Fiscal Year 2024-25 Five-Year Water Resource Development Work Program

Proposed October 24, 2024



NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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1 INTRODUCTION

Florida's water management districts are required by sections 373.036 and 373.709, Florida Statutes (F.S.), to conduct water supply planning in regions where existing sources of water are determined to be inadequate to supply water for existing and future reasonable-beneficial uses and to sustain water resources and related natural systems for at least a 20-year planning period. This determination is based on a technical assessment of all sources of water, existing water uses, anticipated future needs, and water conservation efforts. District governing boards re-evaluate the determination at least once every five years.

The Northwest Florida Water Management District (NWFWMD or District) established seven water supply planning regions in 1996 (Figure 1). The most recent Districtwide water supply assessment (WSA) was completed in 2023. Consistent with the findings of successive assessments beginning in 1998, a regional water supply plan (RWSP) for Region II (Santa Rosa, Okaloosa, and Walton counties) was first approved and has been in implementation since February 2001. The plan was most recently updated in 2019 with a 2020-2040 planning horizon. A 2024 update to the Region II RWSP is under development. Additional information is available at: https://nwfwater.com/Water-Resources/Water-Supply-Planning.



Figure 1. NWFWMD Water Supply Planning Regions

Districts are required by section 373.536(6)(a)4, F.S., to prepare a Five-Year Water Resource Development Work Program (WRDWP or Work Program) as a part of the annual budget reporting process. Work Programs describe implementation strategies and funding plans over a five-year period for water resource and water supply development, including alternative water supply development, for each approved regional water supply plan developed or revised under section 373.709, F.S.

This Work Program covers fiscal year (FY) 2024-25 through FY 2028-29. It is consistent with the projects and strategies described in the Region II RWSP and the District's final adopted budget for FY 2024-25.

1.1 PURPOSE

Pursuant to section 373.536(6)(a)4, F.S., the Work Program must address all elements of the water resource development component in the approved RWSP and identify water supply projects proposed for District funding and assistance. The annual funding plan identifies anticipated District funding and additional funding needs. The Work Program must also:

- Identify projects that will provide water;
- Explain how each water resource development and water supply development 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 RWSPs in supporting the implementation of minimum flows and minimum water levels (MFLs) and water reservations; and
- Ensure sufficient water is available to meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event and to avoid the adverse effects of competition for water supplies.

A proposed Work Program is furnished within 30 days after adoption of the District's final budget and posted on the District website for public review. The final Five-Year WRDWP is incorporated into the District's March 1 Consolidated Annual Report.

1.2 WORK PROGRAM SUMMARY

The Work Program presented herein, including the District's implementation strategy and five-year funding plan, has been developed to ensure water is available to meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event, to maintain the function of natural systems, and to avoid the adverse effects of competition for water supplies. The Work Program is specifically focused on implementation of the Region II RWSP, with additional description of Districtwide and supporting activities.

The Fiscal Year 2024-25 Work Program describes current progress toward implementing water resource development projects included within the Region II RWSP. The Work Program also describes funded alternative water supply development projects. The Work Program further includes five-year funding plans for water resource development and water supply development projects, to include the current year budgeted amounts and proposed funding levels for the following years.

For Fiscal Year 2024-25, \$1,745,940 is budgeted for water resource development within Region II, and \$8,021,096 is budgeted for alternative water supply development and water conservation within the region. The Work Program identifies approximately 6.4 million gallons per day (mgd) of reclaimed water to be made available through currently funded alternative water supply development projects within the region.

2 REGION II WORK PROGRAM

The 2019 update to the Region II RWSP was developed following the recommendation of the 2018 WSA and was approved by the District's Governing Board on January 23, 2020. The District completed its 2023 WSA update in December, and the 2024 update to the Region II RWSP is subsequently anticipated to be completed in December. Water demand projections for the 2024 RWSP update were revised with newly published agricultural water demand projections provided by the Florida Department of Agriculture and Consumer Services. Water use in the region was estimated to be about 76 mgd in 2020, and it is projected to climb 40 percent to approximately 107 mgd by 2045 (Table 1). Public supply is estimated to represent about 70 percent of the future demand over the planning horizon. Public supply and recreational landscape irrigation water uses are expected to remain approximately 86 percent of all Region II water demand through the planning horizon. In drought conditions, public supply and recreational landscape irrigation together are projected to comprise about 88 percent of demand in 2045.

