Fiscal Year 2018-19 Five-Year
Water Resource Development Work Program

Proposed October 26, 2018

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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Introduction

Water Management Districts are required by section 373.709, Florida Statutes (F.S.), to evaluate water resources to ensure that existing sources of water are adequate to supply water for all existing and future reasonable-beneficial uses and to sustain the water resources and related natural systems for a 20-year planning period. A Regional Water Supply Plan (RWSP) is developed when a District determines that water supplies in a region are not sufficient to meet the region's needs in a sustainable manner. RWSPs include a technical analysis of current and future demands, evaluate available sources, and identify water resource development projects and water supply development projects to meet those demands.

The District is also required to prepare a Five-Year Water Resource Development Work Program (Work Program) as a part of its annual budget reporting process, pursuant to subsection 373.536(6)(a)4., F.S. The Work Program must describe the District's implementation strategy relating to its water resource development and water supply development (including alternative water supply development) components over the next five years. Further, the Work Program must:

- Address all the elements of the water resource development component in the District's approved RWSPs, as well as the water supply projects proposed for District funding and assistance;
- Identify both anticipated available District funding and additional funding needs for the second through fifth years of the funding plan;
- Identify projects in the Work Program which will provide water;
- Explain how each water resource and water supply project will produce additional water available for consumptive uses;
- Estimate the quantity of water to be produced by each project;
- Provide an assessment of the contribution of the District's RWSPs in supporting the implementation of minimum flows and minimum water levels and water reservations; and
- Ensure sufficient water is available to timely meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event and to avoid the adverse effects of competition for water supplies.

This Work Program covers the period from fiscal year (FY) 2018-19 through FY 2023-24 and is consistent with the planning strategies of the District's RWSPs. The District has developed two RWSPs, briefly summarized below and depicted in Figure 1. For additional information about the District's RWSPs, please see www.nwfwater.com/Water-Resources/Water-Supply-Planning.

- Region II RWSP includes Santa Rosa, Okaloosa and Walton counties. The 2012 RWSP provides estimates and projections for the 2015-2035 planning period. The primary concern in this region is water quality constraints on availability in the coastal Floridan aquifer caused by the effects of saltwater intrusion. An update to the plan is underway and included in the FY 2018-19 Work Program.
- Region III RWSP includes Bay County and was approved in 2014. The plan covers the 2015-2035 planning period. The primary goal of the RWSP is to develop an alternative

surface water intake to ensure the primary water source for residents and industry in Bay County, the Deer Point Lake Reservoir, is protected from saltwater intrusion during storm events. In June 2015, the alternative pump station project was completed.

