



2025 Regional Water Supply Plan

Executive Summary
June 2025

Public Draft

Southwest Florida
Water Management District



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Southwest Florida Water Management District

2025 Regional Water Supply Plan

This report is produced by the Southwest Florida Water Management District

June 2025

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Chapter 1. Introduction

The 2025 Regional Water Supply Plan (RWSP) is an assessment of projected water demands in the Southwest Florida Water Management District (District) and potential sources of water to meet those demands for the period from 2020 through 2045. The RWSP has been prepared in accordance with the Florida Department of Environmental Protection's (FDEP) 2019 Format and Guidelines for Regional Water Supply Planning. The RWSP consists of four geographically based volumes that correspond to the District's four designated water supply planning regions (Figure 1). The RWSPs for each planning region contain the following chapters: Chapter 1, Introduction; Chapter 2, Resource Protection Criteria; Chapter 3, Demand Estimates and Projections; Chapter 4, Evaluation of Water Sources; Chapter 5, Overview of Water Supply Development Options; Chapter 6, Water Supply Projects Under Development; Chapter 7, Water Resource Development Component; and Chapter 8, Overview of Funding Mechanisms. This Executive Summary also contains a list of Guiding Principles outlining strategies to meet water supply demand throughout the planning period.

The purpose of the RWSP is to provide a framework for future water management decisions in the District. The 2025 RWSP for the four planning regions shows that water supply demands for all use sectors can be met through 2045. It also shows natural systems can be restored or sustained using a combination of alternative water sources, fresh groundwater, and water conservation measures. The RWSP also identifies a variety of potential water supply options and associated costs for developing alternative sources. The options are not intended to represent the District's most preferable options for water supply development (WSD); however, they are provided as reasonable concepts that water users in the planning region may pursue to meet their water supply needs. Water users can select a water supply option as presented in the RWSP or combine elements of different options that suit their water supply needs, provided such options are consistent with the intent and direction of the RWSP. Additionally, the RWSP provides information to assist water users in developing funding strategies to implement water supply projects. The District previously completed five RWSPs since 2001 that included the Southern, Heartland, and Tampa Bay planning regions. The 2010 update included the District's Northern Planning Region for the first time.

Statutory Requirements for Water Supply Planning

The requirement for regional water supply planning originated from legislation passed in 1997 that amended Chapter 373, Florida Statutes (F.S.). Regional water supply planning requirements are codified in Part VII of Chapter 373 (373.709), F.S., and this RWSP was prepared pursuant to these provisions. Regional water supply planning requirements were amended with the passage of Senate Bill 444 during the 2005 Florida legislative session. The bill strengthened requirements for the identification and listing of WSD projects. In addition, the legislation intended to foster better communication among water planners, local government planners, and local utilities. Local governments are now permitted to develop their own water supply assessments, which the water management districts (WMDs) are required to consider when developing their RWSPs. Finally, a trust fund was created to provide WMDs with state matching funds to support the development of alternative water supplies (AWS) by local governments, water supply authorities, and other water users.

Connection to Central Florida Water Initiative (CFWI)

The District continues to work with public water supply utilities, the St. Johns River and South Florida WMDs, FDEP, Florida Department of Agriculture and Consumer Services (FDACS), and multiple stakeholders on the Central Florida Water Initiative (CFWI), which was established in 2011. The CFWI Planning Area includes Orange, Osceola, Polk, Seminole, and southern Lake counties (Figure 2). The WMDs previously determined through water supply planning efforts and real-time monitoring that groundwater availability is limited in the CFWI Planning Area. The CFWI aims to protect, develop, conserve, and restore central Florida's water resources by collaborating to address central Florida's current and long-term water supply needs. The CFWI is led by a Steering Committee composed of a public water supply utility representative, a Governing Board member from each of the three WMDs, and representatives from FDEP and FDACS. The Steering Committee oversees the CFWI process and provides guidance to the technical working groups and oversight/management committees that are developing and refining information on central Florida's water resources. This work has included development of and subsequent updates to the CFWI RWSP, which was first published in 2015 and most recently updated in 2025. In addition, the FDEP in coordination with the three WMDs adopted uniform rules for application within the CFWI Planning Area (Rules 62-41.300 through 62-41.305), as set forth by the Florida Legislature in Section 373.0465(2)(d), F.S. These rules were completed in 2021 and are currently being implemented by the three WMDs as outlined in the CFWI Supplemental Applicant's Handbook. More detailed information about these efforts is available on the CFWI website at <https://cfwiwater.com/>.

Connection to Growth Management and Local Government Comprehensive Plans

Consistent with Section 373.709(8)(a), F.S., within six months following approval or amendment of a RWSP, the District is to notify each local government covered by the RWSP of that portion of the plan relevant to the local government. Within one year after the notification, each local government is required to provide the District with notification of any AWS projects or options that it has developed or intends to develop; an estimate of the quantity of water to be produced by each project; and the status of project implementation, including development of the financial plan. The information is updated annually in a progress report provided to the District. If an entity does not intend to develop an AWS project option identified in the RWSP, the local government is to propose, within one year after notification, another AWS project option sufficient to address the demands within the local government's jurisdiction; and to provide an estimate of the quantity of water to be produced by the project and the status of project implementation. The local government has the option to request that the District consider a project not included in the RWSP.

Within 18 months after Governing Board approval of a RWSP, Section 163.3177(6)(c)3., F.S., requires that local governments in the planning region update their comprehensive plans. These updates must incorporate a work plan detailing alternative and traditional water supply projects, including conservation and reuse, within the local government's jurisdiction, covering at least a 10-year planning period.

Agency Coordination/Public Outreach

The RWSP was developed in an open public process, in coordination and cooperation with staff from other WMDs, water supply authorities, the FDEP, FDACS, and representatives from utilities, agriculture, various industries, and environmental organizations.

The District actively involved stakeholders in the RWSP planning process by facilitating public workshops in the Brooksville and Tampa service offices. The District conducted and recorded interactive webcasts at all public workshops and involved its standing advisory committees (public supply, agricultural and green industry, industrial, and environmental).

Additionally, draft water demand projections, based on methodologies carried forward from the 2020 RWSP, were presented to the District's standing advisory committees. The District also sought local government and utility assistance in identifying potential WSD project options for inclusion in the RWSP. Finally, the District's RWSP webpage was updated to provide public drafts of the entire document, advertise public workshops, and solicit comments from the public and interested parties.

Overall, the District conducted a variety of outreach activities to inform and engage the public and stakeholders on development of the 2025 RWSP. These activities included public workshops and presentations at District advisory committees between August 2023 and August 2025. These outreach activities provided the opportunity to explain the draft RWSP, collect input on major plan components, and develop water resource and water supply project options.

