

Five-Year
Water Resource Development
Work Program

Fiscal Year 2016-2017 Update

Proposed October 21, 2016



Northwest Florida Water Management District

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For additional information, write or call:

Northwest Florida Water Management District
81 Water Management Drive
Havana, Florida 32333-4712
(850) 539-5999
public.information@nfwwater.com

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Introduction

Chapter 373, Florida Statutes directs the state's five water management districts to conduct water supply planning through a two-step process that involves: (1) assessing the water supply needs and sources of each water supply planning region; and (2) developing regional water supply plans (RWSPs) for those regions where existing water sources are considered inadequate to supply water for all existing and future reasonable-beneficial uses while sustaining water resources and natural systems over a twenty-year planning period. Regional water supply plans must include both water resource development and water supply development components, with supporting data and analysis, to exceed the projected water demands through the planning horizon (see [373.709](#), F.S.).

[Section 373.536](#)(6)(a)4, F.S., requires each district to prepare a Five-Year Water Resource Development Work Program (WRDWP or Work Program) to describe the implementation strategy and funding plan for the water resource, water supply, and alternative water supply development components of each approved RWSP. In accordance with the statute, the Work Program is submitted to the Governor, the President of the Senate, the Speaker of the House of Representatives, the Secretary of the Department of Environmental Protection, the chairs of legislative committees with substantive or fiscal jurisdiction over the districts, and the governing boards of counties in which the districts have jurisdiction. The Department of Environmental Protection (DEP) then conducts a review of the Work Program, to include a "written evaluation of the program's consistency with the furtherance of the district's approved regional water supply plans, and the adequacy of proposed expenditures."

Water resource development and water supply development are complementary components of the RWSP. Water resource development projects are typically regional and broad in scope and can support development of non-traditional water sources. Water supply development projects are more localized and address water treatment, storage, and delivery to end users. In statute, water management districts are largely responsible for water resource development, while water supply development is primarily the responsibility of local governments, water supply authorities, and utilities. While their primary focus is water resource development, the districts do provide technical and financial assistance for water supply development.

Regional Water Supply Planning in Northwest Florida

The Northwest Florida Water Management District (NFWFMD or "District") established seven water supply planning regions in 1996 (Figure 1). The initial District Water Supply Assessment (WSA) (NFWFMD 1998) evaluated the sufficiency of supplies to meet demands through 2020 and concluded that only Region II (Santa Rosa, Okaloosa, and Walton counties) required a RWSP. The primary resource concern identified in Region II is drawdown in the coastal Floridan aquifer caused by groundwater pumping.

In 2006, the NFWFMD Governing Board determined that the need for planning alternative surface water development in Gulf County and resource constraints in coastal Franklin County (Region V) warranted development of a RWSP. Similarly, in 2008, the Governing Board concluded that the need for additional source redundancy and sustainability warranted development of a RWSP for Region III (Bay County).

A 2008 WSA update extended water demand projections and an evaluation of sources through 2030. The update concluded that no additional RWSPs were required and that water supply planning and implementation efforts should continue in regions II, III, and V (Coates et al. 2008).

The District again updated the WSA in 2013, projecting water demands and evaluating source sufficiency through 2035 (Countryman et al. 2014). The report showed that public supply remains the largest use category for the District, accounting for approximately 45 percent of the demand in 2010. This ratio of water use is projected to remain similar through the 2015-2035 planning period. The Governing Board discontinued the RWSP for Region V due to the completion of surface water source development in Gulf County and adequacy of water supplies in Franklin County under revised growth projections. The District continues to work with Region V communities to address resource needs and concerns and is continuing hydrologic data collection and analysis to support resource monitoring.

