

Fiscal Year 2020-21 Five-Year  
Water Resource Development Work Program

Proposed October 22, 2020



**NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT**

# NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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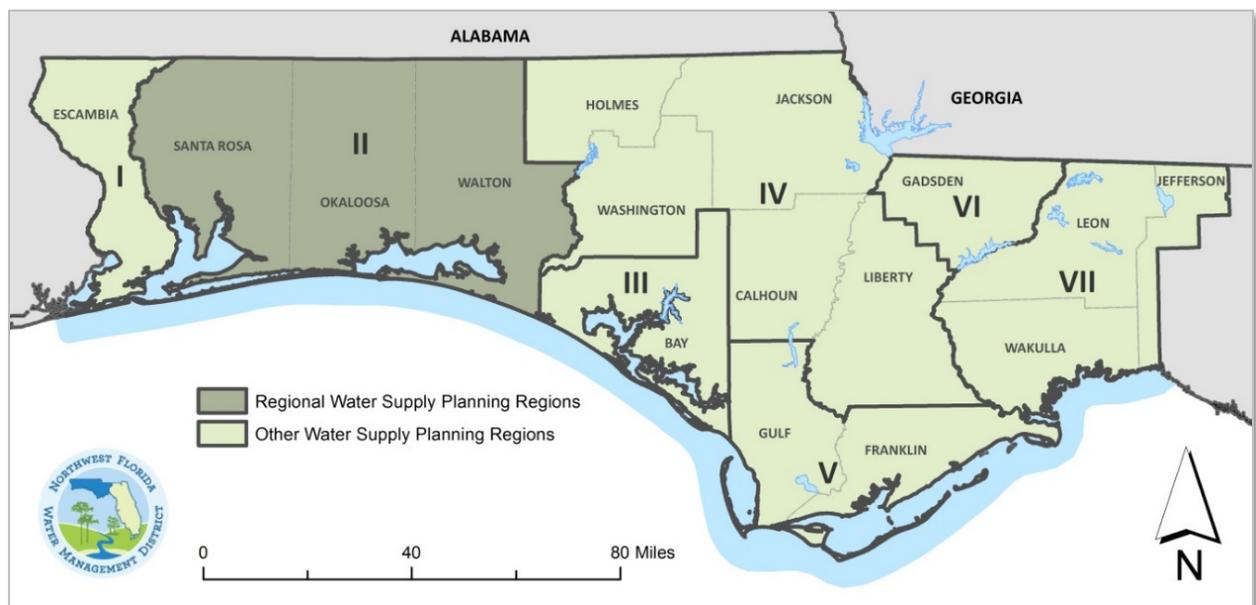
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# 1 INTRODUCTION

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 it determines existing sources of water to be inadequate to supply water for all 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.

Districts are also 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 (RWSP) developed or revised under section 373.709, F.S.

The Northwest Florida Water Management District (NFWMD or District) established seven water supply planning regions in 1996 (Figure 1). The most recent districtwide water supply assessment (WSA) was completed in 2018. Consistent with the findings of successive assessments beginning in 1998, the Region II (Santa Rosa, Okaloosa, and Walton counties) RWSP was approved and has been in implementation since 2000. The plan was most recently updated in 2019 with a 2020-2040 planning horizon. Additional information is available at: <https://nfwwater.com/Water-Resources/Water-Supply-Planning>.



**Figure 1. NFWMD Water Supply Planning Regions**

This Work Program covers fiscal year (FY) 2020-2021 through FY 2024-25 and is consistent with the strategies described in the Region II RWSP. Projects in this Work Program are reflected in Appendix C of the District’s final adopted budget.

## 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 which 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 timely meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event and to avoid the adverse effects of competition for water supplies.

Since 2016, Work Programs are also expected to include information on projects related to water quality or water quantity, including a list of all specific projects identified to implement a Basin Management Action Plan (BMAP) or an MFL recovery or prevention strategy.<sup>1</sup> In 2018, the Florida Department of Environmental Protection (DEP) issued guidance for meeting these requirements and to support evaluating Work Program projects and compiling statewide data for annual reporting requirements.<sup>2</sup>

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 is adequate to ensure water is available to timely meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event, to maintain the function of natural systems, and to avoid the adverse effects of competition for water supplies. Over the next five years, this Work Program outlines the District's plan and commitment to ensure the availability of adequate water supplies to accomplish these purposes.