Use Category	Estimates	Future	2020-2045 Change					
Use Category	2020	2025	2030	2035	2040	2045	mgd	%
Public Supply	54.17	59.70	64.06	67.88	71.46	74.90	20.73	38.3%
DSS	2.07	1.80	1.74	1.62	1.46	1.27	-0.79	-38.5%
Agriculture	2.92	5.9	6.32	6.87	7.46	8.02	5.11	175.1%
Recreational	12.14	13.30	14.28	15.09	15.82	16.49	4.35	35.8%
ICI	4.69	4.99	5.55	5.87	6.07	6.07	1.38	29.4%
Power	-	-	-	-	-	-	n/a	n/a
TOTALS*	75.98	85.69	91.95	97.32	102.27	106.75	30.76	40.5%

Table 1. 2020 Estimated Water Use and 2025-2045 Demand Projections for Region II

*Figures expressed in million gallons per day (mgd). Numbers may not sum due to rounding.

There are currently no adopted MFLs, no recovery or prevention strategies, and no water reservations in Region II.

2.1 WATER RESOURCE DEVELOPMENT

Water resource development is "the formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and nonstructural programs to protect and manage water resources; the development of regional water resource implementation programs; the construction, operation, and maintenance of major public works facilities to provide for flood control, surface and underground water storage, and groundwater recharge augmentation; and related technical assistance to local governments, government-owned and privately owned water utilities, and self-suppliers to the extent assistance to self-suppliers promotes the policies as set forth in s. 373.016."¹ As indicated in section 373.705, F.S., water resource development is primarily a role of the water management districts, although utilities may provide assistance.

The Draft 2024 Region II RWSP includes water resource development projects encompassing strategies for managing water resources and supporting alternative water supply development (Table 2).

¹ Section 373.019(24), F.S.

Activity	Description	Timeframe	Project Cost
Reuse	Coordination for water reuse projects, grants, and programs.	FY 2024-25 – FY 2028-29	\$423,700
Conservation	Coordination and technical support for water conservation projects and programs as well as evaluation of the potential future water savings.	FY 2024-25 – FY 2028-29	\$143,180
Surface Water Evaluations	Evaluations of potential surface water sources and coordination with utilities and local governments regarding funding and future implementation and the development of minimum flows for the Shoal River.	FY 2024-25 – FY 2028-29	\$865,240
Aquifer Storage and Recovery (ASR) and Managed Aquifer Recharge	LongLongLongcoordination for water reuse projects, grants, and rograms.FY 2024-25 - FY 2028-29FY 2028-29coordination and technical support for water onservation projects and programs as well as valuation of the potential future water savings.FY 2024-25 - FY 2028-29valuations of potential surface water sources and oordination with utilities and local governments gradring funding and future implementation and the evelopment of minimum flows for the Shoal River.FY 2024-25 - FY 2028-29echnical support and evaluations of the feasibility of quifer storage and recovery (ASR) and/or managed quifer recharge (AR).FY 2024-25 - FY 2028-29ata collection to better define the nature and extent f the confining unit that restricts poor-quality roundwater within the Lower Floridan aquifer from noving vertically into the potable production zone of ae Upper Floridan aquifer.FY 2024-25 - FY 2024-25 - FY 2024-25 - FY 2024-25 - FY 2026-27lentify potential options to reduce groundwater roduction near the coast and shift production north, cluding utility interconnections, to reduce or abilize the cone of depression in the Floridan quifer resource evaluations and nodeling analyses to update alternative water supply sesesments.FY 2024-25 - FY 2028-29SIoridan aquifer resource evaluations with refined roundwater flow and solute transport models to nform water availability.FY 2024-25 - FY 2028-29Sfully folgo data collection, monitoring, and analyses; rater use data, analyses, planning, and WSD support.FY 2024-25 - FY 2028-29\$		TBD
Lower Floridan Aquifer Enhanced Data Collection	Data collection to better define the nature and extent of the confining unit that restricts poor-quality groundwater within the Lower Floridan aquifer from moving vertically into the potable production zone of the Upper Floridan aquifer.		\$2,310,000
	Identify potential options to reduce groundwater production near the coast and shift production north, including utility interconnections, to reduce or stabilize the cone of depression in the Floridan aquifer and the rate of saltwater intrusion.		
Groundwater Evaluations	Sand-and-gravel aquifer resource evaluations and modeling analyses to update alternative water supply assessments.		\$1,535,510
	Floridan aquifer resource evaluations with refined groundwater flow and solute transport models to inform water availability.		
	Minimum flow development for Morrison Spring.		\$675,000
Data Collection and Analysis	Hydrologic data collection, monitoring, and analyses; water use data, analyses, planning, and WSD support.		\$1,797,310
Total	1		\$7,749,940

