation Mapping (WS01)	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	Annual Request	District
Submerged Aquatic Vegetation Mapping (WS01)	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	Annual Request	District
Submerged Aquatic Vegetation Mapping (WS01)	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	Annual Request	District
Submerged Aquatic Vegetation Mapping (WS01)	$50,000	$50,000	$50,000	$50,000	$50,000	$50,000	Annual Request	District
Totals	**$32,015,347**	**$272,000**	**$272,000**	**$2,272,000**	**$272,000**	**$272,000**	**$49,761,380**	

Consolidated Annual Report

March 1, 2024

Polk Regional Water Cooperative

Status Report

Southwest Florida
Water Management District

Chapter 7 Polk Regional Water Cooperative Status Report

The Polk Regional Water Cooperative (PRWC) was created in 2016 through Interlocal Agreement and consists of Polk County and 15 municipal member governments. The PRWC was formed to provide for regional cooperation on the development and delivery of water resources to meet future water demands within Polk County. The majority of the PRWC jurisdiction is located within the District's Southern Water Use Caution Area, while the entirety of its jurisdiction is located within the Central Florida Water Initiative (CFWI) planning area.

In 2017, the Florida Legislature passed the Heartland Headwaters Protection and Sustainability Act (HB 573) to recognize the critical importance of Polk County's aquifers to the economic and ecological health of the region as headwaters for six of Florida's major river systems. The Act requires the development of a comprehensive annual report to be completed by the PRWC and submitted to the Governor, President of the Senate, Speaker of the House, Department of Environmental Protection, and water management districts by December 1 of each year. In addition, the Act further requires the PRWC to coordinate with the appropriate water management district to provide a status report on projects receiving priority state funding and to include such status report in the consolidated water management district annual report (Section 373.463(3), Florida Statutes). This section of the District's Consolidated Annual Report serves as the PRWC status report for 2023.

For the FY2022-23 funding cycle, a ranked list of 26 PRWC member projects were submitted for state funding consideration, with $20,000,000 received from the Florida Legislature for priority projects. A total of 48 ranked member projects were submitted for state funding support in FY2023-24, with $8,500,000 received for priority projects.

For FY2024-25, a prioritized list of 47 PRWC and local member government projects are being submitted for funding consideration by the Florida Legislature. Table 1 lists the ranked 2 PRWC and 45 local member government projects, including total project cost, requested state funding, and local member government funding. A detailed description of each project is included in the Heartland Headwaters Protection and Sustainability Act Annual Comprehensive Water Resources Report recently published and available from the PRWC. For FY2024-25, $147,060,134 will be required to implement all 47 identified projects, with $90,588,245 committed in local member government funding. A total of $56,471,889 for the 47 priority projects is being requested from the state and their implementation is subject to approval of state funding for the FY2024-25 budget year.

Table 1. FY2024-25 Project Cost and Rank

Priority Ranking	Project Name	Member Government	Total Project Cost (All Years)	Total Project Cost (FY 24-25)	State Funding Requested (FY 24-25)	Local Gov. Funding (FY 24-25)
1	Southeast Wellfield Construction and Land Acquisition	PRWC	$ 411,136,646	$ 68,682,361	$ 10,008,179	$ 58,674,182
2	Demand Management Implementation Program	PRWC	$ 150,000	$ 150,000	$ 75,000	$ 75,000
3	Haines City AWS Receiving Facility	City of Haines City	$ 5,400,000	$ 500,000	$ 500,000	$ -
3	PRWC Alternative Water Supply Receiving Facility	Lake Alfred	$ 3,500,000	$ 500,000	$ 500,000	$ -
3	City of Davenport AWS Blending Facility	City of Davenport	$ 608,400	$ 304,200	$ 304,200	$ -
3	Water Inter-Connect Construction and Upgrades	Town of Dundee	$ 6,168,749	$ 6,168,749	$ 4,000,000	$ 2,168,749
3	City of Bartow Emergency Transmission Main (Design)	City of Bartow	$ 4,350,000	$ 4,350,000	$ 4,350,000	$ -
3	Auburndale / Winter Haven Alternative Water Interconnect	City of Auburndale	$ 2,000,000	$ 2,000,000	$ 2,000,000	$ -
3	Alternate Water Supply Receiving Facility (Pollard Road WPF)	City of Winter Haven	$ 11,500,000	$ 2,987,424	$ 2,000,000	$ 987,424
3	CRUSA AWS Receiving Facilities	Polk County Utilities	$ 3,386,250	$ 500,000	$ 500,000	$ -
3	ERUSA AWS Receiving Facilities	Polk County Utilities	$ 4,515,000	$ 750,000	$ 750,000	$ -
3	NERUSA AWS Receiving Facilities	Polk County Utilities	$ 5,407,500	$ 500,000	$ 500,000	$ -
3	Williams WTP Filter Replacement	City of Lakeland	$ 1,700,000	$ 1,500,000	$ 1,500,000	$ -
		Sub-total:	**$ 459,822,545**	**$ 88,892,734**	**$ 26,987,379**	**$ 61,905,355**
NR	Lift Station Resiliency Project	City of Haines City	$ 1,500,000	$ 1,500,000	$ 750,000	$ 750,000
NR	City of Bartow Doug Allen WRF Flood Protection	City of Bartow	$ 1,500,000	$ 1,000,000	$ 1,000,000	$ -
NR	City of Bartow Wastewater System Model	City of Bartow	$ 300,000	$ 300,000	$ 300,000	$ -
NR	City of Bartow Water System Model	City of Bartow	$ 200,000	$ 200,000	$ 200,000	$ -
NR	Allred WWTF Digester	City of Auburndale	$ 1,000,000	$ 1,000,000	$ 500,000	$ 500,000
NR	Gapway Forcemain	City of Auburndale	$ 6,000,000	$ 6,000,000	$ 3,000,000	$ 3,000,000
NR	Oakland Watermain Replacement	City of Auburndale	$ 500,000	$ 500,000	$ 250,000	$ 250,000
NR	Northern Forcemain	City of Auburndale	$ 3,000,000	$ 3,000,000	$ 1,500,000	$ 1,500,000
NR	Regional WWTF RIBs / Sprayfield	City of Auburndale	$ 3,000,000	$ 3,000,000	$ 1,500,000	$ 1,500,000
NR	Southern Forcemain Reroute	City of Auburndale	$ 3,000,000	$ 3,000,000	$ 1,500,000	$ 1,500,000
NR	Wastewater System Rehabilitation	City of Auburndale	$ 500,000	$ 500,000	$ 250,000	$ 250,000
NR	Inflow Reduction	City of Lakeland	$ 150,000	$ 75,000	$ 75,000	$ -
NR	Indian Trails Subdivision AC Replacement and Fire Improvement	City of Lakeland	$ 265,000	$ 265,000	$ 265,000	$ -
NR	Grit Classifier and Pumps Upgrade	City of Lakeland	$ 300,000	$ 200,000	$ 200,000	$ -
NR	Effluent Ditch Rehabilitation	City of Lakeland	$ 300,000	$ 269,000	$ 200,000	$ 69,000
NR	Edgewood Ext. Pump Station Rehabilitation	City of Lakeland	$ 350,000	$ 300,000	$ 300,000	$ -
NR	E. Lake Parker AC Replacement	City of Lakeland	$ 115,000	$ 115,000	$ 115,000	$ -
NR	Dredging and Sediment Management	City of Lakeland	$ 783,894	$ 680,000	$ 500,000	$ 180,000
NR	Wet Well Rehabilitation	City of Lakeland	$ 300,000	$ 150,000	$ 150,000	$ -
NR	W. Lake Parker 6" AC Replacement	City of Lakeland	$ 258,400	$ 258,400	$ 258,400	$ -
NR	Undesignated Generator Replacements	City of Lakeland	$ 160,000	$ 80,000	$ 80,000	$ -
NR	Undesignated Generator Installations	City of Lakeland	$ 300,000	$ 150,000	$ 150,000	$ -
NR	Rehabilitate Sewer Lines	City of Lakeland	$ 2,400,000	$ 1,200,000	$ 1,200,000	$ -
NR	Manhole Rehabilitation	City of Lakeland	$ 150,000	$ 75,000	$ 75,000	$ -
NR	Service Laterals CIPP Lining	City of Lakeland	$ 300,000	$ 150,000	$ 150,000	$ -
NR	Sapphire Necklace Creation: Resilient Solutions for Central Florida	City of Winter Haven	$ 146,000,000	$ 22,000,000	$ 10,000,000	$ 12,000,000
NR	WWTP#3 Expansion	City of Winter Haven	$ 151,700,000	$ 700,000	$ 350,000	$ 350,000
NR	Lake Idyl Nutrient Reduction and Stormwater Reuse Feasibility Study and Design	City of Winter Haven	$ 200,000	$ 200,000	$ 100,000	$ 100,000
NR	Northern Winter Haven Aquifer Recharge Project	City of Winter Haven	$ 3,300,000	$ 100,000	$ 50,000	$ 50,000
NR	ASR Wellfield Construction at WWTP#3	City of Winter Haven	$ 4,000,000	$ 4,000,000	$ 1,312,500	$ 2,687,500
NR	Septic-to-Sewer	City of Winter Haven	$ 6,000,000	$ 1,500,000	$ 503,610	$ 996,390
NR	Logistics Parkway Storm Water Reclamation	City of Winter Haven	$ 4,400,000	$ 2,200,000	$ 1,100,000	$ 1,100,000
NR	Direct Potable Recharge Mobile Pilot	City of Winter Haven	$ 5,800,000	$ 200,000	$ 100,000	$ 100,000
NR	Water Resource Center	City of Winter Haven	$ 3,300,000	$ 3,300,000	$ 1,500,000	$ 1,800,000
		Sub-total:	**$ 351,332,294**	**$ 58,167,400**	**$ 29,484,510**	**$ 28,682,890**
		Total for all PRWC and PRWC Member Projects	**$ 811,154,839**	**$ 147,060,134**	**$ 56,471,889**	**$ 90,588,245**

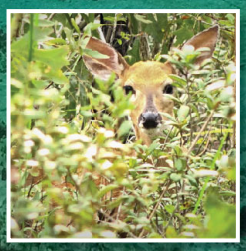
Source: Heartland Headwaters Protection and Sustainability Act Annual Comprehensive Water Resources Report, PRWC, 2023.

Consolidated Annual Report

March 1, 2024

Florida Forever Work Plan

Annual Update 2024



Southwest Florida Water Management District

Chapter 8 Florida Forever Work Plan

Introduction

As required by Section 373.199(7), Florida Statutes (F.S.), this report is the District's annual update of its original Florida Forever Work Plan. The District's approach to the Florida Forever Work Plan is to provide a discussion of the eligible projects the District could consider acquiring using funding under the Florida Forever Act, Section 259.105, Florida Statues (Florida Forever) over a five-year period using existing District funds or additional funds received through the sale of surplus lands. The District could also consider the acquisition of Florida Forever projects if it receives future funding under Florida Forever. Per Florida Statutes subsection 373.139 (6) revenue received from the sale of surplus lands may not be used for any purpose except the purchase of other conservation lands. Additionally, the District's Governing Board Policy, Sale, Exchange, or Conveyances of Interest in Lands by the District states that revenue derived from the sale of lands may not be used for any purpose except for the purchase of other lands related to the District's four areas of responsibility. This report depicts eligible properties on the maps included herein and reports on progress and changes since the report's last update.

Florida Forever initially provided for the issuance of up to $3 billion in bonds to state agencies, water management districts and local governments. Water management district funding is to be used for land acquisition (including less-than-fee purchases), water resource development, and water body restoration. Over the life of the program, at least 50 percent of the funds allocated to the water management districts must be spent on land acquisition.

This annual update is organized into nine sections including the introduction, modifications to last year's Florida Forever Work Plan, land acquisitions completed during fiscal year 2023 (FY2023), restoration projects, land acquisition status, lands surplused during FY2023, summaries of land management activities, progress of funding, staffing and resource management activities, and project maps that identify lands for potential acquisition by planning region.

Florida Forever funds must contribute to achieving the following goals as set forth in Section 259.105, F.S.:

- Enhance the coordination and completion of land acquisition projects.
- Increase the protection of Florida's biodiversity at the species, natural community, and landscape levels.
- Protect, restore, and maintain the quality and natural functions of land, water, and wetland systems of the state.
- Ensure that sufficient quantities of water are available to meet the current and future needs of natural systems and the citizens of the state.
- Increase natural resource-based public recreational and educational opportunities. Preserve significant archaeological or historic sites.
- Increase the amount of forestland available for sustainable management of natural resources.
- Increase the amount of open space available in urban areas.

The District used Florida Forever funding to support land acquisition in FY2023 expending the remainder of what had been allocated. This annual update has been prepared with the anticipation of no new Florida Forever funds through the planning period of fiscal year 2024-2025.

A summary of past Florida Forever expenditures is depicted in Table 1. The District fully utilized its total allocation of $233.57 million of Florida Forever funding by FY2023. The District expended about 6 percent of the Florida Forever funding on water resources development projects and about 94 percent on land acquisition.

Table1. **Past Expenditure Through FY2023 – 2024, Expressed in Millions of Dollars.**

Fiscal Year	Water Resource Development	Land Acquisition	Cumulative Expenditures
2022 & Prior	$13.44	$218.98	$232.42
2023	$0	$1.15	$1.15
2024	$0	$0	$0
Total Florida Forever Expenditures	**$13.44**	**$220.13**	**$233.57**

Project Modifications and Additions to the Florida Forever Work Plan

Modifications to the Florida Forever Work Plan in FY2023 include additions and deletions to the proposed acquisition project areas. A total of 12,210 acres were added to the plan as proposed less- than- fee acquisitions. Approximately 53,707 acres were removed from the proposed fee simple acquisition plan and approximately 38,970 acres were removed from the proposed less-than- fee acquisition plan because they have been acquired by other conservation entities, have been developed, were mined, or were otherwise determined to be outside of the District's boundary. These modifications resulted in a net reduction of 80,467 acres in the proposed acquisition project areas. Acres owned, managed, and surplused by the District along with funds budgeted were also updated.

Land Acquisitions in FY2023

In FY2023, the District acquired two conservation easements including 4,365 acres within the Horse Creek Project and 1,003 acres within the Lake Panasoffkee Project. Both acquisitions are reflected below in Table 2.

Restoration Projects

The Lake Hancock restoration project is completed and there were no restoration projects for which Florida Forever funding is being utilized.

District Land Acquisition Status

The following table depicts all lands owned in fee simple and less-than-fee (LTF) interests acquired by the District as of September 30, 2023.

Table 2. District Land Acquisition Status, Rounded Acreages Derived Using Geographic

Project	Fee Acres	LTF Acres	Total
Alafia River Corridor	4,498	1,498	5,996
Alafia River Reserve	334		334
Annutteliga Hammock	1,767	465	2,232
Bright Hour Watershed		32,247	32,247
Brooker Creek Headwaters Nature Preserve	1,039	67	1,106
Brooker Creek Preserve	1,635		1,635
Charlotte Harbor State Park	7,421		7,421
Chassahowitzka River & Coastal Swamps	5,748	4	5,752
Chito Branch Reserve	5,389		5,389
Cliff Stephens Park (Alligator Creek)	43		43
Conner Preserve	3,486		3,486
Crooked Lake	3,586		3,586
Cypress Creek Preserve	8,506	815	9,321
Data Collection Sites	19	241	260
Deep Creek Preserve/Lower Peace River Corridor	2,084		2,084
Edward Medard Park and Reservoir	1,291		1,291
Edward W. Chance Reserve - Coker Prairie Tract	2,136		2,136
Edward W. Chance Reserve - Gilley Creek Tract	5,798	37	5,835
Flying Eagle Preserve	16,305	133	16,438
Green Swamp Wilderness Preserve - Colt Creek State Park	5,068		5,068
Green Swamp Wilderness Preserve - Green Swamp East	67,192	4,531	71,723
Green Swamp Wilderness Preserve - Little Withlacoochee	4,622	19,545	24,167
Green Swamp Wilderness Preserve - Green Swamp West	36,655	4,974	41,629
Gum Slough - Half Moon	4,096	5,831	9,927
Hálpata Tastanaki Preserve	8,171	4	8,175
Hidden Lake	589		589
Hillsborough River Corridor	276	79	355
Horse Creek		4,365	4,365
Jack Creek	1,349		1,349
Lake Hancock - Circle B Bar Reserve	1,268	4	1,272
Lake Hancock - Marshall Hampton Reserve	1,097		1,097

Project	Fee Acres	LTF Acres	Total
Lake Hancock Project	3,754	1,180	4,934
Lake Lowry	390		390
Lake Marion Creek Horseshoe Scrub Tract	290		290
Lake Panasoffkee	9,767	6,907	16,674
Lake Tarpon Outfall Canal	161	101	262
Lake Tarpon Sink Enclosure	10		10
Lake Thonotosassa	144		144
Little Manatee River - Southfork Tract	971		971
Little Manatee River - Upper and Lower Tracts	6,596		6,596
Lower Cypress Creek		290	290
Lower Hillsborough Wilderness Preserve	16,064	3	16,067
Lower Manatee River Floodway	42		42
Masaryktown Canal	168	2	170
Myakka Conservation Area	4,747	18,283	23,030
Myakka Conservation Area - Lewis Longino Preserve		3,419	3,419
Myakka River - Deer Prairie Creek Preserve	6,136		6,136
Myakka River - Schewe Tract	3,993		3,993
Myakka River State Park - Myakka Prairie Tract	8,248		8,248
Myakka State Forest	8,565	15	8,580
Panasoffkee/Outlet	813		813
Peace Creek Canal System	3	18	21
Peck Sink		10	10
Potts Preserve	9,375	3	9,378
Prairie/Shell Creek	609		609
Rainbow River Corridor	112	12	124
RV Griffin Reserve	5,922		5,922
Sawgrass Lake Park	397		397
Starkey Wilderness Preserve	19,469	175	19,644
Structure Sites/Office Sites	100	53	153
SWIM Conservation Easements		171	171
Tampa Bay - Clam Bayou	84		84
Tampa Bay - Ekker Preserve	84		84

Project	Fee Acres	LTF Acres	Total
Tampa Bay - Frog Creek	119		119
Tampa Bay - Schultz Preserve	132		132
Tampa Bay – Rock Ponds	2,530		2,530
Tampa Bay - Terra Ceia Preserve State Park	1,463		1,463
Tampa Bay - Terra Ceia/Huber	287		287
Tampa Bypass Canal/Harney Canal	1,378	323	1,701
Three Sisters Springs	57		57
Tsala Apopka Outfall Canal	3	141	144
Two Mile Prairie - Tsala Apopka Connector	462		462
Two-Mile Prairie - Withlacoochee State Forest	2,898		2,898
Upper Hillsborough Preserve	9,460	7,915	17,375
Upper Myakka River Watershed	2,357	2,264	4,621
Upper Saddle Creek	37		37
Weeki Wachee Springs State Park	539		539
Weekiwachee Preserve	12,821	2	12,823
Wysong Park	4	1	5
Total	**343,029**	**116,128**	**459,157**

Surplus Lands

The following table depicts surplus lands sold by the District during FY2023.

Table 3. Surplus Lands, Acreage Derived Using Geographic Information

Project	County	Acres Surplused	Compensation	Parent Tract Funding Source	Comments
Annutteliga Hammock (multiple parcels)	Hernando	60.93	$798,459	*WMLTF * P2000 *FF	Deed Restricted and Encumbered Fee
Green Swamp Wilderness Preserve - East Tract	Polk	227.31	$275,000	Ad Valorem	Encumbered Fee
Lake Panasoffkee	Sumter	63.11	$276,000	WMLTF	Encumbered Fee
Tampa Bypass Canal	Hillsborough	3.18	$630,000	*TBD	Fee Simple
		354.53	$1,979,459		

* Water Management Lands Trust Fund (WMLTF), *Preservation 2000 (P2000), *Florida Forever (FF), * To Be Determined (TBD).

Land Management Activities

The District manages its properties using a variety of tools including but not limited to direct management as well as utilizing management partnerships that match land use to agency mission. For example, Colt Creek State Park was purchased with District, State, and Polk County Florida Forever funds, and is managed by the Florida Department of Environmental Protection as a state park. Hunting at the Green Swamp is via a wildlife management area agreement with the Florida Fish and Wildlife Conservation Commission. Additionally, the District's conservation lands have land management plans that outline the management goals and objectives for the property as well as authorized activities. The following is a brief description of the land projects and land management activities for properties owned by the District.

Alafia River (including Alafia River Corridor, Chito Branch Reserve and Alafia River Reserve) – The Alafia River Corridor Project contains parcels of land along the Alafia River from Bell Shoals Road extending upstream to the headwaters of the Alafia River and spans both Hillsborough and Polk counties. The Alafia River's natural floodplain is a mixture of hardwood swamps and upland hammocks. Acquisition of the land within Hillsborough County was co-funded by the District and Hillsborough County with fee simple title held entirely by the District. In 1996, the District entered into a lease agreement with Hillsborough County that designated the County as manager of lands jointly purchased by the County and the District. Recreational improvements provided by Hillsborough County include hiking trails, equestrian trails, fishing, and primitive and group camping. Project lands in Hillsborough County acquired by the District for the C.W. "Bill" Young Reservoir are jointly managed by the District and Tampa Bay Water and are known as the Chito Branch Reserve. In Polk County, the District and Polk County have co-funded and co-own the Alafia River Reserve. Polk County is responsible for a park site on the property and the District is responsible for resource management and trail development on the property. Parcels within this project with less-than-fee ownership are monitored by the District pursuant to the corresponding conservation easements.

Annutteliga Hammock – The Annutteliga Hammock project is in Hernando County generally within a regional area located between Homosassa Springs to the northwest, the Withlacoochee State Forest to the northeast, Brooksville to the southeast, and Weeki Wachee Springs to the southwest. Since lands acquired to date are for the most part not contiguous, recreational use is limited to foot traffic and equestrian riding on more than eight miles of marked trails. Land management activities consist of security, prescribed burning, resource monitoring, exotic species control, and public use/recreational development and conservation easement monitoring.

Bright Hour Watershed – The Bright Hour Watershed project is within DeSoto County and consists of extensive, high-quality prairie, hammock, marsh, and slough systems that provide water management benefits. Hydrologic values include protection of the headwaters of several important creek systems, such as Prairie and Shell creeks. Water storage, conveyance, and flood control are also provided by the watershed's poorly drained landscape. Habitat protection for numerous rare plant and animal species and globally imperiled, high quality natural communities is amply afforded by this project. Since the District does not hold fee simple title to lands within the project, land management activities consist of monitoring the terms of conservation easements located within the project. There is no public recreation available since these are conservation easements.

Brooker Creek – The Brooker Creek project is located within Hillsborough and Pinellas counties. The Brooker Creek Headwaters Nature Preserve located in Hillsborough County remains as islands of undeveloped natural and rural lands in the changing landscape of northwest Hillsborough County. The lands include several extensive and interconnected cypress swamps which form the headwaters of Brooker Creek. These headwater swamps are an important water resource feature on their own, as well as for their contribution to downstream elements of the creek. Lands within the Brooker Creek Headwaters are managed by Hillsborough County. The County has developed and made available several miles of unimproved interior roads that are open to hikers. The dominant habitats within the Brooker Creek Preserve, located in Pinellas County, include cypress and mixed hardwood swamps along portions of Brooker Creek. As part of the area's natural drainage system, Brooker Creek is an important water resource feature. Local low-lying areas are drained by the creek's system of sloughs and swamps. Floodplain vegetation offers treatment of runoff prior to discharging into Lake Tarpon. Lands within the Brooker Creek project in Pinellas County are managed by Pinellas County. Recreational improvements/amenities available on the tract include equestrian trails, hiking trails and an interpretive foot trail. The District's Land management activities primarily consist of coordination with the lead land managers from Pinellas County and easement monitoring.

Charlotte Harbor State Park – The Charlotte Harbor project is located in Charlotte County and was jointly purchased by the District and the Trustees of the Internal Improvement Trust Fund of the State of Florida. Lands within the project area are characterized by a variety of natural communities including isolated freshwater marshes, pine flatwoods, tidal marshes, and tidal swamps. Under a management agreement with the State, the Florida Division of Recreation and Parks is lead land manager for the project. Currently, the park offers hiking, birding, canoeing and boating. The District's land management activities consist primarily of coordination with the State Parks land manager.

Chassahowitzka River and Coastal Swamps – The Chassahowitzka River project is located in western Citrus and Hernando Counties and contains the Chassahowitzka River and its expansive coastal swamps. This project includes nearly two miles along the Chassahowitzka River and the Chassahowitzka Springs, which form the river's headwaters. The project is contiguous with the federally owned Chassahowitzka National Wildlife Refuge to the west, the Withlacoochee State Forest's Homosassa Tract to the north and the Chassahowitzka Wildlife Management Area to the south. The project contains the Chassahowitzka River Campground, which is operated and maintained by a private vendor through an agreement between the vendor and the District. Recreational activities/amenities are primarily managed by the vendor and include canoe/boat launch, campsites (some with full hook-ups), canoe rental; picnic pavilions; restrooms; potable water; and primitive camp sites along the river. Land management activities are conducted by the District directly and consist of prescribed burning, resource monitoring, land maintenance, and recreational monitoring.

Conner Preserve – The Conner Preserve project is in Pasco County and includes the upper portion of Cypress Creek, a regionally important surface water feature and tributary creek of the Hillsborough River. Cypress Creek originates near I-75, east of CR 581 and north of CR 578 and has a contributing watershed of 74.5 square miles. Land use of the project area is primarily agricultural, dominated by several large cattle ranches. Land cover consists primarily of improved pasture, rangeland, live oak hammocks, pine flatwoods, xeric oak/longleaf pine, cypress domes and freshwater marshes/wet prairies. The project includes several shallow lakes, many of which include extensive marshes or open prairies. The project area itself is located between the District's

Cypress Creek Preserve and the Cross Bar/Al-Bar Ranch complex, representing two major public supply wellfields operated by Tampa Bay Water. Recreational activities/amenities available include 1.7 miles of hiking trails, and approximately 15 miles of shared-use trails for hiking, horseback riding and biking. Land management activities are conducted by the District directly and consist of prescribed burning, restoration, resource monitoring, and recreational development/monitoring.

Crooked Lake/Bowlegs Creek –The Crooked Lake/Bowlegs Creek project, which is located in Polk County, represents opportunities taken to protect important water resource ecosystems in the east central region of the District. Acquisition benefits include protecting important areas and habitat for aquifer recharge associated with the Lake Wales Ridge (Ridge) and protecting the water quality of Crooked Lake and Lake Cinch and Lake Reedy which receive flow from Crooked Lake. Crooked Lake is one of the largest lakes within the Ridge and is the only designated Outstanding Florida Water (OFW) in Polk County. The lake has good water quality because of existing shoreline vegetation coverage and relatively little urbanization around it. Although the alteration of natural lands throughout the region has resulted in habitat loss and fragmentation, this tract represents one of the few larger tracts remaining relatively intact and more importantly, is the last remaining large tract adjacent to a large Ridge lake. Lands within the project are jointly owned by the District and Polk County, and contain easements acquired by the United States Department of Agriculture/Natural Resources Conservation Services. Polk County manages the property.

Cypress Creek Preserve – Cypress Creek Preserve project, located in Pasco County, was purchased to provide flood protection, and to serve as a public water supply. Cypress Creek Well Field serves as an important source of water for the surrounding region and is managed by Tampa Bay Water. Cypress Creek Preserve includes the heavily forested Cypress Creek swamp, formed by its namesake, Cypress Creek, as it flows to the Hillsborough River. As part of the tributary system to the Hillsborough River, the project serves both a water detention role and a water conveyance role. Additionally, the low-lying swamps provide treatment and assimilation of runoff waters. Within the property, the creek threads its way through an expanse of cypress and hardwood forests. Recreational activities/amenities available include equestrian and primitive camping, 3.5 miles of hiking trails, and approximately 15.5 miles of shared-use trails for hiking, horseback riding and biking. Land management activities are conducted by the District and include prescribed burning, mowing, exotic species control, timber management, resource management, public use, recreation development/maintenance, and easement monitoring.