There are currently no adopted minimum flows or minimum water levels (MFLs), no recovery or prevention strategies, and no water reservations in Region II.

This Work Program identifies approximately 3.9 mgd of reclaimed water to be made available through currently budgeted water supply development projects. Approximately \$5.9 million is currently budgeted for water resource and water supply development within Okaloosa, Santa Rosa, and Walton counties. The proposed water resource and supply development funding for the Five-Year Work Program is approximately \$14.9 million for all projects through FY 2024-25.

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<sup>1</sup> Section 373.036(7)(b)8., F.S.

<sup>2</sup> RWSP Annual Report (s. 373.709(6), F.S.) and STAR Report (s. 403.0675, F.S.).

## 2 REGION II WORK PROGRAM

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The 2019 update to the Region II RWSP was based on the districtwide WSA completed in 2018. The 2019 Region II RWSP was approved by the District’s Governing Board on January 23, 2020. Water use was estimated to be about 70 mgd in 2015, and it is projected to climb 36 percent to 95 mgd by 2040, an increase of 25 mgd. Public supply and recreational landscape irrigation water uses are expected to remain approximately 85 percent of all Region II water demand through the planning horizon (Table 1).

**Table 1. 2015 Estimated Water Use and 2020-2040 Demand Projections (mgd) - Average**

Use Category	Estimates	Future Demand Projections - Average Conditions					2015-2040 Change	
	2015	2020	2025	2030	2035	2040	mgd	%
<b>Public Supply</b>	47.480	51.645	55.275	58.777	62.004	64.999	17.519	36.9%
<b>DSS</b>	3.956	4.328	4.672	4.627	4.580	4.444	0.488	12.3%
<b>Agriculture</b>	2.798	3.004	3.241	3.523	3.769	3.967	1.169	41.8%
<b>Recreational</b>	10.793	11.827	12.749	13.552	14.288	14.923	4.130	38.3%
<b>ICI</b>	4.708	6.073	6.315	6.546	6.546	6.546	1.838	39.0%
<b>Power</b>	-	-	-	-	-	-	n/a	n/a
<b>TOTALS</b>	<b>69.734</b>	<b>76.879</b>	<b>82.251</b>	<b>87.025</b>	<b>91.185</b>	<b>94.879</b>	<b>25.144</b>	<b>36.1%</b>

Public supply is estimated to be about 67 to 70 percent of future demand over the planning horizon. In drought conditions, public supply and recreational landscape irrigation together are projected to comprise about 86.5 percent of demand in 2040.

### 2.1 WATER RESOURCE DEVELOPMENT

Water resource development (WRD) 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.”<sup>3</sup>

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

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<sup>3</sup> Section 373.019(24), F.S.

**Table 2. Summary of Region II WRD Projects**

<b>Activity</b>	<b>Description</b>	<b>Water (mgd)<sup>(A)</sup></b>
<b>Surface Water</b>	Resource evaluations to determine minimum flows needed to protect riverine habitats and associated resources.	<b>TBD</b>
<b>Reuse</b>	Coordination of reuse of reclaimed water projects and programs.	<b>10</b>
<b>Conservation</b>	Coordination of water conservation projects and programs.	<b>6</b>
<b>Aquifer Storage and Recovery (ASR)</b>	Technical support for aquifer storage and recovery (ASR) or aquifer recharge (AR) as a component of IWUPs.	<b>2</b>
<b>Groundwater Evaluations</b>	Sand-and-gravel aquifer resource evaluations to update alternative water supply assessments.	<b>TBD</b>
	Floridan aquifer resource evaluations and <u>Coastal Floridan MFL Technical Assessment</u> to develop and apply groundwater flow and saltwater intrusion models with recovery/prevention strategies as required.	<b>TBD</b>
<b>Data Collection and Analysis</b>	Hydrologic and water quality data collection, monitoring, and analyses.	<b>NA</b>
	Water use data, analyses, planning, and WSD support.	<b>NA</b>

(A) Estimates of water available or potential to be made available.

### Surface Water Development

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

District staff developed an MFL Work Plan for the Shoal River and identified preliminary hydrologic data collection needs. In consideration of updated demand projections in Okaloosa County, the schedule for development of an MFL technical assessment for the Shoal River was moved to future years with the 2019 update to the MFL Priority List and Schedule. Reflecting this, the budget requirements over the next five years are reduced from those reflected in the previous Work Program.