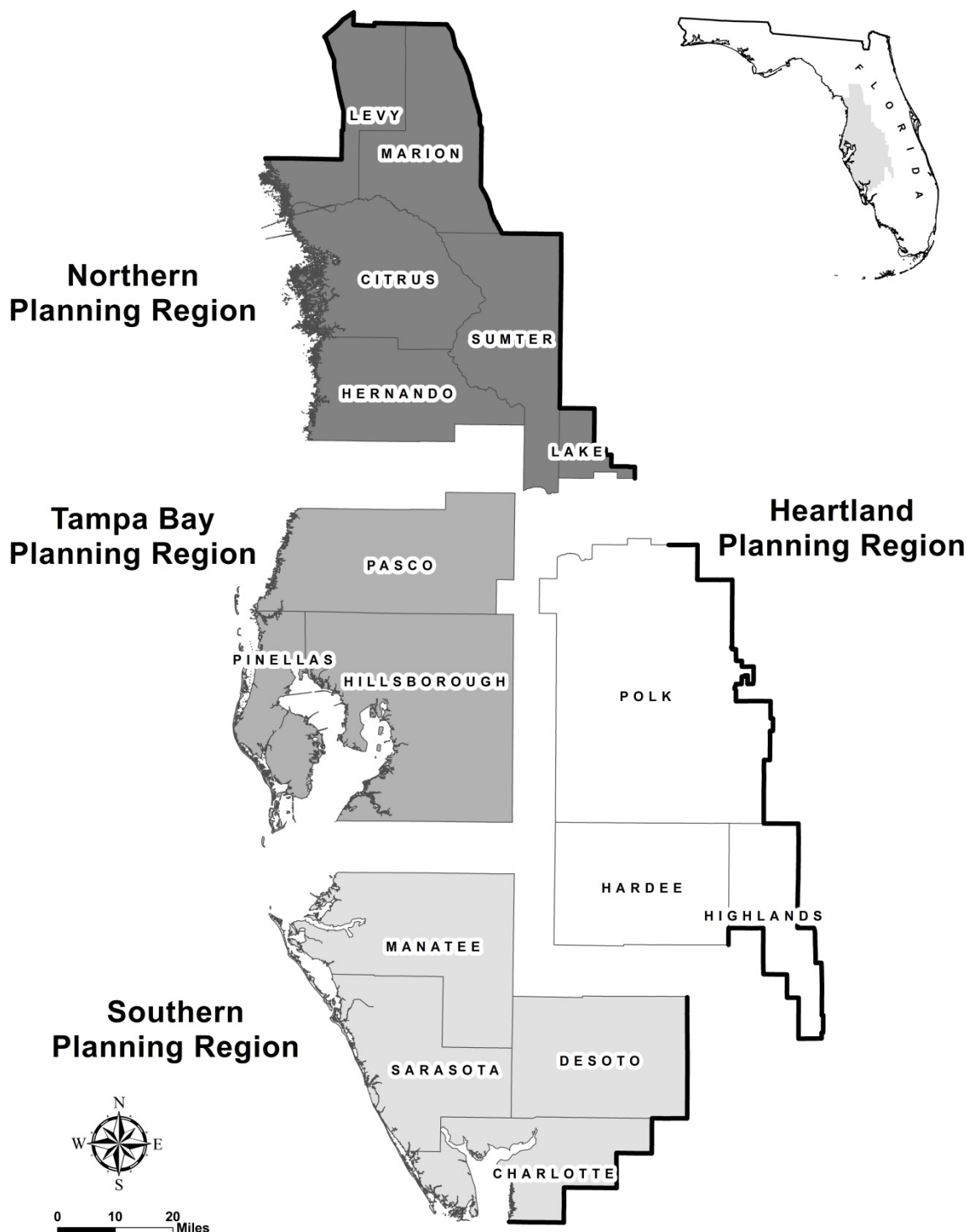


Figure 1. Location of the District's four water supply planning regions

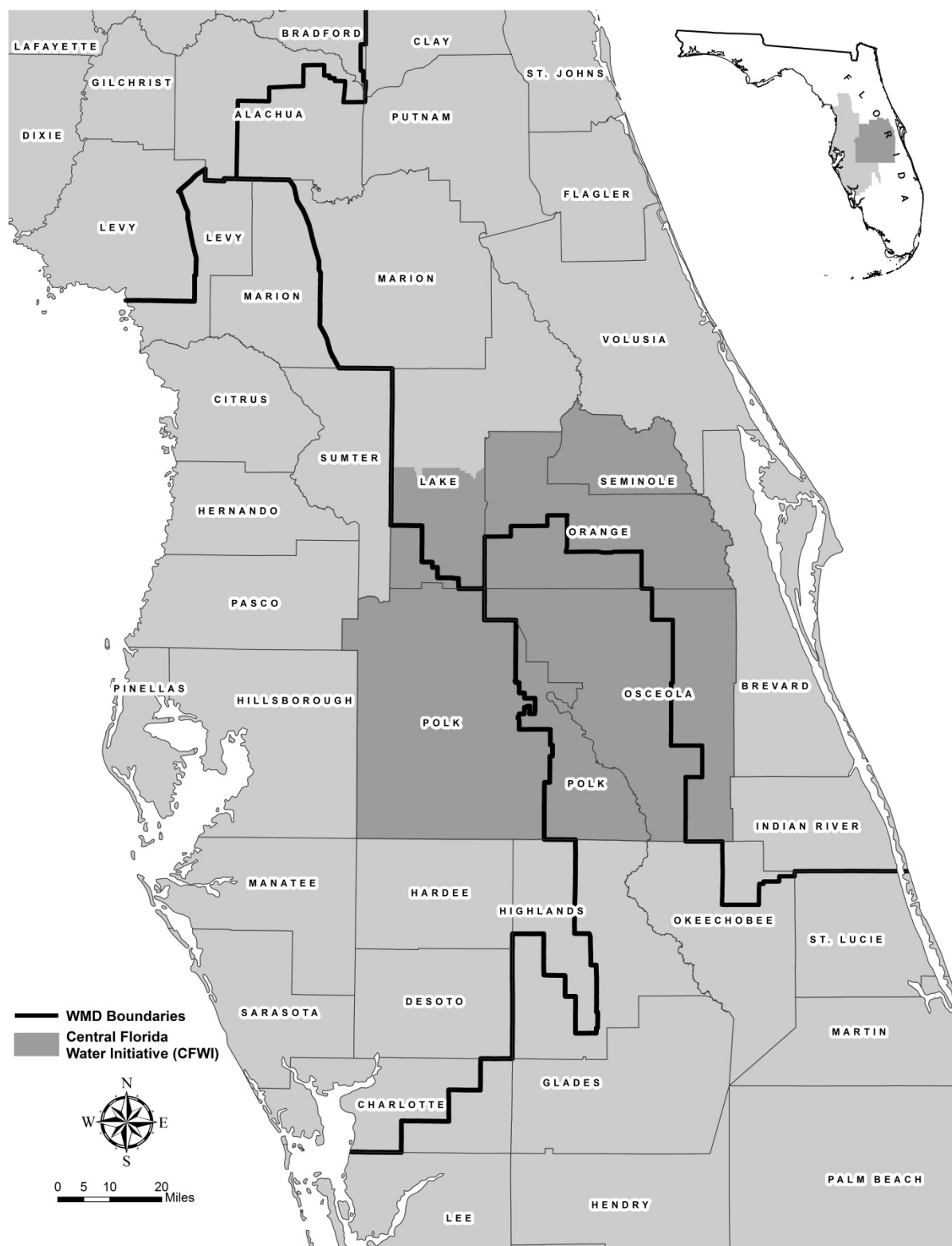


Figure 2. Location of the Central Florida Water Initiative Planning Area

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Chapter 2. Resource Protection Criteria

This chapter addresses the primary strategies the District employs to protect water resources, which include water use caution areas (WUCAs), minimum flows and levels (MFLs), prevention and recovery strategies, reservations, and consideration of the potential effects of climate change.

Water Use Caution Areas (WUCAs)

Water use caution areas (WUCAs) are areas where the District's Governing Board has determined that regional action is necessary to address cumulative water withdrawals that are causing or may cause adverse impacts to the water and related natural resources or the