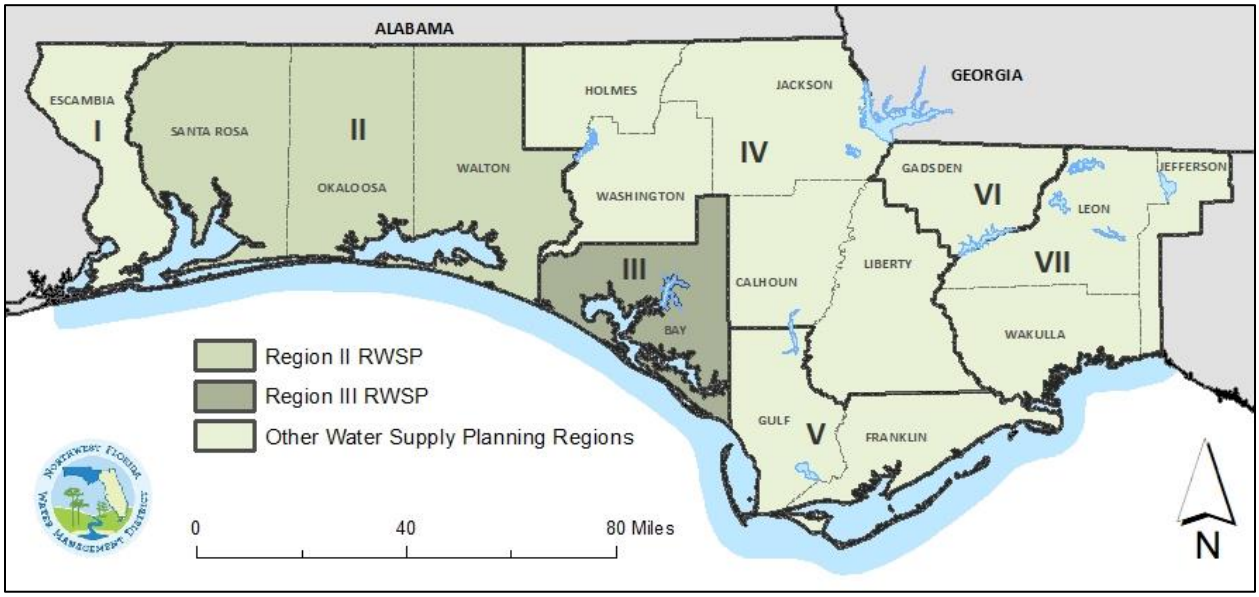

Figure 1. Map of NWFWMD Water Supply Planning Regions

This Work Program is presented in two sections: Water Resource Development and Water Supply Development, followed by summaries of districtwide water supply activities and of funding resources.

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 and to avoid the adverse effects of competition for water supplies. Over the next five years, this Work Program outlines the District's commitment to ensure the availability of adequate water supplies for all reasonable-beneficial uses and to maintain the function of natural systems.

In total, this Work Program outlines a FY 2018-19 budget of $10.27 million for water resource development and water supply development activities in Bay, Okaloosa, Santa Rosa, and Walton counties. The proposed funding for the Five-Year Work Program is approximately $13.3 million through FY 2022–23.

Water Resource Development

Water resource development (WRD) is defined in section 373.019(24), F.S., as "the formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and nonstructural programs to protect and manage water resources; the development of regional water resource implementation programs; the construction, operation, and maintenance of major public works facilities to provide for flood control, surface and underground water storage, and groundwater recharge augmentation; and related technical assistance to local governments, government-owned and privately owned water utilities, and self-suppliers to the extent assistance to self-suppliers promotes the policies as set forth in s. 373.016."

The District is primarily responsible for implementing WRD activities and projects; however, project development, funding, and technical support may also come from utilities and other project partners.

In both RWSP regions, the District implements the following water resource development programs:

- Hydrologic Data Collection
- Water Reuse
- Water Conservation
- Regional Water Supply Planning.

Hydrologic Data Collection

The District has a data collection network of rainfall gauges, stream gauges, and monitoring wells throughout Regions II and III. Groundwater and surface water monitoring capabilities have been enhanced by continuing cooperation with the U.S. Geological Survey surface water gauging network and developing an expanded monitoring network for the sand-and-gravel and Floridan aquifers where new water sources have been developed or are planned. This monitoring is essential for ensuring the success of long-term water supply initiatives, as well as for refining groundwater models and analyses to support future management decisions.

Expansion of the groundwater and rainfall monitoring in Region II continues to support resource evaluations and development of improved modeling tools for both planning and consumptive use permitting. In FY 2017-18, three remaining monitor wells were instrumented, and enhanced water quality and quantity data continues to be collected. The data from these additional monitoring sites will support updated modeling of the coastal Floridan aquifer and the establishment of Minimum Flows and Minimum Water Levels (MFLs) for this resource by 2021.

In cooperation with Bay County, the District maintains data collection stations for the Deer Point Lake Watershed Hydrologic Monitoring Program. This effort includes operation of stream stage/discharge and rainfall monitoring stations that provide a continuous record of precipitation and surface water flows during both dry weather and storm conditions. The District operates additional groundwater level, stream flow, and lake level monitoring sites within the county, all intended to characterize water resource conditions and trends within the region. In FY 2017-18, data collection continued at groundwater monitor wells in the Econfina

Creek groundwater contribution area and two surface water stations were added along Econfina Creek to help calculate discharge for the Gainer Spring group. When combined with discrete discharge measurements collected at individual springs, this data will be used to develop MFLs for the Gainer, Williford, Sylvan, and Econfina Blue spring groups and Devils Hole Spring. Monitoring will continue through FY 2018-19.