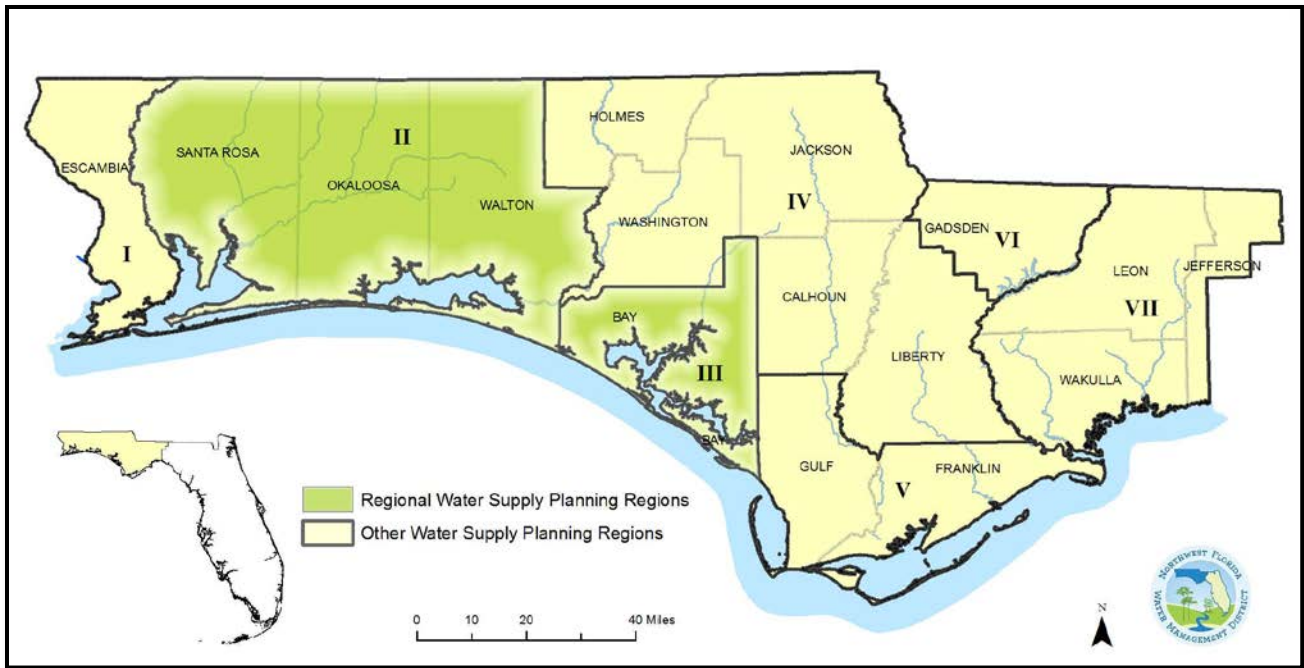


Figure 1. Water Supply Planning Regions

Funding for Water Resource and Supply Development

The state constitution limits the NFWMD to 0.05 mills of *ad valorem* taxing authority, which is 1/20th of the limit afforded the other four water management districts. The District's fiscal year (FY) 2015-2016 tax millage rate, as set by the Governing Board, was 0.0378. The budget for FY 2016-2017 includes a millage rate of 0.0366. Based on taxable values provided by the 16 counties in the District, tax collections are projected to be \$3,483,769 for FY 2016-2017. Because the District has historically collected slightly less than the amount estimated (about 96%), *ad valorem* was budgeted at \$3,413,531 or 2.0% less than projected. With a recurring operating budget of \$16,847,479, 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.

Until recently, water resource development in northwest Florida has depended primarily on funding from the Water Management Lands Trust Fund. This trust fund, however, was discontinued by the 2015 Florida Legislature through Senate Bill 2516-A. The bill established 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

water resource and supply development 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 water supply development projects and priority water resource development and springs protection activities. No funding has been appropriated for the WPSPTF since FY 2009-2010.

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. Additionally, Florida Forever has been a potential source of construction funding for reclaimed water storage facilities. Florida Forever, however, has not had significant appropriations for NFWFMD programs since FY 2010-2011.

Since FY 2013-2014, the Governor and Florida Legislature have allocated \$165,000,000 statewide in funding for springs restoration and protection. The District has received more than \$35.7 million toward restoration and protection projects, including those that assess, 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.

Funding budgeted for water resource development is listed in summary tables for water supply planning regions II and III in the following sections (Tables 2 and 6, respectively). The approved water resource development funding for FY 2016-2017 is \$9,228,800. The anticipated five year water resource development implementation cost through FY 2020-2021 is \$15,174,300.

Since FY 2013-2014, the District has approved \$20.6 million from reserve funds for water supply development assistance grants across northwest Florida. Per changes to Chapter 373, Florida Statutes, effective July 1, 2016, this report now includes funding budgeted for water supply development activities in water supply planning regions II and III. Summary tables are included in the following sections (Tables 4 and 8, respectively). The approved water supply development funding for FY 2016-2017 is \$2,786,201. The anticipated five year water supply development implementation cost through FY 2020-2021 is \$3,490,265.

In total, this represents a FY 2016-2017 budget for water resource and water supply development activities of \$12,015,001 in Bay, Okaloosa, Santa Rosa, and Walton counties.

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Region II: Santa Rosa, Okaloosa, and Walton Counties

Since the 1940s, Santa Rosa, Okaloosa, and Walton counties (Figure 2) have been characterized by significant growth in water demands within coastal portions of the region. Extensive pumping of the coastal Floridan aquifer caused formation of a substantial cone of depression, creating a risk of salt water intrusion and damage to public supply wells. Resource regulation and water supply planning over the past two decades have focused on reducing coastal withdrawals, constraining coastal demand, and developing inland water supply sources as alternatives to coastal groundwater.

Chapter 40A-2, Florida Administrative Code (F.A.C.), established the coastal Water Resource Caution Area (WRCA) across the southern reach of all three counties. Within the coastal WRCA, regulatory approaches to resource sustainability are applied, including stringent conservation and reporting requirements and the prohibition of new allocations of coastal Floridan aquifer water for non-potable uses.