Table 2. Summary of Region II RWSP	Water Resource Development	Projects 2024 through 2029
Table 2. Summary of Region II R WSI	water Resource Development	. 1 1 0 jects, 2024 till ough 2029

Surface Water Evaluations

Surface water investigations and cooperative efforts have focused on the Shoal River as an alternative water supply source for Okaloosa County. This source has the potential to augment potable water supplies in mid-county and coastal areas of the county, which will further support water resource sustainability and reduce reliance on Floridan aquifer withdrawals in coastal areas. Okaloosa County has acquired land along the Shoal River and has completed significant planning and analysis toward development of a future water supply source.

Considering potential resource concerns about traditional water supply sources within Walton County, the District is focusing water resource development efforts on identifying potential alternative water supply sources within this portion of the region. In 2024, the District initiated work to assess the Choctawhatchee River as a potential water supply source. The Choctawhatchee River is the 3rd largest river in Florida in terms of flow, with a watershed that spans portions of Florida and Alabama and exceeds 3 million acres. The median flow at the USGS station near Bruce, Florida, based on the 1994 to 2024 period of record is 3,830 cfs (approximately 2,061 mgd). The Choctawhatchee River is designated as Critical Habitat for Gulf Sturgeon and several listed mussel species occur along the river. Flows from the river support a diverse and productive estuary. Although a specific withdrawal schedule protective of aquatic habitat for this river system remains to be determined, a yield of 10 mgd from the Choctawhatchee River would comprise less than 0.5 percent of the median flow. A water supply project of this scale may require partnerships among utilities, as well as considerable state and federal funding for successful implementation.

Two waterbodies in Region II are on the District's MFL Priority List and Schedule: Morrison Spring, a second-magnitude spring in Walton County, and the Shoal River, which spans central Walton and Okaloosa counties. Rule adoption is scheduled for 2031 and 2033, respectively. To date, there are no adopted MFLs and therefore no recovery or prevention strategies (RPS) in Region II. Further, there are no waterbodies in the region subject to water reservations.

Reuse of Reclaimed Water

Reclaimed water remains an important alternative water supply source for meeting current and future demands in Region II. The District continues to work with local and regional partners to identify viable strategies to further develop and extend reclaimed water resources. Reuse planning is focused on achieving potable water offset by providing reclaimed water for such purposes as public access irrigation, toilet flushing, fire protection, and industrial uses. The draft 2024 RWSP update identifies a potential for up to approximately 12 mgd of reclaimed water from water supply development projects to be made available by 2045. Ongoing efforts are focused on project development in cooperation with local governments and utilities and identification of future opportunities for water reuse and development of integrated water quality and quantity strategies. Such efforts ultimately can result in development of regionally-significant water reuse facilities. Among current examples are the South Santa Rosa Reuse Initiative and the Pace Water System and City of Niceville reuse projects described below, as well as Okaloosa County's Shoal River Ranch Water Reclamation Facility. Current reclaimed water projects funded in cooperation with the District are listed in Appendix A.

Water Conservation

Like reuse, water conservation is an essential component of ensuring the long-term sustainability and sufficiency of water supplies within Region II. Enhanced water conservation measures are required of individual water use permittees within the coastal water resource caution area (WRCA).

As part of the ongoing 2024 Region II RWSP update, the District has engaged consultant services to further identify water conservation savings using the Alliance for Water Efficiency's water conservation tracking tool. The draft 2024 RWSP update identifies a potential for up to 9.3 mgd in additional water conservation savings by 2045 that may be achieved through passive savings and conservation measures and other programs implemented by utilities and local governments. Among potential strategies are cost-share grants and incentive programs, facility retrofits for improved efficiency and water loss prevention, conservation rate structures, improved utility data management, and public education and outreach. Conservation rate structures, public education, enhanced data analysis, and water loss prevention efforts are implemented by utilities in response to resource conditions and regulatory requirements. Additionally, passive savings is anticipated to occur as consumers replace older plumbing fixtures with newer low volume fixtures. Water use data and analysis have documented sustained progress in reducing per capita water use rates.