Edward W. Chance Reserve – In 2007, the former Lake Manatee Reserve was dedicated and renamed as the Edward W. Chance Reserve project (Reserve), in honor of departed Governing Board member, Ed Chance. The Reserve, which is located in Manatee County, extends over a large area which includes narrow floodplain forests and native pine flatwoods surrounded by vast areas of rangeland, improved pastures, croplands, and citrus groves. Lands purchased within this project protect an existing regional water resource, protect floodplains, and restore adjoining wetlands in the headwaters. Recreational amenities available include more than 10 miles of hiking trails and approximately 13 miles of shared-use trails for hiking, horseback riding and biking. Management units include the Coker Prairie and Gilley Creek Tracts. Land management activities conducted by the District include prescribed burning, mowing, exotic species control, timber management, resource management, public use, and recreation development/maintenance.

Flying Eagle Preserve – The Flying Eagle Preserve project is located within the Lake Tsala Apopka region of Citrus County. The property includes over five miles of frontage on the Withlacoochee River and its forested floodplain. A broad expanse of mixed hardwoods and cypress swamps cover the floodplain along the river. Areas of hammocks and xeric oak scrub lands occur throughout the higher elevations of the interior portions. Scattered marshes and wet prairies complete the landscape. The Tsala Apopka system is important because it has been described as a primary recharge area for the Floridan aquifer. Recreational activities/amenities available at Flying Eagle include four (4) miles of hiking trails and approximately 18 miles of shared-use hiking, horseback riding and bicycle trails; and primitive and equestrian camping. Hunting opportunities are available on both the wildlife management area administered by Florida Fish and Wildlife Conservation Commission and by the District on the Boy Scout tract. Land management activities are conducted by the District directly and include prescribed burning, resource monitoring, natural systems restoration, mowing, exotic species control, security patrol, public use and recreational development/maintenance.

Green Swamp Wilderness Preserve (including Colt Creek State Park) – The Green Swamp Wilderness Preserve project, (GSWP) is the District's largest landholding and is located in Pasco, Lake, Sumter and Polk counties. The GSWP includes Green Swamp East, Green Swamp West, Hampton tract, Little Withlacoochee Tract which is managed by the Florida Forest Service, and Colt Creek State Park which is managed by the Florida Department of Environmental Protection. The GSWP is the headwaters for four major rivers: the Withlacoochee River, the Ocklawaha River, the Hillsborough River, and the Peace River. Acquisitions have been directed at protecting the headwater swamps, floodplains, and watershed areas in the Green Swamp region and along the two principal river systems (Withlacoochee and Hillsborough). The Green Swamp and its river systems are of hydrologic importance to central Florida, both in terms of surface water and ground water resources. Swamps, floodplains, and headwaters serve as natural flood detention areas, while uplands serve as areas for recharge. Recreational amenities on District-managed lands in the GSWP include over 31 miles of hiking trails (including approximately 15 miles of the Florida National Scenic Trail) and 140 miles of shared-use hiking, horseback riding and bicycle trails. Primitive, equestrian and backcountry camping is also available. Hunting is managed by the Florida Fish and Wildlife Conservation Commission. Land management activities are mostly conducted by the District directly and include prescribed burning, resource monitoring, natural systems restoration, mowing, exotic species control, security patrol, public use and recreational development/maintenance.

Gum Slough – Lands within the Half Moon Gum Slough project is located within Marion and Sumter counties and are dominated by densely forested swamps and hammocks. Nearly 1,100 acres of forested hardwood swamps that line the Gum Slough run from a common boundary with state-owned lands to the east (Half-Moon Wildlife Management Area). The lands within the area offer protection to portions of the Withlacoochee River, Gum Slough, and its various hydrologic characteristics. Recreational amenities available on the property are shared-use trails available for hiking, bicycling and horseback riding. The property is managed by the Florida Fish and Wildlife Conservation Commission as part of the Half Moon Wildlife Management Area. Land management activities are conducted by FWC and include prescribed burning, resource monitoring, natural systems restoration, mowing, exotic species control, security patrol, public use, and recreational development/maintenance. Parcels within this project with less-than-fee ownership are monitored by the District pursuant to the corresponding conservation easements.

Hálpata Tastanaki Preserve – The Hálpata Tastanaki Preserve project, located in Marion County, adjoins the Marjorie Harris Carr Cross Florida Greenway to the north and Ross Prairie State Forest to the east. To the southwest is Two Mile Prairie tract of the Withlacoochee State Forest in Citrus County. Primary surface water features include five miles of floodplain along the northern bank of the Withlacoochee River. The isolated wetlands and marshes scattered throughout the site form the site's internal drainage system and provide local surface water storage. The site of Camp Izard, an important battleground during the second Seminole War, is located within the project lands. Recreational amenities include approximately four (4) miles of hiking trails and more than 12 miles of shared-use trails for hiking, horseback riding and bicycling. Land management activities conducted by the District directly include prescribed burning, natural systems restoration, timber management, exotic species control, resource monitoring, recreation development/maintenance and security.

Hidden Lake – The Hidden Lake project is in the west-central Pasco County and is part of an interconnected system of lakes within the Rocky Sink/Boggy Creek basin of the Bear Creek Watershed. District ownership ensures protection of the lake and the surrounding forested wetlands and will help preserve water quality within the lake and sub-basin. Recreational use of the lands within the project is extremely limited due to development in the vicinity and the fact that the lands are essentially a "lake swamp." Limited land management is required, primarily security patrols for illegal activities (dumping and archaeological digging) and is conducted by the District.

Horse Creek – The Horse Creek project, located in DeSoto and Hardee Counties, provides a buffer for Horse Creek, a high water-quality tributary of the Peace River. The project supports additional resource protection for the Peace River watershed and riverine wetlands. The Horse Creek natural communities include mesic and wet flatwoods, bottomland forest, depression and basin marshes, mesic hammock, scrubby flatwoods, baygall, and blackwater streams. The natural uplands are principally longleaf-pine-dominated mesic flatwoods with pockets of scrubby flatwoods on the highest elevations and more hydric wet flatwoods in the ecotone between the uplands and the Horse Creek floodplain. Recreation is not available on this project as the District holds a less-than-fee interest. Land management activities primarily consist of monitoring the associated conservation easement.

Jack Creek – The Jack Creek project, located in Highlands County, includes a significant part of Jack Creek, its 100-year floodplain, and outlying forested areas associated with the creek system and local lake outflow wetlands. The project area also includes portions of sand pine scrub and mixed scrub–among Florida's most unique threatened upland habitats. Jack Creek and its associated swamps serve as the natural drainage basin for the immediate area, as well as the water conveyance system for lakes in the area. The District has a management agreement with the Florida Fish and Wildlife Conservation Commission (FWC) wherein FWC manages both recreation and natural resources on the land. Land management activities consist of prescribed burning, security patrols, public use/recreation maintenance and enhancements, exotic species control, mowing and monitoring for listed plants and animals. Recreational amenities/activities on the Jack Creek property are limited to 6.5 miles of hiking trails due to its remote location, environmental sensitivity, and access constraints.

Lake Hancock – The Lake Hancock project is located southeast of the City of Lakeland and north of the City of Bartow in Polk County. At approximately 4,500 acres, Lake Hancock is the largest lake associated with the Peace River and is the third largest lake in Polk County. A statutorily mandated minimum flow has been established for the Peace River and accordingly

requires development of a recovery strategy. The strategy for the upper Peace River is to restore storage in Lake Hancock and release some of the water during the dry season to help meet the minimum flow requirements. Historically, Lake Hancock fluctuated more than a foot higher than it has during the past several decades. Lands acquired within this project assist in reversing those impacts by replacing the District's outfall structure so that water levels can be maintained at historical levels until released to help meet the upper Peace River minimum flow. The District acquired fee simple and less- than -fee interests to accomplish the recovery strategy. Additionally, the District and Polk County jointly acquired Circle B Bar and entered into a management agreement authorizing Polk County to manage the recreation and resources on both Circle B Bar Reserve and the Marshall Hampton Reserve. Recreational activities available at the Circle B Bar Reserve include a Discovery Center, six (6) miles of hiking trails and wildlife viewing opportunities. Recreational activities available on Marshall Hampton Reserve include eleven (11) miles of hiking and equestrian trails and wildlife viewing opportunities.

Lake Panasoffkee – The Lake Panasoffkee project is in Sumter County and is comprised of a large, contiguous area of relatively undisturbed lands along the eastern portion of Lake Panasoffkee's watershed. The project extends north to include Big Jones and Little Jones creeks, both tributaries to the lake. Wetlands dominate the area with extensive mixed hardwood and maple swamps, lake front marshes, and willow areas. Lands within the project protect local and regional drainage features and provide storage and detention of surface waters, while providing important wildlife resources. Recreational activities/amenities more than 15 miles of shared-use hiking, horseback riding and bicycle trails; group picnic pavilion, horse stalls, primitive and equestrian camping, restrooms, and a campground host site to help oversee the facilities. The Florida Fish and Wildlife Conservation Commission manages hunting on the property and the District directly manages the other natural resources. Land management activities include exotic species control, land security, cattle lease management, maintenance of facilities located on the property, public use, recreation development/maintenance, prescribed burning, timber management, natural systems restoration, resource, and conservation easement monitoring.

Little Manatee River – The Little Manatee River project, located in Hillsborough and Manatee Counties, contains parcels of land along the Little Manatee riverine corridor from downstream estuarine waters to the river's headwaters. Dense forest dominates the land along the river's floodplain with the adjoining uplands being comprised of a mixture of pine flatwoods, mixed hardwoods, and shrub and brushlands. The District has an interlocal agreement with Hillsborough County wherein the County has lead management responsibility for lands jointly purchased by Hillsborough County and the District located within Hillsborough County. Lands within Manatee County, known as the Southfork Tract, are directly managed by the District, and include approximately six (6) miles of hiking trails. Recreational improvements/amenities made available by Hillsborough County include canoe landing sites adjacent to primitive campsites along the river, fishing, and hiking trails. District land management activities on the Southfork Tract consist of road stabilization, prescribed burning, natural systems restoration, mowing and recreational development/maintenance.

Lower Hillsborough Wilderness Preserve – The Lower Hillsborough Wilderness Preserve project located in Hillsborough County includes several miles of the Hillsborough River and its broad flood plain. The project contains important areas of natural flood conveyance and storage associated with the Hillsborough River, the Tampa Bay Bypass Canal and levee system, and houses the Morris Bridge Wellfield. Recreational activities available include five developed park sites managed by Hillsborough County with such amenities as hiking, paved and off-road

bicycle trails, picnic pavilions, restrooms, boat launches and visitor centers. The District has also made available an additional 25 miles of equestrian trails and two primitive camping areas. The Florida Fish and Wildlife Conservation Commission oversees the Lower Hillsborough wildlife management area which offers family hunting opportunities. Other land management activities conducted by the District directly include exotic species control, land security, public use and recreation development/maintenance, prescribed burning, timber management, wildlife management, natural systems restoration and mowing.

Lower Peace River Corridor (including Deep Creek) – Located in DeSoto and Charlotte County, the Lower Peace River Corridor project includes an extensive network of tributaries, floodplain swamps and connected headwaters. Recreational activities available include non-potable water, approximately two (2) miles of hiking trails; more than six (6) miles of shared-use trails for hiking and horseback riding. Land Management activities are conducted by the District directly and include prescribed burning, mowing, exotic species control, recreational amenity development/monitoring, and security.

Myakka River/Deer Prairie Creek/Myakka State Forest – A majority of the lands within the Myakka River project were jointly purchased with the Trustees of the Internal Improvement Trust Fund of the State of Florida (Myakka State Forest) and Sarasota County (Deer Prairie Creek). Lands within the project area are characterized by a variety of natural lands and lands altered by development including mesic pine flatwoods, oak hammocks, shell mounds, prairie hammock and improved pasture. The project area includes portions of the Myakka River and its floodplain forests. Lands included within the Myakka State Forest boundary are managed by the Florida Forest Service (FFS). The FFS has made the following recreational improvements/amenities available on the property: shared-use trails for bicycling, horseback riding and hiking, and primitive camping. Lands within Deer Prairie Creek are jointly managed by the District and Sarasota County with the County managing recreation and the District managing the natural resources. Recreation on Deer Prairie Creek includes over 70-miles of unpaved and paved hiking and bicycling trails, canoe launch, fishing pier, picnic facilities, and restrooms. Land management activities include fencing, road maintenance, exotic species control, , public use, prescribed burning and mowing.

Myakka Conservation Area (including Myakka Prairie) – The Myakka Conservation Area project consists of oak/cabbage palm hammock dominated banks along the southern portions of the creek, isolated marshes and improved pastures within the upland portions and mixed natural lands scattered throughout. The property is characterized by the region's flat topography and includes landscapes of extensive shrub and brushlands, pine flatwoods and pastures. Numerous isolated freshwater marshes dot the site's flatlands. The main surface water feature, Myakkahatchee Creek, is a 21.5-mile-long tributary creek of the Myakka River. Approximately 4,700 acres are managed by Sarasota County. The Myakka Prairie is adjacent to lands within the Myakka River State Park and is managed by the Division of Recreation and Parks. Recreational development/amenities on the property made available by the State Park include hiking, bicycling and horseback riding trails. Land management activities conducted directly by the District include conservation easement monitoring.

Panasoffkee/Outlet Tract – Lands within the Panasoffkee/Outlet Project extend over three miles along the eastern floodplain of the Withlacoochee River in Sumter County. For the most part, the areas are representative of the river's five-year floodplain, which include the regularly flooded cypress and mixed hardwood forests, as well as some areas of temperate hammock.

Preservation of these lands along the river will maintain their function and protect forested swamps important to the water resources and water quality of the river system. Recreational activities on the property include approximately three (3) miles of hiking trails, fishing, and boat access. Land management activities conducted directly by the District include prescribed burning, mowing, road maintenance, exotic species control, cattle lease management, public use, and recreation development/ maintenance.

Potts Preserve – The Potts Preserve project is located within the Lake Tsala Apopka region in eastern Citrus County and includes portions of the Hernando Pool. The Preserve's eastern boundary is formed along 5.5 miles of the Withlacoochee River and its associated floodplain. The lands are a mixture of lakes, ponds, and marshes surrounding islands of oak forests and lands partially cleared for agriculture. The Tsala Apopka system is considered important as an area of recharge for the Floridan aquifer. Recreational activities/amenities available include approximately 12 miles of hiking trails, nine (9) miles of shared-use trails for hiking, horseback riding and bicycling, equestrian, primitive, and backcountry camping. Hunting is also allowed on the property and is managed by the Florida Fish and Wildlife Conservation Commission. Land management activities conducted by the District directly include public use and recreation development/maintenance, land security, prescribed burning, natural systems restoration, and mowing.

Prairie/Shell Creek – The Prairie/Shell Creek project is envisioned as a greenway corridor from the mouth of the Peace River to the District's Bright Hour Watershed project to the north and to the State's Babcock Ranch to the south. The District to date has acquired the Prairie Shell Creek Preserve in northern Charlotte county along the Peace River. The project protects a portion of the Peace River shoreline as well as provides a place to attenuate floodwaters along the Prairie and Shell Creeks. Recreational activities/amenities available on the Preserve include approximately five (5) miles of hiking trails. Land management activities conducted by the District directly include prescribed burning, resource monitoring, resource protection, and recreational development.

Rainbow River Ranch – The District's Rainbow River Ranch project is located along the eastern bank of the Rainbow River below the head spring. The property is located in Marion County adjacent to the Rainbow Springs State Park. Rainbow Springs is the seventh largest first magnitude spring in Florida and is the primary source of water for the Rainbow River which flows for approximately 5.7 miles until it discharges into the Withlacoochee River. The District's Rainbow River Ranch tract comprises about 16 percent of the eastern bank of the Rainbow River and is the last major undeveloped property along the eastern bank of this natural river corridor. Its shoreline includes marshes, wetlands, and giant bald cypress trees. The property is managed by the Division of Recreation and Parks as part of Rainbow Springs State Park. The District is developing two projects to restore natural communities and improve water quality.

RV Griffin Reserve (including Lewis Longino Preserve) – The RV Griffin Reserve project is in DeSoto and Sarasota counties and includes lands supporting and surrounding the existing facilities at the Peace River/Manasota Regional Water Supply Authority reservoirs and water treatment plant. Lands in the project area include mixed hardwood forests along the river; however, a majority of the lands consist of pine flatwoods, rangelands, pastures, and pine plantations. The Reserve supports and protects present potable water supplies. The Water Supply Authority manages the approximately 6,000 acres owned by the District in fee simple. Recreational activities/amenities include shared-use trails available for bicycling, horseback riding and hiking. The District monitors a conservation easement known as the Lewis Longino Preserve.

Sawgrass Lake – The Sawgrass Lake project is located in Pinellas County. The acquisition of the Sawgrass Lake project began in the 1970s to provide flood protection to the City of Pinellas Park. A water control structure was built to facilitate drainage canal improvements and to maintain desirable water level fluctuations in Sawgrass Lake and the surrounding swamp. The lake and swamp system provides natural water treatment to enhance the quality of water draining to Tampa Bay. In 1976, the District, Pinellas County, and the Pinellas County School Board cooperatively agreed to establish a county park and an environmental education center on the site. The property is managed by Pinellas County and Pinellas County School Board. Pinellas County has developed a wide array of recreational amenities on the property including restrooms, potable water, elevated boardwalks, hiking trail, nature center, outdoor interpretive displays, and they offer interpretive tours by reservation. The School Board has established an environmental education program onsite that serves area students from kindergarten through fifth grade.

Starkey Wilderness Preserve – The Starkey Wilderness Preserve project is located in southwestern Pasco County. The Starkey Wilderness Preserve protects portions of Five-Mile Creek, Pithlachascotee River, Anclote River, South Branch, Sandy Branch, and Cross Cypress Branch. The property consists of a combination of pine flatwoods, sand pine scrub, oak forests, scattered marshes, and cypress swamps. The Starkey Wellfield and part of the J. B. Starkey Wilderness Park (Starkey Wilderness Park) are located within the project limits. Recreation at the Starkey Wilderness Park is managed by Pasco County, while the District manages recreation on the Serenova Tract. Recreational activities/amenities available at Starkey Wilderness Park include paved bicycle trails, equestrian trails, hiking/backpacking trails, cabin rental, primitive camping, horse corral, picnic pavilions, self-guided educational nature trail, and restrooms. Recreational amenities on the Serenova tract include approximately 16 miles of shared-use hiking, horseback riding, and bicycle trails; and equestrian and primitive camping. Land management activities conducted by the District on the Preserve include prescribed burning, natural systems restoration, exotic species control, land security, recreational development/management, and mowing.

Tampa Bay Estuarine Ecosystem – The Tampa Bay Estuarine Ecosystem project spanning Hillsborough, Pinellas, and Manatee Counties, furthers the Tampa Bay Surface Water Improvement and Management (SWIM) plan. Approximately half the project consists of mangroves and salt marsh which dominate the northern project area along Bishop Harbor and the western area associated with the tidal bays of Moses Hole, Clambar Bay and Williams Bayou. The natural upland and wetland habitats within the project area provide natural water quality treatment of overland flows before reaching the receiving waters of Tampa Bay. A majority of lands within the Tampa Bay Estuarine Ecosystem project were jointly purchased with the State or other local governments. Under an agreement with the State, the Division of Recreation and Parks is the lead land manager for Terra Ceia Preserve State Park. Hillsborough County manages the Ekker Preserve and Schultz Preserve tracts; Pinellas County manages the Clam Bayou tract; and the District manages the Rock Ponds, Frog Creek, and Terra Ceia/Huber tracts. Land management activities conducted by the District on the Rock Ponds, Frog Creek and Huber include prescribed burning, natural systems restoration, exotic species control, land security, recreational development/management, and mowing.

Two Mile Prairie State Forest –Two-Mile Prairie tract project, located in Citrus County lies along the southern bank of the Withlacoochee River at the northern end of the Tsala Apopka Lake system and includes a variety of upland plant communities characterized by well-drained soils. Wetlands and surface water features include several miles of the Withlacoochee River and

isolated depression marshes. The project protects natural floodplain areas along portions of the southern bank of the river, while adjoining uplands provide buffer areas to protect the river from high intensity land uses. The lands within this project were jointly purchased between the District and the Trustees of the Internal Improvement Trust Fund of the State of Florida (TIITF). Under a management agreement with the TIITF, the Florida Forest Service (FFS) is the lead land manager and Two Mile Prairie is managed as part of the Withlacoochee State Forest. Recreational improvements/amenities made available by the FFS include a trail network north of CR-491 for bicycling and horseback riding, canoeing and non-gas-powered boating, fishing, primitive camping, picnicking, and two and eight tenths (2.8) miles of registered "trail walkers" trail. Land management activities consist of monitoring and coordinating with the FFS regarding their management of the tract.

Two Mile Connector – The Two Mile Prairie/Tsala Apopka Connector project is located in northeastern Citrus County with Two Mile Prairie State Forest to the northwest and Potts Preserve to the southeast. This project provides a connection between the Tsala Apopka and Two-Mile Prairie projects allowing for conveyance of surface waters and floodwater attenuation. Natural communities include basin marsh, scrub, and xeric and mesic hammock. Land management activities conducted by the District directly include resource monitoring and land maintenance. At this time there are no developed trails available on this tract, but it is open to the public for passive recreation.

Upper Hillsborough Preserve – The Upper Hillsborough project, located in Pasco and Polk counties, includes the headwaters of the Hillsborough River, and lies just south of a unique hydrologic feature - the Withlacoochee River/Hillsborough River overflow. At this point, a portion of the flow of the Withlacoochee River naturally conveys to the Hillsborough River north of U.S. Highway 98. Lands within this project protect the hydraulic features of the river system along with extensive areas of forested wetland habitats. Recreational activities/amenities available include non-potable water; approximately nine (9) miles of hiking trails; more than 30 miles of shared-use hiking, horseback riding and bicycling trails; primitive, back country, and equestrian camping, and fishing. Hunting is managed by the Florida Fish and Wildlife Conservation Commission through a wildlife management area agreement. Land management activities conducted by the District directly include prescribed burning, exotic species control, public use and recreational development/maintenance, land security and natural systems restoration.

Upper Lake Marion Creek Watershed – The Upper Lake Marion Creek Watershed project, located in Polk County, is a relatively undisturbed creek system of the Upper Lake Marion Creek Watershed flows north out of Lake Marion, joins Snell Creek, and ultimately flows southeast to Lake Hatchineha. The entire Lake Marion Creek basin extends over 18,300 acres and includes portions of both the Southwest and South Florida water management districts. This district has an agreement with the South Florida Water Management District (SFWMD) to assist in the management of this land since the property's proximity to SFWMD-managed lands enables the SFWMD to manage the property more cost-effectively. District land management consists primarily of coordination with the SFWMD.

Upper Myakka River Watershed – The Upper Myakka River Watershed project is in Manatee County and includes forested floodplain swamps and marshes along the upper portions of the Myakka River watershed. The headwater swamps function as retention and detention areas for local drainage. Wetland forests and adjoining uplands provide treatment of surface runoff. Access to the property is limited to hiking and fishing since the project lands are predominately

wetland, which is not conducive to recreational trail development, however there are two miles of hiking trails available. Land Management conducted by the District directly includes natural systems restoration, exotic species control, land security, public use and recreational development/maintenance, prescribed burning, road maintenance and mowing. Additionally, activities include monitoring of conservation easements.

Upper Saddle Creek Corridor– The Upper Saddle Creek Corridor project is in Polk County between the state-owned Tenoroc Fish Management Area and Lake Hancock. The property lies upstream of Lake Hancock and the upper Peace River and adjoins Saddle Creek Park which is owned by Polk County. The property is part of and provides protection to the floodplain of Saddle Creek, the major tributary to Lake Hancock. The District and Polk County jointly acquired and co-own the project lands, and Polk County is responsible for the management of the property.

Weekiwachee Preserve – The Weekiwachee Preserve project is located in Hernando and Pasco counties and includes several miles of the Weeki Wachee River and extensive areas of hardwood swamps and hammocks. The Weeki Wachee Swamp extends several miles along the coastal portions of Hernando County and represents a regionally important wildlife area. The riverine swamps are environmentally sensitive areas, which play an important role in the river's conveyance system and in flood and storm abatement. As they approach their outfall at the Gulf of Mexico, the Weeki Wachee and Mud rivers form a complex system of productive estuarine marshes and lowlands. Recreational activities/amenities include approximately six miles of hiking trails and six miles of shared-use hiking and bicycling trails, and fishing. The Preserve is open to vehicular access two Saturdays of every month. Hunting is managed by the Florida Fish and Wildlife Conservation Commission through a wildlife management area agreement. Land management activities at the Preserve conducted by the District directly include natural systems restoration, exotic species control, security, public use and recreational development/maintenance, prescribed burning, road maintenance and mowing. The Weeki Wachee Springs State Park is adjacent and is managed by the Florida Park Service offering boat tours, canoe/kayak launch, interpretive opportunities, and swimming.

Progress of Funding, Staffing and Resource Management

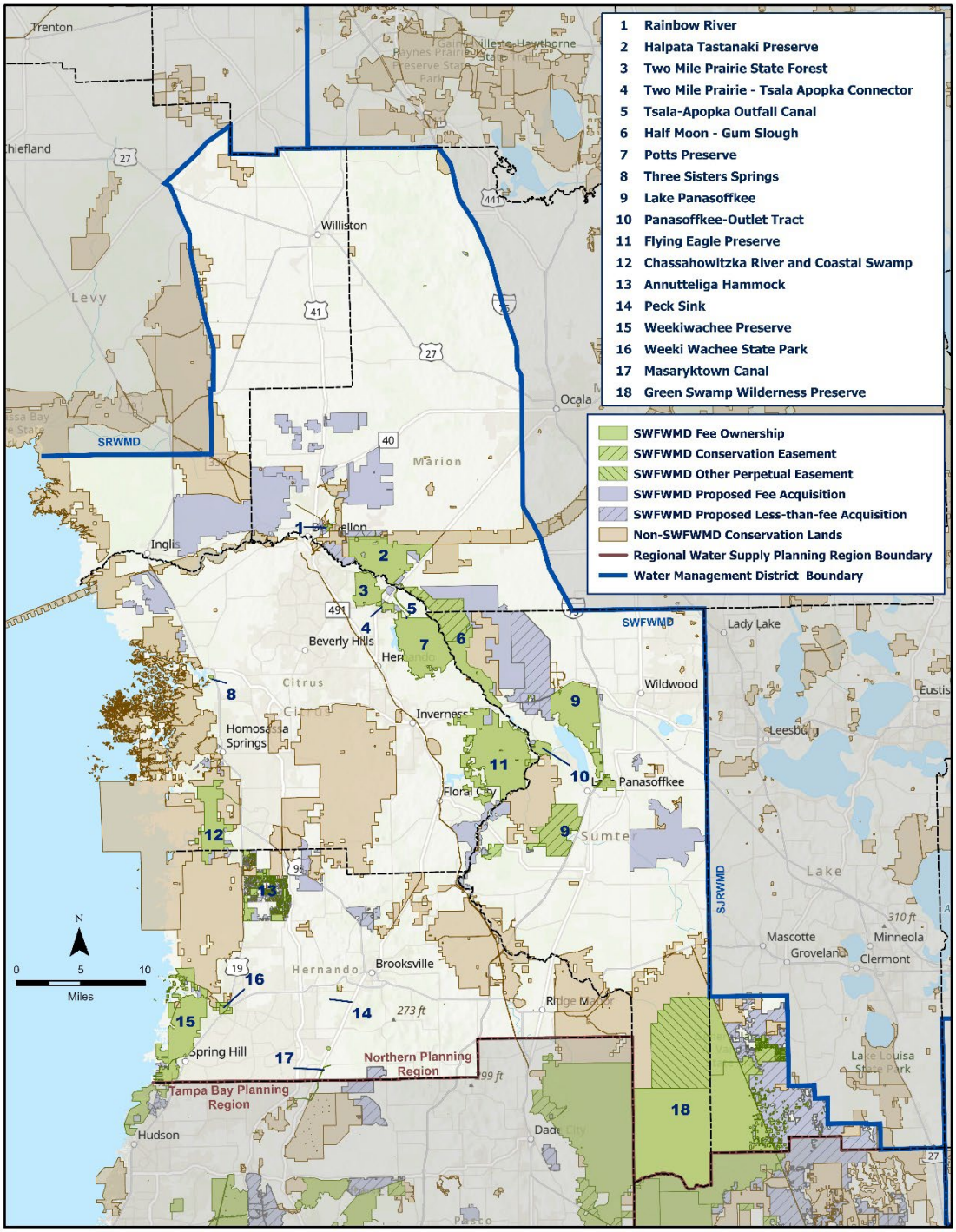
The following table depicts the District's budget for funding and staffing for resource management and public use.