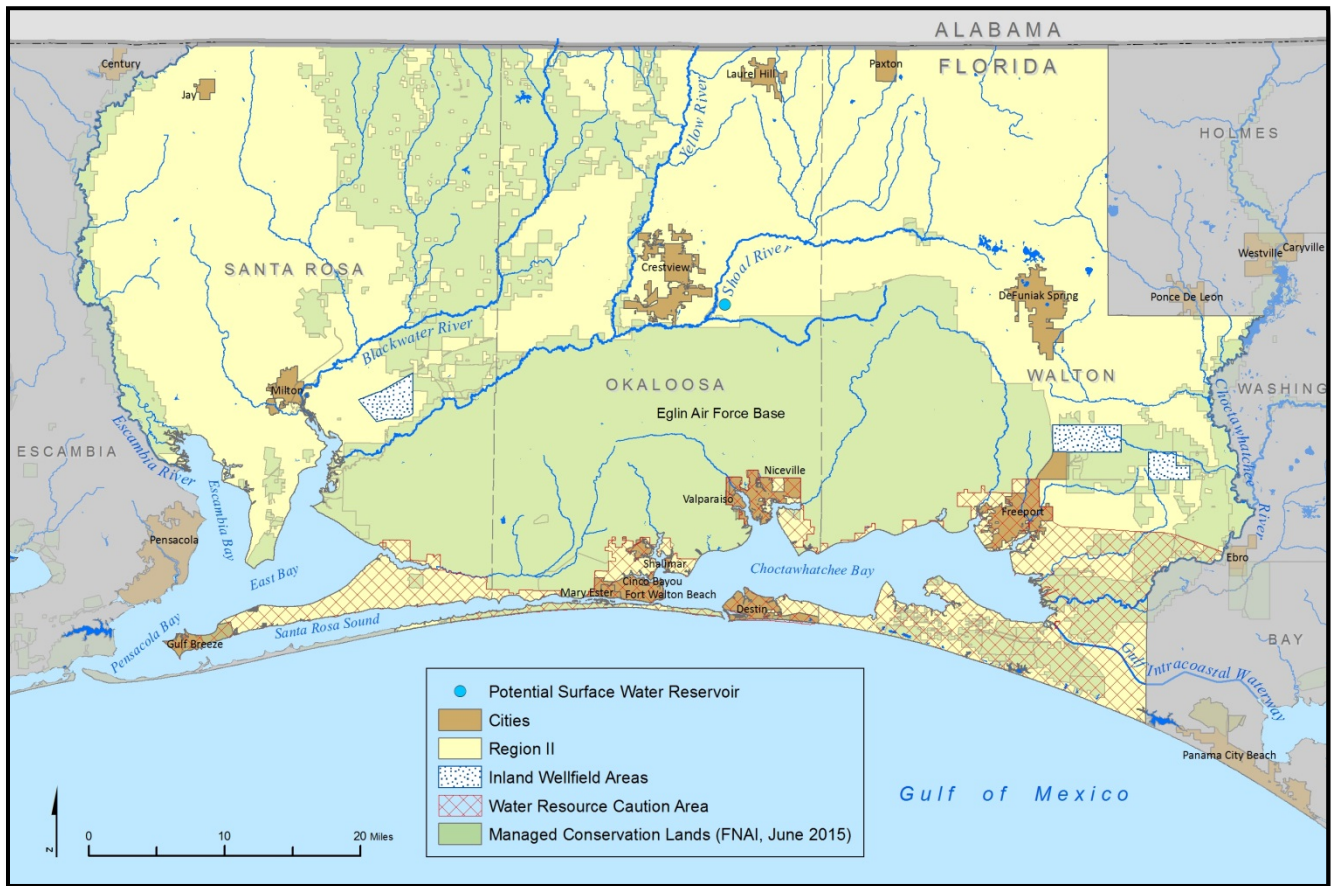


Figure 2. Water Supply Planning Region II

The District's first RWSP was approved by the Governing Board for Region II in February 2001, with updates to the plan approved in 2006 and most recently in 2012 (Busen and Bartel 2012). According to the 2013 WSA Update, public supply accounted for approximately 46 million gallons per day (mgd), or 62 percent of 2010 water use in Region II, with recreational water use comprising an additional 14 mgd (nearly 19 percent) (Countryman et al. 2014). It is expected that public supply demand within the region will increase through the planning horizon, although its relative proportion of water use will decline slightly.

Region II Water Resource Development Projects

The Region II RWSP includes ten water resource development projects encompassing strategies for preserving water resources and in support of alternative water supply development (Table 1). The quantities of water identified in the table indicate preliminary figures based on regional scale model simulations of groundwater systems, regional planning objectives, and application of literature-based factors for reuse and water conservation. The amounts will be refined upon completion of updated analyses or project implementation.