public interest (Rule Chapter 40D-2.801, Florida Administrative Code (F.A.C.)). To determine whether an area should be declared a WUCA, the Governing Board must consider various factors, including the quantity and quality of water available for use from surface and groundwater; the health of environmental systems; lake stages or surface water rates of flow; and off-site land uses (Section 40D-2.801(2), F.A.C.). In response to continuing resource concerns, the District established the Northern Tampa Bay Water Use Caution Area (NTBWUCA), the Southern Water Use Caution Area (SWUCA) and its Most Impacted Area (MIA), and the Dover/Plant City Water Use Caution Area (Dover/Plant City WUCA) (Figure 3).

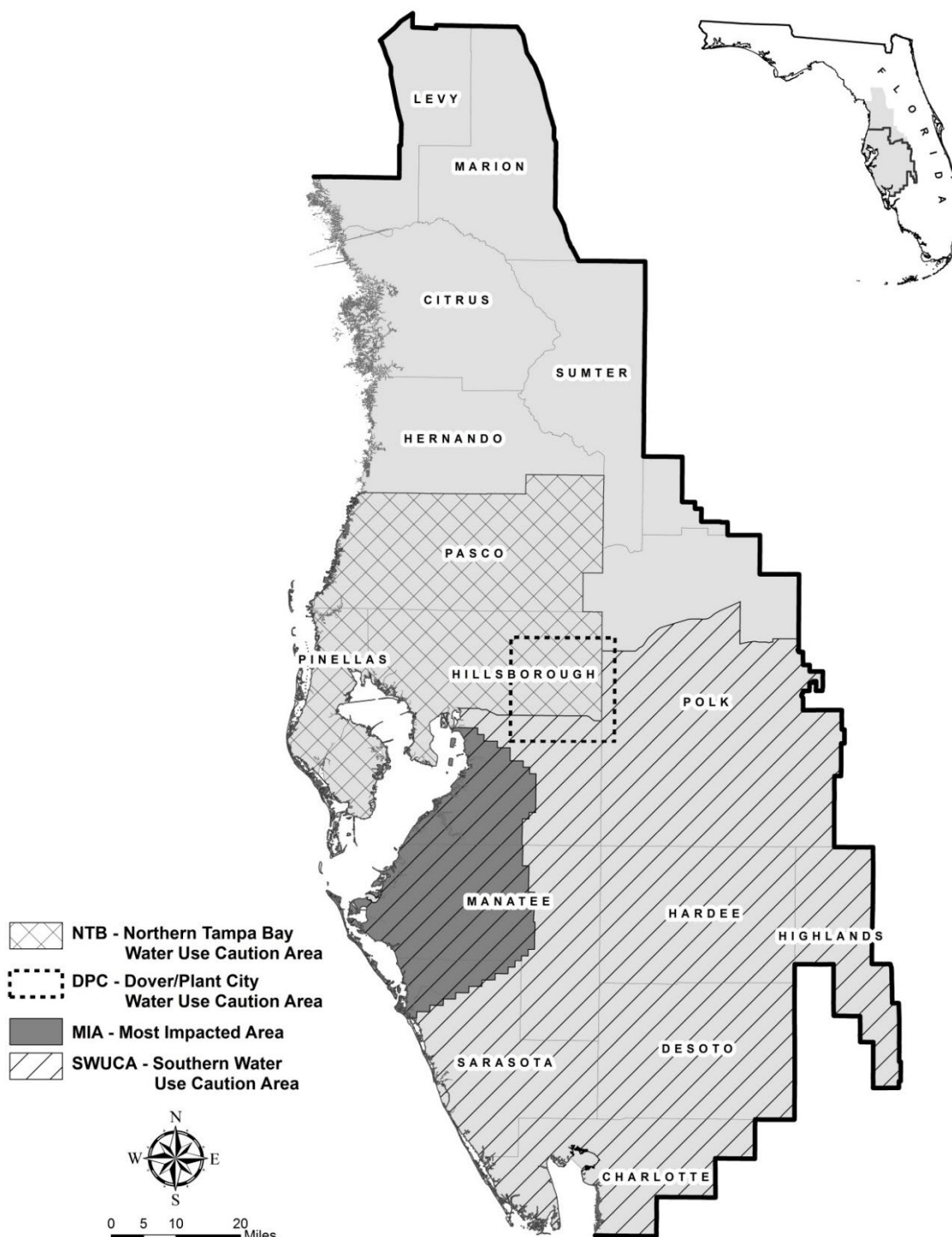
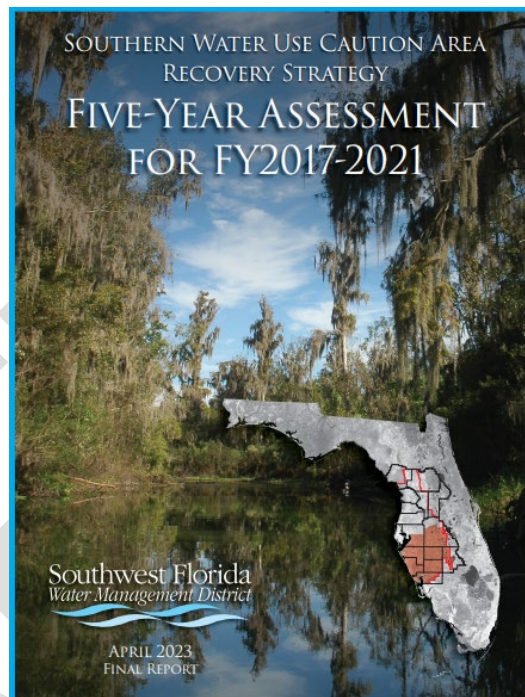


Figure 3. Location of the District's water use caution areas and the Most Impacted Area of the Southern Water Use Caution Area.