Table 4. Progress of Funding, Staffing, and Resource Management.

Budget Area	FY2020 Budget	FY2021 Budget	FY2022 Budget	FY2023 Budget	FY2024 Budget
FTEs	34	35	37	36	34
Resource Management and Public Use	$5,355,345	$5,020,227	$5,379,849	$5,860,175	$5,901,567

Florida Forever Land Acquisition Projects

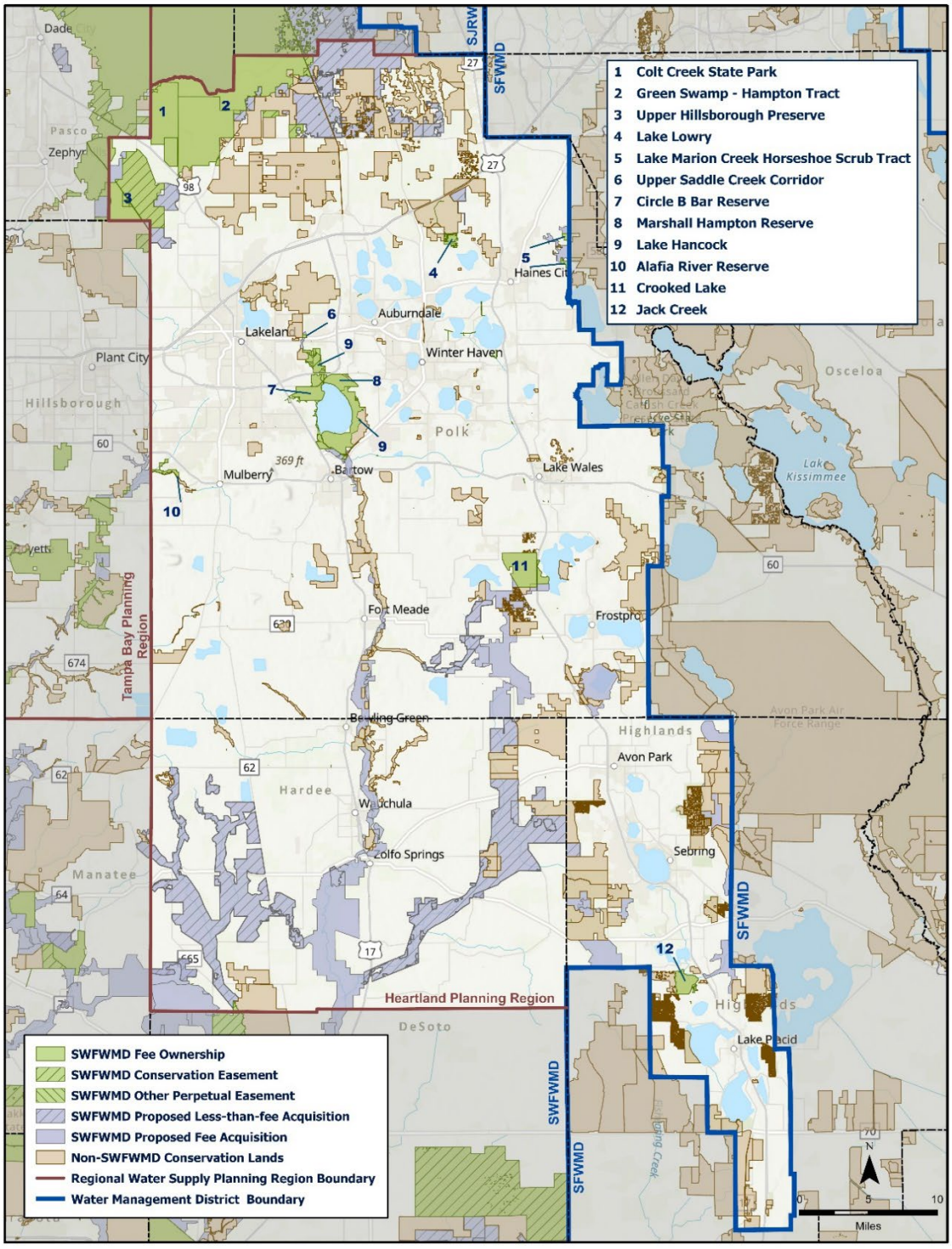
Figure 2. Northern Planning Region Map.



The lands eligible for acquisition within the Northern Planning Region are identified as follows:

- Approximately 81,400 acres identified for potential fee simple acquisition
- Approximately 40,800 acres identified for potential acquisition through less-than-fee techniques

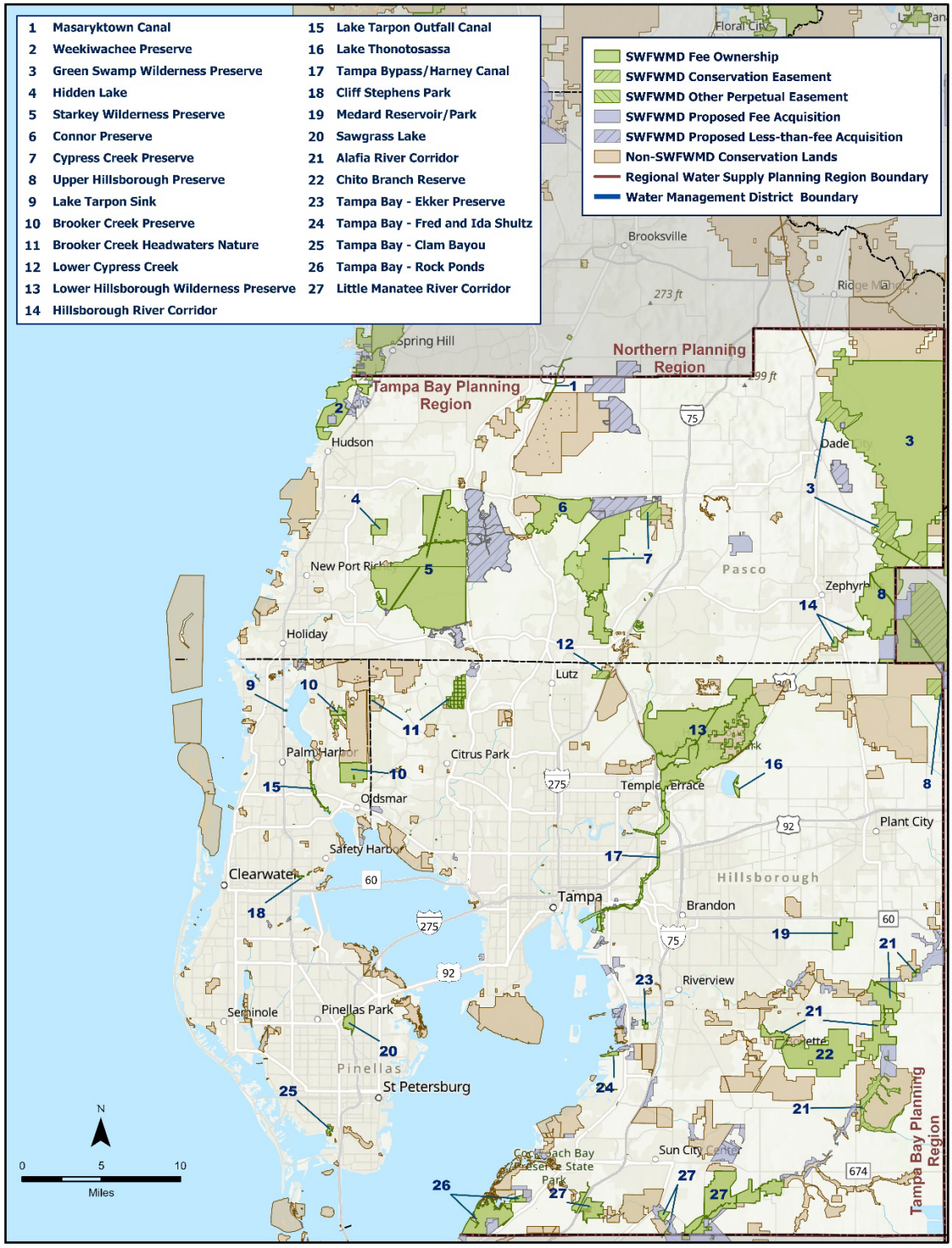
Figure 3. Heartland Planning Region Map.



The lands eligible for acquisition within the Heartland Planning Region are identified as follows:

- Approximately 56,500 acres identified for potential fee simple acquisition
- Approximately 85,800 acres identified for potential acquisition through less-than-fee techniques

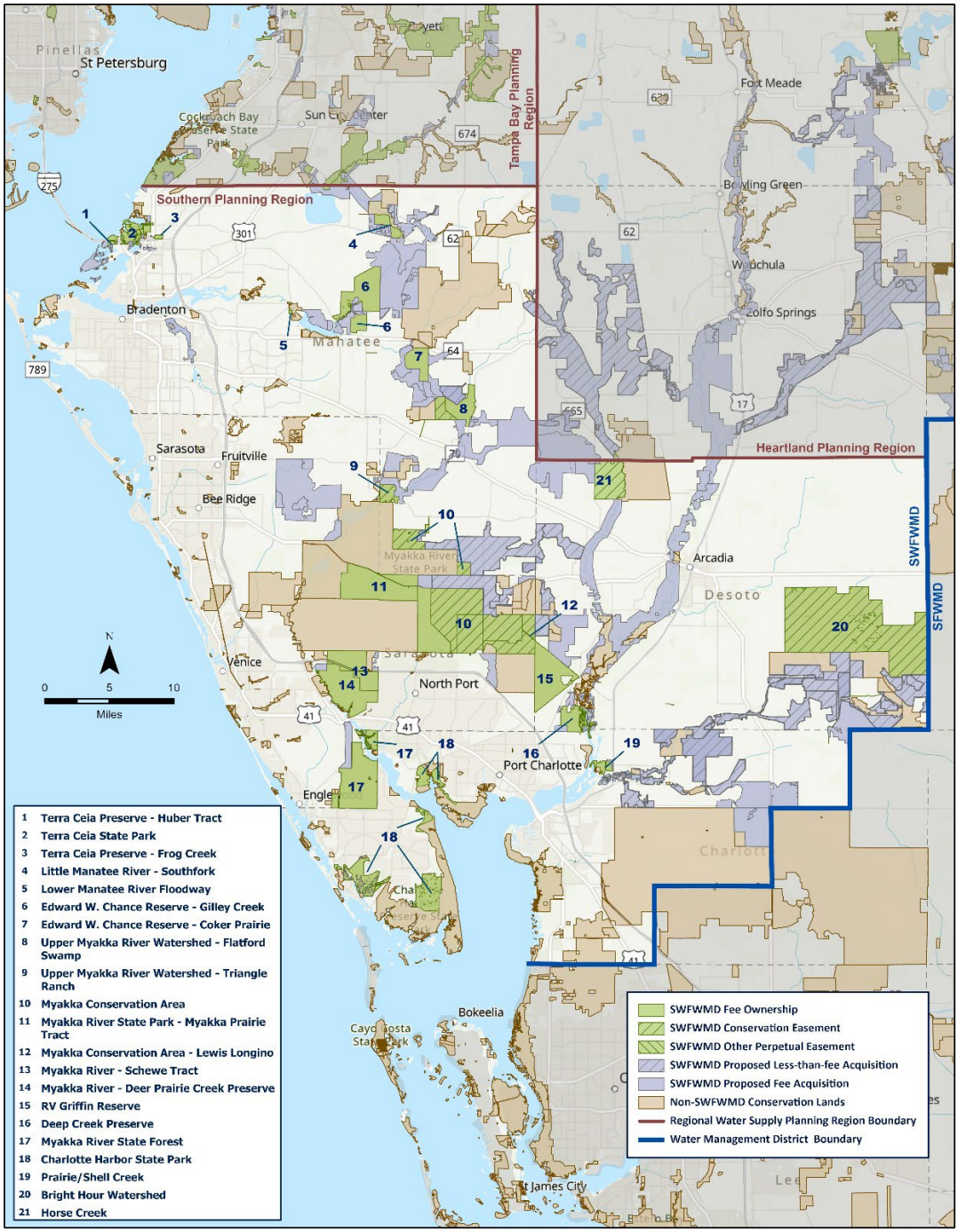
Figure 4. Tampa Bay Planning Region Map.



The lands eligible for acquisition within the Tampa Bay Planning Region are identified as follows:

- Approximately 13,300 acres identified for potential fee simple acquisition
- Approximately 14,600 acres identified for potential acquisition through less-than-fee techniques

Figure 5. Southern Planning Region Map.



The lands eligible for acquisition within the Southern Planning Region are identified as follows:

- Approximately 101,000 acres identified for potential fee simple acquisition
- Approximately 54,000 acres identified for potential acquisition through less-than-fee techniques

Base maps provided by *University of South Florida, FDEP, Esri, HERE, Garmin, SafeGraph, FAO, METI/NASA, USGS, EPA, NPS, Esri, CGIAR, USGS, Esri, HERE, Garmin, FAO, NOAA, USGS, EPA*

Consolidated Annual Report

March 1, 2024

2023 Mitigation Donation Annual Report

Southwest Florida
Water Management District

Southwest Florida Water Management District

2379 Broad Street, Brooksville, Florida 34604-6899
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January 1, 2024

The Honorable Ron DeSantis
Governor of Florida
Plaza Level 05, The Capitol
400 South Monroe Street
Tallahassee, Florida 32399-0001

Subject: Annual Report on Cash Payments as Mitigation

Dear Governor DeSantis:

This letter is written pursuant to Section 373.414(1)(b)(2), Florida Statutes, which requires that each water management district report annually to the Executive Office of the Governor "all cash donations accepted under subparagraph 1 during the preceding calendar year for wetland mitigation purposes."

During the reporting period, the Southwest Florida Water Management District received no cash payments as mitigation, pursuant to 373.414(1)(b), Florida, Statutes.

Sincerely,

Brian J. Armstrong, P.G.
Executive Director

cc: Secretary Shawn Hamilton, FDEP

2024–2028 Strategic Plan

Southwest Florida
Water Management District

Message from the Chair

The Southwest Florida Water Management District manages water resources across 16 counties with a population nearing 6 million people. The District's mission is to protect the water resources, ensure water supply needs are met, and reduce the risks of flooding.

The biggest challenge we face is continuing to ensure that we have adequate water supplies to meet current and anticipated growth. That challenge will get harder and harder. People want to move here, with good reason. It's a great place to live. We need to stay ahead of that curve and ensure that we have the water supplies necessary while also protecting the natural resources that attract so many people here.

The District's long-term success has been based on a culture of adapting to changing circumstances. We recognize that we must remain open to new data, new approaches, and adapt as necessary to achieve the best outcomes. When over-reliance on groundwater began affecting the environment, we shifted gears, focusing more on conservation and the development of alternative water resources. We have been able to significantly reduce groundwater withdrawals, promote environmental recovery, and still meet the demands of growth.

That growth fuels our economy, but it can also impact the District's four areas of responsibility: water supply, water quality, natural systems, and flood protection. Continued success depends on the wise use of time, taxpayer dollars, and our staff. That's why we have a Strategic Plan.

The District's Strategic Plan provides clarity and direction regarding our mission and our priorities. The Plan identifies who we are, what we do, and how we do it. It also highlights a five-year plan of action to focus our resources and maximize benefits for both the public and environment.

The Plan also prioritizes water resource issues in each of our four planning regions. For example, in our Northern Planning Region one of the objectives is to enhance our five first-magnitude springs, implementing projects to improve water quality and natural systems. In the Heartland Region, we are helping the Polk Regional Water Cooperative (PRWC) to develop 30 million gallons a day of drinking water.

Ed Armstrong
Chair

The beneficial reuse of reclaimed water serves as a critical tool across the District to ensure a sustainable water supply. Reclaimed water is wastewater that has been treated and reused beneficially. The District is a national leader, beneficially reusing 57 percent of our wastewater, compared to only 7 percent nationally. Through our conservation, reuse efforts, and the development of alternative water sources, we have been able to reduce not only groundwater pumping but also overall water use, even with our ever-growing population.

As Governing Board Chair, my priority is keeping the District's focus on internal execution and external communications with our critical stakeholders. The District functions at a high level of efficiency and effectiveness, but we can always get better. The enemy is complacency.

The District's biggest strength is its staff. I've heard some people say that government workers are clock watchers. Those people clearly haven't experienced our District in action. District staff are effective, efficient, and outcome-oriented. At every level of the organization, staff are committed to our mission, and to doing the right things for the right reasons. Grounded in science, we make difficult decisions based on data, not emotions or politics. That's the best way to approach policies that have such wide-reaching ramifications for millions of people.

Meeting the District's mission does not come cheaply. For example, the District is committing nearly $300 million to help the PRWC develop its alternative water supplies. The District's ability to fund these projects and meet its responsibilities is dependent on excellent fiscal stewardship of taxpayer dollars. The District continually looks for ways to reduce costs, improve effectiveness, and maximize taxpayer investment in our mission to deliver better value to the public. The taxpayers deserve to know their taxes are used wisely to maximize the public benefit.

Our success rests not only on the Governing Board and District staff, but also on our ability to collaborate with our stakeholders to form partnerships where we work together toward shared interests while respecting different perspectives.

We have the resources, resilience, and resolve to meet our mission. This Strategic Plan creates the blueprint for success.

Ed Armstrong
Governing Board Chair

Governing Board

The Governing Board establishes policies for the District. Board members are unpaid citizen volunteers appointed by the Governor and confirmed by the Florida Senate.

Ed Armstrong
Chair
Pinellas

Michelle Williamson
Vice Chair
Hillsborough

John Mitten
Secretary
Hernando, Marion

Jack Bispham
Treasurer
Manatee

Kelly S. Rice
Former Chair
Citrus, Lake, Levy, Sumter

Joel Schleicher
Former Chair
Charlotte, Sarasota

Ashley Bell Barnett
Polk

John Hall
Polk

James Holton
Pinellas

Dustin Rowland
Pasco

Robert Stern
Hillsborough

Nancy Watkins
Hillsborough, Pinellas

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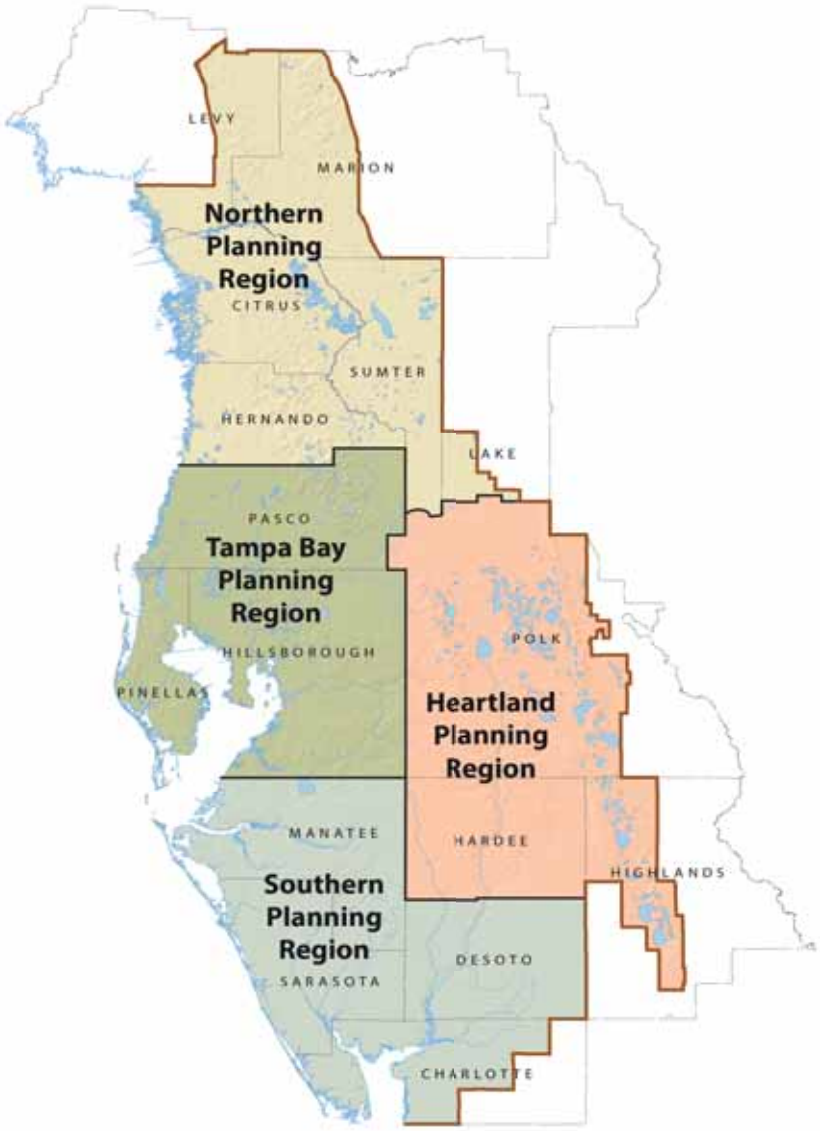
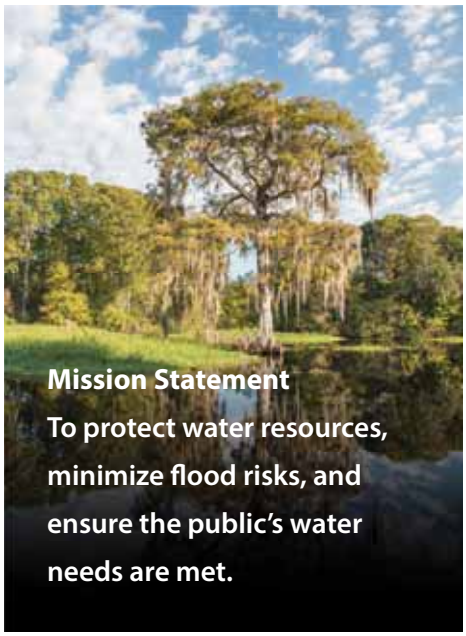
Overview

The Southwest Florida Water Management District (District) is a science-based organization responsible for managing and protecting water resources in west-central Florida. The District's job is to ensure there are adequate water supplies to meet the needs of current and future users while protecting and restoring water and related natural resources. (See Mission Statement.)

The District encompasses all or part of 16 counties, from Levy County in the north to Charlotte County in the south. It extends from the Gulf of Mexico east to the highlands of central Florida. The District contains 97 local governments spread over approximately 10,000 square miles, with an estimated 5.56 million permanent residents in 2021. This figure does not include seasonal residents and tourists. For planning purposes, the District is divided into four regions: Northern, Tampa Bay, Heartland and Southern. (See District Planning Regions map.)





Mission Statement

To protect water resources, minimize flood risks, and ensure the public's water needs are met.

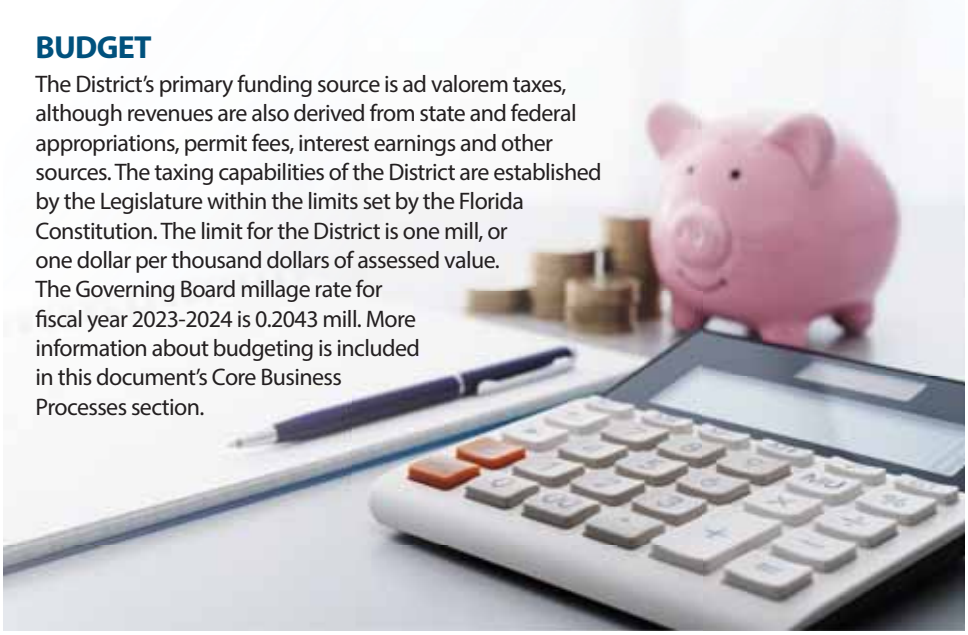
GOVERNING BOARD

A 13-member Governing Board establishes policies and sets the budget for the District. Appointed by the Governor and confirmed by the Senate, Governing Board members are unpaid volunteers representing varied backgrounds and interests. Board members, who must live in the District, serve four-year terms.

Overview

BUDGET

The District's primary funding source is ad valorem taxes, although revenues are also derived from state and federal appropriations, permit fees, interest earnings and other sources. The taxing capabilities of the District are established by the Legislature within the limits set by the Florida Constitution. The limit for the District is one mill, or one dollar per thousand dollars of assessed value. The Governing Board millage rate for fiscal year 2023-2024 is 0.2043 mill. More information about budgeting is included in this document's Core Business Processes section.



CORE MISSION

Florida Statutes, primarily Chapter 373, authorize the District to direct a range of initiatives, programs and actions. These responsibilities can be grouped under four general areas, which form the District's core mission: water supply, water quality, natural systems and flood protection. The District has established a goal for each of these areas of responsibility:

Water Supply Goal:
Ensure an adequate supply of water to provide for all existing and future reasonable and beneficial uses while protecting and maintaining water resources and related natural systems.

Water Quality Goal:
Protect and improve water quality to sustain the water resources, environment, economy and quality of life.

Natural Systems Goal:
Preserve, protect and restore natural systems to support their natural hydrologic and ecological functions.

Flood Protection Goal:
Minimize flood damage to protect people, property, infrastructure and investment.

Strategic Initiatives

The District is implementing a wide array of programs and projects to meet these four goals. These activities are grouped under 12 Strategic Initiatives:

- Regional Water Supply Planning
- Alternative Water Supplies
- Reclaimed Water
- Water Conservation
- Water Quality Assessment and Planning
- Water Quality Maintenance and Improvement
- Minimum Flows and Minimum Water Levels (MFLs) Establishment and Monitoring
- Conservation and Restoration
- Floodplain Management
- Programs, Projects, and Regulations
- Flood Protection Facilities
- Emergency Flood Response

Regional Priorities

While the Strategic Initiatives identify activities implemented throughout the District, the water resource needs vary from one planning region to another. The top water resource priorities for each region, along with measurable objectives, are identified in the Regional Priorities section of this document.