Table 1. Region II Water Resource Development Projects

Project	Activity	Water Identified (mgd)
Floridan Aquifer	Development and application of a regional groundwater flow model and salt water intrusion models to identify regional availability from the coastal Floridan aquifer.	30
Inland Sand-and-Gravel Aquifer	Development and application of a three-dimensional, transient groundwater flow model.	18
Surface Water Sources	Identification and development of feasible surface water sources and optimal facilities.	25*
Aquifer Storage and Recovery	Development of aquifer storage and recovery systems, primarily to support the reuse of reclaimed water.	2
Water Reuse	Assistance in the development of reclaimed water to offset and conserve potable water resources.	5
Water Conservation	Assistance to local governments and utilities in the conservation of potable water resources.	3
Regional Water Supply Planning	Development and implementation of regional water supply plans.	N/A
Interconnection of Water Supply Systems	Interconnection of coastal utility infrastructure to enhance the resilience of the coastal water systems.	N/A
Hydrologic Data Collection and Analysis	Collection and analysis of surface and groundwater data throughout the region.	N/A
Abandoned Well Plugging	Assistance to local governments and utilities in the plugging of abandoned wells.	N/A

*This amount is an up-to amount originally included in the 2012 Region II RWSP for the Shoal/Yellow Rivers project; an updated estimate by Okaloosa County is approximately 10 mgd.

Floridan Aquifer

Preserving the coastal Floridan aquifer as a viable water supply source is a primary focus of the Region II RWSP. Models of the Floridan aquifer were previously developed to include a western domain encompassing Santa Rosa and western Okaloosa counties and an eastern domain that includes eastern Okaloosa and Walton counties. Model simulations were made to predict the extent of salt water intrusion through 2100 for the eastern and western domain models. Results indicate that salt water intrusion into potable portions of the Floridan aquifer may continue to occur at a slow rate (HydroGeoLogic, Inc., 2007b, HydroGeoLogic, Inc. and Hazlett-Kincaid, Inc. 2007). Principal pathways of saline water intrusion identified include lateral intrusion within the upper Floridan aquifer from beneath the Gulf of Mexico, lateral intrusion from the lower to the upper Floridan aquifer around the edge of the Bucatunna Clay confining unit, intrusion of saline waters where the Bucatunna Clay confining unit is absent (easternmost Choctawhatchee Bay area), and downward vertical leakage through the Intermediate System.

Beginning in FY 2014-2015, the District began a project to refine the groundwater models. The two models have been combined into a single western district model and expanded to include portions of Escambia and Bay counties, in addition to coastal Region II. The project will incorporate newer monitoring data, updated water demand projections, and it will be calibrated to reflect groundwater withdrawals since inland wellfields have been developed. Additional investigation into the sand-and-gravel aquifer is also planned as part of this model update

(see more detail below). The updated model will be used by both regulators and permittees to evaluate future withdrawal scenarios. Additionally, a central district groundwater model is being developed that incorporates the eastern portion of Region II. Work on this model will be ongoing through FY 2016-2017.

The increase in resources for this project is tied to the initiation in 2014 of minimum flows and levels (MFLs) for the coastal Floridan aquifer in Planning Region II. A work plan for developing and establishing an MFL for coastal Region II, an extensive data review and evaluation, and bid specifications for rehabilitating existing wells and expanding monitoring wells were completed in 2015. The current NFWFMD 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 the Santa Rosa County. Water from the wellfield is conveyed south to alleviate pumping demand from the Floridan aquifer along the coast. Public supply water withdrawals from the inland wellfield and vicinity increased from 1.0 mgd in 1998 to 5.6 mgd in 2013. In 2014, however, withdrawals fell to 3.4 mgd due to a line break across East Bay that rendered it out of service for several months, temporarily increasing coastal Floridan aquifer withdrawals to meet water demands.

Previous District evaluations indicate that total groundwater production of up to 18 mgd, inclusive of current withdrawals, may be available from the sand-and-gravel aquifer. The model includes the transient response of the aquifer to drought and climatic variability. Considerable data were gathered, which involved constructing project-specific monitoring wells, determining aquifer hydraulic properties, mapping aquifer unit thicknesses, and measuring groundwater levels and stream discharge. The groundwater flow model was subsequently developed and calibrated. The sand-and-gravel aquifer model may be updated as part of the western district and central district models described above.

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 reviewed an evaluation of 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 accelerating the MFL development schedule for the Shoal and Lower Yellow River system to begin in FY 2016-2017.

Aquifer Storage and Recovery

Aquifer storage and recovery (ASR), depending on the particular 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. The District will work with utilities on the feasibility of additional ASR activities within Region II, as needed or requested.