Water Reuse

District staff work with utilities and local governments to identify opportunities for expanded water reuse to meet non-potable water needs, as well as feasible funding sources and strategies. Significant investments in reuse have been made in both water supply planning regions, particularly for golf course irrigation.

The District continued efforts to further identify opportunities for more integrated water management and resource sustainability in northwest Florida in FY 2017-18. For example, the District and the City of Panama City Beach partnered to design a project that would expand reclaimed water along Panama City Beach Parkway.

Assisting utilities and local governments in developing beneficial reuse projects will remain a priority, with implementation depending on funding availability. Future water reuse projects may include assessments matching reclaimed water generators with users, feasibility studies, pilot projects, and demonstration projects. Projects of highest priority are those that offset and reduce the consumption of potable quality water, as well as those that protect natural systems and achieve integrated water resource management. Additionally, reuse information for the District will be updated annually.

Water Conservation

This project supports conservation and efficiency programs, practices, and measures on the part of local governments and utilities. Water conservation serves the public interest by enhancing efficiency, reducing costs to the public, and limiting impacts to natural resources.

Under Chapter 40A-2, Florida Administrative Code (F.A.C.), regulatory measures help to conserve water in the coastal Region II Water Resource Caution Area (WRCA). Additionally, with cooperative planning and regulatory incentives, numerous utilities implement water conservation measures that include inclining block rates, conservation plans, and the use of reclaimed water.

In Region II and III, the District has worked in cooperation with the Florida Department of Environmental Protection (DEP) and other water management districts to address public supply water conservation under section 373.227, F.S. The participating agencies have worked to define a common water conservation planning process for public supply utilities including creating standardized analysis methods and tools, common supporting technical references, and consistent permitting requirements and incentives related to goal-based conservation planning.

Limited staff time was spent on conservation activities in FY 2017-18, mainly focusing on quarterly coordination with water management districts implementation of regulatory practices noted previously. Staff will continue to maintain efforts with other water management districts,

local governments, and utilities to further improve water use efficiency for public supply and other water use categories.

Regional Water Supply Planning

Development and refinement of regional strategies, project planning and development, and RWSP updates are essential components of water resource development. Related activities include technical support and coordination with local governments and utilities to ensure a regional focus in the planning and development of alternative water supply projects. Associated administrative activities include project and funding management, coordination with DEP and other agencies, educational and outreach materials and programs, and progress reporting.

The District provides assistance with hydrogeology and related technical evaluations for development of new and alternative water sources including the inland Floridan aquifer, the sand-and-gravel aquifer, surface water, and reclaimed water. Other ongoing efforts include working with local governments and state and regional agencies to better coordinate land use and water supply planning. During FY 2017-18, staff continued working on the 2018 update to the districtwide water supply assessment (WSA); maintained collaboration with the Florida Department of Agriculture and Consumer Services (DACS) on the Florida Statewide Agricultural Irrigation Demand (FSAID) reports; maintained collaboration with DEP and the other water management districts on updates to the RWSP format and guidelines; and provided technical assistance to the Legislature's Office of Economic and Demographic Research.

Additionally, staff completed the request for proposals process for water supply planning services to assist in the update of the Region II RWSP. In FY 2018-19, staff will complete the 2018 WSA update, substantially complete an update to the Region II RWSP, and continue managing water supply development grants awarded in previous years.

Additional WRD projects specific to each region are included below.

Region II

Floridan Aquifer

Since late 2014, the District has worked to develop a new groundwater flow modelling tool within Region II. A western district regional model, which includes portions of Escambia and Bay counties, in addition to coastal Region II, incorporates newer monitoring data and updated water demand projections, in addition to being calibrated to reflect groundwater withdrawals since inland wellfields have been developed. Additional investigation into the sand-and-gravel aquifer will also be incorporated into this model update. The updated model will be used by both regulators and permittees to evaluate future withdrawal scenarios. Work on the groundwater flow model will be initially completed in FY 2018-19 with model refinement continuing into FY 2019-20.