### Reuse and Conservation

Developing reclaimed water sources and water conservation are important components of meeting future demands in Region II. Reuse feasibility studies and conservation measures are required of water use permittees within the Region II Water Resource Caution Area (WRCA) and are encouraged in other areas. Further efforts are needed to quantify water conservation savings and identify potential reclaimed water projects. The District continues reuse and conservation data collection, analyses, inter-district coordination, reporting, and program development.

### *Reuse of Reclaimed Water*

Reuse planning is focused on achieving potable offset by providing reclaimed water for such purposes as public access irrigation, toilet flushing, fire protection, and industrial uses. The RWSP identified a potential for up to 10 mgd of reclaimed water to be made available by 2040. This is in addition to approximately 9.4 mgd of reclaimed water currently being provided by utilities in the region for public access irrigation. The District continues to work with utilities and local governments to identify opportunities for reuse development and expansion and for development of more integrated water quality and quantity reuse management strategies.

The 2019 RWSP includes reuse project options submitted by utilities in all three Region II counties with a combined total potential reuse flow of 9.5 mgd. Most of the project options indicate some availability of local matching funds and proposed implementation within the next five to ten years. Current projects are described in the water supply development section. Ongoing efforts include annual reuse data compilation and analysis and cooperative efforts with Region II utilities to identify reclaimed water needs and potential reuse projects.

### *Water Conservation*

The RWSP identified a potential for up to six mgd in additional water conservation savings that may be achieved by 2040. Among potential implementation strategies are incentive programs, funding for facility retrofits for improved efficiency and water loss prevention, conservation rate structures, improved utility data management, and public education and outreach. These complement continuing efforts on the part of utilities in response to regulatory requirements. Water use data and analysis have documented progress in reducing per capita water use rates.

In FY 2019-20, a Region II conservation analysis was completed providing detailed population estimates, water use, and per capita rate data from 1995-2018. This analysis also provided corroborating data in support of the six mgd conservation potential estimate previously identified. The District is continuing efforts to quantify water conservation savings. A grant and cost-share program has also been conceptually outlined for potential implementation. In addition to conservation benefits, the program would be designed to assist project partners in quantifying the amount of water saved. This water conservation program is being considered as a potential AWS funding request. District staff also participate in inter-district coordination, advancing statewide water conservation goals.

### **Aquifer Storage and Recovery**

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 RWSP estimated that approximately 2.0 mgd may be achieved over the planning horizon through ASR, including an existing ASR system permitted for 1.12 mgd. There are no current ASR 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 as an alternative water source. To collect data to better characterize the geology and the groundwater flow in the aquifer, an Invitation to Bid was issued for monitor well construction. The construction of seven new monitor wells was completed in September 2020. The District's 2020 MFL Priority List added the sand-and-gravel aquifer in Okaloosa and Santa Rosa counties as a waterbody to be scheduled for future years.

### *Floridan Aquifer*

The Floridan aquifer functions as a regional system across inland and coastal areas. Data collection for the Region II Coastal Floridan Aquifer MFL technical assessment began in 2015 and continued through FY 2019-20. The assessment includes the construction of deep Floridan aquifer wells to monitor the saltwater interface, expanded water quality data collection at existing wells, groundwater flow and transport modeling, and the evaluation of pumpage effects on saltwater movement.

Groundwater modeling of the Upper Floridan aquifer to support the MFL technical assessment continued through FY 2019-20. Transient calibration of a regional groundwater flow model is complete. A variable-density groundwater flow and saltwater transport (SEAWAT) model has been developed and is being used to assess the effects of current and projected pumpage on saltwater movement in the Upper Floridan aquifer. Water quality data have also been evaluated for trends in saline indicators. The MFL technical assessment report will incorporate these results and is anticipated to be complete by December 2020.

## **Data Collection and Analysis**

### *Hydrologic Data*

Hydrologic data collection, monitoring, and hydrologic analyses are essential to multiple District functions and programs. In Region II, the District continues building the network of rainfall gauges, streamflow gauges, and monitoring wells. Water quality and water quantity monitoring capabilities are enhanced by continuing cooperation with USGS and data provided by water use permittees. Hydrologic and long-term trends data provide valuable inputs to water resource evaluation programs and activities.