Water Reuse

The Region II RWSP previously identified approximately 5 mgd of new beneficial reuse available to offset demands on the coastal Floridan aquifer. In response to regulatory and cooperative planning efforts, significant investments in reuse have been made in the region, particularly for golf course irrigation in coastal areas. As of 2014, 25 reuse applications associated with 11 reuse systems in Region II were permitted for public access reclaimed water, producing an estimated 10.6 mgd for public access reuse (DEP 2015). These facilities supported landscape irrigation for approximately 2,421 residences, 19 golf courses, 14 parks, four schools, and two cooling towers. Past District funding assistance has helped provide for construction of wastewater infrastructure improvements to facilitate reuse near the City of Freeport and in north-central Okaloosa County.

Statewide water reuse coordination efforts continued in FY 2015-2016 in support of the Senate Bill 536 initiative to evaluate the expansion of the use of reclaimed water, as well as stormwater and excess surface water. The District is also continuing efforts to further identify opportunities for more integrated water management and resource sustainability in northwest Florida. Additionally, the District works with utilities in the region to expand the use of reclaimed water to meet non-potable water needs through a districtwide water supply grant program. Since 2013, \$1,478,423 has been awarded for six reuse projects in Region II that include: expanding and upgrading reuse systems in the cities of Fort Walton Beach and Niceville in Okaloosa County and the City of Gulf Breeze, the Holley Navarre Water System, and Pace Water System in Santa Rosa County. With grant funding from the District, the City of Mary Esther will complete a reclaimed water feasibility study by June 2018.

In May 2015, the District's Governing Board passed a resolution declaring May 15-21 as "Water Reuse Week" and encouraging citizens to conserve and reuse water throughout the year.

Assisting utilities and local governments in developing beneficial reuse projects will remain a priority, with implementation depending on funding availability. Future project emphasis will be focused on opportunities that reduce demand for potable water and provide environmental benefit. Additionally, reuse information for the District will be updated as part of the WSA Update in FY 2016-2017.

Water Conservation

A significant effort to increase water conservation has been underway in Region II for some time, largely in response to regulatory requirements and incentives established within the coastal WRCA. As a result, per capita water use has declined in recent years in the region. Water conservation remains a priority to build upon current water use efficiencies and to further enhance resource preservation. To support this effort, an updated evaluation of water conservation potential was completed in 2015-2016. It includes a review of existing programs in the region and identification of potential water savings achievable from additional water conservation measures.

Under Chapter 40A-2, F.A.C., new and expanded withdrawals from the Floridan aquifer for non-potable uses are not permitted within the coastal WRCA. Additionally, in response to resource limitations, cooperative planning, and regulatory requirements and incentives, numerous utilities implement water conservation measures that include inclining block rates, conservation plans, and the reuse of reclaimed water. Goals for utility conservation measures for permitted withdrawals within the WRCA include reducing the annual average residential per capita water consumption to 110 gallons per day or lower and reducing water leakage to 10 percent or less of the water withdrawn. Utilities withdrawing an average of over 100,000 gallons per day are required to report withdrawals annually, with the majority required to report per capita water use. Most utilities in Region II reporting these values are achieving the 110 residential gallons per capita per day (gpcd) District goal.

The District has worked in cooperation with DEP and the Florida water management districts to address public supply water conservation within Florida 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. As part of this initiative, the District established a process to allow for extension of permit duration for utilities which have demonstrated water savings achieved through implementation of a goal-based water conservation plan (Rule 40A-2.321, F.A.C.).

Funding for projects that achieve quantifiable water savings are eligible for grant funding under the water supply development grant program. Additionally, conservation information for the District will be updated as part of the WSA Update in FY 2016-2017.

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, 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 2015-2016, District staff maintained collaboration with the Florida Department of Agriculture and Consumer Services (DACS) and other water management districts on the Florida Statewide Agricultural Irrigation Demand (FSAID) reports. Staff began working on the next update to the districtwide water supply assessment in early 2016 and this work will continue through FY 2016-2017. Additionally, work on an update to the Region II RWSP is anticipated to begin in 2017.

Staff are also assisting communities and utilities through water supply development projects. In FY 2015-2016, four of 13 water supply development grants were awarded to Region II totaling more than \$700,000 and leveraging more than \$1.1 million in local match. Additionally, staff maintain relationships with the Walton/Okaloosa/Santa Rosa Regional Utility Authority and other utilities in the region on project funding needs and collaboration opportunities.

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.

Although this feasibility study is complete, the District supports local governments and utilities planning interconnect projects that help ensure available and reliable water supplies, particularly in coastal areas.

Hydrologic Data Collection

The District has a data collection network of rainfall gauges, stream gauges, and monitoring wells throughout Region II. 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.