Core Business Processes

In addition to adhering to its adopted values, the District must excel in eight core business processes to successfully achieve its Strategic Initiatives:

- Water Resources Planning and Monitoring
- Innovative Projects
- Financial Sustainability
- Regulation
- Land Management
- Structure Operations
- Knowledge Management
- Engagement

Water Supply

1. Regional Water Supply Planning

Goal Statement: Identify, communicate and promote consensus on the strategies and resources necessary to meet future reasonable and beneficial water supply needs.

The District's regional water supply planning effort provides the framework for future water supply management decisions and is a statutory requirement where current water sources are not adequate to supply existing and future uses while sustaining natural resources (F.S., 373.709(1)). This is a collaborative, transparent effort involving local governments, utilities, the agricultural community, business representatives, environmental organizations and other stakeholders.

STRATEGIES

- Develop accurate and reliable demand projections
- Identify sufficient regional water supply sources to meet projected demands
- Encourage the development and use of regional water supply authorities to plan and coordinate water supply solutions
- Incorporate adaptive management processes in water supply planning
- Coordinate with other water management districts on water supply and regulation approaches
- Proactively coordinate with water supply utilities
- Demonstrate the District's financial commitment to assist in the development of regional water supply needs

2. Alternative Water Supplies

Goal Statement: Increase development of alternative sources of water to ensure groundwater and surface water sustainability.

Alternative water supply (AWS) refers to any nontraditional source of water that reduces the region's dependency on fresh groundwater. Since 1988, the District has helped to develop approximately 400 million gallons per day (mgd) of alternative water supplies, including reuse and water conservation benefits and new potable water sources.

STRATEGIES

- Develop alternative water supply sources that include surface water capture, desalination and brackish groundwater systems
- Continue to promote partnerships with agriculture through District programs such as the Facilitating Agricultural Resource Management Systems (FARMS) Program
- Partner with regional entities to provide alternative water supplies
- Continue to leverage District funds to facilitate the development of alternative water supplies
- Continue to support research and development of aquifer storage and recovery technology
- Promote conjunctive use of surface and groundwater resources through regulation and funding incentives

3. Reclaimed Water

Goal Statement: Maximize beneficial use of reclaimed water to offset potable water supplies and restore water levels and natural systems.

Reclaimed water is wastewater that has received at least secondary treatment and disinfection and is used for a beneficial purpose, such as irrigation, manufacturing processes or power generation. By offsetting demand for groundwater and surface water, this alternative water supply reduces stress on environmental systems, provides economic benefits by delaying costly water system expansions and reduces the need to discharge wastewater effluent to surface waters. More than 212 mgd of reclaimed water is being beneficially reused in the District, accounting for more than 16 percent of overall water use. In addition, the District's Governing Board recently identified potable reuse as a priority for the District to achieve its goal of 75 percent reuse of available wastewater by 2040.

STRATEGIES

- Increase availability by increasing storage capacity
- Increase availability by promoting interconnects between reclaimed water utilities
- Maximize efficient and beneficial use of reclaimed water
- Improve efficiency through measures such as metering and volume-based pricing
- Continue to support reclaimed water research, monitoring and public education
- Partner with cooperators for the development of potable reuse projects, with priority for regional entities
- Promote the beneficial use of reclaimed water and the offset of traditional water supplies through the existing regulatory framework
- Promote the use of reclaimed water for aquifer recharge and environmental enhancement projects
- Promote active public engagement on potable reuse through outreach and education programs.
- Continue to support and promote the One Water Florida initiative.

4. Water Conservation

Goal Statement: Enhance efficiencies in all water-use sectors to ensure beneficial use.

Water conservation is achieved through education, financial incentives and various regulatory and non-regulatory programs. Per capita water usage in the District has regularly ranked as the lowest in the state.

STRATEGIES

- Promote water conservation through public engagement programs
- Support research and implementation of water conservation techniques and practices
- Promote water-conserving rate structures
- Utilize financial incentives to further encourage effective water conservation practices through the Water Incentives Supporting Efficiency (WISE) program and Florida Water Star.
- Utilize regulatory programs to establish effective water conservation practices
- Continue to promote partnerships with agriculture through District programs such as the FARMS Program

Water Quality

1. Assessment and Planning

Goal Statement: Collect and analyze data to determine local and regional water quality status and trends to support resource management decisions and restoration initiatives.

Those who manage Florida's water resources must have access to accurate and timely information to support good management decisions. The District's water quality monitoring programs and networks help provide these data.

STRATEGIES

- Continue to develop and maintain long-term water quality monitoring networks to collect, analyze and distribute accurate water quality information
  - Coastal Groundwater Quality, Inland Water Quality and Water Use Permit Monitoring Networks
  - Springs and Aquifer Nutrient Monitoring Networks
  - Surface Water Quality Monitoring Networks
- Continue to support the District's internal data governance process
- Continue to promote partnerships through District water quality programs
- Assess the utilization of new technologies to improve accuracy and availability of water quality data

2. Maintenance and Improvement

Goal Statement: Develop and implement programs, projects and regulations to maintain and improve water quality.

The District develops and implements projects, programs and regulations to maintain and improve water quality consistent with the Governor's Executive Order 19-12, which instructs the water management districts to review budgets and prioritize available funding to focus on projects that will help address harmful algal blooms and maximize nutrient reductions. Examples of these efforts include partnerships for best management practices (BMPs) implementation such as the FARMS Program, focused on the agriculture community, and the Watershed Management Program (WMP), addressing watershed improvements; and the Surface Water Improvement and Management (SWIM) and Springs initiatives programs that implement nutrient removal and other water quality improvement projects.

Gathering a water sample from the Weeki Wachee River.

The District also acquires and manages land for water resources conservation/protection purposes through its land resources program and regulates stormwater management through the Environmental Resource Permitting (ERP) process. Additionally, data and information are shared with counties, cities and the state for projects to improve water quality.

STRATEGIES

- Continue to support, review and track Florida Department of Environmental Protection (DEP) Total Maximum Daily Load (TMDL) and Basin Management Action Plans (BMAP) processes for District priority water bodies
- Promote Florida-Friendly Landscaping™ principles and other behaviors that protect water quality
- Participate in the development and implementation of the statewide stormwater management criteria to enhance the District's ERP program
- Use regulatory programs to promote water quality protection and improvement
- Continue to promote partnerships through District water quality programs such as the SWIM and FARMS programs and the Quality of Water Improvement Program
- Support the implementation of prioritized septic and package plant retrofit projects within the Northern region to reduce nutrient concentrations in springs priority focus areas
- Support local government efforts to improve District priority water bodies

Three Sisters Springs Wetland Treatment Project in Crystal River.

Natural Systems

1. Minimum Flows and Levels Establishment and Monitoring

Goal Statement: Establish and monitor MFLs, and where necessary, develop and implement recovery/prevention strategies to recover water bodies and prevent significant harm.

Minimum flows and levels (MFLs) identify the limit or water level at which further withdrawals would be significantly harmful to the water resources or ecology of the area. Rivers, streams and springs require minimum flows, while minimum levels are set for lakes, wetlands and aquifers. MFLs are used for permitting or planning decisions concerning how much water may be safely withdrawn from or near a water body.

Through fiscal year 2023, the District has established MFLs for 203 water bodies. The District's process for establishing MFLs includes an annual update of water bodies prioritized for MFLs development, extensive data collection, analysis and reporting, public review, independent scientific peer review and rule adoption. The District routinely assesses potential water supply/resource concerns and evaluates water use permit applications to ensure violations of established MFLs do not occur. In addition, water bodies with established MFLs are monitored and assessed annually to determine the need for strategies to recover or prevent flows or levels from falling below established MFLs. All necessary recovery or prevention strategies are included in the District's Regional Water Supply Plan (RWSP).

As of 2023, 95 percent of the established MFLs were being met. To address water bodies where MFLs are not being achieved, the District is implementing recovery strategies for the lower Hillsborough River and the Southern Water Use Caution Area (SWUCA). In addition, the District has successfully implemented recovery strategies for the Northern Tampa Bay Water Use Caution Area (NTBWUCA) and lower Alafia River and determined the NTBWUCA and the Dover/Plant City Water Use Caution Area (DPCWUCA) recovery strategies are no longer necessary.

STRATEGIES

- Update the MFLs priority list and schedule annually
- Establish MFLs through:
  - Data collection
  - Data analysis and reporting
  - Independent scientific peer review and public review
  - Governing Board approval and rule adoption
- Continue to incorporate MFLs in District water use permit application review processes and compliance monitoring
- Monitor and report hydrologic conditions to support status assessments for water bodies with established MFLs
- Continue to review and refine scientific methods used for establishing MFLs
- Develop, adopt and implement MFLs recovery and prevention strategies
- Incorporate MFLs recovery and prevention strategies into the RWSP development process

Ibis in the wetlands.

2. Conservation and Restoration

Goal Statement: Restoration and management of natural ecosystems for the benefit of water and water-related resources.

The Conservation and Restoration Strategic Initiative preserves, protects and restores natural systems to support natural hydrologic and ecologic functions. The major components of this initiative include land acquisition and management, ecosystem monitoring and restoration, education and regulation. To date, over 43,000 acres of habitat have been restored through District programs and partnerships with state and local governments.

Acquisition and management of land are critical to the District's conservation and restoration objectives. Once acquired, altered land is restored, if necessary, and managed to maintain ecological and hydrological functions. The District monitors its lands to ensure continued compliance with its mission and initiatives.

Restoration initiatives, such as the SWIM Program, are overseen by the District to restore natural systems associated with priority water bodies.

The District also regularly tracks land and water resource alterations through its aerial land use/land cover, wetland and seagrass mapping efforts. Through reviews such as local government plan amendments and large-scale development proposals, Florida Coastal Management applications and related activities, staff can offer feedback to better link land and water resources. In addition, the District's ERP program helps protect water resources.

STRATEGIES

- Evaluate acquisition opportunities, placing priority on water resource benefits by contributing to water resource projects, additions linking conservation areas, management efficiencies such as inholdings, and leveraging partnership dollars
- Promote innovative restoration projects and partnerships
- Regulate to avoid impacts or minimize and mitigate unavoidable impacts
- Partner to continue wetland, lake and river monitoring and analysis
- Provide technical assistance to state, regional and local governments for linking land and water issues and concerns
- Apply adaptive land management strategies to maintain and enhance District conservation lands

Flood Protection

1. Floodplain Management

Goal Statement: Collect and analyze data to determine local and regional floodplain information, flood protection status and trends to support floodplain management decisions and initiatives.

The WMP identifies, prioritizes and addresses flood-related water resource issues within a watershed. Information developed through the WMP is used by local governments, the District and state and federal governments in regulatory and advisory floodplain management programs.

STRATEGIES

- Implement the WMP, collect and analyze data and develop and distribute accurate floodplain information
- Continue to promote partnerships at the local, state and federal level
- Increase public awareness of floodplains and flood risk
- Provide system-based data to support the operation of District flood control and water conservation structures
- Document levels after flood events to ensure up-to-date modeling and historic records

2. Programs, Projects, and Regulations

Goal Statement: Develop and implement programs, projects and regulations to maintain and improve flood protection to minimize flood damage while preserving the water resource.

The District's ERP program uses WMP information and regulations to protect floodplain and historic basin storage and ensure that new development does not increase flood levels or the rate of stormwater runoff onto neighboring properties.

Strategic property acquisition allows land to fulfill natural functions of storing and accommodating excess water and reduces the risk of flood damage by preserving floodplains.

The District's WMP identifies flood risk and efficient alternatives to reduce the risk of flood damages. The District encourages implementation of selected intermediate and regional system improvement projects to reduce flood risk and to maximize opportunities to provide water quality improvements. Implementation of local system improvements is primarily the responsibility of the local government.

STRATEGIES

- Implement the ERP program using WMP floodplain information to maintain current levels of flood protection
- Identify floodplain management and flood protection value associated with land acquisition opportunities
- Support local government efforts to reduce the risk of flood damages by improving intermediate and regional flood protection systems
- Operate and maintain District flood control and water conservation structures, canals, dams, levees and associated facilities
- Develop, implement, and maintain an asset management program for District flood control and water conservation structures and associated facilities

3. Flood Protection Facilities

Goal Statement: Operation, Maintenance and Capital Improvements of the District's dams, canals, and water control structures to minimize flood damage while preserving the water resource and contributing to water supply.

The District operates, maintains and performs capital improvements on three earthen dams, five major canal systems and 84 water control structures in support of the Flood Protection Strategic Initiative.

The District monitors the water resources and operates its water control structures 365 days a year. The maintenance of the dams, canals, and water control structures is an ongoing effort and aligns with federal standards, where necessary. A Capital Improvement Plan has been completed for the District's highest priority water control structures. The District is implementing high-priority improvements identified in the District's risk-based plan. These improvement projects are in design, which include cement repair, addition of cathodic protection systems for some of the coastal structures, and the replacement of flood gates and their associated lift system based on the age and condition, all of which will further improve the preventative maintenance, life cycle management, and capital improvement planning for the water control structures. The full plan containing all 84 water control structures is planned for completion by the end of calendar year 2024.

STRATEGIES

- Operate and maintain the District's 84 water control structures to maximize the flood protection benefits
- Monitor and maintain the District's dams and canals
- Develop and implement an asset management program for District's 84 water control structures
- Conduct long-term, risk-based capital planning
- Implement prudent capital projects to minimize the likelihood of failure of the District's water control structures

4. Emergency Flood Response

Goal Statement: Provide effective and efficient assistance to state and local governments and the public to minimize flood damage during and after major storm events, including operation of District flood control and water conservation structures.

Through its emergency flood response initiative, the District prepares for, responds to, recovers from and mitigates the impacts of critical flooding incidents. To ensure adequate preparation, the District has developed an emergency operations program and maintains a Comprehensive Emergency Management Plan (CEMP), which provides guidelines for pre-incident preparation, post-incident response and recovery, deployment and annual exercises. The District's Emergency Operations Center and emergency response staff are critical to incident response. All water management districts are members of the State Emergency Response Team and serve as support agencies to the state. The District also provides emergency assistance to local governments and the public. The District's Hydrologic Data Section provides data to internal and external customers to assist with situation assessments and decision making.

STRATEGIES

- Continue to promote an effective and efficient incident management system
- Train staff in National Incident Management System /Incident Command System structure
- Exercise the District's CEMP, high hazard structure Emergency Action Plans and Flood Event Guidelines
- Provide emergency assistance to the state, local governments, and other agencies

Northern Planning Region - Springs

PRIORITY:
Improve the Chassahowitzka River, Crystal River/Kings Bay, Homosassa River, Rainbow River, Weeki Wachee River, and associated springs

OBJECTIVES:
- Implement water quality and natural systems projects identified in the SWIM plans for the five first-magnitude spring systems
- Assist with septic to sewer conversions and package plant retrofits within the five first-magnitude springsheds
- Monitor status and trends associated with targets in each SWIM plan to assess the ecological condition of the spring systems
- Continue support of the Springs Coast Steering Committee (SCSC)
- Implement MFLs to protect spring flow through monitoring and reporting hydrologic conditions, and through their consideration in water use permit reviews and water supply planning

HIGHLIGHT:
The water resources in the District include more than 200 documented springs, and the rivers, bays, and estuaries that are fed by them. The five largest spring groups within the District are concentrated in the Northern region along the Springs Coast. These five first-magnitude (flow rates of 100 cubic feet per second or greater) spring groups form the headwaters of the Chassahowitzka River, Crystal River/Kings Bay, Homosassa River, Rainbow River and Weeki Wachee River. All five systems are listed as a District SWIM priority water body, and by the state as Outstanding Florida Waterways and Outstanding Florida Springs. In addition, the District has established MFLs to help protect each of these systems.

The Crystal River/Kings Bay, Homosassa, Chassahowitzka and Weeki Wachee rivers flow into a region of the Gulf of Mexico known as the Springs Coast. The estuaries and nearshore coastal waters of the Springs Coast contain over 500,000 mapped acres of seagrass habitats making it one of the largest expanses of seagrass in the world. Along with seagrass, the nearshore coastal waters of the Springs Coast include many species of attached algae, sponges, corals and hard bottom habitat supporting numerous ecologically and economically important species such as bay scallop, grouper, tarpon and manatee. The District's seagrass mapping program has been the single most relied upon metric for tracking the overall health of our Springs Coast estuaries. Springs Coast seagrass mapping occurs every four years using a combination of aerial imagery and intensive field surveys.

The rivers, bays and springs of this region have experienced ecological changes caused by both natural and human impacts. Issues facing these coastal resources include sea-level rise, reduced water clarity and changes in the aquatic vegetation and nutrient enrichment. In addition, spring flow is highly dependent upon seasonal rainfall patterns. The District has established, and continues to evaluate, MFLs for its first-magnitude springs and other water bodies in the region to prevent significant harm that could occur as a result of water withdrawals.

In 2014, the District, together with local, regional and state partners, formed the SCSC. The committee's mission is to build consensus and partnerships to improve and manage each of the five first-magnitude spring systems through effective development and implementation of SWIM plans. All first-magnitude spring groups now have approved SWIM plans.

Rainbow River.

Each SWIM plan is a living document with adaptive management at its core. These plans identify management actions, projects that address the issues facing each system and specific quantifiable objectives and indicators to assess overall progress and help guide the SCSC. In the August 2017 workshop, the District's Governing Board prioritized combining District funds with state and local funds for projects that would convert septic systems to central sewer to benefit springs. The Board also identified the need to protect the District's investment by ensuring controls are in place to prevent additional pollution from new septic systems.

In addition to these management plan development and implementation activities, the FARMS Program continues to work with agricultural producers to implement BMPs to reduce groundwater use and nutrient loading in springsheds.

Quantifiable objectives and indicators are established for each first-magnitude spring system.

Chassahowitzka River Spring Group
- Water clarity
- Nitrate concentration
- Minimum flows
- Coverage of desirable submerged aquatic vegetation
- Coverage of invasive aquatic vegetation

Crystal River/Kings Bay Spring Group
- Water clarity
- Nitrate concentration
- Phosphorus concentration
- Chlorophyll concentration
- Minimum flows
- Coverage of desirable submerged aquatic vegetation
- Coverage of invasive aquatic vegetation
- No net loss of shoreline in natural condition
- Enhancement of disturbed shoreline

Homosassa River Spring Group
- Water clarity
- Nitrate concentration
- Minimum flows
- Coverage of desirable benthic habitat
- Coverage of invasive aquatic vegetation
- No net loss of shoreline in natural condition

Rainbow River Spring Group
- Water clarity
- Nitrate concentration
- Minimum flows
- Coverage of desirable submerged aquatic vegetation
- Coverage of invasive aquatic vegetation

Weeki Wachee River Spring Group
- Water clarity
- Nitrate concentration
- Minimum flows
- Coverage of desirable submerged aquatic vegetation
- Coverage of invasive aquatic vegetation

Northern Planning Region – Water Supply

PRIORITY:
Ensure long-term sustainable water supply

OBJECTIVES:

- Increase water conservation
  - Achieve and maintain 150-gallon daily compliance per capita with all public supply utilities
  - Achieve and maintain average unadjusted gross per capita water use of 148 gallons per capita per day (gpcd) by 2025
    - This represents a 5.4 percent savings of 4.35 mgd from the 2011-2015 average
  - Achieve 75 percent utilization of all wastewater flows and a 75 percent resource benefit by 2040 and assist in the implementation of potable reuse
    - As of 2021 (latest published data), the Northern region had 20.7 mgd of wastewater flow and 24.8 mgd of reuse for a utilization rate greater than 100 percent through imports of additional sources from outside the District
- Increase the use of reclaimed water for potable, recharge and environmental enhancement projects
- Continue to partner with the Withlacoochee Regional Water Supply Authority to promote regional water supply planning and development

The District promotes regional approaches to water supply planning and development. The benefits of regional systems include economies of scale, better ability to manage environmental impacts, improved system reliability, operational flexibility and emergency backup capability. Larger regional systems are also able to take advantage of conjunctive use, wherein both groundwater and alternative sources are available and can be managed to mimic natural hydrologic cycles.

In the Northern region, the District is partnering with the Withlacoochee Regional Water Supply Authority to promote regional water supply planning and development. This most recently includes cooperatively funding regional water conservation efforts and an update to the Authority's Master Water Supply Plan.

HIGHLIGHT:
The District's 2020 RWSP shows that demand for water in the Northern region through 2040 and beyond could be met with fresh groundwater if the region's considerable potential for reuse and water conservation is realized. The District will be updating the RWSP for the Northern Region in 2025.

Public supply use, which accounts for about 50 percent of the water use in the Northern region, has significant potential for water savings. In 2021, there were four utilities in the Northern region with compliance per capita figures higher than 150 gpcd. The District's goals are to ensure that all utilities fall below the maximum compliance per capita usage and to further reduce the regional average per capita in accordance with the RWSP. The District's plan to assist public supply utilities is to minimize the need for additional groundwater supplies by maximizing the use of available reclaimed water and implementing comprehensive water conservation measures and best management practices.

Reclaimed water transmission line construction project on U.S. 19 in Hernando County.

Tampa Bay Planning Region – Lower Hillsborough River MFLs Recovery and MFL Monitoring

PRIORITY:
Implement the lower Hillsborough River MFLs Recovery Strategy and monitor other MFLs

OBJECTIVES:

- **Northern Tampa Bay Water Use Caution Area**
  - Complete annual assessments and the third required five-year evaluation of results achieved from implementation of the MFLs recovery strategy adopted for the lower Hillsborough River
  - Achieve 75 percent utilization of all wastewater flows and a 75 percent resource benefit by 2040 and assist in the implementation of potable reuse
    - As of 2021 (latest published data), the Tampa Bay Region had 236 mgd of wastewater flow and 116 mgd of reuse for a utilization rate of nearly 50 percent
  - Increase the use of reclaimed water for potable, recharge and environmental enhancement
  - Achieve and maintain a reduction in 2011-2015 regional average unadjusted gross per capita (94 gpcd) water use by 5.3 percent to 89 gpcd by 2025. This represents savings of 16.25 mgd
  - Assist Tampa Bay Water in the development of 20 mgd of alternative supply sources, and 11 mgd of water conservation savings
  - Maintain regulatory programs associated with the NTBWUCA
  - Continue to monitor the environmental conditions through annual assessments of established MFLs
- **Dover/Plant City Water Use Caution Area**
  - Maintain achievement of the DPCWUCA minimum aquifer level for the Upper Floridan aquifer by continuing to implement cold protection permitting procedures, assess their status annually and promote FARMS projects that reduce cold protection groundwater uses
  - Continue to monitor the aquifer system through annual assessment of the established DPCWUCA minimum aquifer level
- **Southern Water Use Caution Area**
  - Achieve 40 mgd offset in groundwater withdrawals in the SWUCA by 2025
  - Achieve the SWUCA saltwater intrusion minimum aquifer level (SWIMAL) for the Upper Floridan aquifer to slow the rate of saltwater intrusion in the Most Impacted Area (MIA)
  - Ensure that there are sufficient water supplies for all existing and projected reasonable-beneficial uses
  - Continue to monitor recovery of environmental conditions in the SWUCA through annual assessments of MFLs and five-year recovery status reviews

HIGHLIGHT:
The District sets MFLs on priority water bodies. An MFL is the limit or water level at which further withdrawals would be significantly harmful to the water resources or ecology of the area. If the existing flow or level of a water body is below or is projected to fall below an applicable minimum flow or level within 20 years, a recovery or prevention strategy must be implemented.

Additionally, the District can designate a water use caution area (WUCA) when the Governing Board determines that regional action is necessary to address cumulative water withdrawals which are causing or may cause adverse impacts to the water and related natural resources or the public interest. WUCA rules enhance the protection and recovery of the water resources. Three WUCAs, the NTBWUCA, DPCWUCA, and SWUCA, have been identified for portions of the Tampa Bay Planning Region.

The **NTBWUCA**, which encompasses all of Pinellas and Pasco counties, and those portions of Hillsborough County north of Highway 60, was established to address adverse impacts caused by ground and surface water withdrawals. The first phase of the District's recovery strategy for restoring water resources within the NTBWUCA called for reduced pumping from Tampa Bay Water's regional wellfields and providing financial incentives for construction of alternative water supply projects. To date, these efforts have produced more than 140 mgd of new alternative water sources and allowed for groundwater withdrawals to be reduced by more than 60 mgd. In addition, Tampa Bay Water has formed a regional water conservation program called Tampa Bay Water Wise. This program offers a variety of incentives for water conservation Best Management Practices (BMPs) with the long-term goal of conserving 11 mgd.

In 2010, the District determined that more information was needed to fully evaluate the effects of the reductions on MFLs recovery and initiated a second phase of the NTBWUCA recovery strategy through adoption of a comprehensive plan that would sunset in 2020. The plan included continued monitoring and evaluation of environmental mitigation for withdrawal impacts and continued water conservation activities by Tampa Bay Water's member governments.

Comprehensive recovery assessments completed by Tampa Bay Water and the District in 2020, as well as MFL status assessments completed by the District in 2020 and 2021, identified substantial recovery of hydrologic and ecologic conditions associated with strategy implementation and rainfall conditions. Collectively these evaluations indicated that as of 2021, 120 of the 121 established MFLs in the NTBWUCA were being achieved, with the exception being MFLs established for the lower Hillsborough River. Based on these findings, the District's Governing Board repealed the comprehensive recovery plan for the NTBWUCA in 2021 and re-adopted the Hillsborough River Recovery Strategy for continued implementation. Corrective operational protocols for achieving minimum flows in the river have been identified and are being implemented to ensure future compliance. The recovery strategy for the lower Hillsborough River addresses the augmentation of the river with water from a variety of sources, including Sulphur Springs, Blue Sink, the Tampa Bypass Canal, and Morris Bridge Sink. An update on the status of the Hillsborough River Recovery Strategy is provided to the Governing Board annually. In addition, two comprehensive five-year recovery assessments have been completed and a third and final five-year assessment will be completed in 2024.

The DPCWUCA extends over an approximate 260-square-mile area in northeast Hillsborough County and eastern Polk County and overlaps with portions of the NTBWUCA and the SWUCA. The DPCWUCA was established in 2011 to address impacts from groundwater pumping for cold protection. To protect crops from freeze events, common management practice for many farmers with agricultural commodities, including strawberries, blueberries, citrus and nurseries, involves pumping groundwater for cold protection when air temperatures drop to near freezing. Substantial groundwater use during these times lowers groundwater levels and can impact residential wells and contribute to sinkhole development. During a historic 11-day freeze event in January 2010, numerous residential wells in the Dover/Plant City area were impacted, and sinkholes were reported. As a result, the District developed and adopted a minimum aquifer level and recovery strategy for the DPCWUCA in 2011 to significantly reduce and monitor groundwater pumping during future freeze events that may cause impacts to existing legal users.

The objectives of the DPCWUCA Recovery Strategy were, by 2020, to have reduced groundwater pumped for cold protection by 20 percent relative to that pumped during the 2010 weather event and to achieve the minimum aquifer level. Recovery mechanisms identified in the strategy include non-regulatory and regulatory approaches. Non-regulatory mechanisms associated with the strategy include cost-share assistance through the FARMS Program to incentivize the implementation of BMPs to offset groundwater withdrawals for cold protection. The strategy's regulatory measures addressed groundwater withdrawal impacts, alternative water supplies, frost/freeze protection methods and resource recovery. These rules along with the non-regulatory mechanisms were intended to promote continued recovery of the minimum aquifer level.

An assessment completed in 2020 indicated the 2010 weather event that precipitated adoption of the DPCWUCA minimum aquifer level and recovery strategy may be expected about once every 570 years. In addition, use of updated modeling and evaluation of declining historic and projected agricultural land use and water use indicated the minimum aquifer level was being achieved and the recovery strategy was not needed. Based on these findings, the District repealed the DPCWUCA recovery strategy in 2022, continues to implement the DPCWUCA rules and associated projects, and will annually assess the status of the currently met minimum aquifer level.