The Coastal Floridan aquifer MFL technical assessment was supported by construction of saltwater interface monitor wells, discrete interval water quality sampling at new and existing wells, and evaluation of water quality trends in saline indicators. The District is expanding its monitoring of the sand-and-gravel aquifer within Region II to provide water level data for future model revisions and to better understand surface water and groundwater interactions. This enhanced data collection and monitoring are scheduled to continue through the five-year work plan period.

### *Water Use Data and Planning*

Water use data collection and analysis supports multiple District and state programs and reporting requirements. Data are analyzed to prepare estimates and report metrics annually, with future demand projections generated every five years in conjunction with WSA updates. Development of the next Districtwide WSA is scheduled to begin in 2021.

Associated ongoing efforts include statewide water supply planning collaboration with DEP, the Florida Legislature’s Office of Economic and Demographic Research, other water management districts, and the Florida Department of Agriculture and Consumer Services (FDACS) on Florida Statewide Agricultural Irrigation Demand (FSAID) annual reports.

### Water Resource Development Annual Funding Plan

The proposed annual funding plan to support accomplishment of the District’s WRD priorities, as described above, is provided by Table 3.

**Table 3. Region II RWSP Water Resource Development Annual Funding Plan**

Water Resource Development Projects	Budget Activity	FY 19-20 Expenditures <sup>1</sup>	Anticipated Five Year Work Program					FY 20-21 to FY 24-25 Cost Estimate
			FY 20-21 Budget <sup>2</sup>	FY 21-22	FY 22-23	FY 23-24	FY 24-25	
Surface Water	1.1.1 1.1.2	\$3,231	\$2,500	\$10,000	\$15,000	\$15,000	\$10,000	\$52,500
Reuse	1.1.1 2.2.1	\$16,150	\$25,800	\$20,000	\$25,000	\$25,000	\$25,000	\$120,800
Conservation	1.1.1 2.2.1	\$14,842	\$27,800	\$25,000	\$20,000	\$15,000	\$10,000	\$97,800
Aquifer Storage and Recovery	2.2.1	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Groundwater Evaluations	1.1.2 2.2.1	\$327,656	\$266,000	\$75,000	\$75,000	\$75,000	\$75,000	\$566,000
Data Collection and Analysis	1.1.1 1.2.0	\$112,284	\$187,100	\$250,000	\$250,000	\$250,000	\$250,000	\$1,187,100
<b>TOTAL WRD</b>		<b>\$474,163</b>	<b>\$509,200</b>	<b>\$380,000</b>	<b>\$385,000</b>	<b>\$380,000</b>	<b>\$370,000</b>	<b>\$2,024,200</b>

<sup>1</sup>Preliminary figures. Final expenditures to be provided in March 1, 2021 Consolidated Annual Report.

<sup>2</sup>Based on approved adopted budget.

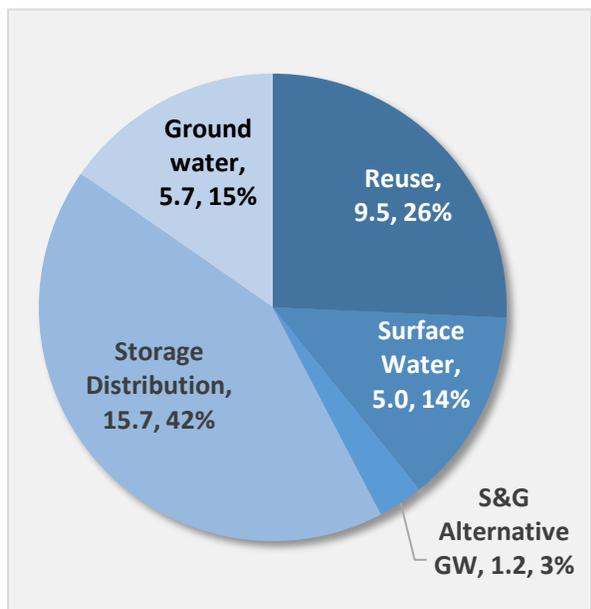
## 2.2 WATER SUPPLY DEVELOPMENT

Water supply development (WSD) 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.”<sup>4</sup> Water supply development encompasses both traditional and alternative water supply development. Alternative water supply sources may include salt water, 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 water bodies with reclaimed water, stormwater, and any other water supply source designated as nontraditional.<sup>5</sup>

<sup>4</sup> Section 373.019(26), F.S.

<sup>5</sup> Section 373.019(1), F.S.

In addition to the AWS sources noted above, the Region II RWSP provides for evaluation and development of the sand-and-gravel aquifer in Santa Rosa County as an alternative to coastal Floridan aquifer withdrawals.