The increase in resources for this project are tied to the initiation in 2014 of MFL development for the coastal Floridan aquifer in Planning Region II. Substantial data collection, monitor well installation, and model development activities have been achieved since that time. Continued monitoring of new and existing wells is scheduled for FY 2017-18. The current NWFWMD

MFL Priority List shows the technical assessment for this project is scheduled for completion in 2020, with rule adoption in 2021.

Inland Sand-and-Gravel Aquifer

Due to its high recharge rate, the inland sand-and-gravel aquifer in Region II is capable of providing regionally significant quantities of water. Development of an inland sand-and-gravel aquifer wellfield was initiated in 1999 within Santa Rosa County. Water from the wellfield is conveyed south to alleviate pumping demand from the Floridan aquifer along the coast.

Previous District evaluations resulted in development of a groundwater flow model. The model includes the transient response of the aquifer to drought and climatic variability. This model has produced a better understanding of the shallow groundwater flow system which acts regionally as a source of water for the deeper Floridan aquifer. Elements of the sand-and-gravel aquifer model will be incorporated into the western district model described previously.

Surface Water Sources

In 2006, the District and its water supply consultants prepared an analysis of potential surface water supply sources in Okaloosa County, presented in the report "Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates" (PBS&J 2006). This study reviewed the technical and economic feasibility of several alternatives, including direct river withdrawal, riverbank filtration, and construction of tributary reservoirs. The District also concurrently evaluated a proposed Yellow River Reservoir and concluded that the proposal was not feasible.

Okaloosa County continues to evaluate surface waters in the Yellow and Shoal river basins as potential future water supply sources. Potential facilities may include direct withdrawal and treatment systems, as well as an offline reservoir or other storage facilities. In 2015, the county completed a major land acquisition and has facilitated public workshops jointly with the U.S. Army Corps of Engineers as part of its long-range water supply planning efforts. The District will continue efforts to support planning for alternative surface water development, including MFL development for the Shoal River system, which continued in FY 2017-18. As part of the MFL development, the western district regional groundwater flow model (described previously) will include refinements to better represent the permeable zones within the sand-and-gravel aquifer near the Shoal River.

Aquifer Storage and Recovery

Aquifer storage and recovery (ASR), depending on the hydrogeologic characteristics of an area, has the potential to store large quantities of water more effectively and at a lower cost than above-ground storage. Destin Water Users has developed an ASR system for storage of reclaimed water in the sand-and-gravel aquifer. This reclaimed water is available to meet irrigation demands, helping to conserve potable water resources and mitigate potential impacts associated with this volume of groundwater withdrawal.

The use of ASR in the future for storage of reclaimed water or perhaps the use of direct aquifer recharge as a salinity barrier may require a regional approach, since water introduced into a geologic formation could affect the groundwater beneath jurisdictions or service areas of multiple utilities and local governments. There are no current ASR projects included in the

District's FY 2018-19 Adopted Budget. However, the District will work with utilities on the feasibility of additional ASR activities within Region II, as needed or requested.

Interconnection of Water Supply Systems

Largely focused on Region II, the Coastal Water Systems Interconnection Project was a District initiative focused on increasing water supply reliability in coastal communities in cooperation with local utilities. The goal of the initiative was to enhance the resilience of the coastal water systems by enabling transfer of water between utilities during droughts or other contingencies. The Coastal Water Systems Interconnection Initiative was completed in 2013 with the final report providing a detailed analysis of interconnect alternatives and design parameters. Two interconnection projects were selected for potential future implementation: a coastal interconnection between Santa Rosa and Okaloosa counties and a coastal interconnection between Walton and Bay counties.

No expenditures are planned for this project in the five-year planning horizon. The District will continue to support local governments and utilities planning interconnect projects that help ensure available and reliable water supplies, particularly in coastal areas.

Abandoned Well Plugging

The District's Regulatory Services Division implements an active effort to plug abandoned artesian wells. The overall goal of the program is to protect available groundwater resources from aging, uncontrolled, or improperly constructed wells that are no longer in use. Technical assistance and funding is available to local governments and utilities for plugging abandoned wells identified as having the potential to adversely affect groundwater quality. To date, the District has issued 9,029 permits for the plugging of abandoned wells within Region II, 259 of which were plugged in FY 2017-2018.