Work continues to expand the groundwater and rainfall monitoring network in Region II to support resource evaluations and development of improved modeling tools for both planning and consumptive use permitting. In FY 2015-2016, 20 existing monitoring wells were evaluated for rehabilitation and enhanced data collection with another six locations evaluated for monitor well construction. In FY 2016-2017, an additional salt water intrusion monitoring well will be added to the quarterly groundwater monitoring network. The data from this additional monitoring site, as well as additional monitoring sites to be instrumented in FY 2016-2017, will support the establishment of MFLs for the coastal Floridan aquifer in Region II and improved water resource development monitoring activities.

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. The District achieves proper abandonment of such wells through two methods: requiring contractors to plug abandoned wells found on site during new well construction or initiating a well abandonment contract with a well owner or local government. 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. This is an ongoing effort that the District implements where feasible, in partnership with stakeholders and local governments. To date, the District has facilitated the plugging of 7,737 abandoned wells within Region II, 271 of which were plugged in FY 2015-2016.

Funding Summary: Region II Water Resource Development Projects

Table 2 displays past year expenditures, current year budget, and anticipated future expenditures for water resource development within Region II.

Table 2. 2017-2021 Region II Water Resource Development Project Funding

Water Resource Development Projects	Budget Activity	FY 15-16 Expenditures ¹	Anticipated Five Year Work Program					FY17-FY21 Cost Estimate
			FY 16-17 Budget ²	FY 17-18	FY 18-19	FY 19-20	FY 20-21	
Floridan Aquifer	1.1.2 2.2.1	\$242,175	\$1,123,100	\$348,750	\$473,750	\$348,750	\$188,750	\$2,483,100
Inland Sand-and-Gravel Aquifer	1.1.2 2.2.1	\$11,036	\$30,500	\$163,750	\$163,750	\$138,750	\$88,750	\$585,500
Surface Water Sources	1.1.2 2.2.1	\$0	\$23,500	\$157,500	\$157,500	\$132,500	\$82,500	\$553,500
Aquifer Storage and Recovery	2.2.1	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Reuse	2.2.1	\$12,865	\$23,300	\$20,000	\$15,000	\$15,000	\$15,000	\$88,300
Water Conservation	1.1.1 2.2.1	\$4,728	\$8,800	\$8,000	\$8,000	\$8,000	\$8,000	\$40,800
Regional Water Supply Planning	1.1.1	\$37,515	\$150,600	\$60,000	\$50,000	\$35,000	\$35,000	\$330,600
Interconnect of Water Supply Systems ³	1.1.1	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hydrologic Data Collection	1.2.0	\$60,859	\$115,300	\$130,000	\$90,000	\$90,000	\$90,000	\$515,300
Abandoned Well Plugging	4.2.0	\$9,485	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
TOTAL		\$378,663	\$1,485,100	\$898,000	\$968,000	\$778,000	\$518,000	\$4,647,100

¹Preliminary figures; final costs will be provided in the March 1, 2017, Consolidated Annual Report.

²FY 2017 figures based on adopted budget.

³Project completed during FY 2013-2014.

The budget for FY 2016-2017 reflects an increase in anticipated spending as compared to that presented in the previous WRDWP. This reflects the development of an improved groundwater flow model and associated hydrologic monitoring to support water supply planning, water resource development, MFL development, and consumptive use permitting in Region II. The modeling will principally address the Floridan aquifer, but will also be integrated with the sand-and-gravel aquifer model. Work will begin on a central district groundwater model, which includes the eastern portions of Region II. The increase also reflects the acceleration of the Shoal and Yellow River system MFL development, which benefits both the development of surface waters and the inland sand-and-gravel aquifer projects. Additionally, the budget provides for an increased level of effort for contractual services to support the WSA Update and Region II RWSP update.

Region II Water Supply Development

Water supply development strategies of the Region II RWSP, including preferred alternative water supply development projects, are listed in Table 3.

Table 3. Region II Water Supply Development Projects

Project	Activity	Estimated Cost	Estimated Water Available (mgd)
Inland Floridan Aquifer Alternative Water Supply	Development of the inland Floridan aquifer wellfield and transmission infrastructure to bring inland groundwater to serve coastal utilities in Walton and Okaloosa counties.	\$48,100,268	15 ¹
Inland Sand-and-Gravel Aquifer Alternative Water Supply	Development of the inland sand-and-gravel aquifer wellfield and associated infrastructure to bring inland groundwater to serve coastal utilities in Santa Rosa County.	\$9,588,500	18 ²
Surface Water Supply Development	Development of alternative surface water supply source, storage system, conveyance, and conjunctive use.	TBD	10 ³
Water Reuse Facilities	Assist utilities and local governments in the development of reclaimed water to achieve potable water offset.	TBD	5
Water Supply Management Projects	Development of conveyance and interconnection facilities, facilitating development of alternative water supplies.	\$41,200,000	N/A

¹ Represents new inland wellfield pumping capacity; total pumping capacity approximately 28 mgd.