**Figure 2. Potential WSD Water Production by Project Type (mgd)**

The 2019 Region II RWSP identified WSD project options that may generate up to 37 mgd of water by 2040 for future needs (Figure 2). About 42 percent or 16 mgd are AWS, including reclaimed water, surface water, and the sand-and-gravel aquifer as an alternative to coastal Floridan aquifer withdrawals.

Storage and distribution project options include water storage tanks, distribution infrastructure improvements, and system interconnections. Water conservation project options include infrastructure replacements and upgrades, advanced metering systems, and public information conservation programs.

Water conservation and AWS 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 District’s WSD Grant Program awarded more than \$5 million in District reserves to 21 projects in Region II beginning in FY 2013-14 for reuse, infrastructure (including distribution, transmission, and storage capacity improvements), and feasibility studies for local governments and utilities. Program funds were fully allocated through FY 2016-17, with one project in Region II continuing. No further grant cycles are currently planned.

State AWS and Water Protection and Sustainability Program Trust Fund appropriations from FY 2019-20 have been identified to leverage local and other resources for two major multijurisdictional reuse projects, summarized below. Additional proposed reuse projects are listed in the 2019 RWSP update.

- The Okaloosa County-Niceville-Eglin AFB Reclaimed Water Project will provide for construction of 11 miles of reclaimed water transmission main from Okaloosa County’s Arbennie Pritchett Water Reclamation Facility to the City of Niceville, with service connections to Eglin AFB. Upon completion, this project will increase the available capacity of reclaimed water by approximately 2.5 mgd.
- 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, increases the reclaimed water resource for the region and

eliminating a wastewater discharge into Santa Rosa Sound. Upon completion, this project is expected to make 1.4 mgd of reclaimed water available.

Where resources and opportunities are available, expanding the reuse of reclaimed water will help achieve integrated water resource management goals, particularly water quality improvement when reuse helps facilitate improved wastewater treatment and elimination of wastewater discharges.

The District's FY 2020-21 budget, Appendix C, includes limited staff funding for water supply development assistance (Activity 2.2.2). This is reflected in Table 4 on the following page for current ongoing projects.

**Table 4. Region II RWSP Water Supply Development Annual Funding Plan**

Unique ID	Project Name	Cooperating Entity	Project Type	Project Status	Total Water <sup>(1)</sup> (mgd)	Prior District Funding	FY 2020-21 Budgeted	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	Cooperating Entity Match	Project Total
NF00016A	Water Production Wells	Moore Creek Mount Carmel Utilities	Other Project Type	Complete	NA	\$151,020	\$0 <sup>(2)</sup>	\$0	\$0	\$0	\$0	\$888,692	\$1,039,712
NF00019A	Skyline Road Waterline Loop	Laurel Hill, City of	PS and CII Conservation	Construction	NA	\$3,685	\$131,178	\$0	\$0	\$0	\$0	\$0	\$134,863
NF00043A	Floridan Aquifer	Varies with specific project implemented	Water Resource Management Programs	Underway	TBD	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NF00044A	Sand-and-Gravel Aquifer	Varies with specific project implemented	Water Resource Management Programs	Underway	TBD	\$3,012	\$0	\$0	\$0	\$0	\$0	\$0	\$3,012
NF00045A	Shoal River Surface Water	Okaloosa County	Water Resource Management Programs	Underway	TBD	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
NF00046A	Reuse	Varies with specific project implemented	Water Resource Management Programs	Underway	TBD	\$1,398	\$3,750	\$3,750	\$3,750	\$3,750	\$0	\$0	\$16,398
	Okaloosa Co. / Eglin AFB / Niceville Reclaimed Water Project	Okaloosa County	Reclaimed Water (for potable offset)	Design	2.50	\$0	\$2,500,000	\$0	\$0	\$0	\$0	\$8,000,000	\$10,500,000
	South Santa Rosa Reuse Initiative	Santa Rosa County	Reclaimed Water (for potable offset)	Design	1.40	\$0	\$2,600,000	\$2,500,000	\$2,500,000	\$2,500,000	\$0	\$22,775,000	\$32,875,000
	Reuse (AWS Funding Pending Allocation)	Varies with specific project implemented	Reclaimed Water (for potable offset)	RWSP Option	TBD	\$0	\$180,000	\$0	\$0	\$0	\$0	TBD	TBD
	Conservation	Varies with specific project implemented	Water Resource Management Programs	Underway	TBD	\$3,012	\$1,715	\$0	\$0	\$0	\$0	\$0	\$4,727
NF00047A	Storage and Distribution	Varies with specific project implemented	Water Resource Management Programs	Underway	TBD	\$91,728	\$0	\$0	\$0	\$0	\$0	\$0	\$91,728

(1) Total reuse and non-reuse water to be made available upon project completion.