Table 1. FY 2019-2023 Region II Water Resource Development Project Funding

Water Resource Development Projects	Budget Activity	FY 17-18 Expen-ditures[1]	Anticipated Five Year Work Program					FY19-FY23 Cost Estimate
			FY 18-19 Budget[2]	FY 19-20	FY 20-21	FY 21-22	FY 22-23	
Floridan Aquifer	1.1.2 2.2.1	$79,250	$468,700	$473,750	$423,750	$198,750	$123,750	$1,688,700
Inland Sand-and-Gravel Aquifer	1.1.2 2.2.1	$32,777	$113,100	$81,250	$93,750	$176,250	$156,250	$620,600
Surface Water Sources	1.1.2 2.2.1	$14,654	$111,700	$75,000	$87,500	$170,000	$150,000	$594,200
Aquifer Storage and Recovery	2.2.1	$0	$0	$0	$0	$0	$0	$0
Water Reuse	2.2.1	$22,833	$25,100	$15,000	$15,000	$15,000	$20,000	$90,100
Water Conservation	1.1.1 2.2.1	$6,972	$10,900	$8,000	$8,000	$8,000	$8,000	$42,900
Regional Water Supply Planning	1.1.1	$31,011	$157,000	$75,000	$75,000	$75,000	$75,000	$457,000
Interconnect of Water Supply Systems[3]	1.1.1	$0	$0	$0	$0	$0	$0	$0
Hydrologic Data Collection	1.2.0	$97,920	$110,500	$100,000	$100,000	$100,000	$100,000	$510,500
Abandoned Well Plugging	4.2.0	$7,805	$10,000	$10,000	$10,000	$10,000	$10,000	$50,000
TOTAL		$293,222	$1,007,000	$838,000	$813,000	$753,000	$643,000	$4,054,000

[1]Preliminary figures; final costs will be provided in the March 1, 2019, Consolidated Annual Report.
[2]FY 2018-19 figures based on adopted budget.
[3]Project completed during FY 2013-14.

Region III

Econfina Creek and Groundwater Recharge Area Protection

The District's Land Acquisition and Management Division manages more than 43,000 acres in the Econfina Creek Water Management Area (WMA) to protect a regionally significant groundwater recharge area and other water resources while also providing public access and a resource for compatible public use and recreation.

In FY 2017-18, construction of spring restoration and public access improvements at Devils Hole Spring was largely completed with additional improvements to be completed in FY 2018-19. Engineering work for restoration at Econfina Blue Spring Camp also began and construction will be completed in FY 2018-19. The District completed acquisition of the Hodson conservation easement on 229 acres within the Econfina Creek groundwater contribution area. Work also began on a 22.5-acre exchange between the District, Bay County

and the Porter Family to provide public recreation access along Econfina Creek and to acquire a conservation easement on 60 acres in the northern portion of the groundwater contribution area. Both acquisitions are planned to be complete in FY 2018-19. Finally, work continued on acquisition of a major conservation easement to purchase up to 942 acres at Gainer Spring group, a first-magnitude springs group in northern Bay County.

Table 2. FY 2019-2023 Region III Water Resource Development Project Funding

Water Resource Development Projects	Budget Activity	FY 17-18 Expen-ditures[1]	Anticipated Five Year Work Program					FY19-FY23 Cost Estimate
			FY 18-19 Budget[2]	FY 19-20	FY 20-21	FY 21-22	FY 22-23	
Econfina Creek & Groundwater Recharge Area Protection	2.1.0 2.5.0 2.6.0 3.1.0	$1,580,416	$8,144,000	TBD	TBD	TBD	TBD	$8,144,000
Hydrologic & Water Quality Data Collection	1.1.2 1.2.0 2.2.1	$41,383	$215,700	TBD	TBD	TBD	TBD	$215,700
Water Reuse	2.2.1	$13,729	$9,500	TBD	TBD	TBD	TBD	$9,500
Water Conservation	1.1.1 2.2.1	$2,561	$3,400	TBD	TBD	TBD	TBD	$3,400
Regional Water Supply Planning	1.1.1	$8,393	$9,100	TBD	TBD	TBD	TBD	$9,100
TOTAL		$1,646,482	$8,381,700	$0	$0	$0	$0	$8,881,700

[1]Preliminary figures; final costs will be provided in the March 1, 2019, Consolidated Annual Report.