The District will continue to seek funding for conservation grant programs to complement ongoing water conservation measures implemented by utilities and addressed through permit conditions. Additional efforts to support water conservation measures are reflected in the water supply development assistance budget to support grants to help rural communities acquire and install modern water meters to facilitate a reduction in water loss.

Aquifer Storage and Recovery and Managed Aquifer Recharge

Depending on hydrogeologic characteristics, aquifer storage and recovery (ASR) has the potential to store large quantities of water for subsequent use. A few aquifer recharge projects have been permitted in the region for groundwater remediation and restoration. The draft 2024 RWSP update does not currently identify any new water savings over the 20-year planning horizon through ASR. However, an existing ASR system permitted for 1.12 mgd remains in service. As part of the 2024 RWSP update, the District initiated work to begin assessing the potential for managed aquifer recharge projects to enhance the sustainability of the Upper Floridan aquifer. A planning level review suggests that hydrogeologic conditions may be suitable for aquifer recharge, but no conceptual projects have been identified. There are no current ASR or managed aquifer recharge projects included in the District's Budget or Five-Year Work Program.

Groundwater Evaluations

District groundwater evaluation programs include data collection, groundwater and saltwater intrusion modeling, MFL technical assessments, and associated resource assessments.

Sand-and-Gravel Aquifer

The District plans to incorporate sand-and-gravel aquifer resources into larger groundwater models and further evaluate the sustainability of the sand-and-gravel aquifer as an alternative water source. Groundwater levels within the sand-and-gravel aquifer are routinely monitored as part of the District's quarterly water level and continuous monitoring networks. The District's 2020 MFL Priority List includes the sand-and-gravel aquifer in Okaloosa and Santa Rosa counties as a waterbody to be evaluated and scheduled, if necessary, for future years. Beginning in FY 2024-25, additional efforts are planned to include developing a sand-and-gravel aquifer model along with the Western District Model framework.

Floridan Aquifer

The Floridan aquifer functions as a regional aquifer system across inland and coastal areas. Designation of Upper Floridan aquifer withdrawals as "coastal" or "inland" facilitate water use and planning

evaluations. However, Upper Floridan aquifer withdrawals in inland areas can affect Upper Floridan aquifer water levels near the coast. Data collection for the Region II coastal Upper Floridan MFL began in 2015. Groundwater flow and transport models were developed and calibrated in 2019 and 2020 to evaluate the need to establish minimum aquifer levels for the Upper Floridan aquifer in Region II. Although the MFL evaluation determined, at the time, that minimum aquifer levels were not needed, subsequent increases in projected water demand as identified in the 2023 WSA update and increased drawdowns at the coast suggest that regional threats to Upper Floridan aquifer water supplies persist. Sustainability modeling will continue by verifying model predictions and recalibration, if needed, using data collected since initial model development. Water quality trend analyses will also be updated with newer data.

Water quality and water level data collection activities will continue for the Upper Floridan aquifer. The groundwater modeling results were updated for the Districtwide Water Supply Assessment in 2023. Additionally, groundwater flow and transport modeling was updated for the Region II RWSP that is underway.

Data Collection and Analysis

Hydrologic Data

Hydrologic data collection, monitoring, and analyses are essential to multiple District functions and programs. In Region II, the District maintains a network of rainfall gauges, streamflow gauges, and monitoring wells. Hydrologic and water quality data collection are enhanced by continued cooperation with the United States Geological Survey (USGS) and data provided by water use permittees. Data collected and the evaluation of long-term trend data inform water resource evaluation programs and activities.

Sand-and-gravel aquifer and Floridan aquifer monitoring wells within Region II also provide water level data for numerical groundwater flow and solute transport models, which are used to assess resource sustainability and saltwater intrusion risk. Data collection and monitoring will continue through the five-year work plan period. Contracted services to monitor discharge and stage at the Shoal River and to perform discrete interval water quality sampling to monitor for potential saltwater intrusion will continue through FY 2028-29.