Minimum Flows and Levels (MFLs)

An MFL is the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area (Section 373.042, F.S.). The District implements established MFLs primarily through its water supply planning, water use and environmental resource permitting programs, and by funding water resource and WSD projects that are part of a recovery strategy. The District establishes and annually updates a list of priority ground and surface waters for which MFLs will be set. Numerous factors are considered in determining which water resources are included, such as the importance of the water resources to the state or region; the existence of or potential for significant harm to occur; the required inclusion of all first-magnitude springs and all second-magnitude springs within state or federally-owned lands purchased for conservation purposes; the availability of historic hydrologic records; the proximity of MFLs already established for nearby water bodies; the possibility that the water resource may be developed as a water supply; and the value of developing an MFL for regulatory purposes.



The SWUCA saltwater intrusion minimum aquifer level was met for the first time in 2023.

Prevention and Recovery Strategies

Section 373.0421(2), F.S., requires that a recovery strategy be adopted or modified, and implemented if the existing flow or level in a water body is below an applicable MFL, or a prevention strategy if an existing flow or level is projected to fall below an applicable MFL within 20 years. To date, the District has developed several recovery strategies for achieving compliance with adopted MFLs. Regional plans were developed for the NTBWUCA and SWUCA, and recovery strategies were developed for the lower Alafia and Hillsborough rivers and the DPCWUCA. Regulatory components of the recovery strategies for water resources in these areas are or were incorporated into District rules (Rule Chapter 40D-80, F.A.C.) or individual WUPs and outlined in District reports.

Since the 2020 RWSP and based on several, separate assessments, the District's Governing Board has authorized the repeal of the Comprehensive Environmental Resources Recovery Plan from the NTBWUCA Recovery Strategy and the DPCWUCA Recovery Strategy. The Hillsborough River Strategy Rule continues as a standalone rule. For more information on the NTBWUCA and DPCWUCA recovery strategies, please see Chapter 2 of the Tampa Bay Planning Region document.

Reservations

Section 373.223(4), F.S., authorizes reservations of water from use by permit applicants for the protection of fish and wildlife or public health and safety. The District will consider establishing a reservation of water when a District water resource development (WRD) project will develop water needed to achieve and maintain adopted MFLs. Reservations of water are established by rule. Details on the Lake Hancock/Lower Saddle Creek and Morris Bridge Sink reservations are provided in the Heartland and Tampa Bay planning region volumes, respectively.

Climate Change

Climate change and associated sea level rise may affect water supply sources and should be factored into evaluations of the adequacy of supplies to meet future demand. It also has the potential to change centers of population, which in turn may impact demand projections. The District accounts for adaptive management strategies through its five-year RWSP updates. These updates allow sufficient time to anticipate transitional changes to population centers in the water demand projections and to develop appropriate water supply options for the next 20 years. Continued development of regionally interconnected water systems also allows large-scale water treatment facilities to adjust distribution to new demand locations. The routine assessments of MFLs and other natural resource protections also use a monitor and adapt approach toward protection from climate change. For further information, see the climate change section in Chapter 2 of each planning region's RWSP.

Chapter 3. Demand Estimates and Projections

This chapter provides a comprehensive analysis of water demands for all use categories in the District for the 2020 to 2045 planning period. This includes the District's methods and assumptions used to project water demand for each county, the demand projections in five-year increments, and an analysis of important trends in the data.

Water demand has been projected for the following sectors for each county in the District: public supply (PS), agriculture (AG), industrial/commercial (I/C), mining/dewatering (M/D), power generation (PG), and landscape/recreation (L/R). The FDACS prepared Florida Statewide Agricultural Irrigation Demand (FSAID) 10 projections through 2045. For an explanation of the District's integration of the FSAID 10 for AG demand projections, see Appendix 3-1.

Table 1 summarizes the projected changes in demand for the average rainfall (5-in-10) condition for each water use sector in the District in five-year increments during the planning period. The table shows that the overall increase in water supply demand for the planning period for all use categories is 215.35 million gallons per day (mgd); a nearly 20 percent increase over the quantity used in the 2020 base year.

Table 1. Summary of the projected demand by planning region (5-in-10) (mgd)

Water Use Category	Planning Period						Change 2020-2045	
	2020	2025	2030	2035	2040	2045	mgd	%
Heartland Planning Region								
Public Supply	92.80	103.87	111.43	117.53	122.77	127.23	34.43	37.10%
Agriculture	141.58	144.26	146.55	144.35	141.83	139.32	2.25	1.59%
I/C & M/D	35.03	50.33	62.67	60.42	57.63	57.82	22.78	65.04%
Power Gen.	7.41	9.12	9.22	9.35	9.50	9.66	2.25	30.33%
Landscape/Rec.	9.31	10.34	10.78	11.14	11.44	11.71	2.40	25.79%
Region Total	286.13	317.92	340.65	342.80	343.18	345.74	59.61	20.83%
Northern Planning Region								
Public Supply	97.12	104.14	113.13	122.09	128.48	133.04	35.92	36.98%
Agriculture	22.46	22.37	22.07	22.05	22.33	22.38	-0.08	-0.3%
I/C & M/D	4.63	4.74	4.90	5.07	5.23	5.40	0.77	16.59%
Power Gen.	1.41	2.06	2.15	2.33	2.53	2.76	1.35	95.69%
Landscape/Rec.	12.37	13.11	16.67	20.34	21.94	23.03	10.66	86.14%
Region Total	137.99	146.42	158.92	171.87	180.52	186.61	48.62	35.23%
Southern Planning Region								
Public Supply	113.35	122.24	129.71	135.75	140.96	145.53	32.17	28.38%
Agriculture	117.03	118.67	118.90	117.93	117.00	115.99	-1.04	-0.89%
I/C & M/D	5.08	7.04	7.06	7.08	7.11	7.13	2.05	40.43%
Power Gen.	2.43	4.89	5.23	5.61	5.99	6.40	3.96	163.08%
Landscape/Rec.	19.88	21.06	22.05	22.87	23.58	24.20	4.33	21.76%
Region Total	258.36	273.91	282.96	289.23	294.63	299.25	40.89	15.83%
Tampa Bay Planning Region								
Public Supply	331.19	352.59	370.39	384.40	396.01	405.91	74.72	22.56%
Agriculture	49.13	46.15	44.20	41.78	39.74	37.29	-11.84	-24.10%
I/C & M/D	13.28	26.21	13.39	13.57	13.74	13.91	0.63	4.76%
Power Gen.	0.17	0.16	0.17	0.18	0.20	0.22	0.05	30.92%
Landscape/Rec.	16.51	17.26	17.89	18.39	18.81	19.17	2.67	16.17%
Region Total	410.28	442.37	446.04	458.33	468.50	476.51	66.23	16.14%
Districtwide								
Public Supply	634.46	682.84	724.66	759.77	788.22	811.70	177.24	27.94%
Agriculture	330.19	331.45	331.72	326.11	320.90	314.99	-15.21	-4.61%
I/C & M/D	58.02	88.32	88.02	86.14	83.71	84.26	26.24	45.22%
Power Gen.	11.42	16.24	16.77	17.47	18.22	19.04	7.61	66.66%
Landscape/Rec.	58.06	61.77	67.40	72.73	75.77	78.12	20.05	34.54%
Districtwide Total	1,092.76	1,180.62	1,228.58	1,262.23	1,286.83	1,308.10	215.35	19.71%