(2) Project budgeted at \$151,020 in FY 2020-21 but completed and paid in full during FY 2019-2020. Amount shown in prior year funding.

### 3 DISTRICTWIDE AND SUPPORTING INITIATIVES

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Implementation of water resource, water supply development, and water quality projects in Region II are complemented by broader regional and Districtwide programs and initiatives.

#### Water Supply Development

The District continues support for WSD by assisting local governments and utilities with project development and in identifying funding sources and options. Limited additional grant funding may be provided as resources allow. Assisting utilities and local governments in developing reclaimed water projects with potable offset projects will remain a Districtwide priority, with implementation assistance depending on future funding availability.

#### 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. The District will continue to work with local cooperators and FDEP to identify the funding resources needed for implementation.

#### Agricultural Best Management Practices Cost Share Program

Significant efforts continue to enhance agricultural water use efficiency and support implementation of associated water quality best management practices (BMPs), targeted primarily for the Jackson Blue Spring basin of the Apalachicola River watershed. Together with the Northwest Florida Mobile Irrigation Laboratory, these efforts are increasing water use efficiency and reducing nutrient applications within the spring basin.

Through FY 2020-21, the District has received \$9.8 million of state spring restoration funding and other grant funds for these activities. The District provides a 75 percent cost-share to help producers retrofit irrigation systems and to implement more efficient nutrient and water application systems. Through September 2020, approximately 106 projects with 88 producers have been implemented.

#### 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 identified 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. The cost-share program is coordinated with DEP and currently pays up to 50 percent of costs to properly plug and abandon eligible wells.

During FY 2019-20, approximately 818 permits were issued to plug abandoned or contaminated wells Districtwide. Approximately 36 percent of those permits 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 Order 19-12 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 (<https://www.nfwwater.com/Water-Resources/Surface-Water-Improvement-and-Management>).

The program engages stakeholder-driven initiatives, and it 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 (<https://protectingfloridatogether.gov/>).

Current project 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 224,189 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, natural resource conservation. District lands within the Econfina Creek Recharge Area, purchased for water resource development purposes, serve to protect the quality and quantity of recharge for a major public water supply source.

## 4 FUNDING SOURCES AND NEEDS

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The state constitution and statutory millage rate cap for the NFWWMD is 0.05, significantly less than the ad valorem taxing authority afforded the other four water management districts. The District's FY 2020-21 ad valorem tax millage rate, as set by the Governing Board, is 0.0311 and the estimated tax revenue budgeted is \$3.59 million. To meet its areas of responsibility with a recurring annual expenditure of about \$18 million, the District relies on state and other revenue sources. Among the funding sources the District looks to for water supply planning and water resource development are the following:

- Land Acquisition Trust Fund;
- Water Protection and Sustainability Program Trust Fund (WPSTF);
- Direct Legislative appropriations;
- District Fund Balance;
- Federal grants;
- Florida Forever; and
- Local government and water supply utility cost sharing.

The WPSTF, established by the 2005 Legislature, has enabled the District to provide cost-share assistance for construction of alternative WSD projects and implementation of priority WRD 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.

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: BASIN MANAGEMENT ACTION PLAN PROJECTS IN REGION II

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Basin Management Action Plans provide “blueprints” for achieving pollutant load reductions specified in TMDLs developed to meet State water quality standards. In 2016, the Florida Legislature amended section 373.036, F.S., to require the identification of all specific projects that implement a BMAP or a recovery or prevention strategy in the Work Program.

Within northwest Florida, BMAPs have been adopted for three waterbodies: Bayou Chico (Escambia County), Jackson Blue Spring and Merritt’s Mill Pond (Jackson County), 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 NFWFMD 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. Moreover, there are no adopted minimum flows or levels (MFLs) in Region II and henceforth no recovery or prevention strategies to report on in this Work Program.

Additional information required pursuant to section 373.036(7)(b), F.S., will be reported in the District’s March 1 Consolidated Annual Report.