Water Use Data and Planning

Water use data collection and analysis are foundational to regional water supply planning, as well as Districtwide assessments of water use and resource sustainability. Data are analyzed to prepare water use estimates and report metrics annually, with future demand projections generated every five years in conjunction with WSA updates. Annually, individual water use permittees submit water use/pumpage reports detailing water use over the past year. District staff compile and evaluate these reports to assess water use trends and to calculate per capita use statistics. The projections, together with resource assessments, provide the basis for identifying alternative water supply source development needs within the RWSP.

The District completed an updated Districtwide WSA in December 2023. The 2023 assessment was approved at the December 2023 governing board meeting. Associated ongoing water supply planning efforts include collaboration with the Florida Department of Agriculture and Consumer Services on Florida Statewide Agricultural Irrigation Demand annual reports, coordination with the Department of Environmental Protection (DEP), other water management districts, and the Florida Legislature's Office of Economic and Demographic Research.

Water Resource Development Annual Funding Plan

The proposed annual funding plan to support accomplishment of the District's water resource development priorities, as described above, is provided in Table 3.

Water			Anticipated Five Year Work Program								
Resource Development Projects	Budget Activity	FY 23-24 Expendi- tures*	FY 24-25 Budget [†]	FY 25-26	FY 26-27	FY 27-28	FY 28-29	to FY 28-29 Cost Estimate			
Surface Water	1.1.1 1.1.2	\$184,509	\$161,240	\$176,000	\$176,000	\$176,000	\$176,000	\$865,240			
Reuse	1.1.1 2.2.1	\$26,856	\$83,700	\$85,000	\$85,000	\$85,000	\$85,000	\$423,700			
Conservation	1.1.1 2.2.1	\$92,231	\$63,180	\$20,000	\$20,000	\$20,000	\$20,000	\$143,180			
Aquifer Storage and Recovery	2.2.1	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Groundwater Evaluations	1.1.2 2.2.1	\$354,851	\$780,510	\$1,485,000	\$1,485,000	\$385,000	\$385,000	\$4,520,510			
Data Collection and Analysis	1.1.1 1.1.2 1.2.0	\$613,828	\$657,310	\$285,000	\$285,000	\$285,000	\$285,000	\$1,797,310			
TOTAL		\$1,272,275	\$1,745,940	\$2,051,000	\$2,051,000	\$951,000	\$951,000	\$7,749,940			

 Table 3. Region II Water Resource Development Annual Funding Plan

*Preliminary figures. Final expenditures to be provided in the March 1, Consolidated Annual Report. [†]Based on approved adopted budget.

2.2 WATER SUPPLY DEVELOPMENT

Water supply development involves "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."² Water supply development encompasses both traditional and alternative water supply development. Alternative water supply sources may include saltwater, brackish waters, surface water captured predominately during wet weather flows, sources made available through the addition of new storage capacity, reuse of reclaimed water, downstream augmentation of waterbodies with reclaimed water, stormwater, and any other water supply source designated as nontraditional for a water supply planning region in the applicable regional water supply plan.³ As indicated by section 373.705, F.S., water supply development is primarily the role of local governments, regional water supply authorities, and water utilities, although water management districts may provide assistance.

² Section 373.019(26), F.S.

³ Section 373.019(1), F.S.

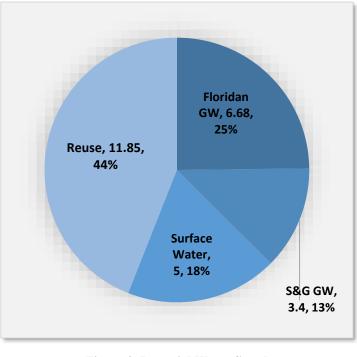


Figure 2. Potential Water Supply Development by Project Source (mgd)

The 2024 Region II RWSP draft identifies water supply development options that may generate up to 26.93 mgd of water by 2045 for future needs (Figure 2). About 62 percent or roughly 17 mgd are alternative supplies, including reclaimed water, and surface water as an alternative to traditional aquifer withdrawals.

Storage and distribution project options include distribution water storage, infrastructure improvements, and system interconnections. While these projects investment into the represent water distribution system and often increase capacity, they do not create new water supply. Due to this, increases in capacity from these projects are not counted among future potential water supply. Water options conservation project include infrastructure replacements and upgrades, advanced metering systems, and public

information conservation programs. Water conservation and alternative water supply projects meet the goals of the RWSP and are therefore preferred options. Traditional groundwater projects may also continue to be an option for inland areas.