The SWUCA extends over 5,100 miles in eight District counties and includes the southern portion of Hillsborough County within the Tampa Bay Planning Region. Depressed aquifer levels in the SWUCA have resulted in saltwater intrusion along the coast, contributed to reduced flows in the upper Peace River, and lowered lake levels in areas of Polk and Highlands counties. Groundwater withdrawals have been identified as the primary cause of the depressed aquifer levels throughout the groundwater basin, with drawdowns in some areas exceeding 50 feet.

The District adopted the SWUCA Recovery Strategy in 2006 to recover MFLs that were concurrently established with the strategy. The major goals for the recovery strategy are reducing the rate of saltwater intrusion in the MIA, restoring minimum flows in the upper Peace River and restoring minimum levels within the lakes in the Ridge area, which extends roughly 90 miles along the center of the state in Polk and Highlands counties. A status assessment completed in 2023 indicated that, for the first time, the SWUCA SWIMAL was being met. Through fiscal year 2023, the District has adopted MFLs for 46 priority water bodies in the SWUCA and approximately 80 percent of these MFLs are being met.

Within the Tampa Bay Planning Region, the District is helping to fund the Hillsborough County South Hillsborough Aquifer Recharge Project (SHARP). This project's goal is to expand the use of reclaimed water to recharge non-potable portions of the Upper Floridan aquifer to improve aquifer water levels in the MIA of the SWUCA and to slow the rate of saltwater intrusion.

Primary elements of the SWUCA Recovery Strategy for this region include:

- Updating the RWSP to identify how to address increasing water needs while minimizing impacts to the water resources and related natural systems
  - The District approved a plan update in 2020 and will update it again in 2025
- Providing financial incentives for water conservation, creation of alternative supplies and regional interconnections
- Monitoring and reporting

Tampa Bay Planning Region – Improve Water Bodies

PRIORITY:
Improve Tampa Bay and lakes Seminole, Tarpon and Thonotosassa

OBJECTIVES:
- Develop and implement natural system projects that restore critical shoreline, coastal uplands and intertidal systems and freshwater wetlands
- Develop and implement water quality projects to reduce nutrient loading
- Update the Tampa Bay, Lake Tarpon and Lake Thonotosassa SWIM plans

HIGHLIGHT:

Tampa Bay is designated as an Estuary of National Significance and a District SWIM priority water body. The 373-square-mile bay is Florida's largest open-water estuary. Its 2,200-square-mile watershed contains more than two million residents.

Three main challenges exist in the Tampa Bay watershed. Coastal uplands and wetlands have been altered and lost. Nonnative animal and plant species have spread, and water quality has been degraded from pollutants and nutrient loading.

The District is working with the Tampa Bay Estuary Program (TBEP), local governments and stakeholders to update the Tampa Bay SWIM Plan in line with the recent comprehensive conservation and management plan update by the TBEP. These plans will be used to identify water quality and natural systems improvement projects to protect and restore Tampa Bay.

The District's seagrass mapping program has been the most relied upon metric for tracking the overall health of our estuaries. Seagrass habitat is mapped every two years using a combination of aerial imagery and intensive field surveys. A success indicator is the baywide seagrass acreage target of 40,000 acres set by the TBEP. This target is based on seagrass acreage estimates from 1950s aerial photography and identified in the Habitat Master Plan (2020 Update). From 1982 to 2016, seagrass habitat in Tampa Bay steadily increased. In 2018, a slight decline began followed by a sharper decline in 2020. The baywide seagrass acreage decreased to levels not seen since 2010. Despite these losses, seagrass acreage remains well above 1982 totals. In addition, the District SWIM Program and local cooperators have restored over 7,300 acres of coastal habitats as of December 2022. The District and its partners have provided water quality projects treating more than 132 square miles of contributing area to Tampa Bay.

Lake Seminole is a 684-acre freshwater lake in west-central Pinellas County that was created in the 1940s by the impoundment of an arm of Long Bayou, a brackish water segment of Boca Ciega Bay. The lake's watershed encompasses approximately 3,500 acres, of which almost 90 percent is developed. Water quality concerns in Lake Seminole began in the 1960s, as urbanization of the watershed increased and worsened in the 1980s and 90s.

Lake Seminole was included in the DEP's draft verified list of impaired waters in 2006 for nutrients and trophic state index (i.e., for nutrients). Due to its impaired status, Pinellas County developed a Reasonable Assurance (RA) Plan in 2007, which was submitted to DEP. This RA Plan established the trophic state index and chlorophyll-a as the success indicators for Lake Seminole. Control of excessive nutrients entering the lake and the fate of the nutrients that do reach the lake (e.g., internal nutrient recycling) was expected to help achieve the targets. In 2004, Pinellas County adopted the Lake Seminole Watershed Management Plan to identify and implement projects to reduce nutrient concentrations in the lake and to meet targeted water quality goals.

Dredging on Lake Seminole.

These projects included retrofitting stormwater outflows from five of the highest nutrient loading sub-basins, which were completed, and removing nutrient rich sediments from the lake. In 2017, the Pinellas County Board of County Commissioners approved funding, matched with District funding, to dredge nutrient-rich sediment from the lake. Dredging of this sediment is completed and the project is currently in the close-out phase.

Water and muck slurry entering the dredge material manangement area.

The heavier sands fall out almost immediately. The lighter muck molecules will fall out over time and drop into the bottom of the dredge material management area.

The clean water is then skimmed off the top and returned to the lake.

Lake Tarpon extends over 2,532 acres, making it the largest freshwater lake in the Tampa Bay area. The lake is designated as an Outstanding Florida Water, a fish management area and a District SWIM priority water body. Overall, Lake Tarpon can be described as a water body with excellent sport fishing and healthy submerged aquatic vegetation (SAV) habitat.

Despite its healthy status, the lake is currently listed by DEP as being impaired for chlorophyll-a (a measure of phytoplankton abundance) based on exceedance of the state's Numeric Nutrient Criteria (NNC). However, the lake is in compliance with water quality standards for both total nitrogen (TN) and total phosphorus (TP), creating a disconnect between chlorophyll-a and nutrient concentrations. In recent years, Pinellas County and the District have co-funded technical projects to examine this disconnect.

The Lake Tarpon Water Quality Management Plan was completed in 2017. One of the many findings of this report was that chlorophyll-a concentrations were a function of residence time and lake levels and not nutrient loading. In 2018, Pinellas County completed a Lake Tarpon Paleolimnological Study to provide historical context for the lake's status. That study concluded that relatively high concentrations of chlorophyll-a existed in the lake prior to human impacts and are a result of natural phenomena, not increased nutrient pollution. Based on these studies and guidance from DEP, Pinellas County is discussing submitting a petition to DEP to consider a Type III Site Specific Alternative Criteria (SSAC).

The findings of these studies will be incorporated into the next SWIM Plan update, which is under development. Two technical stakeholders' workshops were held to coordinate the District's update to the SWIM plan with the activities of agencies and local governments that manage water resources in the Lake Tarpon watershed. Revisions to success indicators identified for Lake Tarpon are being considered based on discussion with DEP and the outcome of the county's SSAC petition.

Lake Thonotosassa, the largest natural lake in Hillsborough County with a surface area of greater than 800 acres, is popular for recreational use as it is one of the few natural lakes in the area with public access. The lake discharges into the Hillsborough River, which is used for the City of Tampa's municipal water supply and the lake is designated as a District SWIM priority water body.

Challenges exist in the Lake Thonotosassa watershed. Nutrient loadings from the watershed have caused extreme nutrient enrichment resulting in algal blooms within the lake. Habitat quality and species diversity have declined. Nonnative plant species are more abundant, while availability of desirable sport fish has decreased.

The District completed a nutrient source tracking project with Hillsborough County to identify nutrient sources in the watershed. Areas with high nutrient loadings were prioritized for projects, such as stormwater improvement projects, maintenance/control of exotic plants, enhancement of wetland and aquatic habitats and public education and awareness of stormwater pollution prevention. As part of this implementation, the District's FARMS and SWIM programs are coordinating with the Florida Department of Agriculture and Consumer Services to work with agriculture operations in the watershed to implement BMPs. During 2018 and 2019, the District participated in DEP's development of a nutrient TMDL for Lake Thonotosassa, which was adopted by DEP in July 2019.

Lake Tarpon.

Lake Thonotosassa.

Heartland Planning Region – SWUCA Recovery

PRIORITY:
Implement the SWUCA Recovery Strategy

OBJECTIVES:
- Achieve 40 mgd of offsets in groundwater withdrawals in the SWUCA by 2025
- Achieve the SWUCA SWIMAL for the Upper Floridan aquifer to slow the rate of saltwater intrusion in the MIA
- Assist in recovering the minimum flows for the upper Peace River through implementation of the Lake Hancock Lake Level Modification project
- Recover minimum levels for Polk County and Highlands County lakes by 2025
- Ensure a sustainable water supply
  - Achieve and maintain daily 150-gallon compliance per capita with all public supply utilities
  - Achieve and maintain a reduction in 2011-2015 regional average unadjusted gross per capita (111 gpcd) water use by 4.3 percent to 106 gpcd by 2025. This represents a water savings of 3.8 mgd
  - Assist Polk Regional Water Cooperative (PRWC) in the development of 30 mgd of alternative water supply sources and implementation of water conservation programs identified in its demand management plan
  - Increase percentage of total water use supplied by alternative sources
  - Maximize the water conservation potential for the region
  - Maximize regional interconnects among public supply utilities
  - Complete the next updates for the District and Central Florida Water Initiative (CFWI) RWSP by 2025
  - Achieve 75 percent utilization of all wastewater flows and a 75 percent resource benefit by 2040 and assist in the implementation of potable reuse
    - As of 2021 (latest published data), the Heartland region had 39.5 mgd of wastewater flow and 23.9 mgd of reuse for a utilization rate of 60 percent

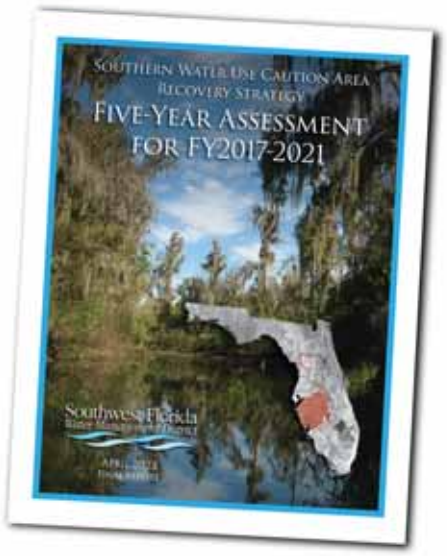
HIGHLIGHT:
Most of the District's Heartland Planning Region falls within the eight-county SWUCA, which encompasses approximately 5,100 square miles. In the SWUCA, depressed aquifer levels have caused saltwater intrusion along the coast, contributed to reduced flows in the upper Peace River and lowered lake levels in portions of Polk and Highlands counties.

Groundwater withdrawals were identified as the primary cause of the depressed aquifer levels throughout the groundwater basin, with drawdowns in some areas exceeding 50 feet.

Through fiscal year 2023, the District has adopted MFLs for 46 priority water bodies in the SWUCA and approximately 80 percent of these MFLs are being met. An MFL is the limit or water level at which further withdrawals would be significantly harmful to the water resources or ecology of the area. The District adopted the SWUCA Recovery Strategy to achieve MFLs that are not being met by reducing the rate of saltwater intrusion in the MIA, restoring flows to the upper Peace River and increasing water levels at lakes in the Ridge area, which extends roughly 90 miles along the center of the state in Polk and Highlands counties.

Primary SWUCA Recovery Strategy elements for this region include:
- Updating the RWSP to identify how to address growing regional water needs while minimizing impacts to water resources and related natural systems
  - The District approved a plan update in 2020 and will update it again in 2025
- Providing financial and regulatory incentives for conservation, construction of alternative supplies and regional interconnections
- Monitoring and reporting

As described in the most recent SWUCA Recovery Strategy five-year assessment, the District has been successful in multiple efforts associated with its SWUCA goals. Partnering with the Peace River Manasota Regional Water Supply Authority (PRMRWSA), the District has assisted in developing a sustainable water supply to meet the needs of a four-county region within the SWUCA. The District has also assisted with the creation of the PRWC and is helping to fund its evaluation and development of AWS projects, including water conservation. The FARMS Program and other water conservation efforts have reduced Upper Floridan groundwater withdrawals in the SWUCA, which has helped to increase groundwater levels in the MIA.




Peace River (Hardee County).

The SWIMAL elevation established for the Upper Floridan aquifer in the MIA must be met or exceeded for five consecutive years for recovery. This elevation was met or exceeded from 2018 through 2022, leading to the SWIMAL being recently achieved for the first time. This accomplishment represents an important step towards slowing the rate of saltwater intrusion in the region.

The District's Lake Hancock Lake Level Modification Project became fully operational in 2014 and a reservation was established in 2020 for water stored in Lake Hancock and released to lower Saddle Creek to help recover minimum flows in the upper Peace River. Implementation of the project and the reservation supported achievement of MFLs established for all three upper river sites in 2020, and again in 2021 and 2022. Recovery in the upper Peace River has also led to improvements in low-flow conditions in the lower portion of the river. Ridge lake water levels have increased several feet since the 1990s, but some lake MFLs in the SWUCA continue to not be met. Reevaluation of these MFLs by 2025 using new, updated lake-level methods and peer-reviewed wetland criteria will support future assessment of recovery needs.

While the southern two-thirds of Polk County is included in the SWUCA, all of Polk County is part of the designated CFWI planning area. The CFWI planning area includes all of Polk, Orange, Osceola, and Seminole counties and the southern portion of Lake County. The boundaries of the St. Johns River, South Florida and Southwest Florida water management districts meet in the planning area.

The District is collaborating with the other water management districts, the state, and local governments and utilities to identify a sustainable water supply for the CFWI planning region. Key successes in meeting the water resource challenges of the area have included refinement of a shared groundwater model to determine regional resource availability and the publication of the second CFWI RWSP in 2020. Ongoing efforts include coordination and planning for water resource data collection needs, establishment of consistent rules among the three water management districts with jurisdiction in the CFWI planning area, and development of a 2025 RWSP for the area.

As part of the CFWI, the need for development of 30 mgd of AWS sources by 2040 in the Polk County area has been identified. The District assisted in the establishment of the PRWC in 2016 as a collaborative entity to address water supply needs among its member governments and is currently coordinating with the PRWC on the development of AWS projects and maximizing water conservation efforts to meet projected 2040 water supply demands. These efforts include implementation of a long-term demand management plan, ongoing District investigation of the Lower Floridan aquifer as a potential alternative water supply source and provision of $40 million in initial funding to the PRWC to assist in implementation of identified projects. In 2017, co-funding agreements were executed that assigned $11.5 million of the initial funding for Phase I of three projects. At its April 2018 meeting, the Governing Board approved an additional $5 million per year (fiscal years 2019–23) for Phase II implementation of the selected projects. The PRWC has completed preliminary design and initiated Phase II implementation for both the Southeast and West Polk Lower Floridan Aquifer Wellfield projects. Water conservation efforts and demand management plans will help extend the resources developed through these expensive AWS projects.

Lake Hancock.

Heartland Planning Region – Improve Water Bodies

PRIORITY:
Improve Winter Haven Chain of Lakes and Ridge Lakes

OBJECTIVE:
- Implement plans and projects for water quality and natural systems improvement

HIGHLIGHT:
The **Winter Haven Chain of Lakes** is a system of 19 interconnected lakes in Polk County within a combined 32-square mile watershed. Designated as a District SWIM priority water body, the chain includes two major groups, with five lakes in the northern chain and 14 in the southern chain. A series of constructed canals connect the lakes and enhance recreational access throughout the chain.

Two main challenges exist in the Winter Haven Chain of Lakes watershed: nutrient loading from urban runoff and the loss of natural systems. The District is working with local governments through its cooperative funding program to reduce nutrient loadings by improving stormwater management and to restore natural systems which can also improve water quality and provide additional environmental benefits.

Success will be measured by water quality improvements, including those associated with reductions in non-point source loading of nutrients and areal increases in restored natural systems. Additionally, lakes with sufficient water quality data will be evaluated using Florida's numeric nutrient criteria.

As of 2022, water quality improvement projects have been implemented for eight lakes in the chain (Conine, Howard, May, Lulu, Hartridge, Jessie, Cannon, and Mariana). In addition, more than 30 low impact development (LID) best management projects have been installed within the downtown area of the City of Winter Haven.

Approximately 130 lakes lie within the **Ridge Lakes** area, which extends roughly 90 miles along the center of the state in Polk and Highlands counties. The high number of deep sinkhole basin lakes makes this region uniquely different from the other lake regions in the District and throughout the state.

Declining water quality, due to nutrient loading from the watershed, remains a challenge for lakes in the Ridge Lakes area. Common water quality impacts include stormwater runoff, wastewater effluent, residential fertilizer applications, agricultural runoff, shoreline habitat degradation and hydrologic alterations. Through the District's Ridge Lakes Restoration Initiative, emphasis has been placed on protective lake management strategies. Stormwater treatment has been a high priority, as well as enhancement and restoration of natural systems and additional flood protection.

The District-led Ridge Lakes Plan update was completed in 2019. The project's purpose was to propose lake-specific action plans and conceptual designs for prioritized lakes. In addition, a general action plan was also developed for the non-prioritized lakes to provide a path forward to further efforts in the Ridge Lakes. Data needs are identified for lakes without sufficient water quality information. Of the 136 lakes studied, 21 are impaired or potentially impaired for one or more nutrients, 23 are not impaired and more than 94 lakes do not have enough water quality data to determine impairments. Improved monitoring plans were recommended for the 94 lakes with insufficient data. Conceptual designs for water quality improvement projects were prepared for 12 prioritized lakes. The plan will be used to work with local governments to develop projects and programs aimed at water quality improvements.

Blue Heron on lake.

Lake Cannon.

Southern Planning Region – SWUCA Recovery

PRIORITY:
Implement the SWUCA Recovery Strategy

OBJECTIVES:
- Achieve 40 mgd of offset in groundwater withdrawals in the SWUCA by 2025
- Achieve the SWUCA SWIMAL for the Upper Floridan aquifer to slow the rate of saltwater intrusion in the MIA
- Ensure a sustainable water supply
  - Achieve and maintain 150-gallon daily compliance per capita with all public supply utilities
  - Assist the Peace River Manasota Regional Water Supply Authority in the development of 21 mgd of alternative supply sources
- Achieve and maintain a reduction in 2011-2015 regional average unadjusted gross per capita (84 gpcd) water use by 5.2 percent to 79.7 gpcd by 2025, a water savings of 4.7 mgd
  - Maximize water conservation
  - Maximize public supply interconnects
  - Achieve 75 percent utilization of all wastewater flows and a 75 percent resource benefit by 2040.
    - As of 2021 (latest published data), the Southern region had 76 mgd of wastewater flow and 47 mgd of reuse for a utilization rate of 62 percent)
  - Develop ASR options for potable and reclaimed water supply
  - Increase the percentage of total water use supplied by alternative sources
  - Continue assessing the viability of using excess runoff in Flatford Swamp for improving groundwater levels in the MIA

HIGHLIGHT:
The entire Southern region of the District falls within the eight-county SWUCA. Within the approximate 5,100-square-mile SWUCA, depressed aquifer levels have caused saltwater intrusion along the coast, contributed to reduced flows in the upper Peace River and lowered lake levels in areas of Polk and Highlands counties. Groundwater withdrawals are the primary cause of the depressed aquifer levels throughout the region, with drawdowns in some areas exceeding 50 feet.

Through fiscal year 2023, the District has adopted MFLs for 46 water bodies in the SWUCA and approximately 80 percent of these MFLs are being met. An MFL is the limit or water level at which further withdrawals would be significantly harmful to the water resources or ecology of the area. The District adopted the SWUCA Recovery Strategy in 2006 to address MFLs not being met by reducing the rate of saltwater intrusion in the MIA, restoring flows to the upper Peace River and increasing water levels at lakes in the Ridge area, which extends roughly 90 miles along the center of the state in Polk and Highlands counties.

Primary SWUCA Recovery Strategy elements for this region include:
- Updating the RWSP to identify how to address growing regional water needs while minimizing impacts to the water resources and related natural systems
  - The District approved a plan update in 2020 and will update it again in 2025
- Providing financial incentives for water conservation, development of alternative supplies and regional interconnections
- Monitoring and reporting

The District has been successful in multiple efforts associated with its SWUCA goals, as noted in a recently completed five-year assessment of the ongoing SWUCA Recovery Strategy. Partnering with the PRMRWSA, the District has assisted in developing a sustainable water supply to meet the needs of a four-county region within the SWUCA. The District has also assisted with the creation of the PRWC and is helping to fund its evaluation and development of AWS, including water conservation. The FARMS Program and other water conservation efforts have reduced Upper Floridan groundwater withdrawals in the SWUCA, which in turn has helped to increase groundwater levels in the MIA.

The SWIMAL elevation established for the Upper Floridan aquifer in the MIA must be met or exceeded for five consecutive years. This elevation was met or exceeded from 2018 through 2022, resulting in the achievement of the SWIMAL for the first time. This compliance with the SWIMAL represents an important milestone for meeting the recovery strategy goal of slowing saltwater intrusion in the region.

Based on groundwater modeling, the District's Flatford Swamp Aquifer Recharge project continues to show promise in its potential to help to support SWIMAL recovery, as well to slow saltwater intrusion by recharging the Floridan aquifer system near the MIA. As of July 2023, the test recharge well, monitoring wells, and surface water facilities have all been completed and operational testing of the system is underway.

Lake Hancock.

The District's Lake Hancock Lake Level Modification project became fully operational in 2014 and a reservation was established in 2020 for water stored in Lake Hancock and released to lower Saddle Creek to help meet the minimum flows in the upper Peace River. Recovery in the upper Peace River, where MFLs established for all three sites in the river segment were achieved in 2020, 2021, and 2022, has led to improvements in low-flow conditions in the lower portion of the river. Ridge lake water levels have increased several feet since the 1990s, but some lake MFLs in the SWUCA continue to not be met. Reevaluation of these MFLs by 2025 using updated lake-level methods and new, peer reviewed wetland criteria will support future assessment of recovery needs.

Southern Planning Region – Improve Water Bodies

PRIORITY:
Improve Charlotte Harbor, Sarasota Bay, Shell/ Prairie/Joshua Creeks

OBJECTIVES:
- Develop plans and implement projects for water quality improvement
- Develop plans and implement projects to restore natural systems

HIGHLIGHT:
Charlotte Harbor is Florida's second largest open water estuary at 270 square miles. Generally considered one of the most productive estuarine ecosystems in southwest Florida, the harbor is designated an Estuary of National Significance and a SWIM priority water body.

Challenges for the 4,400-square-mile Charlotte Harbor watershed include alteration and loss of wetlands, an increase in nonnative plant species, water quality degradation from point and non-point source pollutants and seagrass loss.

The success indicator for this system (as reported in the November 2020 update to the Charlotte Harbor SWIM Plan) is to maintain seagrass cover for Charlotte Harbor proper and Lemon Bay, including Dona and Roberts Bay, at 2016 levels (23,503 acres). As of 2022, total mapped seagrass acreage was 17,392 acres. This represents a continued sharp decline since 2018 and the lowest acreage reported since the District began mapping seagrass habitat in 1988. The District's seagrass mapping program has been the most relied upon metric for tracking the overall health of our estuaries, including Charlotte Harbor and Lemon Bay. Seagrass habitat is mapped every two years using a combination of aerial imagery and intensive field surveys.

The District participates with other government agencies through the Coastal and Heartland National Estuary Partnership to update and implement the comprehensive conservation and management plan, and implement water quality and hydrologic alteration improvement projects to restore coastal upland, wetland and intertidal habitats.

As of December 2022, the District and its cooperators have completed 28 natural systems projects, which have restored approximately 5,200 acres of coastal habitats for Charlotte Harbor. The District and its partners have completed water quality projects treating approximately 153 square miles of contributing area for the watershed. Construction of the District's Lake Hancock Outfall Treatment System has been completed. This initial phase of operation was focused on vegetation establishment and monitoring. Water quality and operational data are being collected to optimize system operation.

Sarasota Bay is designated as an Estuary of National Significance and a SWIM priority water body. Like Charlotte Harbor, challenges to this 150-square-mile watershed include changes to coastal uplands, loss of wetlands, increases in nonnative plant species and water quality degradation from point and non-point source pollutants and more recently significant losses in seagrass habitat.

From 2008 to 2018, seagrass acreage for Sarasota Bay remained relatively consistent. However, in 2022, Sarasota Bay like its neighbors to the north and south, continued experiencing significant declines, reducing seagrass acreage to a 15-year low. Despite these losses, seagrass acreage remains above 1988 totals. Field verification has proven some areas are starting to recolonize but are too sparse to be included during aerial imagery mapping. The next mapping cycle will be in 2024.

Lake Hancock Outfall Treatment Facility.

The District is working with other government agencies on Sarasota Bay initiatives. These include assisting with the update to the Sarasota Bay Estuary Program's comprehensive conservation and management plan, implementation of water quality improvement projects and restoration of coastal upland, wetland and intertidal habitats. As of December 2022, the District and its partners have completed 14 projects to provide water quality treatment for 61 square miles of watershed contributing to Sarasota Bay. Additionally, 39 projects restoring more than 925 acres of coastal habitats have been completed in Sarasota Bay.

Shell, Prairie and Joshua Creek (SPJC) watersheds are in the southern region of the Peace River Basin. Combined, the SPJC watersheds comprise a surface area of 487 square miles, or approximately 20 percent of the Peace River Basin.

The City of Punta Gorda obtains its potable water supply from the Shell Creek in-stream reservoir. Prairie and Shell creeks (and associated tributaries) are designated as Class I waters, which means they are designated for use as potable water supplies.

Groundwater withdrawals for agricultural irrigation created mineralized water quality issues in the SPJC watersheds. The FARMS Program was created in 2003 with the goal of improving the watersheds' water quality. Through BMP implementation, the FARMS Program has partnered with producers to reduce groundwater use and capture runoff in tailwater recovery ponds and reuse the water for irrigation. This reduces the amount of mineralized groundwater used within the watershed and results in downstream water quality benefits.

A key success indicator is the reduction of total dissolved solids (TDS) in these surface waters. Through the implementation of FARMS Program projects and other initiatives, water quality concentrations for chloride, specific conductance and TDS measured at key surface water reference sites in the SPJC watersheds have significantly improved. Additionally, these FARMS Program projects have reduced approximately 15.3 mgd of groundwater use, which contributes to SWUCA recovery.

Shell Creek (Charlotte County).

Prairie Creek (DeSoto County).

FARMS Project: Bethel Farms Phase 3 Project (H777) (DeSoto County).

Core Business Processes

Managing and protecting the water resources of a 16-county area requires a highly skilled, motivated work force with the right tools, support and good information to make informed decisions and provide high-quality service to the residents of the District. All the various functions of this workforce have been evaluated and categorized into eight core business processes. To successfully achieve our Strategic Initiatives and Regional Priorities, the District must excel in each of these.

WATER RESOURCES PLANNING AND MONITORING

Water Resources Planning and Monitoring encompasses surface water and groundwater resource evaluations and other comprehensive planning efforts in partnership with local, state, regional, federal and other stakeholders. These responsibilities include identifying, collecting, analyzing and disseminating relevant and accurate data and mapping products and providing technical assistance.

Examples include the SWUCA Recovery Strategy Five-Year Assessment, MFLs studies, Regional Water Supply Planning, Strategic Plan update, WMPs, Consolidated Annual Report and reviews of proposed comprehensive plan amendments and large-scale development.

Prescribed burn conducted on District land.

INNOVATIVE PROJECTS

The District initiates and supports creative, collaborative projects to produce measurable benefits to the environment, water resources and the regional community. The projects address the core mission goals for water supply, flood protection, water quality and natural systems.