Notes: Summation and/or percentage calculation differences occur due to rounding. Values match the 5-in-10 scenarios provided in Table 3-6 of each planning region's respective volume. Additional water quantities may be required over the planning period to address environmental restoration needs, including those for the SWUCA SWIMAL, upper Peace River, and lower Hillsborough River.

Chapter 4. Evaluation of Water Sources

This chapter presents the results of investigations by the District to quantify the amount of water that is potentially available from all sources of water within each planning region to meet demands through 2045. Sources of water evaluated include surface water, stormwater, reclaimed water, seawater, brackish groundwater, fresh groundwater, and conservation. Aquifer storage and recovery (ASR) is also discussed as a storage option with great potential to maximize the utilization of surface water, stormwater, and reclaimed water. Aquifer recharge (AR) is discussed as a method to directly or indirectly increase water supply, restore aquifer levels, and manage saltwater intrusion.

Table 2 summarizes the potential availability of water from each source and the potential for water conservation measures to reduce demand through 2045 in each of the planning regions. The table shows that 56.53 mgd is available from permitted, unused fresh groundwater and approximately 538.41 mgd is available from permitted, unused surface water or AWS options. The table also shows that water conservation measures have the potential to reduce demand and therefore reduce and delay the need for development of more expensive AWS projects, by nearly 70 mgd. The total water supply availability and potential for water conservation to reduce demand in the District through 2045 is 664.71 mgd. When compared to the projected 2045 additional demand of 215.35 mgd (Table 1), it can be concluded that the available water supplies and conservation measures are sufficient to meet the 2045 projected demands.

Water demand will be met differently in each planning region. The following is a general overview of how the projected water demands in each planning region are likely to be met with the identified sources.

Heartland Planning Region

The 2020 to 2045 increase in water demand in the Heartland Planning Region is projected to be 59.61 mgd. As of 2020, it is estimated that 14.64 mgd in existing permitted quantities are potentially available; however, these quantities may be limited due to resource constraints within the planning region. Potential additional water availability, including up to 14.09 mgd of reclaimed water, 7.71 mgd of non-agricultural water conservation, and up to 7.22 mgd of agricultural water conservation, will supply a portion of the 44.97 mgd in remaining demand (Table 2). Projects under development, including reclaimed water projects and both agricultural and non-agricultural conservation projects will further add a combined 27.09 mgd for water supply or resource benefit (Table 3). In addition, the development of regional AWS and transmission systems, such as the Polk Regional Water Cooperative's Southeast and West Polk brackish water wellfield projects, are anticipated to help improve water supply reliability and assist with environmental restoration.

Northern Planning Region

The 2020 to 2045 increase in demand in the Northern Planning Region is projected to be 48.62 mgd. As of 2020, it is estimated that 19.01 mgd has either been met or will be met by existing permitted quantities. Potential additional water availability, including up to 10.27 mgd of reclaimed water, 10.65 mgd of non-agricultural water conservation, and up to 2.74 mgd of agricultural water conservation, will supply a portion of the 29.61 mgd in remaining demand (Table 2). Projects under development, including reclaimed water and both agricultural and non-agricultural

conservation, will add an additional combined 2.91 mgd for water supply or resource benefit (Table 3). Scenario modeling results using the Central Springs Model (CSM) version 1.1 show that groundwater from the UFA is available to meet demand through 2045 by utilizing conservation and reuse initiatives, with the exception of the area surrounding Gum Slough Spring Group. In areas where concentrated groundwater withdrawals occur, management strategies such as increased monitoring, conservation, use of reclaimed water, and LFA groundwater extraction (Northern Sumter) are being promoted to offset potential future impacts to MFL water bodies. While the availability of fresh groundwater from the UFA can be prolonged by maximizing conservation and reclaimed water benefits, future groundwater availability will be dependent on achieving MFLs. For more information on the CSM modeling results, please see Chapter 4 of the Northern Planning Region.

Southern Planning Region

The 2020 to 2045 increase in water demand in the Southern Planning Region is projected to be 40.89 mgd. As of 2020, it is estimated that most or all of this demand has been or can be met by existing permitted quantities of 66.85 mgd. Potential additional water availability includes up to 13.22 mgd of reclaimed water, 7.06 mgd of non-agricultural water conservation, and 3.42 mgd of agricultural conservation (Table 2). Projects under development, including reclaimed water projects and both agricultural and non-agricultural conservation, will add an additional combined 7.01 mgd for water supply or resource benefit (Table 3). The continued development of regional water supply and transmission systems will enable utilities to meet public supply needs from multiple sources. Reductions in agricultural water use through Facilitating Agricultural Resource Management Systems (FARMS) projects will continue to assist the planning region in meeting the demands of agriculture and environmental restoration for the SWUCA Recovery Strategy.

Tampa Bay Planning Region

The 2020 to 2045 increase in water demand in the Tampa Bay Planning Region is projected to be 66.23 mgd. As of 2020, it is estimated that most or all of this demand has either been met or will be met by existing permitted quantities of 104.67 mgd. Infrastructure improvement projects are necessary in some instances to fully utilize these resources, with Tampa Bay Water identifying such projects as part of its 2023 Long-term Master Water Plan update. Potential additional water availability includes up to 26.52 mgd of reclaimed water, 27.32 mgd of non-agricultural water conservation, and 3.65 mgd of agricultural conservation (Table 2). In addition, projects under development, including reclaimed water and both agricultural and non-agricultural conservation, will add an additional 5.57 mgd for water supply or resource benefit (Table 3).