The 2024 RWSP draft includes within the water supply development component reuse project options submitted by utilities in all three Region II counties with a combined total potential reuse flow of approximately 11.9 mgd by 2045. This is in addition to approximately 9.2 mgd of reclaimed water currently provided by utilities in the region for public access irrigation. Most of the project options indicate some availability of local matching funds and proposed implementation within the next five to ten years.

State alternative water supply and water protection and sustainability trust fund (WPSTF) appropriations have been awarded that leverage local and other resources. In FY 2022-23, Okaloosa County completed a 2.5 mgd reclaimed water transmission main connecting the County's Arbennie Pritchett Water Reclamation Facility to the City of Niceville and Eglin AFB.

Ongoing District-supported projects are summarized below:

- The South Santa Rosa Reuse Initiative, a cooperative effort between Santa Rosa County, the Holley-Navarre Water System, the City of Gulf Breeze, and Eglin AFB, will interconnect multiple utilities, improve water reclamation facilities, and expand reclaimed water systems, increasing the reclaimed water resource for the region and eliminating wastewater discharge into Santa Rosa Sound. Upon completion, this project is expected to make 1.4 mgd of reclaimed water available.
- The Pace Water System Chumuckla Highway Ground Storage Tank and Booster Pump Station Project will provide for construction of a 2.0 million gallon ground storage tank and booster pump station to deliver reclaimed water to residential customers and a park complex.

• In FY 2023-24, the City of Niceville began working on the Reclaimed Water to Deer Moss Creek Subdivision Project in cooperation with the District and the Florida Department of Environmental Protection. The project will provide 22,500 linear feet of reclaimed watermain, a holding pond, and high service pumps. Reclaimed water from Okaloosa County will be routed through this facility and provided to the Deer Moss Creek subdivision.

Additionally, the District is working with rural communities to identify funding resources that can reduce water loss and better position these communities to meet current and future water supply infrastructure needs. A grant project with the City of Paxton to reduce water loss through installation of approximately 350 water meters and appurtenances was recently completed. A list of water supply development projects submitted by utilities in support of the 2024 RWSP update is included in Appendix A.

3 DISTRICTWIDE AND SUPPORTING INITIATIVES

Implementation of water resource development, water supply development, and water quality projects in Region II are complemented by broader regional and Districtwide programs and initiatives. Programs such as these, including in areas where RWSP development is not required, reflect proactive efforts that are protective of resources and advance resource sustainability Districtwide.

Water Supply Development Assistance

The District continues support for water supply development by assisting local governments and utilities with project development and identifying funding sources and options. Limited additional grant funding may be provided as resources allow. In FY 2022-23, Gulf County completed a \$300,000 grant project for upgrades to improve water service on St. Joseph Peninsula. Other ongoing projects include a \$50,000 grant to the City of Gretna for construction of a ground storage tank and a \$50,000 grant to the Town of Campbellton for replacement of approximately 130 water meters to reduce water loss.

Water Reuse

Helping local governments and utilities across northwest Florida identify opportunities to develop and expand the reuse of reclaimed water remains a District priority. Projects that both offset the use of potable water sources and reduce wastewater discharges have been identified in several regions.

During FY 2022-23, the City of Gretna completed a \$44,385 project funded by the WPSTF to install effluent meters integrated within a supervisory control and data acquisition system to allow continuous monitoring of wastewater constituents. Reclaimed water from this system is provided to a nearby nursery operation.

The District continues a \$500,000 grant to assist Bay County in construction of an approximately six-mile reuse transmission main to provide reclaimed water for landscape irrigation and reduce effluent discharge from the North Bay Wastewater Treatment Facility.

Water Conservation

As funding becomes available, the District will extend water conservation cost-share assistance to utilities Districtwide, with emphasis on assisting financially disadvantaged small communities. Among projects considered may be the installation of modern water meters to enable rural communities to improve potable water conservation and management. Additional efforts include agricultural water use efficiency measures, as described below.