FINANCIAL SUSTAINABILITY

The District's primary funding source is ad valorem taxes, which vary from year to year. In addition to paying for its operating costs, the District provides financial incentives through partnerships with public and private entities on projects that protect and restore the water resources of the region, such as promoting water conservation, developing alternative water supplies, enhancing natural systems and water quality, and promoting flood management activities.

The District operates on a pay-as-you-go basis that allows it to make more funding available for projects. The District targets at least 50 percent of its budget each year for water resources projects.

REGULATION

Regulation involves multiple permit activities that promote a fair allocation of the water resources, protect wetlands, enforce well construction standards and ensure that new activities do not increase the risk of flooding or degrade water quality. The permitting process also ensures operational performance monitoring of permitted systems to protect the region's citizens and water resources.

The District is committed to protecting its water resources and related natural systems while also providing quality service to the regulated community. The District's Regulation Division is structured to eliminate duplication, increase efficiency and consistency, and reduce costs. Centralizing the permitting review process in the District's Tampa office ensures that permit applicants throughout the District are treated consistently. Improved online permitting services make it easier and more convenient to submit a permit application and access permit data.

The District also continues to work with the other water management districts and DEP to achieve statewide permitting consistency wherever possible while allowing for regional water resource differences.

LAND MANAGEMENT

Land Management is responsible for maintaining District lands. In its 10,000 square-mile region, the District owns nearly 460,000 acres of land that provide various water resource benefits. These lands are managed utilizing prescribed fire, forest management, invasive exotic species control, and restoration and enhancement of natural systems while providing recreational opportunities. Approximately 99% of District lands owned in fee are open to the public. Management of these conservation lands restore and sustain natural systems, store flood waters, recharge the aquifer and improve water quality. District conservation lands are managed following an adaptive management strategy based on science to achieve land management goals. Land Management staff focus restoration efforts on imperiled natural communities where appropriate.

District lands are evaluated periodically to ensure that benefits are being achieved. Surplus is considered when lands are not necessary for statutory requirements, benefit fewer than two of the District's areas of responsibilities or present a management inefficiency for the District.

In addition, effective July 1, 2022, section 373.036(2)(e), F.S., requires the District to develop a list of critical wetlands to be acquired using funds from the Land Acquisition Trust Fund (Critical Wetland List). The statute requires the Critical Wetland List to be included in the District's Strategic Plan. In developing the Critical Wetland List, the District must consider the ecological value of the wetland, the effect of the wetland on water quality and flood mitigation, the ecosystem restoration value of the wetland, and the inherent susceptibility of the wetland to development due to its geographic location or natural aesthetics. Before adopting or amending

the Critical Wetland List, the District must notify the current property owners and allow them to request their property be removed.

The District does not plan to acquire conservation lands using funds from the Land Acquisition Trust Fund in Fiscal Year 2024. Therefore, the District has not developed a list of critical wetlands as described in section 373.036(2)(e), F.S. However, the District's Florida Forever Workplan identifies conservation lands and lands necessary for water resource development projects or waterbody restoration projects that meet eligibility criteria for acquisition. If the District determines that funds from the Land Acquisition Trust Fund are necessary to acquire lands, the Strategic Plan will be updated to include the list described in section 373.036(2)(e), F.S.

Tampa Bypass Canal Structure S-160.

STRUCTURE OPERATIONS

Structure Operations maintains and operates 84 water control structures. Most of these structures are conservation structures that are operated to maintain water levels and provide limited flood relief. The larger flood control structures, like those associated with the Tampa Bypass Canal, are capable of quickly moving large quantities of water and are operated to maximize flood protection. Structure S-160 on the Tampa Bypass Canal is the largest state-owned flood control structure.

KNOWLEDGE MANAGEMENT

As an information-based organization, high-quality data are critical to making informed decisions that protect and enhance the water resources. Knowledge Management is the practice of systematically and actively collecting, managing, sharing and leveraging an organization's data, information and processes.

As the region's knowledge leader for water resources information, the District collects a variety of regulatory, scientific and socio-economic and business data to support its Strategic Initiatives. While the focus of Knowledge Management activities is on meeting and supporting these initiatives, it is recognized that many public and private stakeholders also rely on this information to meet their business needs. Since FY2016, an emphasis has been placed on building awareness and expanding a culture of Knowledge Management throughout all business units within the agency, as well as improving the documentation, organization, review and storage of key business practices and related supporting documentation (governing documents). During FY2024, the District will continue efforts to organize governing documents to facilitate knowledge sharing, ensure the alignment of division/bureau practices with the Governing Board's policies and executive director procedures and allow for timely retrieval and review of existing governing documents. The focus also will cover streamlined processes for maintenance of updated documents.

Information technology and water resource data collection activities at the District are managed by a governance procedure, with oversight by a governance committee that includes members of the District's Executive Team. The information technology and data governance process monitors, informs, and controls the efficient and effective use of information technology and data collection to ensure these initiatives and associated resource expenditures are in alignment with the strategic direction and priorities of the District. The focus for the future will be on expanding governance processes across all business practices at the District to further supplement the District's Knowledge Management initiatives.

The District promotes consistency of data collection activities by coordinating with local, regional and state entities through participation on statewide, regional councils and interagency workgroups. The District is also working with the other water management districts and state agencies to implement common replacement standards for equipment; to develop common standards for sharing financial, geospatial, scientific and permit information; and to establish frameworks for joint development of software applications.

ENGAGEMENT

Engagement is a key to retaining a highly skilled and motivated work force, the cornerstone of any successful organization. Keeping staff informed and involved promotes good morale and increases productivity. Additionally, engagement extends beyond internal staff.

To manage water resources effectively over a large region, engaging external publics, including citizens, media, elected officials, advisory committees and other stakeholders is also critical. Outreach and education engage these various groups to foster behaviors, secure funding and assist in developing laws that conserve, protect and sustain Florida's water and related natural resources. Also, through its planning and outreach processes the District collaborates with stakeholders and advisory committees to help meet those goals. Input from stakeholders and advisory committees is used by the Governing Board to make water resource decisions.

Engagement helps to communicate those shared interests, forging relationships that support collaboration to benefit the region's water and related resources, economic stability and quality of life.

Southwest Florida
Water Management District

VISAY 01-09-2024

The Southwest Florida Water Management District (District) does not discriminate on the basis of disability. This nondiscrimination policy involves every aspect of the District's functions, including access to and participation in the District's programs, services and activities. Anyone requiring reasonable accommodation, or who would like information as to the existence and location of accessible services, activities, and facilities, as provided for in the Americans with Disabilities Act, should contact the Human Resources Office Chief, at 2379 Broad St., Brooksville, FL 34604-6899; telephone (352) 796-7211 or 1-800-423-1476 (FL only); or email *ADACoordinator@WaterMatters.org*. If you are hearing or speech impaired, please contact the agency using the Florida Relay Service, 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice). If requested, appropriate auxiliary aids and services will be provided at any public meeting, forum, or event of the District. In the event of a complaint, please follow the grievance procedure located at *WaterMatters.org/ADA*.

Strategic Plan Annual Work Plan Report

Section 373.036(2)(e)4, Florida Statutes (F.S.), indicates the water management districts may substitute an Annual Work Plan Report, included as an addendum to the annual Strategic Plan, for the statutorily- required District Water Management Plan. The Annual Work Plan Report must detail the implementation of the Strategic Plan for the previous fiscal year, addressing success indicators, deliverables, and milestones. The Southwest Florida Water Management District (District) has decided to submit an annual Strategic Plan and Annual Work Plan Report in lieu of the District Water Management Plan.

The Annual Work Plan Report is intended to fulfill the statutory requirement by identifying the regional priorities and objectives in the Strategic Plan, and providing a discussion of the milestones, success indicators and deliverables achieved in FY2023 as they relate to the specific programs that implement the plan.

Northern Region Priorities and Objectives

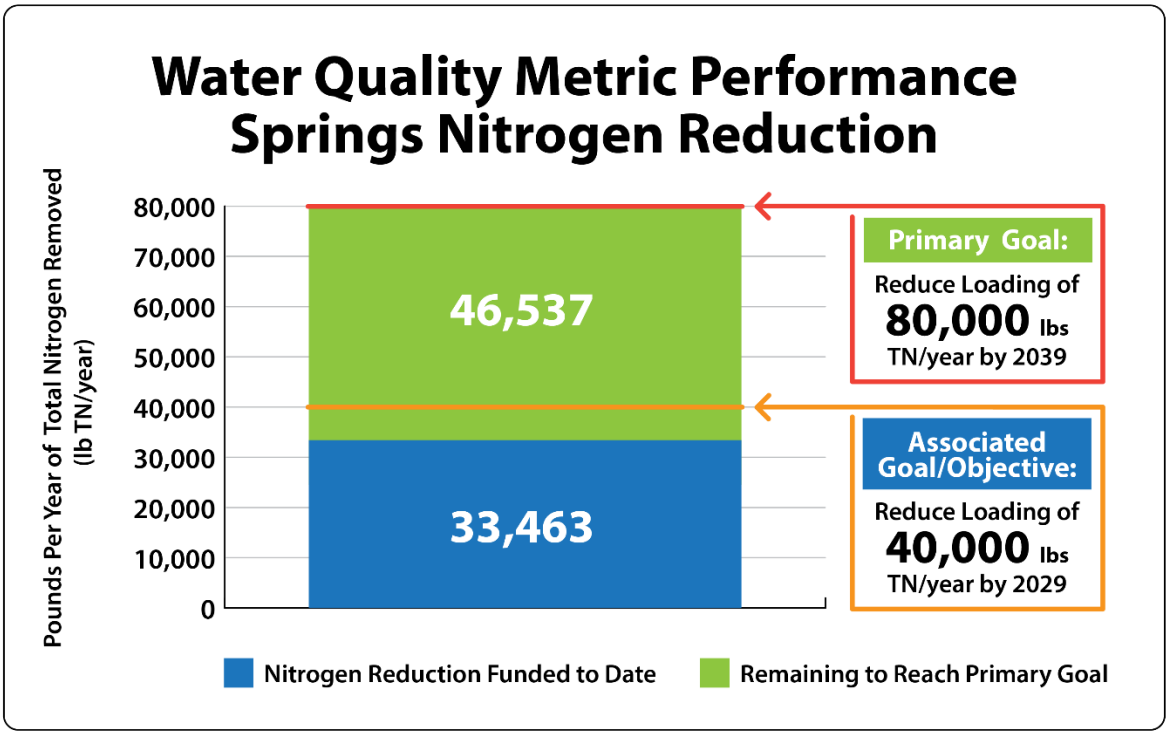
Priority: Improve Northern Coastal Spring Systems

Objective: Implement water quality and natural systems projects identified in the five Surface Water Improvement Management Plans

Surface Water Improvement Management (SWIM) plans have been approved for the Rainbow, Homosassa, Chassahowitzka and Weeki Wachee rivers and Crystal River/Kings Bay. These plans identify and implement specific management actions and projects (i.e., programs, initiatives, and Cooperative Funding Initiative (CFI)) to address major issues facing the systems. Each SWIM Plan is a living document with adaptive management at its core. The SWIM Plans include numeric targets called quantifiable objectives. Currently, these five SWIM Plans are under refinement to include long-term trend indicators along with quantifiable objectives. Together, these long-term trends and objectives are used to develop and prioritize management actions and projects, thus promoting effective and efficient resource management. If the objectives are achieved, the expected result is a healthy spring ecosystem.

The District implements data collection, investigations and habitat restoration and water quality improvement projects to support the SWIM Plans in the five springsheds. In FY2023, summer and winter mapping and evaluation of submerged aquatic vegetation was completed in the Weeki Wachee, Chassahowitzka, Homosassa, Rainbow River and Kings Bay systems (WS01). The District also began construction on the Three Sisters shoreline stabilization project which is a cooperative project with the City of Crystal River and U.S. Fish and Wildlife Service. The project, which extends from the mouth of the Three Sisters spring run to around the area of Idiot's Delight Spring will benefit the Crystal River/Kings Bay spring system by restoring habitat, including critical manatee habitat, and reducing erosion along the shoreline of the Three Sisters property. Construction is ongoing for a stormwater retrofit within the Weeki Wachee springshed (WW05). The District continues the Weeki Wachee Channel Restoration project (WW04) which will remove sediments from a 1.5-mile segment of the river impacted by excessive sedimentation. The project will improve habitat for fisheries and manatee passage, as well as improve water quality by removing sediment sources in the river. The DEP is contributing funding to the project and the funding agreement was executed. In addition, design is ongoing for natural management structures, known as submerged woody habitat arrays, at locations along the Weeki Wachee River to maintain sediment transport continuity and provide aquatic habitat. In Rainbow River, a study was completed to investigate a correlation between iron concentrations and filamentous algae growth. One Mini-Facilitating Agricultural Resource Management Systems (FARMS) projects was also approved in FY2023 for the northern coastal springs systems, resulting in an estimated 18,120 gpd reduction in groundwater use.

In addition, the District's Governing Board approved a water quality metric in February 2020 to measure the District's success in assisting state and local governments by funding projects that achieve a nitrogen reduction within the District's five first-magnitude springs basin management action plans (BMAPs) boundaries. This metric has a start date of June 2018. The metric includes a primary goal to reduce nitrogen loading to the springs through District-funded projects by 80,000 pounds per year (lbs/year) of total nitrogen (TN) by FY2039. The metric also includes an associated goal/objective to reduce nitrogen loading through District-funded projects by 40,000 lbs/year of TN by FY2029. District staff evaluated performance by compiling and analyzing data from projects completed or funded after June 2018 through FY2023. The evaluation revealed that 11 District-funded projects within the five first-magnitude springs BMAPs boundaries are expected to reduce nitrogen loading by 33,463 lbs/year of TN. This achieves approximately 42 percent of the primary goal and is approaching the 2029 associated goal/objective. (See graphic for illustration of this.) The District will continue to prioritize funding for projects that reduce nitrogen loading and protect the District's first-magnitude springs.



Objective: Assist with septic to sewer conversion within the five first-magnitude spring areas

Converting properties on septic systems to centralized sewer by constructing line connections has been identified to improve the water quality of Florida springs. In an August 2017 workshop, the District's Governing Board prioritized combining District funds with state and local funds for projects that would connect domestic septic systems to central sewer to benefit springs. The Board also identified the need to protect the District's investment by ensuring controls are in place to prevent additional pollution from new conventional septic systems and to ensure the new infrastructure is utilized.

During FY2023, three projects are expected to start construction, including Cambridge Greens, Old Homosassa West, and Old Homosassa East septic to sewer conversion projects in Citrus County. For FY2023, no new construction projects were included in the District's budget through the CFI program.

Objective: Monitor status and trends associated with targets in each springs plan to assess the health of the spring systems

Each of the SWIM Plans for the five first-magnitude spring systems on the Springs Coast have identified quantifiable objectives and long-term trend indicators for the three focus areas of water quality, water quantity and natural systems. The District closely monitors the water quality and the submerged aquatic vegetation (SAV) to track the status and trends in the various quantifiable objectives. Beyond the quantifiable objectives, District status and trend monitoring is part of a holistic approach for evaluating the overall ecological health of the five first-magnitude spring systems. Data collection and analysis for these systems have been ongoing since the mid-1990s and form the foundation upon which science-based decisions are made.

The District has a comprehensive array of water quality monitoring activities including groundwater monitoring wells in the springsheds, individual spring vents and surface water stations in associated rivers and nearshore coastal waters. Through the District's joint funding agreement with the United States Geological Survey (USGS), stage, discharge, velocity and select water chemistry analytes are also collected. In addition, the District has been monitoring vegetation in these systems, with mapping conducted twice a year to capture seasonal variation. Leveraging years of experience by District scientists, the monitoring information is analyzed and reported on an annual basis and placed in the context of long- term trends. This information is presented to the Springs Coast Management Committee (SCMC), Springs Coast Steering Committee (SCSC) and several community and volunteer organizations.

In 2007, the District began mapping seagrass along the Springs Coast. This region has one of the largest and most diverse seagrass ecosystems in the world covering an area of over 900 square miles from Waccasassa Bay south to Anclote Key and extending approximately 25 miles offshore. Seagrasses are often mixed with other ecologically important organisms like sponges, corals and attached algae, forming a mosaic of diverse and biologically productive habitats. While seagrasses help maintain good water quality, they are also sensitive to increased nutrient pollution and other stressors like red tide and hurricanes. For this reason, the District maps seagrasses along the Springs Coast every four years. In 2021, the District completed the most recent mapping cycle. A total of 586,511 acres of seagrass habitat was mapped, a slight increase from the 577,920 acres mapped in 2016. The next Springs Coast seagrass mapping will begin in 2024.

Objective: Continue support of the Springs Coast Steering Committee

The SCSC meets on a quarterly basis and is supported by the SCMC and Technical Working Group. The initial focus of these groups was to create SWIM plans for each of the five first-magnitude springs in the District. These SWIM plans were finalized between 2015 and 2017, and subsequently, the SCSC and SCMC's primary focus has involved soliciting and evaluating projects which will benefit the water quality, water quantity or natural systems of springs within the District. The committees annually evaluate State springs funding project applications submitted by city, county and other local stakeholders using DEP guidelines. In 2023, three projects were evaluated and recommended to DEP for first year funding request of $9,184,895 and project selection announcement is anticipated before the end of the calendar year. In FY 2022-2023, 11 projects were awarded approximately $32.5M by the DEP.

Objective: Implement Minimum Flows and Levels to protect spring flow
Minimum flows have been established for 10 springs or spring groups within the District, including all five of the District's Outstanding Florida Springs (i.e., the first-magnitude Chassahowitzka, Homosassa, Kings Bay, Rainbow and Weeki Wachee Spring groups). Ongoing hydrologic and

hydrogeological data collection, annual status assessments, evaluations completed on a five-year basis as part of the District's regional water supply planning process, consideration of spring minimum flows during water use permit review processes, and as-needed reevaluations of spring and other minimum flows and minimum water levels (MFLs) ensure the successful protection of spring flows.

Priority: Ensure Long-Term Sustainable Water Supply

Objective: Increase conservation

The District utilizes per capita water use to help ensure a sustainable water supply in the future and to measure progress in measuring conservation. Specifically, the goals are to achieve and maintain 150 gallons per day compliance per capita with all public supply utilities and to reduce the 2011 to 2015 Northern regional average unadjusted gross per capita (156 gpcd) by 5.6 percent by 2025. The District has been making progress toward meeting these per capita objectives. In 2011, there were 14 utilities with compliance per capita above 150 gpcd. Based on 2021 data, seven utilities were over 150 gpcd with four of them in the Northern Region. The regional average unadjusted gross per capita has declined by approximately 5.1 percent to 148 gpcd in 2021.

The District has been active in promoting conservation in the Northern Region. These efforts include cooperatively funding three conservation projects with northern utilities in FY2023 through the District's CFI program. These projects are estimated to conserve a total of 59,555 gpd and have a District investment of $264,250. The District also provides funding for conservation projects through the Water Incentives Supporting Efficiency (WISE) program.

In FY2022, the District co-funded four projects in the Northern Region through WISE with a District investment of $31,039, saving an estimated 13,115 gpd. Additionally, the District operates a leak detection program to help public supply water utilities locate water leaks in utility water distribution systems. One leak detection survey was conducted in FY2022 in the Northern Region. Since the program's inception, 716 water leaks have been identified in the Northern Region, resulting in over 2.6 mgd of water conserved.

The District partnered with one northern utility in FY2021 through the Conservation Education Program (CEP) to develop, implement and fund conservation education projects to help reduce residential water use. CEP projects are fully funded by the District at a total investment of $30,000. The District also oversees the Florida Water Star^{SM} (FWS) program, a voluntary water conservation certification program for new and existing residential homes and commercial construction. In FY2022, there was a total of 389 residential properties that achieved FWS certification in the Northern Region, with a total estimated water savings of approximately 51,080 gpd. Additional conservation outreach efforts in the Northern Region in FY2021 and FY2022 included ongoing community-wide outreach programs and awareness campaigns, the provision of free publications and water-conserving items and school district funding support ($60,400 per year).

Objective: Maximize beneficial use of reclaimed water

The Strategic Plan identifies the objectives of 75 percent reclaimed water utilization and resource benefit by 2040. As of 2021 (latest published data), with District assistance, this region has achieved 100 percent utilization and 75 percent resource benefit, exceeding the interim 2025 goals of 60 percent utilization and resource benefit. For 2021, the region had a beneficial reclaimed water flow of 24 mgd, while the objectives are 14 mgd by 2025 and 24 mgd by 2040. The regional water supply planning process updates these targets as needed.

Objective: Continue to partner with the Withlacoochee Regional Water Supply Authority to promote regional water supply planning and development

The District maintains an ongoing partnership with the Withlacoochee Regional Water Supply Authority (WRWSA) to promote regional water supply planning and development. In cooperation with the District, the WRWSA completed the most recent update to its Regional Water Supply Plan (RWSP) in 2019. This Plan evaluated water use demand for all use categories and identified projected increases of approximately 67.3 mgd from 2015 to 2040. The quantity of water available and demand reduction potential for the same period ranges from 126.4 to 142.3 mgd, indicating that demands for all use categories can be met through 2040. Coordination on the next RWSP update was initiated in 2023 and will be completed in 2024. In addition, an ongoing water conservation partnership with the WRWSA currently includes phase seven of the Regional Irrigation System Audit program, which addresses outdoor water conservation.

Tampa Bay Region Priorities and Objectives

Priority: Implement Minimum Flows and Level Recovery Strategies

Objective: Northern Tampa Bay Water Use Caution Area Recovery Strategy

The District established the Northern Tampa Bay Water Use Caution Area (NTBWUCA) in 1989 to address adverse impacts to water resources from water withdrawals. The first phase of a recovery strategy for the NTBWUCA was approved by the District in 1999. Among other things, it included the establishment of MFLs, reductions in groundwater withdrawals and the development of alternative water sources. The "Comprehensive Environmental Resource Recovery Plan for the NTBWUCA," which was adopted in 2010, served as the second phase of the NTBWUCA recovery for implementation through 2020.

Under the Comprehensive Plan, Tampa Bay Water (TBW) developed and implemented a "Permit Recovery Assessment Plan." Results from this assessment plan and an independent evaluation completed by District staff were presented to the Governing Board in February 2021, with both indicating implementation of the Comprehensive Plan and the preceding first phase of the recovery strategy had been successful in achieving recovery of hydrologic and ecological conditions in the area. Based on these findings, the Governing Board removed the Comprehensive Plan from the District's Recovery and Prevention Strategies for Minimum Flows and Levels rules in 2021, and also removed references to the plan in the District's Consumptive Use of Water rules. A final Recovery Assessment Plan was submitted to the District by TBW in 2021 and the Consolidated Permit for water withdrawals issued to TBW by the District was renewed in January 2022.

The District's 2023 MFLs status assessment, which was based on hydrologic data collected through 2022, indicated 120 of 121 MFLs within the NTBWUCA are being met, including those established for all 71 lakes, 34 wetlands, 7 aquifer sites, 3 freshwater river segments, 2 springs and 3 of 4 estuaries. Within the NTBWUCA, only the MFLs adopted for the lower Hillsborough River are not being met. Corrective operational protocols for fully recovering minimum flows in the river have been identified and are being implemented to ensure future compliance.

As part of the rulemaking to remove the Comprehensive Plan for the NTBWUCA from District rules, the Governing Board re-adopted the lower Hillsborough River Recovery Strategy rule. Implementation of the recovery strategy for the river calls for the augmentation of flows downstream of the Hillsborough River Reservoir using a variety of sources and projects. For strategy implementation, the District has independently and cooperatively worked with the City of Tampa on the diversion of water from the Tampa Bypass Canal through the reservoir to the lower river and completed permitting and pre- withdrawals monitoring associated with use of Morris Bridge Sink as a recovery source. The District has also supported City of Tampa projects involving diversions from Sulphur Springs and Blue Sink to the base of the dam for river recovery. Currently the District is supporting the City's investigations of the feasibility of routing excess flows from Curiosity Creek to Sulphur Springs to improve flows and salinity conditions in the spring run and river.

An update on the status of the lower Hillsborough River Recovery Strategy is provided annually to the Governing Board. In addition, the District has completed the second of three planned five-year recovery strategy assessments for the river. This assessment, completed in 2020, documented hydrologic and other environmental improvements associated with the ongoing implementation of recovery strategy projects. In FY2023, the District continued data collection and stakeholder outreach efforts associated with the third recovery strategy assessment, in anticipation of its completion in 2024.

The District also continues to encourage water reuse which helps with the achievement of MFLs through groundwater use reduction. The Strategic Plan identifies the objectives of 75 percent reclaimed water utilization and resource benefit by 2040. As of 2021 (latest published data), with District assistance, this region has achieved over 50 percent utilization and almost 69 percent resource benefit, which is on the way to meeting the interim 2025 goals of 60 percent utilization and resource benefit. For 2021, the region had a beneficial reclaimed water flow of 117 mgd, while the objectives are 143 mgd by 2025 and 202 mgd by 2040. The regional water supply planning process updates these targets as needed.

Objective: Assist Tampa Bay Water in the development of 20 mgd of alternative supply sources

In FY2021, the District continued its funding assistance for feasibility studies related to TBW's upcoming transmission and alternative water supply projects. The TBW Regional Surface Water Treatment Expansion Feasibility Study assessed potential options to either expand the existing treatment systems or add an additional facility that could increase treatment capacity by 10 mgd or more. The TBW Desalination Facility Expansion Feasibility Study evaluated the potential for a capacity increase of 10 to 15 mgd from the seawater desalination system. Recently completed with District assistance was a project to increase pumping capacity at TBW's Regional Facility High Service Pump Station. The District is also assisting TBW with funding for two large projects critical to meeting water demands in Hillsborough County. The first project consists of design and construction of a booster pump station to increase delivery capacity by 5 mgd to the existing regional Delivery Point of Connection at the Lithia Water Treatment Facility. The second project is an approximately 26-mile transmission main with capacity of 65 mgd to supply alternative water to a new Point of Connection to serve significant growth in southern Hillsborough County. In addition, the District is assisting TBW with the implementation of a demand management plan to improve efficiencies in customer water use by co-funding rebates and incentives for customers of TBW's member governments.

Objective: Dover/Plant City Recovery Strategy

The Dover Plant City Water Use Caution Area (DPCWUCA), a Minimum Aquifer Level Protection Zone for the area, a Minimum Aquifer Level (MAL) and a recovery strategy were established in 2011 to address impacts from groundwater pumping for cold protection activities associated with agricultural water use. During a historic, 11-day freeze event in January 2010, the District received 750 dry well complaints and approximately 140 sinkhole complaints were reported in the area. To address the situation, the District developed and adopted a comprehensive management plan to reduce and monitor groundwater pumping during future cold protection events.

A preliminary status assessment completed in 2020 indicated that the MAL was being met. However, the recovery strategy requirement of 20 percent reduction in groundwater withdrawal quantities used for cold protection by January 2020 had not been achieved. In accordance with the recovery strategy, a reassessment of the DPCWUCA Recovery Strategy was therefore completed. Trend evaluations indicated demands for cold protection are decreasing and are expected to continue decreasing. Additionally, temperature history for the area indicates the return interval for a cold event of similar magnitude to the 2010 event is approximately once in 570 years. Given the decreasing demand for cold projection withdrawals and the rarity of the January 2010 event, staff concluded that the objective to reduce cold protection use by 20 percent based on that event was impractical and unreasonable. As part of the reassessment, staff also evaluated and refined the approach used for assessing the status of the MAL.

Based on the determination that the MAL is being achieved and the recommendation to eliminate the objective to reduce the January 2010 cold protection quantities by 20 percent, the Governing Board approved the initiation of rulemaking in 2020 to repeal the DPCWUCA Recovery Strategy.