Table 2. Potential additional water availability in the District from sources in each planning region through 2045 (mgd)

Planning Region	Surface Water		Reclaimed Water	Desalination		Fresh Groundwater	Water Conservation		Total
	Permitted Unused	Available Unpermitted	Reuse Flow	Seawater	Brackish Groundwater ¹	Permitted Unused ²	Public Supply and Domestic Self-Supply	Agricultural ³	
Heartland	0.25	3.79	14.09	0.00	22.5	14.39	7.71	5.52-7.22	68.25-69.95
Northern	0.00	49.68	10.27	0.00	TBD	19.01	10.65	2.73-2.74	92.34-92.35
Southern	65.48	201.26	13.22	0.00	23.12	1.37	7.06	3.42	314.94
Tampa Bay	82.91	12.21	26.52	10.00	3.10	21.76	27.32	3.65	187.47
Total	148.64	266.94	64.10	10.00	48.73	56.53	52.74	15.32-17.03	663.00-664.71

¹The brackish groundwater quantities shown include permitted but currently unused capacity. Additional quantities from identified project options will require evaluation similar to fresh groundwater.

²Groundwater that is permitted but unused for public supply, based on the 2022 Estimated Water Use Report (Ferguson & Hampton, 2023).

³These values represent conservation potential (gains in efficiency). There is an estimated potential 16.8 mgd Districtwide for AWS (tailwater recovery) AG projects based on extrapolation from historical FARMS participation.

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Chapter 5. Overview of Water Supply Development Options

The WSD component of the RWSP requires the District to identify water supply options from which water users in each planning region can choose to meet their individual needs. In addition, the District is to determine the associated costs of developing these options. As discussed in Chapter 4, the sources of water potentially available to meet projected water demand in the District include fresh groundwater, water conservation, reclaimed water, surface water, stormwater, brackish groundwater desalination, and seawater desalination. Reasonable options for developing each of the sources have been and continue to be identified, including planning level analyses and costs, where available.

Where applicable, water supply options developed through regional planning efforts conducted by TBW, the Withlacoochee Regional Water Supply Authority, the Peace River Manasota Regional Water Supply Authority (PRMRWSA), and the Polk Regional Water Cooperative, are incorporated into the RWSP for each planning region. These options are not necessarily the District's preferred options but are provided as reasonable concepts that water users in the region



City of Plant City direct potable reuse pilot project.

may pursue in their water supply planning. A number of the options are of such a scale that they would likely be implemented by either a regional water supply authority or a group of users. Other options, such as those involving reclaimed water and conservation, could be implemented by individual utilities or a group of users. It is anticipated that users will choose an option or combine elements of different options that best fit their needs for WSD, provided they are consistent with the RWSP. Following a decision to pursue an option identified in the RWSP, it will be

necessary for the parties involved to conduct more detailed technical assessments to provide the necessary support for developing the option and to obtain all applicable permits. See Chapter 5 in each planning region's respective RWSP for a listing of WSD options in the District.

The CFWI has identified both traditional source water availability and additional AWS development options for the collaborative planning region, including those portions of Polk and Lake counties within the District. These options include use of brackish groundwater, surface water, reclaimed water, and water management strategies such as conservation. The 2025 CFWI RWSP contains additional information regarding the water supply options available to those counties.

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Chapter 6. Water Supply Projects Under Development

This chapter is an overview of water supply projects that are under development in the planning regions. Projects under development are those the District is co-funding and are either (1) actively in the planning, design, or construction phase; (2) not yet in the planning phase but have been at least partially funded through FY2024; or (3) have been completed since the year 2020 and are included to report on the status of implementation since the previous RWSP. Below are brief summaries of the planning regions' water supply projects under development. The anticipated benefits from the numerous reclaimed water and conservation projects are provided in Table 3. See Chapter 6 in each planning region's respective RWSP for a complete listing of water supply projects under development in the District.

The District provides funding for University of Florida Institute of Food and Agricultural Sciences (UF/IFAS) investigations on a variety of agriculture and urban landscape irrigation issues that involve best management practices (BMPs) including water conservation. There are 5 ongoing IFAS research and education projects that involve BMPs to increase water use efficiency. The total cost of these projects is approximately \$1.4 million.

Heartland Planning Region

The PRWC is continuing with development of two lower Floridan aquifer (LFA) brackish groundwater wellfield projects. The Southeast Wellfield and West Polk Wellfield projects will collectively provide up to 22.5 mgd of AWS to serve the PRWC's member governments, helping to reduce reliance on increasingly constrained upper Floridan aquifer sources. The Southeast



PRWC West Polk Wellfield

Wellfield Regional Transmission System is also being developed through a companion project to the Southeast Wellfield. Through its Cooperative Funding Initiative, the District is providing a combined cost share of approximately \$294 million toward these projects.

Reclaimed water supply projects in the planning region include nine that are under development and another four which are estimated to experience additional future supply growth. These projects will supply 4.76 mgd of reclaimed water, resulting in 3.88 mgd

of potable-quality water benefits at a total cost of approximately \$27.5 million.

Non-agricultural water conservation projects in the region include 12 that are under development. These projects include the installation of advanced irrigation systems, advanced metering analytics, and irrigation evaluations. Also included are indoor and outdoor conservation projects with the multi-family, I/C, and L/R sectors. These projects will save approximately 223,602 gallons per day (gpd) at a total cost of approximately \$1,319,066. There are 10 agricultural WRD projects within the region. The combined water resource benefits of these projects are expected to be 490,000 gpd and have a District cost share of approximately \$1,654,131.

Northern Planning Region

Reclaimed water supply projects include two under development and another three that are projected to experience additional future supply growth. These projects will supply more than 3.10 mgd of reclaimed water that will result in 2.50 mgd of potable-quality water benefits at a total cost of approximately \$15.9 million.

Non-agricultural water conservation projects include 29 that are under development in the planning region. These projects include toilet rebates, irrigation evaluations, and comprehensive conservation programs with a variety of indoor and outdoor best management practices. Also included are indoor and outdoor conservation projects with the I/C and L/R sectors. The projects will save approximately 324,111 gpd at a total cost of approximately \$1,664,366. There is one agricultural WRD project underway within the region with water resource benefits expected to be 90,000 gpd at a District cost share of \$31,707.

Southern Planning Region

The PRMRWSA is continuing the development of its Regional Integrated Loop System, which includes a series of transmission pipelines to regionally transfer and deliver water from existing and future alternative supplies to demand centers within its four-county service area. Two of the loop system phases are currently under construction (Phases 2B and 3C), with a combined District cost share of \$62.7 million. The PRMRWSA is also developing the 9 billion gallon, off-stream Peace River Regional Reservoir No. 3 and associated river intake pump station to harvest and store seasonally available flows from the river. The District is also providing funding assistance in the amount of \$115.7 million for this project.