[2]FY 2018-19 figures based on adopted budget.

[3]Funding in future years will be budgeted based on RWSP determination to be made in FY 2018-19.

Water Supply Development

Water supply development components are those that involve "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."[1] A list of all projects meeting these statutory definitions is provided in the Table 3. For the NWFWMD, most of the projects continuing in this Work Program are programmatic efforts, such as development of alternative water supplies, including inland groundwater, surface water, and reuse of reclaimed water; storage and interconnect of potable water; and water conservation. These projects differ from water resource development in the District *supports* efforts of utilities and local governments, such as through technical assistance or through grants, to implement utility-led initiatives. These projects may include alternative water supplies but may also include transmission and distribution improvements.

FY 2016-17 marked the final year of the District's Water Supply Development Grant Program, which awarded more than $6 million in district reserves to funding 25 projects in Bay, Okaloosa, Santa Rosa, and Walton counties since FY 2013-14. In FY 2017-18, six of the nine remaining projects were completed totaling more than $1.5 million expended on water conservation, reclaimed water, engineering and planning efforts, and other water supply projects such as construction of storage facilities. Three projects are scheduled to be complete in FY 2018-19. It should be noted that completion of the grant program to local governments, does not reflect the need for water supply development activities in Regions II and III.

The District is working with utilities in Region III on a project to determine the feasibility of reclaimed water to serve the needs of Gulf Power's Lansing Smith Generator Plant near Southport. In 2016-17, the District awarded a $500,000 grant to Bay County for this reuse project which will reduce wastewater discharges to St. Andrew Bay, eliminate brackish surface water withdrawals for power generation, and position utilities to better meet future reclaimed water demand. An agreement with Gulf Power and Bay County was executed and engineering began in FY 2017-18. Construction of Phase I of the project will continue in FY 2018-19 but may be delayed due to impacts from Hurricane Michael.

As Table 3 shows and except for the projects noted above, funding in future years is limited to staff coordination and support to utilities and local governments.

[1] Section 373.019(26), F.S.

Districtwide Initiatives

Water Supply Development Grant Initiative

The District continues to implement previously approved water supply development funding assistance for local governments and utilities. Since FY 2013-14, the Governing Board has approved 70 projects totaling nearly $21.6 million for the water supply development assistance grant program. As all available funds have now been encumbered, no grant cycles are planned for this or future fiscal years.

Water Reuse

District staff continue to develop approaches for integrated planning of water and wastewater resources. In FY 2017-18, staff maintained geographic information system (GIS) data and facility information associated with wastewater treatment plants and effluent disposition, focusing on opportunities for water reuse. In FY 2018-19, staff will conclude development of a Districtwide water reuse evaluation for understanding opportunities and costs for expanding reuse potential. Assisting utilities and local governments in developing beneficial reuse projects will remain a priority, with implementation depending on future funding availability.

Agricultural Best Management Practices Cost Share Program

Significant efforts are underway to enhance agricultural water use efficiency and to support implementation of associated water quality best management practices (BMPs), targeted primarily for the Jackson Blue Spring basin of the Apalachicola River watershed. Through FY 2017-18, the District has received $4.66 million of spring restoration funding for these activities. The District provides a 75 percent cost-share to help producers retrofit center pivot irrigation systems and to implement more efficient nutrient and water application systems. Together with the Northwest Florida Mobile Irrigation Laboratory, these efforts are expected to significantly enhance efficient use of both water and nutrients within the spring basin. Through September 2018, approximately 50 percent of the available cost-share funds were distributed to 54 producers for implementation of BMPs. An additional $2.5 million in legislatively-approved funding to sustain this effort was awarded and is budgeted for FY 2018-19.

Well Abandonment

The District continues its program to properly plug abandoned or contaminated wells. Well abandonments typically considered for financial assistance from the District include: projects for financially constrained public water systems; wells located within water resource caution areas; and wells within areas identified under Chapter 62-524, Florida Administrative Code (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 program currently pays up to 50 percent of costs to plug and abandon eligible wells. During FY 2017-18, approximately 948 permits were issued to plug wells districtwide at no cost to the District other than staff time.