² Represents total estimated capacity of the inland wellfield region. Approximately 8 mgd currently permitted.

³ Okaloosa County pursuing development of Shoal River surface water source; represents preliminary estimate.

Major completed water supply development projects include construction of inland groundwater wells, transmission pipelines, and associated facilities serving coastal utilities in all three counties. These include the inland sand-and-gravel aquifer wellfield in Santa Rosa County, inland Floridan aquifer wells and transmission facilities in Okaloosa County, and inland Floridan aquifer wellfield and transmission facilities in Walton County.

To date, Region II water supply development projects have made approximately 21 mgd of water available, including 13 mgd from the inland Floridan aquifer and 8 mgd from the inland sand-and-gravel aquifer. The District maintains efforts to make additional water supplies available to meet future needs, particularly focusing on reclaimed water. These water supplies, together with traditional water supply sources, are anticipated to be sufficient to meet demands through 2035 under both normal and 1-in-10 year drought conditions and to avoid the adverse effects of competition for water supplies.

Additionally, \$700,902 in funding was awarded for four projects in Region II during FY 2015-2016 through the District’s water supply development grant program. These projects including planning for increased reuse utilization and improving the reliability and capacity of potable water supply systems (Appendix A, Table 9).

Funding Summary: Region II Water Supply Development Projects

Table 4 displays past year expenditures, current year budget, and anticipated future expenditures for water supply development within Region II.

Table 4. 2017-2021 Region II Water Supply Development Project Funding

Water Supply Development Projects	Budget Activity	FY 15-16 Expenditures ¹	Anticipated Five Year Work Program					FY17-FY21 Cost Estimate
			FY 16-17 Budget ²	FY 17-18	FY 18-19	FY 19-20 ³	FY 20-21	
Inland Floridan Aquifer Alternative Water Supply	2.2.2	\$0	\$1,495,149	\$0	\$0	\$0	\$0	\$1,495,149
Inland Sand-and-gravel aquifer Alternative Water Supply	2.2.2	\$0	\$62,079	\$0	\$0	\$0	\$0	\$62,079
Surface Water Supply Development	2.2.2	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Reuse Facilities	2.2.2	\$22,110	\$847,388	\$42,500	\$0	\$0	\$0	\$889,888
Water Supply Management Projects	2.2.2	\$42,800	\$282,209	\$285,091	\$212,470	\$14,500	\$14,500	\$808,770
TOTAL		\$64,910	\$2,686,825	\$327,591	\$212,470	\$14,500	\$14,500	\$3,255,886

¹Preliminary figures; final costs will be provided in the March 1, 2017, Consolidated Annual Report.

²FY 2016-2017 figures based on adopted budget.

³Project funding for future years based on available budget.

The budget for FY 2016-2017 reflects completion of several previously-awarded and multi-year water supply development grant projects with local governments and utilities in Region II. It also includes a portion of the estimated \$1 million in new grant projects anticipated to be awarded in late 2016. Funding for these projects, as well as planning and staff support, is reflected in the table above under *Water Supply Management Projects*.

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Region III: Bay County

The RWSP for Region III (Figure 3) was developed initially in 2008 and updated in 2013 (NFWFMD 2008; Brooks et al. 2014). The plan describes concerns about the long-term sustainability of water supply resources within the region and presents strategies to increase source reliability and minimize the vulnerability of Deer Point Lake Reservoir, the region’s primary public supply source, to a major hurricane storm surge. Pursuant to the RWSP, the NFWFMD provided over \$5 million in grant funding to Bay County for a \$23 million project to develop an alternate intake at the lower end of Econfina Creek, the primary tributary of the reservoir. The location of new facility will minimize vulnerability to storm surge impacts.



Figure 3. Water Supply Planning Region III

The 2013 WSA Update showed that public supply and industrial-commercial-institutional (ICI) water use together comprised approximately 72 percent of the water use in 2010, accounting for 38 percent and 34 percent respectively (Countryman et al. 2014). The report concluded that existing and reasonably anticipated surface water supplies are adequate to meet projected regional demands through 2035, although the reservoir was vulnerable to salt water intrusion from storm surge associated with hurricanes or tropical storms.

Region III Water Resource Development

The Region III RWSP update includes five water resource development strategies. These are summarized in Table 5. Descriptions of the strategies and progress to date follow.

Table 5. Region III Water Resource Development Projects

Project	Activity	Water Identified (mgd)
Econfina Creek and Groundwater Recharge Area Protection	Land protection and management of the Econfina Creek WMA, a regionally significant groundwater recharge area.	N/A
Hydrologic and Water Quality Data Collection and Analysis	Hydrologic data collection, monitoring, analysis, and modeling to identify baseline conditions and trends, evaluate current and potential water supply sources, and sustainably manage withdrawals.	N/A
Water Reuse Funding and Technical Assistance	Assistance to local governments and utilities in developing reclaimed water uses to extend potable water supplies and improve water quality of St. Andrew Bay.	5
Water Conservation Funding and Technical Assistance	Assistance to local governments and utilities in enhancing water conservation and efficiency efforts.	TBD
Regional Water Supply Planning, Coordination, and Technical Assistance	Technical assistance, support for utility interconnections, and development and update of the regional water supply plan.	N/A

Additional water supplies that could potentially be made available include water reuse and quantifiable conservation efforts. The District supports efforts to help facilitate and provide technical assistance to local governments and utilities on water reuse and conservation projects.