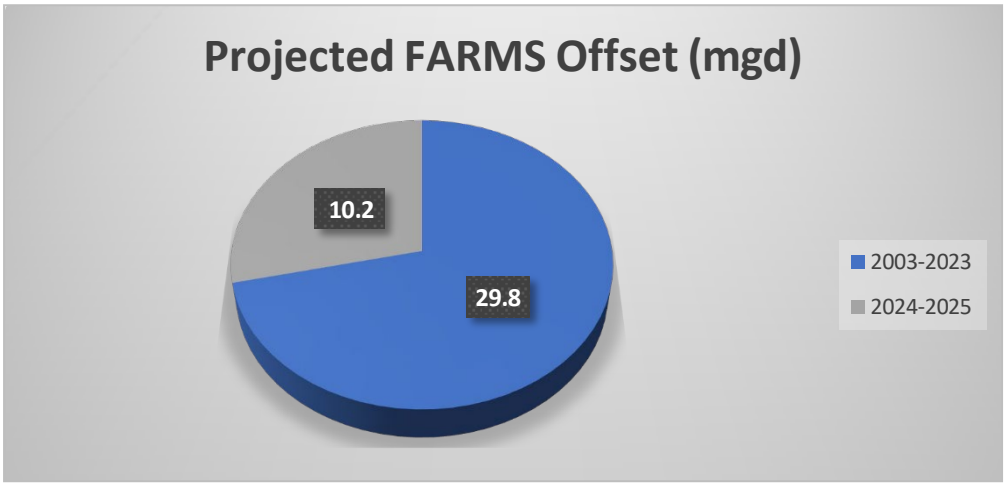
The recovery strategy was ultimately removed from District rules in 2022, while the DPCWUCA and protective measures continue to remain in place due to the area's cold protection water uses and unique geology that has the potential to lead to sinkhole formation and dry wells. In addition, current water use permitting criteria continue to be used, and status and trends are evaluated annually.

The installation of automatic meter (AMR) devices is a critical component of the regulatory program for the DPCWUCA and is slated to continue. Metering is critical for an empirical evaluation of pumping reduction, as opposed to only a review of permitted quantities. At the time of rule development, there were approximately 626 unmetered agricultural withdrawal points in the DPCWUCA that required flow meters. At the start of the DPCWUCA AMR installation program in 2013, there were 961 agricultural withdrawal points that required AMR devices. At the completion of phase one of the program, 541 withdrawals were equipped with flow meters and 852 sites were equipped with AMR devices. At completion of the flow meter reimbursement program on December 31, 2018, 541 flow meters were successfully installed. As of December 1, 2021, 771 withdrawals are equipped with AMR devices. The increase in AMR devices on withdrawal sites is due to water use permit modifications and issuance. Also, a decrease in AMR devices is due to AMR removals of devices no longer required by water use permit conditions.

In addition, in FY2023, eleven Mini-FARMS projects were approved in the DPCWUCA Priority area, resulting in an estimated 94,026 gpd reduction in groundwater use for daily supplemental irrigation.

Objective: Southern Water Use Caution Area Recovery Strategy

The District has a target of offsetting up to 50 mgd in groundwater withdrawals in the Southern Water Use Caution Area (SWUCA) by 2025, with 40 mgd to be achieved through the FARMS program. The District has offset approximately 29.8 mgd of groundwater in the SWUCA through FARMS projects that are operational, under construction and/or have contracts pending. In FY 2023, 26 Mini-FARMS projects and seven FARMS projects were approved in the SWUCA, resulting in an estimated 621,100 gpd reduction in groundwater use. The table below depicts current offsets and future FARMS targets for the period to 2025. The projection for 2023-2025 has been capped at the 40 mgd target.



Source: District FARMS staff, 2023-2024

The two primary factors influencing water levels and flows in the SWUCA are rainfall and groundwater withdrawals. During the past decade (2012-2021) rainfall, the primary source of water to the hydrologic system, was, on an annual average basis, below and above the long-term average in the SWUCA for 4 and 6 years, respectively. Variations in rainfall directly affect surface water body levels and flows and can affect Upper Floridan aquifer water levels both

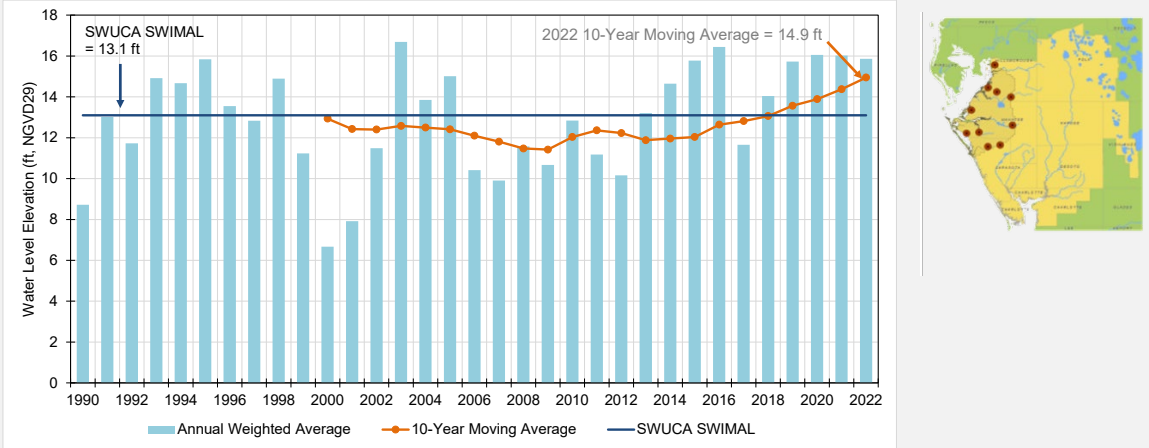
directly and indirectly. Indirect effects of low rainfall on groundwater levels are associated with higher groundwater withdrawal requirements for activities such as agricultural and landscape irrigation during periods of lower rainfall. Estimated groundwater withdrawals (including metered withdrawals) in the SWUCA have declined substantially from the higher rates that occurred from the mid-1970s through the early 2000s. By 2020, the 10-year moving average withdrawal rate in the SWUCA was 502 mgd, a value last observed in the early 1970s.

The Governing Board is provided with an annual update on the recovery's progress. In addition, three five-year assessments for the SWUCA recovery effort have been completed, with the most recent assessment completed in 2023 for the FY2017-FY2021 period. These assessments address the four major goals of the SWUCA Recovery Strategy, which are aligned with the regional objectives included in the District's Strategic Plan.

The water supply goal for the SWUCA Recovery Strategy is to ensure sufficient water supplies. Contributing to this goal, the District's RWSP and the Central Florida Water Initiative (CFWI) RWSP were updated in 2020, with the next and work is ongoing for 2025 plan updates scheduled to be completed in the year 2025. The District also continues to assist the Polk Regional Water Cooperative (PRWC) with the development of regional water sources, including the final design and construction of two Lower Floridan Aquifer (LFA) wellfields with treatment facilities, and a regional transmission system. In addition, the District is assisting with two additional phases of the Peace River Manasota Regional Water Supply Authority's (PRMRWSA) regional integrated loop system. See discussions for the Heartland and Southern regions for additional information on the PRWC and PRMRWSA.

The status of the saltwater intrusion minimum aquifer level (SWIMAL) for the Most Impacted Area (MIA) of the SWUCA serves as an important indicator of recovery progress due to the regional nature of the aquifer and implications for requests for new groundwater withdrawals. One of the goals for this effort is the recovery of the SWIMAL by 2025. A status assessment completed in 2023 indicated that, for the first time, the SWUCA SWIMAL was being met. This success is based on the 13.1 ft Upper Floridan aquifer elevation associated with the SWIMAL being equaled or exceeded for five consecutive years, from 2018 through 2022.

Groundwater Levels in the Most Impacted Area of the SWUCA and the SWUCA SWIMAL



Source: District Environmental Flows and Levels staff, 2023

The goal of achieving all established minimum lake levels in the SWUCA continues to be a challenge, but substantial progress is being made. Based on the 2023 MFLs status assessment, which used hydrologic data collected through 2022, minimum levels were met at 23 of the 32 (72%) SWUCA lakes with MFLs. In addition, MFLs for 7 of 7 freshwater river segments, 1 of 1 spring group, 5 of 5 estuaries within the SWUCA are currently met.

Priority: Improve Lake Seminole, Lake Tarpon, Lake Thonotosassa and Tampa Bay

Objective: Implement plans and projects for water quality improvement and to restore natural systems

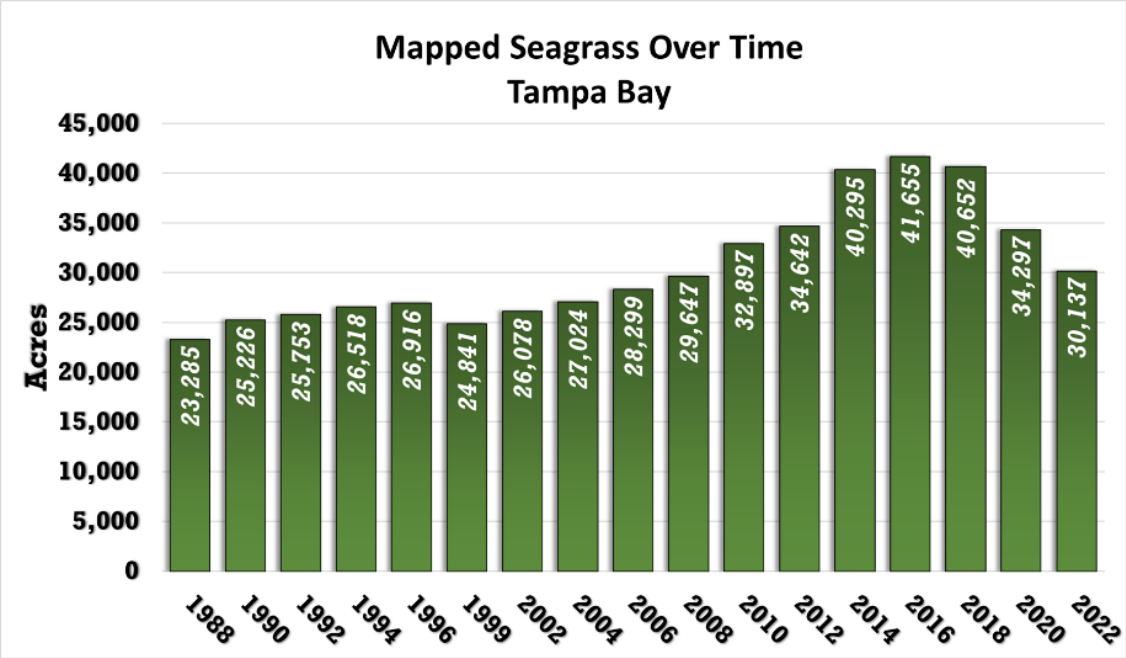
The District's Tampa Bay water quality priorities include those for Lake Seminole and three SWIM water bodies: Lake Tarpon, Lake Thonotosassa and Tampa Bay. The District is continuing to work with local governments on projects to assess these water bodies and identify and implement projects to improve their water quality and habitats. Specific projects and associated FY2023 milestones are discussed below.

Lake Seminole: A major concern for Lake Seminole is nutrients. The District cooperatively funded a project with Pinellas County for the design, permitting and implementation of four water quality treatment systems to improve the quality of runoff entering Lake Seminole. The objective is to remove 2,055 lbs of nitrogen per year. In FY2014, the District completed two of these projects, which removed 623 lbs of nitrogen per year. Another Lake Seminole project was completed in a previous fiscal year, bringing the total removal rate to 1,397 lbs per year. Construction of the last sub- basin Best Management Practices (BMPs) was completed and operational in FY2018. In addition to these stormwater projects, Pinellas County selected a contractor to complete the cooperatively funded Lake Seminole Sediment Removal project anticipated to remove approximately 900,000 lbs of total nitrogen from the lake. Site preparation for dredging began in 2019 and dredge removal of 930,000 cubic yards was completed in October 2020. The contractor has commenced dewatering activities in the dredged material management area, with reclamation of the site ongoing and scheduled for completion in 2024.

Lake Tarpon: In FY2023, the District continued to work with a consultant to assist with the update to the Lake Tarpon SWIM Plan. The District, in coordination with Pinellas County, previously held two technical stakeholder workshops to coordinate the update with the activities of other agencies and local governments that manage water resources in the Lake Tarpon watershed. In early 2021, Pinellas County submitted a petition to DEP to propose Site Specific Alternative Criteria in place of the Numeric Nutrient Criteria FDEP adopted for the Lake. The District has been coordinating with DEP and the County to ensure that the SWIM plan supports data with regards to site specific criteria, prior to moving forward with a public meeting on the SWIM Plan. In September 2022, District and DEP staff agreed to an indicator approach for the SWIM Plan update, using parameters such as chlorophyll-a and total nitrogen. The public meeting for the draft SWIM plan is anticipated for summer 2024. The update will follow the process identified in Chapter 373.451, Florida Statutes, for development of SWIM plans and will build on the findings of the cooperatively funded Lake Tarpon Water Quality Management Plan, developed with Pinellas County.

Lake Thonotosassa: As a result of the recommendation in the FY2017 Nutrient Source Tracking project, the District's FARMS program continues to work with the Florida Department of Agriculture and Consumer Services to enroll farmers in the Best Management Practices (BMP) program and provide education and outreach regarding Lake Thonotosassa water quality. Additionally, the SWIM program continues to evaluate nutrient reduction projects such as stormwater improvement, enhancement of wetland and aquatic habitats and maintenance/control of exotic plants along with public education and awareness of stormwater pollution prevention.

Tampa Bay: Since the 1980s, Tampa Bay has shown significant water quality improvements, resulting in a significant increase in seagrass acreage. In addition to their ecological and economic importance, seagrass habitats, are also excellent indicators of the bay's overall health due to their sensitivity to water quality. Given the strategic importance of seagrass habitat to a healthy bay, the District has, since 1988, been using aerial photography to map seagrasses. The District maps seagrass from Tampa Bay to Charlotte Harbor every two years. The figure below shows the trend in mapped seagrass acres from 1988 to 2022 (latest information). From 1988 to 2016, seagrass habitat in Tampa Bay steadily increased, surpassing the 1950 estimate of 40,400 acres. In 2018, seagrass acreage declined slightly as compared to 2016 totals. Then in 2020, Tampa Bay experienced a sharp decline to levels not seen since 2010. Between 2018 and 2020, Tampa Bay lost approximately 16 percent (6,355 acres) of seagrass habitat with most of that loss occurring in Old Tampa Bay. During the 2022 seagrass mapping cycle another 12% loss was mapped. Despite these losses, seagrass acreage in Tampa Bay still remains well above the 1988 totals.



Source: District SWIM staff, 2023

Notes

- Tampa Bay experienced significant seagrass loss between 2018 and 2022, decreasing seagrass acreage to levels not seen since before 2010.
- In 2020, mapped seagrass acreage dropped to a 10-year low of 34,297 acres. Between 2018 and 2020, the bay lost 6,355 acres of seagrass representing a 16 percent decline.
- In 2022, mapped seagrass acreage dropped again to 30,137 acres. Between 2020 and 2022, the bay lost 4,161 acres of seagrass representing a 12 percent decline.
- The cause of this continued decline is complex and involves several likely factors including red tide, increasing nutrient loads, hurricanes, rainfall patterns and others.
- The District continues to work with partners to investigate the causes.
- The next seagrass mapping cycle begins in 2024.

The District's SWIM program continues its restoration work for Tampa Bay. Construction for the Balm Boyette Habitat Restoration and Palm River Restoration – Phase II East McKay Bay projects has been completed and both are now in a plant-maintenance phase with a second phase of planting approved by DEP. In addition, the District had several ongoing restoration projects in FY2023 in Tampa Bay, some co-funded with cooperators, including the Frog Creek Upland Restoration project, Kracker Avenue Restoration project, Boyd Hill Nature Preserve,

Mobbly Bayou Preserve, Gully Branch Upland Restoration, Weedon Island Tidal Marsh Restoration, Roosevelt Creek Channel 5 Improvements as well as preliminary data collection to support design efforts on two restoration sectors of the Little Manatee River Corridor and on-going design for McIntosh Park Integrated Water Master Plan.

Construction was completed for three stormwater retrofit projects and another four are ongoing. Additionally, the District is co-funding nutrient source tracking projects with Pinellas County.

The District invested in and worked with the Tampa Bay Estuary Program to complete the Habitat Restoration Master Plan Update in August 2020. This document will continue to be used by the District for evaluating habitat restoration priorities in Tampa Bay.

Objective: Update the Tampa Bay, Lake Tarpon and Lake Thonotosassa Surface Water Improvement and Management Plans

In FY2023, the District continued to work with a consultant in updating the Lake Tarpon SWIM Plan. The District, in coordination with Pinellas County, previously held two technical stakeholder workshops to coordinate the update with the activities of other agencies and local governments that manage water resources in the Lake Tarpon watershed. In early 2021, Pinellas County submitted a petition to DEP to propose Site Specific Alternative Criteria in place of the Numeric Nutrient Criteria FDEP adopted for the Lake. The District has been coordinating with DEP and the County to ensure that the SWIM plan supports data with regards to site specific criteria, prior to moving forward with a public meeting on the SWIM Plan. In September 2022, District and DEP staff agreed to an indicator approach for the SWIM Plan update, using parameters such as chlorophyll-a and total nitrogen. The public meeting for the draft SWIM plan is anticipated for Fall 2023. The update will follow the process identified in Chapter 373.451, Florida Statutes, for development of SWIM plans and will build on the findings of the cooperatively funded Lake Tarpon Water Quality Management Plan, developed with Pinellas County.

In FY2023, the District continued working with a consultant to update the Tampa Bay SWIM plan. District staff are coordinating with the Tampa Bay Estuary Program for this update to the Plan. Additionally, the District has convened all three planned technical stakeholders' meetings, presented to the Tampa Bay Estuary Program twice, hosted a public workshop and presented to the District's Environmental Advisory Committee to engage local governments and water resource management agencies in development of the SWIM plan update. Approval from the District's Governing Board to begin the 45-day state and local review period will be requested before the end of the fiscal year.

In FY2019, the DEP developed and adopted a total maximum daily load (TMDL) for Lake Thonotosassa. The District will continue to coordinate with DEP regarding the TMDL prior to the next Lake Thonotosassa SWIM Plan update, which is projected to begin in FY2026.

Priority: Improve flood protection in Anclote, Hillsborough and Pithlachascotee rivers, Lake Tarpon, and Pinellas County coastal watersheds

Objective: Implement Best Management Practices to reduce the impact of existing intermediate and regional system flooding in priority areas

- ***Pithlachascotee River (Pasco County)***
- ***Anclote River (Pinellas/Pasco Counties)***
- ***Curlew Creek and Smith Bayou (Pinellas County)***
- ***City of St. Petersburg (Pinellas County)***

In 2020, Pasco County and the District entered into an agreement for the Griffin Park stormwater improvement project. Once implemented, this project will provide flood protection for the residential area by attenuating stormwater. The project is in the preliminary design phase and will reduce flooding impacts within the Pithlachascotee River watershed. For the Anclote River Watershed, there are two FY2018 BMP implementation projects that the District is cooperatively funding with Pasco County: Forest Hills Conveyance Improvements and Colonial Manor Drainage Improvements. Construction of the Forest Hills project was recently completed, and the Colonial Manor project is under construction.

Pinellas County has recently completed watershed management plans (WMP), cooperatively funded with the District, for the Anclote River, Curlew Creek, and Smith Bayou watersheds. These studies include an alternative analysis that assesses potential BMPs for improved flood protection and water quality benefits. The District is also cooperatively funding a WMP with the City of St. Petersburg that will involve the analysis of implementation projects for improving flood protection within the city.

The City of Tampa has recently completed the Cypress Street large-scale flood protection project. In addition, the City is nearing construction completion of the Southeast Seminole Heights flood protection project, and the Lower Peninsula project's design is now complete with construction commencing soon.

Objective: Develop watershed management plans for priority areas to better support floodplain management decisions and initiatives

- ***Curlew Creek and Smith Bayou (Pinellas County)***
- ***Lake Tarpon (Pinellas County)***
- ***Anclote River (Pinellas/Pasco Counties)***
- ***Hammock Creek (Pasco County)***
- ***Lower Peninsula (Hillsborough County)***
- ***City of St. Petersburg (Pinellas County)***
- ***City of Tarpon Springs (Pinellas County)***
- ***City of Oldsmar (Pinellas County)***

The District is currently participating in cooperative funding projects for all watersheds identified in this objective. The Curlew Creek, Lower Peninsula and City of Oldsmar WMPs were recently completed, and the data produced through these studies are already being utilized for better planning and decision- making. Additional areas within the Tampa Bay Region were added to the priority list including Itchepackesassa Creek, South Creek, Klosterman, Coastal Zone 5, and Plant City watersheds. These studies are also under way.

Objective: Update watershed management plans and develop alternative analyses to improve flood protection

- ***Hillsborough River/Tampa Bypass Canal (Hillsborough County)***
- ***Pemberton Baker (Hillsborough County)***
- ***Alafia River (Hillsborough River)***
- ***Stevenson Creek (Pinellas County)***
- ***City of Seminole (Pinellas County)***
- ***City of Safety Harbor (Pinellas County)***
- ***City of Dunedin (Pinellas County)***

Hillsborough County has completed the cooperatively funding updates to the Hillsborough River/Tampa Bypass Canal, Pemberton/Baker Canal, Alafia River, Silver/Twin Lake, and Duck Pond WMPs. These WMPs provide additional information on current watershed conditions for use in the development of alternative analysis and BMP recommendations.

The City of Seminole is leading the effort, cooperatively funded by the District, to complete an update to its WMP. The City of Safety Harbor is also performing a WMP Update. The goal is to obtain the mutually beneficial objective of identifying BMPs to improve flood protection. In addition, WMP updates for the Pithlachascotee, East Pasco, and Cypress Creek (Pasco County portion), Starkey Road, Roosevelt Creek watersheds and Alternative Analysis for the Curlew Creek & Smith Bayou, Joe's Creek, and McKay Creek watersheds are all underway.

The District has identified the Stevenson Creek and the City of Dunedin WMPs as among the top 20 watersheds requiring updates in its five-year planning program. The ranking criterion is based on land use changes, number of Environmental Resource Permits, flood complaints and age of topography. Having identified the need, the District is currently working with local governments to determine the potential for future coordination on the WMP updates.

Heartland Region Priorities and Objectives

Priority: Implement Southern Water Use Caution Area Recovery Strategy

Objective: Achieve a net reduction of up to 50 million gallons daily of groundwater use in SWUCA by 2025 with 40 mgd of offsets achieved through agricultural reductions via the Facilitating Agricultural Resource Management Systems Program

See Tampa Bay Regional Priorities and Objectives for a discussion on this objective.

Objective: Recover the SWUCA Saltwater Intrusion Minimum Aquifer Level of 13.1 ft NGVD for the Upper Floridan aquifer to slow the rate of saltwater intrusion in the MIA

As noted for the Southern Water Use Caution Area Recovery Strategy objective of the Tampa Bay Region Priorities and Objectives, the SWUCA SWIMAL has been achieved for the first time since its establishment. This success is based on the 13.1 ft Upper Floridan aquifer elevation associated with the SWIMAL being equaled or exceeded for five consecutive years, from 2018 through 2022.

In addition, the 2023 MFLs status assessment, which was based on hydrologic data collected through 2022, indicated that MFLs for 7 of 7 freshwater river segments, 1 of 1 spring group, 5 of 5 estuaries and 23 of 32 lakes within the SWUCA are currently met.

Objective: Recover minimum levels at Polk County and Highlands County lakes by 2025

Based on the 2023 MFLs status assessment, minimum levels are being met at 15 of 19 lakes within Polk County with adopted levels and at 7 of 12 Highlands County lakes with adopted levels.

Objective: Assist in recovering the minimum flows for the upper Peace River through implementation of the Lake Hancock Lake Level Modification Project

The District's Lake Hancock Lake Level Modification project became fully operational in 2014. Following an approximate one-year period during which inflows were stored in the lake, releases through the P-11 structure at the lake outlet to lower Saddle Creek were initiated in late-2015 to help achieve minimum flows in the upper Peace River. In 2020, the District established a reservation for the water stored in Lake Hancock and released to lower Saddle Creek to support river recovery efforts.

Based on the 2023 MFL status assessment, minimum flows for all three segments of the upper Peace River are being met. Annual assessments of MFLs status will continue and in addition, the District will continue monitoring the effectiveness of the Lake Hancock Lake Level Modification project through 2025 prior to evaluating other projects that may be needed for river recovery.

Objective: Restore minimum flows to upper Peace River by 2025 with Minimum Flows being met 95 percent of the year for three consecutive years

Minimum Low Flows are established for the upper Peace River at Zolfo Springs, Ft. Meade and Bartow as annual 95 percent exceedance flows that are met when the measured flow rate at the respective location is at or above the Minimum Low Flow for three consecutive years. The target flows associated with the Minimum Low Flows are 45 cubic feet per second (cfs) at Zolfo Springs, 27 cfs at Ft. Meade and 17 cfs at Bartow.

The minimum flow at Zolfo Springs was first met in 2005 but was not met again until 2016. Based on hydrologic data collected through 2022, the minimum flow at Zolfo Springs continues to meet.

The minimum flows at Ft. Meade and Bartow were first met in 2020 and also continue to be met.

Objective: Ensure a sustainable water supply

The District utilizes per capita water use information to help ensure a sustainable water supply in the future and to measure progress in conservation. Specifically, the goals are to achieve and maintain 150 gallons per day compliance per capita with all public supply utilities and to reduce the 2011 Heartland regional average unadjusted gross per capita (111 gpcd) by 4.3 percent by 2025. The District has been providing assistance on these per capita objectives in the Heartland Region. In 2011, there were four utilities with compliance per capita above 150 gpcd. Based on 2021 data, seven utilities were over 150 gpcd with three of them in the Heartland Region. However, the region's average unadjusted gross per capita has increased by approximately 1.8 percent to 113 gpcd in 2021. The District continues to support the region through a combination of regulatory, economic, incentive-based and outreach measures, as well as technical assistance, to assist in meeting the per capita objectives.

The PRWC was created in 2016 through an inter-local agreement to promote regional cooperation in the development of new alternative water supplies (AWS). A comprehensive water supply assessment identified the need to develop up to 30 mgd of AWS to meet demands while preventing significant harm to wetlands, waterbodies, and existing water resources. Two AWS projects with the potential to collectively provide 22.5 mgd of supply are being developed by the PRWC and are in the final design phases: the Polk Southeast Wellfield and the West Polk Wellfield. The PRWC Regional Transmission Southeast Project is also in final design and will distribute new AWS to several participating local governments. The PRWC also completed feasibility assessments and design concepts for AWS from Peace Creek and the Upper Peace River in 2022. The District is currently reevaluating the MFL for the upper Peace River, which may constrain the surface water availability, so the PRWC may further evaluate these sources once the MFL is updated in 2025.

Through District Governing Board Resolutions 15-07 and 18-06, the Governing Board previously allocated $65 million over nine years (FY2015 through FY2023) for the Polk Partnership fund to develop select projects, pending achievement of specific project objectives. The Polk Partnership fund will cover the District's FY2024 shares of the PRWC's AWS Projects.

The District's investigation of the LFA in Polk County was completed in 2023. This project assessed the LFA's viability as an AWS and sought to gain a better understanding of its characteristics and quality in Polk County. The District's LFA investigation near Crooked Lake was completed in 2022. The final reporting for the Frostproof and Lake Wales investigations will be completed soon.