Funding for Water Resource and Supply Development

The state constitution limits the NWFWMD to 1/20th (0.05 mills) of one mill, significantly less than the ad valorem taxing authority afforded the other four water management districts. The budget for FY 2018-19 includes a millage rate of 0.0338 and the budgeted tax collections are $3,433,483. With a recurring operating budget of $16,752,671, the District must rely on state and other revenue sources to conduct many of its programs. Among the funding sources the District looks to for water supply planning and water resource development are the following:

- Land Acquisition Trust Fund;
- Direct Legislative appropriations;
- District Fund Balance;
- Federal grants;
- Florida Forever; and
- Local government and water supply utility cost sharing.

Water resource development in northwest Florida historically depended on funding from the Water Management Lands Trust Fund. The Florida Legislature discontinued this fund in 2015, establishing the Land Acquisition Trust Fund to accomplish purposes as set forth in Article X, Section 28 of the State Constitution.

To the extent possible, the District applies limited ad valorem funding to augment state appropriations for basic water supply planning functions. Because ad valorem funding is inadequate to support implementation of major WRD and water supply development (WSD) projects and initiatives, the District also applies available encumbered funds and reserves for priority projects.

The Water Protection and Sustainability Program Trust Fund (WPSPTF), established by the 2005 Legislature, enabled the District to provide cost-share assistance for construction of alternative WSD projects and priority WRD and springs protection activities. No funding has been appropriated for the WPSPTF since FY 2009-10.

The Florida Forever Trust Fund has supported acquisition of lands throughout northwest Florida that provide critical water resource functions, including water quality protection and aquifer recharge. Florida Forever, however, has not had significant appropriations for NWFWMD programs since FY 2010-11.

Since FY 2013-14, Florida has dedicated more than $265 million statewide in funding for springs restoration and protection. The District has received $49.4 million toward restoration and protection projects, including those that protect and improve water quality and quantity within the groundwater contribution areas of major spring systems. Additional funding benefitting water resource development has also been provided for springs data collection and monitoring.

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. All projects require substantial local investment once they reach the water supply development stage.