Reclaimed water supply projects include seven under development and another one that is estimated to experience additional future supply growth. These projects will supply 5.55 mgd of reclaimed water and provide 4.10 mgd of potable-quality water benefits at a total cost of approximately \$24.6 million.

A total of 20 non-agricultural water conservation projects are under development in the planning region. These projects include toilet rebates, line looping (to reduce flushing), and installation of advanced irrigation systems. Also included are indoor and outdoor conservation projects with the multi-family, I/C, and L/R sectors. These projects will save approximately 255,475 gpd at a total cost of approximately \$2,295,25. There are 28 agricultural WRD projects within the region. The projects combined water resource benefits are expected to be 2,650,000 gpd and have a District share of approximately \$10,303,366.

Tampa Bay Planning Region

Tampa Bay Water (TBW) is developing the Southern Hillsborough County Transmission Expansion project to construct a potable water transmission interconnection to supply additional AWS from TBW's High Service Pump Station to Hillsborough County. The transmission interconnection will be approximately 26 miles long and is expected to have a max daily capacity of 65 mgd. Through its Cooperative Funding Initiative, the District is providing a cost share of approximately \$145 million toward this project.

The planning region includes ten reclaimed water supply projects under development. These projects will supply approximately 5.34 mgd of reclaimed water, resulting in 4.10 mgd of potable-quality water benefits at a total cost of approximately \$52.7 million.

A total of 24 non-agricultural water conservation projects are under development in the planning region. These projects include toilet rebates, comprehensive conservation programs with a variety of indoor and outdoor BMPs, irrigation evaluations, satellite leak detection, and advanced metering analytics. Also included are indoor and outdoor conservation projects with the multi-family, I/C, and L/R sectors. The projects will save approximately 1,124,936 gpd at a total cost of approximately \$5,019,866. There are seven agricultural WRD projects within the region. The combined water resource benefits of these projects are expected to be 350,000 gpd and have a District share of approximately \$1,798,708.

Table 3. *Reclaimed water and water conservation benefits from projects that meet the District's definition of being under development*

Planning Region	Reclaimed Water (mgd)	Water Conservation (mgd)		Total (mgd)
	Benefit	Non-Agriculture	Agriculture ¹	
Heartland	3.88	0.22	0.49	4.59
Northern	2.50	0.32	0.09	2.91
Southern	4.10	0.26	2.65	7.01
Tampa Bay	4.10	1.12	0.35	5.57
Total	14.58	1.92	3.58	20.08

¹ The FARMS projects calculated were specific projects of the FARMS water resource development program that were budgeted from Fiscal Year (FY) 2020 through FY2024. Benefits were calculated from anticipated savings.

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Chapter 7. Water Resource Development Component

The intent of WRD projects is to enhance the amount of water available for reasonable-beneficial uses and for natural systems. The District classifies WRD efforts into two categories: (1) data collection and analysis activities that support WSD by local governments, utilities, regional water supply authorities and others, and (2) regional projects designed to create an identifiable supply of water for existing and/or future reasonable-beneficial uses.

The data collection and analysis activities conducted by the District support the health of natural systems and the development of water supplies. The activities include a comprehensive scientific data monitoring program that includes assembly of information on key indicators such as rainfall, surface and groundwater levels, water quality, hydrogeology, and stream flows. Data collected allows the District to gauge 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 structure operations, water use and environmental resource permitting and compliance, MFLs evaluation and status assessments, the Surface Water Improvement and Management Program, the NTBWUCA, the SWUCA, the DPCWUCA, water supply planning in the District and CFWI Planning Area, modeling of surface water and groundwater systems, cooperative and district initiative project development and monitoring, and many resource evaluations and reports.



The FARMS Program encourages water conservation and other agricultural best management practices.

As of FY2025, the District has budgeted for 12 projects that are ongoing and meet the definition of WRD. These projects include (1) ASR feasibility and pilot projects to further the development of innovative technologies to produce water from alternative sources and achieve hydrologic restoration; (2) agricultural water supply projects including the FARMS Program that employ agricultural water conservation strategies to increase the water use efficiency of agricultural operations; and (3) projects to restore minimum flows to impacted water resources. Districtwide, these 12 projects will produce or conserve an estimated 49.3 mgd at a total cost of approximately \$130 million.

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Chapter 8. Overview of Funding Mechanisms

This chapter provides an overview of mechanisms available to generate the necessary funds to implement the water supply and WRD projects proposed by the District and its cooperators to meet the water supply demand projected through 2045 and to restore MFLs to impacted natural systems.

To estimate the capital cost for projects needed to meet demands, the District has compiled a list of large-scale WSD projects. The water supply produced from these large-scale WSD projects, combined with the water supply to be produced from numerous other projects currently under development, will meet approximately 21 percent of the projected demand.

The District anticipates that a large portion of the remaining demand will be met through projects that users will select from the water supply options listed in Chapter 5 of the RWSP for each planning region. The amount of funding that will likely be generated through 2045 by the various utility, District, state, and federal funding mechanisms is compared to the capital cost of the potential large-scale projects. This comparison allows an evaluation of funding adequacy for support of projects necessary to meet water demands.

Water Utility Funding

Water supply development (WSD) funding has been, and will remain, the primary responsibility of water utilities and water authorities. Increased demand generally results from new customers that help to finance source development through impact fees and utility bills. Water utilities draw from a variety of revenue sources such as connection fees, tap fees, development impact fees (system development charges), base and minimum charges, and volume charges. Connection and tap fees generally do not contribute to WSD or treatment capital costs. Impact fees are generally devoted to the construction of source development, treatment, and transmission facilities. Base charges generally contribute to fixed customer costs, such as billing and meter replacement. However, a high base charge, or a minimum charge, which covers the cost of the number of gallons of water used, may also contribute to source development, treatment, and transmission construction cost debt service. Volume charges contribute to both source development/treatment/transmission debt service, and operation and maintenance. Financing through volume-related charges is the most economically efficient means to finance new WSD. Volume charge financing provides consumers and businesses the greatest degree of direct control over water-related costs and a direct incentive to conserve.

Community development districts and special water supply and/or sewer districts may also develop non-ad valorem assessments for system improvements to be paid at the same time as property taxes. Regional water supply authorities are also special water supply districts and are typically funded through fixed and variable charges to the utilities they supply, although they have the ability to levy taxes with county/municipal approval. All of the above have the ability to issue secure construction bonds backed by revenues from fees, rates, and charges.