The District updated its RWSP and approved the 2020 CFWI RWSP in November 2020. The two plans provide consistent direction regarding water supply needs and availability in the CFWI area. The CFWI area covers five counties, including Polk and southern Lake in the District, as well as Orange, Osceola and Seminole counties. The 2020 CFWI RWSP details how to best meet the regional water supply needs for the region to 2040. As part of this planning effort, the CFWI teams identified potential AWS, reclaimed water and conservation project options. A number of AWS projects and conservation initiatives identified in the CFWI RWSP are currently being implemented. In FY2023, one FARMS project and 4 Mini-FARMS projects were approved in the CFWI which reduce agricultural groundwater use. The next updates to the District's RWSP and the Central Florida Water Initiative (CFWI) RWSP are expected to be completed by 2025.

The Strategic Plan identifies reclaimed water objectives of 75 percent utilization and resource benefit by 2040. With District assistance, as of 2021 (latest published data), this region has achieved 61 percent utilization and 87 percent resource benefit exceeding the interim 2025 goals of 60 percent utilization and resource benefit. As of 2021, the region has a beneficial reclaimed water flow of 21 mgd, while the objectives are 26 mgd by 2025 and 42 mgd by 2040.

The regional water supply planning process updates these targets as needed.

Objective: Assist the Polk Regional Water Cooperative in the development of 30 mgd of alternative water supply sources

In FY2023, the District provided cooperative funding and technical guidance to the PRWC for two LFA brackish wellfield projects, two additional test production well projects to support the wellfield final designs, a regional transmission system to deliver the new water supplies to municipalities, and a water conservation program: PRWC Demand Management Implementation. Through the Polk Partnership fund, the District reserved a cumulative $65 million through FY2023 for the future design and construction of AWS projects. The Southeast Wellfield and West Polk Wellfield projects are in final design. Their initial construction phases are anticipated to provide a combined 10.0 mgd initial capacity for PRWC members by 2030 and will have expansion flexibility to keep pace with future demands. The wellfield facility and transmission projects received approximately $6.9 million in State grants in FY2023.

Priority: Winter Haven Chain of Lakes and Ridge Lakes

Objective: Implement plans and projects for water quality improvement and restore natural systems

The Winter Haven Chain of Lakes is a SWIM priority water body comprised of 19 interconnected lakes located within and around the City of Winter Haven in north-central Polk County. The Chain consists of two “chains” of lakes – the Southern and Northern Chains. The watershed of the Chain of Lakes includes portions of the cities of Winter Haven, Lake Alfred, and Auburndale. Water quality in the Chain of Lakes varies from lake to lake and between the northern and southern chains. In 2010, a study (Winter Haven Chain of Lakes Water Quality Management Plan, PBS&J) was completed that characterized water quality and prioritized restoration projects to address water quality issues in the Chain of Lakes. It was found that most of the lakes in the Chain are impaired for nutrients. Stormwater treatment projects have been implemented for eight lakes (Conine, Howard, May, Lulu, Hartridge, Jessie, Cannon, and Mariana) in the Chain to reduce nutrient loads to the lakes. The District continues to partner with local governments to implement projects to improve water quality. A study identifying additional nutrient reduction opportunities for Lake Lulu is complete. Ongoing is the design, permitting and construction of low impact design BMPs to treat stormwater runoff in the Winter Haven Ridge area.

An assessment of Ridge Lakes was completed in 2003 for development of management strategies. Assessments were performed for 105 lakes (i.e., 61 in Highlands County, 44 in Polk County) and updated in FY2019. Initial studies identified 26 lakes as threatened by the direct discharge of untreated stormwater. Of these 26 lakes, 11 were selected for additional analysis and implementation activity based on a variety of factors (cost, land ownership, feasibility, etc.). Since that time, projects have been completed for lakes Isis, Tulane, Clinch, Verona, Clay, Menzie and Lulu. Projects for Lake June-in-Winter Catfish Creek and Lake Wales are ongoing.

The District also continues to partner with local governments to implement projects to improve water quality within the Peace Creek watershed. Completed projects include the Lake Gwyn East Surface Water Restoration project with Polk County that restored approximately 60 acres of freshwater wetlands to treat 378 acres of stormwater runoff. This project is

complementary to the previous cooperatively funded Lake Gwyn West Surface Water Restoration project which was completed in FY2016. Ongoing projects include stormwater BMPs with the City of Lake Wales.

Objective: Identify priority Ridge Lakes in need of further evaluation and data collection

The District initiated a project to prepare and update the implementation plan for the Ridge Lakes Restoration Initiative in FY2017. The primary objective of this project is to create a planning document to identify additional projects in the Ridge Lakes watershed for water quality improvements and restoration of natural systems. The project was completed in FY2019. The plan was provided to stakeholders to guide future projects and priorities. Utilizing this plan to guide and set priorities, the District continues to partner with local governments to implement projects to improve water quality.

For example, in FY2018, the District, in cooperation with Highlands County, began a watershed study to determine pollutant sources and loading in the Lake June-In-Winter watershed. The study, which was completed in FY2020, included development of a prioritized list of BMPs and natural system restoration projects to improve water quality. From this study, a water quality improvement project in Lake June-in-Winter Catfish Creek was submitted and approved for funding through the District's Cooperative Funding Initiative for FY2022 and is ongoing.

The District is co-funding feasibility studies to identify opportunities to improve water quality, provide flood protection and restore natural systems with Polk County with the Ridge to Rivers and the upper Peace River feasibility studies.

Southern Region Priorities and Objectives

Priority: Implement Southern Water Use Caution Area Recovery Strategy

Objective: Achieve a net reduction of up to 50 million gallons daily of groundwater use in SWUCA by 2025 with 40 mgd of offsets achieved through agricultural reductions via the Facilitating Agricultural Resource Management Systems Program

See the Tampa Bay Regional Priorities and Objectives for a discussion on this objective.

Objective: Recover the SWUCA saltwater intrusion minimum aquifer level of 13.1 ft NGVD for the Upper Floridan aquifer to slow the rate of saltwater intrusion in the Most Impacted Area

As noted in the Tampa Bay Region and Heartland Region Priorities and Objectives sections of this work plan, the 2023 MFLs status assessment indicated the SWUCA SWIMAL was, for the first time since its establishment, being met. Achieving the SWIMAL is the first step in meeting the SWUCA Recovery Strategy's goal of stabilizing regional groundwater level declines so that the long-term management effort can slow the rate of saltwater intrusion in the MIA.

To develop improved estimates of the rate of saltwater movement in the region, the District is continuing to refine its coastal monitoring network by strategically adding wells to collect data in areas of greatest groundwater quality change. This additional information, along with ongoing development of a saltwater intrusion model (i.e., a solute transport groundwater model) will improve the District's ability to distinguish between local variability and regional saltwater intrusion and contribute to a future reevaluation of the SWUCA SWIMAL.

The 2023 MFLs status assessment also indicated that MFLs for 7 of 7 freshwater river segments, 1 of 1 spring group, 5 of 5 estuaries and 23 of 32 lakes within the SWUCA are also currently met.

Objective: Ensure a sustainable water supply

The District utilizes per capita water use information to help ensure a sustainable water supply in the future and to measure progress in conservation. Specifically, the goal is to achieve and maintain 150 gallons per capita per day compliance with all public supply utilities and to reduce the 2011 to 2015 Southern Region average unadjusted gross per capita (84 gpcd) by 5.2 percent by 2025. The region has no utilities above 150 gpcd, and the regional average unadjusted gross per capita has increased by approximately 2.3 percent to 86 gpcd in 2021. The District continues to support the region through a combination of regulatory, economic, incentive-based and outreach measures, as well as technical assistance, to assist in meeting the per capita objectives. For example, Manatee County's toilet rebate program received FY2023 funding for its 15th phase.

The Strategic Plan identifies reclaimed water objectives of 75 percent utilization and resource benefit by 2040. With District assistance, as of 2021 (latest published data), this region has achieved 62 percent utilization and 81 percent resource benefit, exceeding the interim 2025 goals of 60 percent utilization and resource benefit. As of 2021, the region has a beneficial reclaimed water flow of 47 mgd, while the objectives are 44 mgd by 2025 and 65 mgd by 2040. The regional water supply planning process updates these targets as needed.

The District continues to explore aquifer storage and recharge options and partnership opportunities in the SWUCA. Both surface water and reclaimed water sources exist in sufficient quantity for recharge and aquifer storage and recovery to provide recovery benefit. Preliminary stakeholder feedback on this issue indicates that utilities will be looking for ways to provide a benefit to their customers. The District continues to fund aquifer recharge feasibility and pilot-

testing projects. One example is the cooperatively funded Southern Hillsborough Aquifer Recharge Program, which includes several recharge wells that have been in operation since 2016 and additional planned wells that will use reclaimed water to recharge non-potable portions of the Upper Floridan aquifer to improve aquifer water level conditions in the MIA of the SWUCA. Potential benefits include providing a saltwater intrusion barrier that may allow some limited new groundwater available for public supply use in south Hillsborough County to meet growing demand in the region.

The District is also working to develop AWS in the SWUCA. Alternative supply is an important tool in meeting recovery goals, specifically to offset projected increases in public supply groundwater demand. The SWUCA recovery strategy identified more than 50 mgd of potential AWS projects.

In the MIA, the District completed construction of a test recharge well and associated monitoring wells at Flatford Swamp in 2019. Construction of the associated surface facilities began in FY2020. The well and surface facilities are currently in the start-up and testing phase and the District is working to meet the pre-requisite conditions outlined by DEP prior to full-scale operational testing. The purpose of the project is to determine the feasibility of recharging the Upper Floridan aquifer with excess surface water from the Myakka River that drains into Flatford Swamp. Preliminary modeling of aquifer recharge shows that this project, if completely constructed, could increase aquifer levels in the MIA and contribute to achieving the SWIMAL. In addition, there are potential benefits to the Flatford Swamp itself, related to trending back toward normal hydroperiod conditions.

The PRMRWSA has five completed phases of the Regional Integrated Loop System Projects and recently completed feasibility studies for two additional phases with District funding assistance. These projects are part of a series of transmission pipelines developed to transfer and deliver water from existing and future alternative supplies to demand centers. This will provide the PRMRWSA's customers in four counties with maximum flexibility to address changing needs and emerging circumstances. Phase 3B, cooperatively funded with the District, was completed in FY2021 and will improve flow capacity and reliability to northern Sarasota County and will extend to Manatee County in future phases. Additional phases are planned for the next 20 years. District funding has helped with the five completed phases of the regional loop system.

The PRMRWSA completed the preliminary design for a third offstream reservoir to capture and store additional quantities from the Peace River for regional water supply. A third-party review of the preliminary design was completed in 2023. The District has allocated funding in FY2024 for the reservoir's final design and construction, pending Governing Board approval of the review. The PRMRWSA plans for the reservoir project and forthcoming treatment expansion to meet their reliability and supply goals for growing customer demands by 2030.

***Objective:* Assist the Peace River Manasota Regional Water Supply Authority in the development of 21 mgd of alternative supply sources**

In FY2022, the District provided funding to the PRMRWSA for preliminary design of their Reservoir No. 3, acquisition and improvements for a regional pumping and storage facility, and two feasibility and routing studies for two additional phases of their regional transmission system. These projects will provide additional capabilities for pumping, storage, and delivery of alternative water supplies throughout its four-county region, thereby reducing the member utilities' reliance on traditional groundwater sources in the SWUCA. The Reservoir No.3 preliminary design and third-party review were completed in 2023. The Phase 2B & 2C feasibility and routing study was completed in 2022. This project evaluated route options and infrastructure requirements for a southern loop between the Authority's regional transmission system at Serris Boulevard in Charlotte County and the Carlton WTF in Sarasota County. The Phase 2B project is moving

forward toward preliminary design in FY2023. The Phase 2C project is currently on hold and may move forward in a few years. Phase 3C, which is currently under feasibility study, will extend the Phase 3B segment and interconnect with facilities in Manatee County.

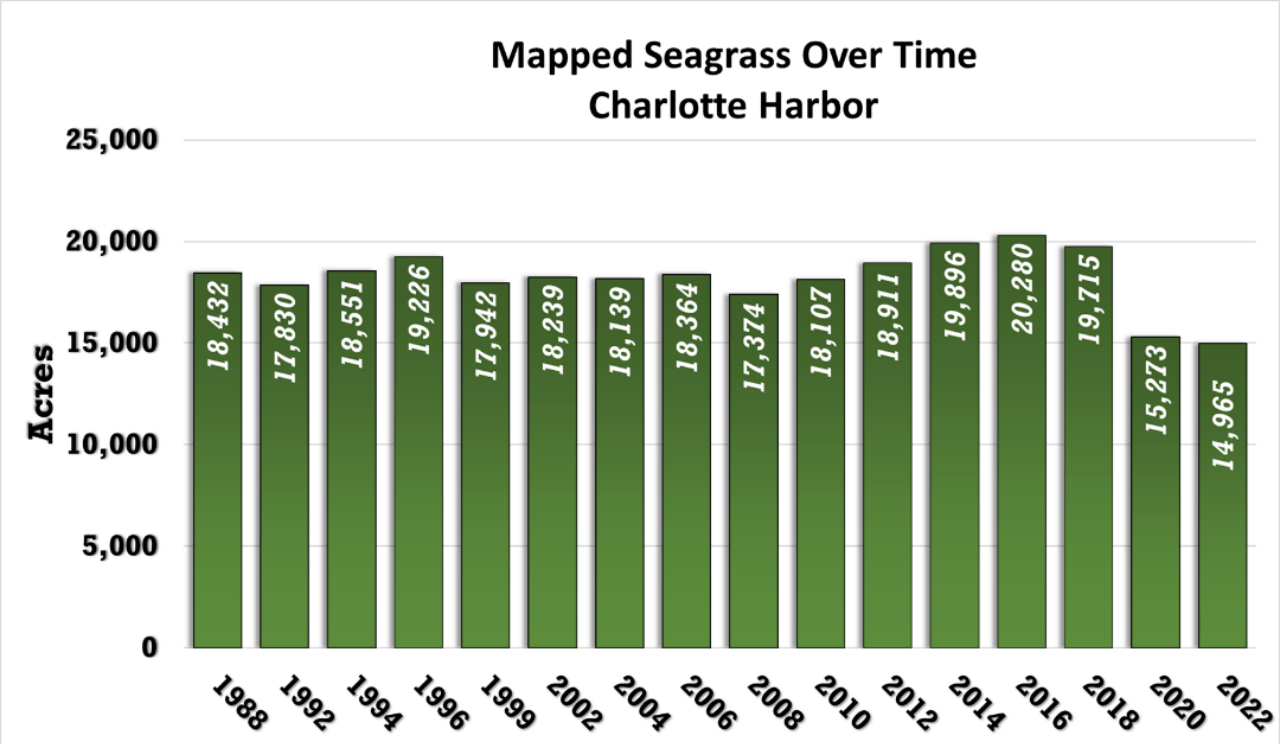
Priority: Improve Charlotte Harbor, Sarasota Bay, Shell/Prairie/Joshua Creeks

Objective: Implement plans and projects for water quality improvement and to restore natural systems

The District continues to work with local governments on projects to assess the conditions of these water bodies and to identify and implement projects to improve water quality and habitat.

Charlotte Harbor: Charlotte Harbor was added to the District SWIM priority water body list during the first update in 1988. In 1993, in accordance with Section 373.453, Florida Statutes (F.S.), the Governing Board adopted the first Charlotte Harbor SWIM Plan. In November 2020, the Governing Board approved the most recent update to the Charlotte Harbor SWIM plan.

Seagrass acreage in Charlotte Harbor has been declining since 2016. With this loss, Charlotte Harbor is at an all-time historic low of just over 14,000 acres. Some areas, such as the West Wall, had an increase in acres of patchy beds but lost acres of continuous beds. The greatest loss was along the northern section of the East Wall, where drift algae persist and attached algae continues to expand. The next mapping cycle will be in 2024. The cause of this decline is complex and involves several likely factors including red tide, increasing nutrient loads, hurricanes, rainfall pattern and others. The District continues to work with our partners to investigate causes. The District maps the portion of Charlotte Harbor that falls within its boundaries every two years.



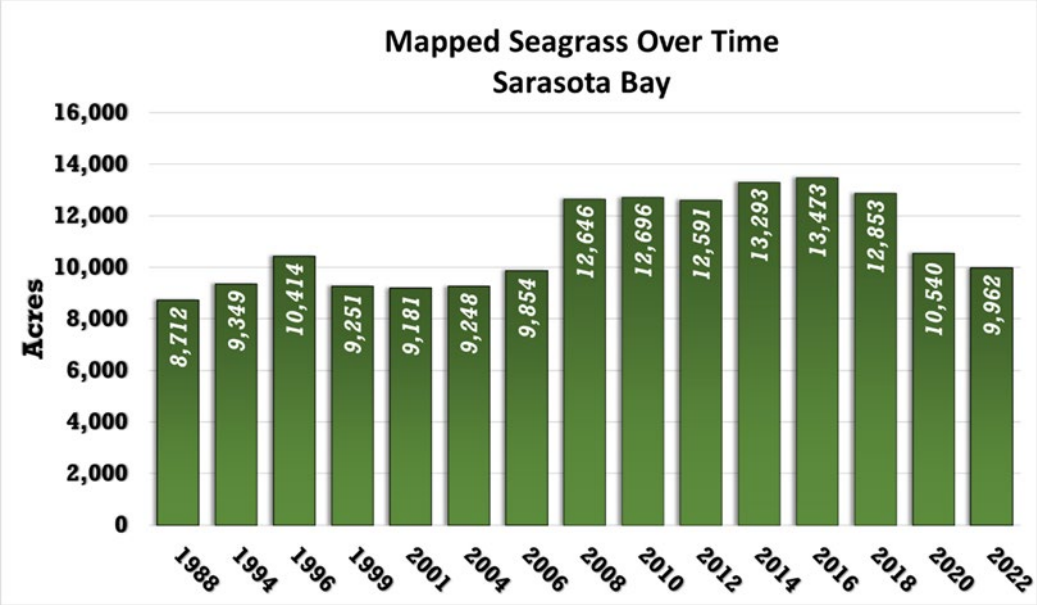
Source: District SWIM staff, 2023

The Charlotte Harbor Flatwoods Initiative (CHFI) is a multi-agency initiative lead by the South Florida Water Management District to restore flows, promote sheet flow enhancement, and restore wetland hydroperiods in Babcock Webb and Yucca Pens Wildlife Management Area (WMA; and improve the timing and magnitude of flows to tidal creeks west of Yucca Pens

WMA. During 2022, District funded data collection contributed to the development of a baseline hydrologic model and scenarios to determine hydrologic benefits of remedying artificial drainage from the Yucca Pens WMA as well as storing and routing excess water from Babcock Web.

The Coastal Charlotte Harbor Monitoring Network (CCHMN) is an ongoing project to monitor water quality and establish long-term water quality monitoring stations in Charlotte Harbor and the estuarine areas of the Peace and Myakka Rivers. It is a collaborative effort that began in 2000, between the District, Charlotte County, and the Florida Fish and Wildlife Conservation Commission. This data provides the basis for habitat restoration planning and management and water quality improvement projects.

Sarasota Bay: Seagrass acreage in Sarasota Bay have been declining since 2016, with the greatest loss in Sarasota Bay proper. With this loss, Sarasota Bay reached a 15-year low of 9,962 acres. However, this is still well above the 1988 minimum of 8,712 acres. Field verification has proven some areas are starting to recolonize, but too sparse of coverage to be included for aerial imagery mapping. The next mapping cycle will be in 2024. The cause of this decline is complex and involves several likely factors including red tide, increasing nutrient loads, hurricanes, rainfall pattern and others. The District continues to work with our partners to investigate causes.



Source: District SWIM staff, 2023

Shell/Prairie and Joshua Creeks: The intent of the Shell, Prairie and Joshua Creeks Reasonable Assurance Plan (SPJCRAP), adopted on February 7, 2012, pursuant to a DEP order, was to improve water quality within these watersheds with explicit emphasis on TMDL impaired sub-basins.

Specifically, the goal was to consistently meet Class I surface-water quality criteria in Florida's Surface Water Quality Standards rules (F.A.C. 62-302.530) for chloride, specific conductance and total dissolved solids (TDS). The target date for achieving reductions in the identified water quality parameters was 2014.

In April 2016, the District, along with the Shell, Prairie and Joshua Creek Stakeholders Group (SPJCSG), submitted the final performance monitoring report required under the SPJCRAP to DEP. This report documented water quality improvements resulting from regulatory and

resource management actions specified in the plan. The DEP delisted Prairie Creek as impaired for TDS and specific conductance based on the findings in the final monitoring report and a request by the District and the SPJCSG. The final monitoring report also suggested that surface waters within WBIDs 2040 and 2041 naturally exceed DEP Class I drinking water standards. Management actions will continue to be implemented in the Shell Creek watershed to address both water quality and quantity issues. DEP did not delist the two WBIDs in Shell Creek (2040 and 2041) as impaired, but the DEP has categorized them as a low priority for TMDL development, due in part to the continuing management actions that will be taken by the stakeholders. In FY2023, four Mini-FARMS projects and six FARMS projects were approved in the SPJC Priority area, resulting in an estimated 521,100 gpd reduction in groundwater use which reduces the TDS from reaching receiving water bodies.

Objective: Develop and update plans and implement projects for water quality improvement

The District's SWIM program continues restoration activities for Charlotte Harbor and Sarasota Bay.

In FY2023, design and permitting continue for the Cape Haze Ecosystem Restoration project. This project will create and enhance estuarine and freshwater wetlands and adjacent uplands on approximately 410 coastal acres within the Charlotte Harbor watershed. This is a continuation of the conceptual plan created under the Coral Creek Restoration project with two previous phases already completed. In FY2023, a project was completed in the Myakka State Forest to stabilize wetland shorelines and improve water quality conditions. The District has also cooperatively funded a project with Sarasota County for construction of a 380-acre surface water storage and treatment facility to improve water quality in Dona Bay.

Objective: Assist local governments with implementation of Best Management Practices to achieve water quality standards

The District uses its local government comprehensive plan amendment review program to communicate development strategies and practices for achieving greater water quality protection. This tool has assisted with the implementation of many District efforts. Examples of strategies communicated include the retention of native vegetation and preference for central sewer use when water bodies are at risk; incorporation of open spaces in flood prone areas; and use of clustering in more appropriate development areas. Most plan review feedback is provided for consideration and voluntary implementation. The District's review and feedback also helps in satisfying provisions in Chapters 373 and 163, F.S., which require technical assistance for the development of comprehensive plan amendments.

In addition, the District uses its CFI program to help fund BMP implementation. The funding of BMPs is used extensively for watershed management, SWIM and springs initiatives. The District, in cooperation with Sarasota County, funded and completed water quality improvements and urban upland and channel shoreline restoration in Hudson Bayou which contributes to improvements in Sarasota Bay. Also, through CFI, the City of Bradenton Beach completed design on stormwater retrofits in the area of Avenues B and C that will contribute to improvements to Sarasota Bay.

All Regions

Strategic Initiative: Develop and implement a capital improvement plan for District flood control and water conservation structures and associated facilities.

Objective: Development and implementation of Asset Management Program

Minimizing flood risks is a component of the District's mission that is supported by the operation and maintenance of the District's 84 water control structures, 17 of which are Flood Control Structures. In 2018, the District Structure Operations staff began developing an Asset Management Program, which uses risk to prioritize how available resources are used within the program. The program consists of four elements: a Capital Improvement Program (CIP), Breakdown and Repair Program, Maintenance Management Program and Life Cycle Management Program. Work within each of the four elements will be prioritized by total risk which consists of the likelihood and the consequences of a failure. Each element is also evaluated for efficiency opportunities and the possibility of a reduction in responsibilities. Several steps towards the implementation of the Asset Management Program have already been initiated.

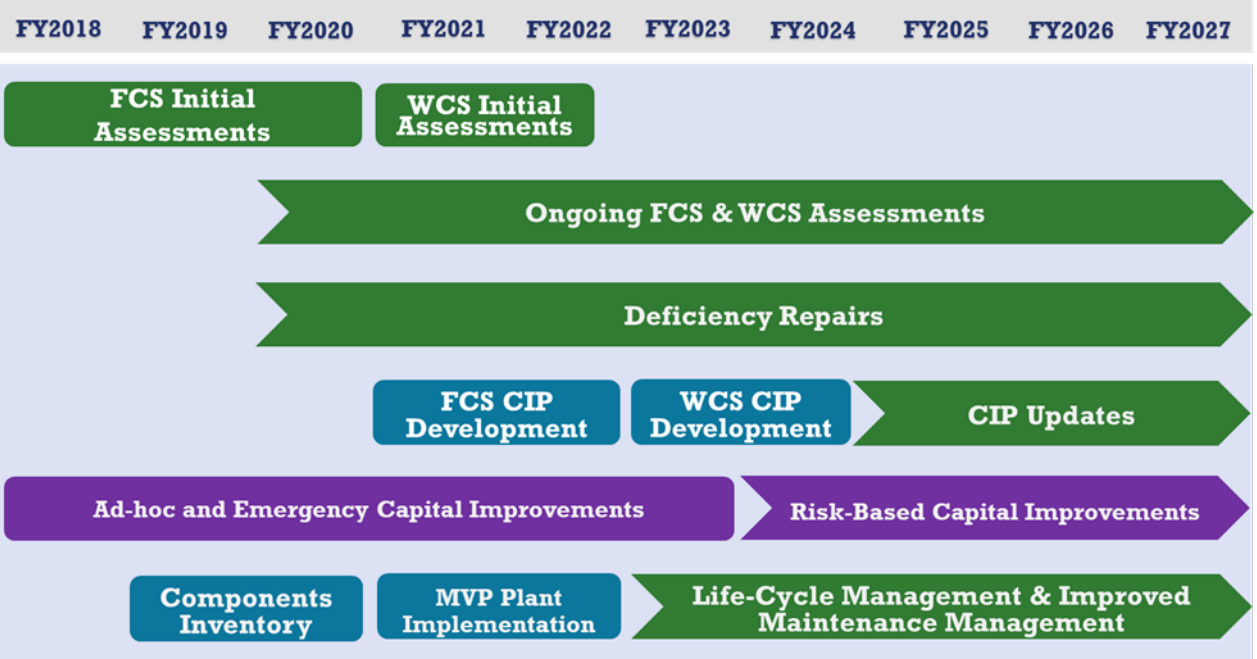
Below is a summary of the Asset Management Program activities to date:

- In FY2022, 100 percent (57) of District water conservation structures requiring assessments were completed and all water conservation structures have now been placed on a multi-year (smoothed) routine schedule for assessment.
- In FY2022, the CIP for the District's flood control structures was completed.
- In FY2023, the CIP for the District's water conservation structures was competed.
- In FY2023, 100 percent of District flood control structures requiring a routine assessment were completed.

Objective: Minimize risk to the District and the public through effective asset management of the District's water control structures

The CIP is a major component of the Asset Management Program. This Program will ensure that the rehabilitation or replacement of any of the District's water control structures is properly planned and budgeted. The CIP will serve as a long-term budgeting tool and will allow for the creation of a stable capital budget. It will also serve as a decision-making tool for competing resource needs within the Structure Operations Section and the District. Maintenance Management is essential to ensure asset life cycles are reached or exceeded. This ensures the District will maximize the benefits of its investment in assets for the taxpayers. Life Cycle Management of individual structure components will ensure components are replaced prior to the failure risk increasing beyond acceptable levels or an actual failure.

Water Control Structure Asset Management Program Timeline (FY2018-2027)



Source: District Operations staff, 2023

Priority: Ensure long-term sustainable water supply

Objective: Maximize beneficial use of reclaimed water

The Strategic Plan identifies the objectives of 75 percent reclaimed water utilization and resource benefit by 2040. As of 2021 (latest published data), with District assistance, utilities within the District have achieved 57 percent utilization and 75 percent resource benefit, which is on the way to meeting the interim 2025 goals of 60 percent utilization and resource benefit. For 2021, Districtwide there was a beneficial reclaimed water flow of 212 mgd, while the objectives are 227 mgd by 2025 and 333 mgd by 2040. The regional water supply planning process updates these targets as needed.