Table 3. NWFWMD Water Supply Development Projects FY 2018-19 through FY 2022-23

Unique ID	Project Name	Cooperating Entity	Project Type	Project Status	RWSP Region Supported	Prior District Funding	FY 2018-19 Budgeted	FY 2019-20	FY 2020-21	FY 2021-22	FY 2022-23	Total Project Cost	Cooperating Entity Match	Project Total
NF00014A	Reclaimed Water System Improvements	Fort Walton Beach, City of	Reclaimed Water (for potable offset)	Complete	Region II	$87,500	$0	$0	$0	$0	$0	$87,500	$87,500	$175,000
NF00015A	Mid-County Tank #4	Okaloosa County Water and Sewer	Other Project Type	Complete	Region II	$1,193,602	$0	$0	$0	$0	$0	$1,193,602	$1,193,602	$2,387,205
NF00018A	Reclaimed Water Feasibility	Mary Esther, City of	Data Collection and Evaluation	Complete	Region II	$100,000	$0	$0	$0	$0	$0	$100,000	$0	$100,000
NF00020A	Dixonville Area Preliminary Engineering Report	Berrydale Water System	Data Collection and Evaluation	Complete	Region II	$35,000	$0	$0	$0	$0	$0	$35,000	$0	$35,000
NF00022A	US-331 Corridor Utilities Planning Study	Freeport, City of	Data Collection and Evaluation	Complete	Region II	$50,000	$0	$0	$0	$0	$0	$50,000	$0	$50,000
NF00026A	9th Street Watermain Replacement	Lynn Haven, City of	PS and CII Conservation	Complete	Region III	$49,725	$0	$0	$0	$0	$0	$49,825	$19,628	$69,453
NF00016A	Water Production Wells	Moore Creek Mount Carmel Utilities	Other Project Type	Construction/Underway	Region II	$0	$151,020	$0	$0	$0	$0	$151,020	$888,692	$1,039,712
NF00021A	Red Eye and Widner Circle Waterline Loop	DeFuniak Springs, City of	PS and CII Conservation	Construction/Underway	Region II	$2,806	$90,330	$0	$0	$0	$0	$93,136	$0	$93,136
NF00019A	Millside Road Waterline Loop	Laurel Hill, City of	PS and CII Conservation	Design	Region II	$3,685	$131,178	$0	$0	$0	$0	$134,863	$0	$134,863
NF00028A	North Bay Wastewater Reuse	Bay County	Reclaimed Water (for potable offset)	Design	Region III	$0	$500,000	$0	$0	$0	$0	$500,000	$3,500,000	$4,000,000
NF00043A	Inland Florida Aquifer Alternative Water Supply	Varies with specific project implemented	Water Resource Management Programs	Complete	Region II	$0	$0	$0	$0	$0	$0	$0	N/A	$0
NF00044A	Inland Sand-and-Gravel Aquifer Alternative Water Supply	Varies with specific project implemented	Water Resource Management Programs	Complete	Region II	$0	$0	$0	$0	$0	$0	$0	N/A	$0
NF00045A	Surface Water Supply Development	Varies with specific project implemented	Water Resource Management Programs	Design	Region II	$0	$0	$0	$0	$0	$0	$0	N/A	$0
NF00046A	Water Reuse Facilities	Varies with specific project implemented	Water Resource Management Programs	Design	Region II	$0	$0	$0	$0	$0	$0	$0	N/A	$0
NF00047A	Water Supply Management Projects	Varies with specific project implemented	Water Resource Management Programs	Design	Region II	$14,478	$6,165	$4,500	$4,500	$4,500	$4,500	$24,165	N/A	$24,165
NF00048A	Water Reuse Facilities	Varies with specific project implemented	Water Resource Management Programs	Design	Region III	$0	$0	$0	$0	$0	$0	$0	N/A	$0
NF00049A	Utility Interconnections and Infrastructure Enhancements	Varies with specific project implemented	Water Resource Management Programs	Complete	Region III	$0	$0	$0	$0	$0	$0	$0	N/A	$0
NF00050A	Water Conservation Projects that Result in Quantifiable Water Savings	Varies with specific project implemented	Water Resource Management Programs	Design	Region III	$2,896	$1,233	$0	$0	$0	$0	$53,181	N/A	$53,181

Appendix: Basin Management Action Plan Recovery and Prevention Strategies in Regions II and III

Basin Management Action Plans are the "blueprint" for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load (TMDL). In 2016, the Florida Legislature amended section 373.036, F.S., to require the identification of all specific projects that implement a Basin Management Action Plan (BMAP) or a recovery or prevention strategy in the Work Program. The District's Work Program has historically identified water resource development projects that support MFL recovery and prevention but has not included specific descriptions of projects primarily intended to implement BMAPs.

Basin Management Action Plans have been adopted for three areas within the District: Bayou Chico in Escambia County; the Upper Wakulla River and Wakulla Springs basin in portions of Wakulla, Leon, and Gadsden counties; and Jackson Blue Spring and Merritts Mill Pond basin in Jackson County. As none of these BMAPs are within Regional Water Supply Planning regions II or III, there are no BMAP projects to include in this five-year work plan update.

The District is currently working to develop MFLs for several waterbodies, including three Outstanding Florida Springs located in northwest Florida. The technical assessment of the first MFL, St. Marks River Rise, will be completed in late 2018. Work on development of an MFL for the Floridan aquifer in coastal Planning Region II is underway, with the technical assessment scheduled to be completed by 2020. The Shoal River system MFL, also in Region II, was initiated in FY 2016-17, with the technical assessment completed in 2023. In Region III, there are multiple MFL waterbodies on the current approved priority list with work assessment dates in future years: Gainer Spring Group (2024); Williford Spring Group (2024); Sylvan Spring Group (2024) and the Floridan aquifer in coastal Bay County (2026).

With no MFLs adopted to date, there are no recovery and prevention strategy projects to include in this five-year work plan update. However, consistent with section 373.036, F.S., and in coordination with DEP and all five water management Districts, the District will include a five-year funding outlook for specific projects, when needed in the future.