District and State Funding

A variety of potential funding sources were evaluated to create a projection of funding that could be used for water supply and WRD projects. These included the District's Cooperative Funding

Initiative and District Initiatives, as well as the state's Water Protection and Sustainability Trust Fund, Springs Initiative, and Water Supply and Water Resource Development Grant Program. The results of this evaluation found that a minimum of \$2.6 billion could potentially be generated or made available to fund those projects necessary to meet projected water supply demands through 2045 and to restore MFLs for impacted natural systems. This figure may be conservative, since it is not possible to determine the amount of funding that may be available in the future from the federal government and state of Florida.

Evaluation of Project Costs to Meet Projected Demand

Of the 215.35 mgd of Districtwide projected demand increases during the 2025–2045 planning period to meet the demand for all users and to restore MFLs for impacted natural systems, it is estimated that 42.59 mgd, or 20 percent of the demand, has either been met or will be met by projects that are under development, including reclaimed water and water conservation. The total District share of cost for these projects currently under development, which also include regional transmission and brackish groundwater treatment systems is just over \$697 million.

To develop an estimate of the capital cost of projects necessary to meet demand, the District compiled a list of prioritized, large-scale WSD projects proposed for development within the 2045 planning horizon. These projects are for the development of 22.5 mgd and regional transmission of AWS. Estimated costs and the quantity of water these projects will produce are listed in Table 4. These projects include those identified by the Peace River Manasota Regional Water Supply Authority (PRMRWSA), Polk Regional Water Cooperative (PRWC), and Tampa Bay Water (TBW) that are currently receiving District co-funding. Also included is funding set aside for the development of potable reuse as outlined in the District's long-term funding plan and supported by the FDEP's February 2025 publication of potable reuse rules in Chapter 62-565, F.A.C. The table shows the estimated total cost of these water supply and transmission projects is \$1.72 billion. Aside from these projects, additional water supplies are being developed in the District outside of the District's funding programs, such as surface water treatment plant expansions being undertaken by the PRMRWSA and TBW. Due to funding constraints as the District co-funds the regional prioritized AWS project options listed in Table 4, the District is currently unable to provide funding for these surface water treatment plant expansions. However, they are critical projects for meeting growing demands.

For the Northern Planning Region, demands for water through 2045 may continue to be met with traditional groundwater sources on a regional scale, for which the District does not provide matching financial resources. However, alternative sources may be needed to supplement traditional sources and meet demands in specific high-growth areas. Regionally, the need for groundwater supplies can be reduced through the use of available reclaimed water and implementation of comprehensive water conservation measures, for which the District has historically provided funding assistance.

Table 4. Proposed large-scale water supply and water resource development projects by 2045 (millions of \$)

Project	Planning Region	Entity to Implement	Quantities (mgd)	Capital Costs (million \$)
Reservoir No. 3	Southern	PRMRWSA	N/A ¹	\$375.08
Regional Integrated Loop System Phase 2B	Southern	PRMRWSA	N/A ²	\$87.44
Regional Integrated Loop System Phase 3C	Southern	PRMRWSA	N/A ²	\$70.80
Southeast Wellfield Implementation	Heartland	PRWC	12.5	\$247.53
Regional Transmission Southeast Phase 1	Heartland	PRWC	N/A ³	\$174.10
West Polk Wellfield	Heartland	PRWC	10.0	\$228.14
Southern Hillsborough County Transmission Expansion	Tampa Bay	PRWC	N/A ⁴	\$438.71
Potable Reuse	TBD	TBD	TBD	\$100.00
Total – Districtwide			22.5	\$1,721.80

¹This project will create 9 billion gallons of surface water storage capacity.

²This project is needed for regional transmission of AWS. Max day transmission capacity is 40 mgd.

³This project is needed for regional transmission of AWS. Max day transmission capacity is 30 mgd.

⁴This project is needed for regional transmission of AWS. Max day transmission capacity is 65 mgd.

Evaluation of Potential Available Funding to Assist with the Cost of Meeting Projected Demand

The conservative estimate of \$2.6 billion in cooperator and District financial resources that will be generated through 2045 for funding is sufficient to meet the projected \$1.7 billion total cost of the large-scale projects listed in Table 4. State and federal funding sources may also assist with any remaining and/or high-end costs for future AWS projects and water conservation measures where fresh groundwater resources are limited. These financial projections are subject to economic conditions that may affect the level of District ad-valorem tax revenue and the availability of state and federal funding. However, such conditions may similarly affect future water demand increases.

For a complete discussion of funding options, see Chapter 8 in each planning region.

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Guiding Principles

The RWSP is based on a number of important principles that will guide the District's strategies to meet water supply demand through 2045. The principles that follow consider statutory directives, hydrologic conditions, existing and potential impacts to natural systems, the characteristics of water user groups, and other factors.

An emphasis on water conservation

Conservation is a potential source of water for all major use types. Future water demand is projected based on current water use efficiencies. If efficiency is increased through conservation, future demand and the need for more expensive AWS projects will be offset and reduced. Conservation is strongly recommended for all users; however, special emphasis is placed on public supply use in the Northern Planning Region, which has tremendous water savings potential. Regarding agricultural demand, the District, in cooperation with the FDACS, developed the FARMS Program, a cost-share reimbursement program for implementation of best management practices that conserve water and improve water quality.

An emphasis on reclaimed water

Reclaimed water is an important resource that can help meet future demands in all use sectors. The District's goals are to utilize 75 percent of all reuse flows and achieve a 75 percent resource benefit from those reuse flows. To meet these goals, the District emphasizes a variety of approaches to maximize reclaimed water utilization and benefit, including direct and indirect potable reuse development, system interconnects, water-conserving rate structures, seasonal storage, and system augmentation where appropriate.

Regional cooperation in water supply planning

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. The primary vehicles for regional cooperation in the District are the CFWI and the four regional water supply authorities whose jurisdictions correspond closely with the four planning regions. The RWSP was developed in close coordination with these entities.

Focus on alternative sources

Since three of the four planning regions are subject to MFL recovery strategies due to the effects of groundwater withdrawals, the RWSP focuses on alternative water sources,

including surface water, brackish groundwater, seawater desalination, reclaimed water, and water conservation.

Meeting future demand through land-use transitions

In the SWUCA, land uses such as agriculture and mining are being displaced by residential and commercial land uses. It is anticipated that the water needs of these new land uses will be met predominately by alternative supplies, such as harvesting and storing the wet-season flow of rivers, reclaimed water, and conservation. Since the land uses being replaced rely almost entirely on groundwater, there will be a net reduction in groundwater use. While a portion of this groundwater will be retired to help meet MFLs, the remainder can be used to meet the demands of development in areas where access to alternative supplies is limited.

The role of constraints such as MFLs

In three of the four planning regions, some water resources are not meeting their established MFLs. In these areas, it will be necessary to continue implementation of MFL recovery strategies while also identifying potential water supply options to meet future demands.