Water Resource Evaluations

The District conducts monitoring and assessment activities to assess the status and sustainability of water resources across northwest Florida. The 2023 Districtwide WSA, described above, includes evaluations of the sustainability of water resources through 2045 for all seven regions of the District. Additionally, during FY 2021-22, the District completed a hydrogeologic evaluation

in Gulf County to assess the suitability of the intermediate aquifer as a water supply source. The work involved construction of a test production well and several monitor wells, water quality testing, and completion of an aquifer performance test. The results indicated that modest quantities of potable groundwater are available from the intermediate aquifer system near White City.

Agriculture BMP Cost-Share Program

Significant efforts continue to enhance agricultural water use efficiency and support implementation of associated precision agriculture practices, targeted primarily for the Jackson Blue Spring basin of the Apalachicola River watershed. As of 2024, the program has been expanded to include the Chipola River Springs groundwater contribution area. Together with the Northwest Florida Mobile Irrigation Laboratory, these efforts are increasing water use efficiency and reducing nutrient applications within the spring basin.

Well Abandonment

The District continues its program to properly plug abandoned and contaminated wells through well permitting and a cost-share assistance program. Well abandonments considered for financial assistance typically include financially constrained public water systems, wells located within a WRCA, and wells within areas delineated under Chapter 62-524, F.A.C. (Escambia, Santa Rosa, Jackson, and Leon counties). Other projects not meeting the previously listed criteria can also be considered, as appropriate.

During FY 2023-24, approximately 826 permits were issued to plug abandoned or contaminated wells Districtwide. Approximately 48 percent of those were in Region II. As there were no requests for financial assistance, permits were issued at no cost to the District other than staff time.

Water Quality

The District's interrelated programs support achievement of statewide goals articulated in the Governor's Executive Orders 19-12 and 23-06 to improve water quality, as well as to further development of alternative water supplies and to enhance coastal resilience. The District's Surface Water Improvement and Management (SWIM) program provides a watershed-based planning framework to support water quality protection and improvement throughout northwest Florida. The program engages stakeholder-driven initiatives and complements and supports state water quality restoration efforts, including Total Maximum Daily Loads (TMDLs), Basin Management Action Plans (BMAPs), the Blue-Green Algae Task Force, nonpoint source management grants, and other cooperative funding programs. Priorities, funding resources, and progress for watershed management and water quality protection and restoration are outlined in Chapter 9 of the District's March 1 Consolidated Annual Report.

Land Acquisition, Restoration, and Management

Since 1984, the District has protected approximately 225,903 acres across northwest Florida for water resource purposes, either in fee simple or through conservation easements. The District acquires lands for water quality protection, flood protection and floodplain management, water recharge, and natural resource conservation. District lands within the Econfina Creek Recharge Area, purchased for water resource development purposes, protect the quality and quantity of recharge for Deer Point Lake Reservoir, the primary source of water for Bay County.

4 FUNDING SOURCES AND NEEDS

The state constitutional and statutory millage rate cap for the NWFWMD is 0.05, significantly less than the ad valorem taxing authority afforded the other four water management districts. The District's FY 2024-25 ad valorem tax millage rate, as set by the Governing Board, is 0.0218. To meet its areas of responsibility, the District must rely on other sources of funding, as available. Funding sources used to support water resource and supply development include:

- State Legislative appropriations for alternative water supply;
- Water Protection and Sustainability Program Trust Fund (WPSTF);
- Federal funding awarded by the State for alternative water supply;
- Land Acquisition Trust Fund;
- District Fund Balance;
- State Legislative appropriations for General Operations;
- Local government match funding; and
- Ad valorem.

Since FY 2019-20, the Florida Legislature has made significant resources available for alternative water supply development. The funding is available to help communities develop alternative water supplies and to implement water conservation programs, with priority funding given to regional projects in the areas of greatest need. The District conducts an annual grant cycle and submits recommended projects to the Governing Board for consideration. Board-approved projects are forwarded to DEP, which evaluates projects from all five of the water management districts in making final funding awards.

The WPSTF, established by the 2005 Legislature, has enabled the District to provide cost-share assistance for construction of alternative water supply development projects and implementation of priority water resource development projects. In FY 2019-20, limited funding was appropriated to the water management districts for the first time since FY 2009-10. The District received \$100,000, which will help support the South Santa Rosa Reuse Initiative. An additional \$180,000 was appropriated in FY 2020-21 to provide additional support for alternative water supply development and water conservation.

Local government and utility funding participation is especially important for several types of water resource development projects, notably alternative surface water, reuse of reclaimed water, water conservation, and aquifer storage and recovery, as well as for construction of water supply development projects. All projects require substantial local investment once they reach the water supply development stage.

APPENDIX A: WATER SUPPLY DEVELOPMENT PROJECTS

The following table provides a listing of Region II water supply development projects. The District has no adopted MFLs in Region II and henceforth no recovery or prevention strategies to report on in this Work Program.

Unique ID	Project Name	Cooperating Entity	Project Type	Project Status	Total Water (mgd)	Prior District Funding	FY 2024-25 Budgeted	FY 2025-26	FY 2026-27	FY 2027-28	FY 2028-29	Cooperating Entity Match	Project Total
NF-00043A	Floridan Aquifer	Varies	Inland Groundwater	Complete	TBD	\$8,745,149	\$0	\$0	\$0	\$0	\$0	\$15,578,371	\$24,323,520
NF-00044A	Sand-and- Gravel Aquifer	Varies	Inland Groundwater	Complete	TBD	\$3,302,647	\$0	\$0	\$0	\$0	\$0	\$451,947	\$3,754,594
NF-00045A	Shoal River Surface Water	Okaloosa County	Surface Water Storage	On Hold	TBD	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NF-00046A	Reuse (AWS Funding Pending Allocation)	Varies	Reclaimed Water for Potable Offset	Underway	TBD	\$6,061,125	\$0	\$0	\$0	\$0	\$0	\$6,511,666	\$12,572,791
NWWS- 00052A	Okaloosa, Eglin AFB, Niceville Reclaimed Water	Okaloosa County	Reclaimed Water for Potable Offset	Complete	2.5	\$2,500,000	\$0	\$0	\$0	\$0	\$0	\$8,000,000	\$10,500,000
NWWS- 00053 (A-D)	South Santa Rosa Reuse Initiative	Holley- Navarre WS; Santa Rosa Co.; Gulf Breeze, Eglin AFB	Reclaimed Water for Potable Offset	Underway	1.4	\$1,294,373	\$3,805,627	\$1,500,000	\$1,500,000	\$1,000,000	\$1,000,000	\$22,775,000	\$32,875,000
NWWS- 00058A	GST and Booster Pump Station	Pace Water System	Reclaimed Water for Potable Offset	Underway	2	\$0	\$1,110,725	\$0	\$0	\$0	\$0	\$1,110,725	\$2,221,450
NWWS- 00059A	Water Meter Replacement	City of Paxton	PS Conser- vation	Underway	TBD	\$0	\$135,615	\$0	\$0	\$0	\$0	\$0	\$135,615
	Reclaimed Water to Deer Moss Creek Sub - division S/D	City of Niceville	Reclaimed Water for Potable Offset	Underway	4	\$0	\$2,970,000	\$0	\$0	\$0	\$0	\$0	\$2,970,000
NF-00047A	Storage and Distribution	Varies	Distribution/ Transmission Capacity	Complete	TBD	\$6,481,222	\$0	\$0	\$0	\$0	\$0	\$21,902,083	\$28,383,305
	Totals						\$8,021,967	\$1,500,000	\$1,500,000	\$1,000,000	\$1,000,000	\$76,329,792	\$117,736,275

Table A. Region II Water Supply Development Projects

APPENDIX B: BASIN MANAGEMENT ACTION PLAN PROJECTS

Basin Management Action Plans provide blueprints for achieving pollutant load reductions specified in TMDLs to meet water quality standards. In 2016, the Florida Legislature amended section 373.036, F.S., to require identification of specific projects related to water quality or water quantity within a work program. To support this requirement, information related to BMAP projects or recovery or prevention strategies within regional water supply planning regions are included within the District's Water Resource Development Work Program. Additional information related to water quality projects and MFLs Districtwide will be reported in the District's March 1 Consolidated Annual Report.

Within northwest Florida, BMAPs have been adopted for three waterbodies: Bayou Chico (Escambia County), Jackson Blue Spring and Merritts Mill Pond (Jackson County), and the Upper Wakulla River and Wakulla Springs (with a contribution area in Wakulla, Leon, and Gadsden counties). Additionally, a small portion of Jefferson County within the NWFWMD is within the contribution area for the Wacissa River and Wacissa Spring Group BMAP.

As none of these BMAPs are within Regional Water Supply Planning Region II, there are no BMAP projects to include in this five-year work plan update.