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. Land management activities include habitat enhancement, restoration, and development and maintenance of public access facilities. Acquisitions of inholdings and additions may be planned in the future depending on funding availability.

In FY 2015-2016, the District re-opened Williford Springs after substantial restoration work in previous fiscal years and continued streambank stabilization and other improvements at Devil’s Hole Spring. A new project in FY 2015-2016 included \$102,000 for acquisition and restoration at the James Tract along Econfina Creek. Both Devil’s Hole Spring and James Tract restoration projects are anticipated to be completed in FY 2016-2017.

For FY 2016-2017, legislative appropriations for springs restoration and protection were again awarded to the District toward two projects in the Econfina WMA. The Gainer Springs Land Acquisition project provides for the purchase up to 942 acres along Econfina Creek and adjacent to Gainer Springs, a first-magnitude springs group in

northern Bay County. A combination of fee-simple and conservation easements will be used toward this \$6 million project. Additionally, \$200,000 has been allocated for streambank stabilization at Econfina Blue Spring.

Hydrologic and Water Quality Data Collection

This project provides the water resource data collection, analysis, and modeling needed for characterizing conditions and evaluating current and potential water supply sources. The project also incorporates long-term monitoring as needed to help ensure future withdrawals are managed to protect water resources and associated natural systems.

In cooperation with Bay County, the District maintains 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 2015-2016, five existing groundwater monitor wells in the Econfina Creek springs complex groundwater contribution area were instrumented for continuous Floridan aquifer water level monitoring. This monitoring will be combined with discrete discharge measurements collected at individual springs to assist with development of the Econfina Creek and spring complex MFL.

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. In FY 2015-2016, the District began 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. This project has the potential to reduce wastewater discharges to St. Andrew Bay, to eliminate brackish surface water withdrawals for power generation, and to position utilities to better meet future reclaimed water demand. In FY 2016-2017, the District has budgeted \$500,000 in grant funding for Bay County Utilities to facilitate Phase I of the project. Other 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.

In May 2015, the District's Governing Board passed a resolution declaring May 15-21 as "Water Reuse Week" and encouraging citizens to conserve and reuse water throughout the year.

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. A final draft evaluation of water conservation potential in Region III was completed in FY 2015-2016. The evaluation review existing programs and identifies potential water savings achievable from additional water conservation measures. Staff will maintain efforts with local governments and utilities to further improve water use efficiency for public supply and other water use categories.

Regional Water Supply Planning

This project includes funding for the District to manage implementation of the Region III RWSP. The work involves coordinating and tracking projects and programs, completing administrative tasks related to plan implementation, and fulfilling statutory reporting requirements. This project also provides for technical assistance to local governments and water suppliers, educational and outreach materials and programs within the region, and other related activities.

In FY 2015-2016, District staff reviewed the Florida Statewide Agricultural Irrigation Demand (FSAID) reports, developed by the Florida Department of Agriculture and Consumer Services (DACS), and provided additional planning and technical assistance for future updates. Staff also continued began an update to the water supply assessment, anticipated to be completed in FY 2017-2018.

Funding Summary: Region III Water Resource Development Projects

Table 6 displays past year expenditures, current year budget, and anticipated future expenditures for water resource development within Region III.

Table 6. 2017-2021 Region III Water Resource Development Project Funding

Water Resource Development Projects	Budget Activity	FY 15-16 Expenditures ¹	Anticipated Five Year Work Program					FY17-FY21 Cost Estimate
			FY 16-17 Budget ²	FY 17-18	FY 18-19	FY 19-20 ³	FY 20-21	
Econfina Creek & Groundwater Recharge Area Protection	2.1.0 2.5.0 2.6.0 3.1.0	\$999,357	\$7,150,900	\$1,100,000	\$1,100,000	TBD	TBD	\$9,350,900
Hydrologic & Water Quality Data Collection	1.1.2 1.2.0 2.2.1	\$47,164	\$65,000	\$265,000	\$265,000	TBD	TBD	\$595,000
Water Reuse	2.2.1	\$6,004	\$508,700	\$5,000	\$5,000	TBD	TBD	\$518,700
Water Conservation	1.1.1 2.2.1	\$3,222	\$4,400	\$3,000	\$3,000	TBD	TBD	\$10,400
Regional Water Supply Planning	1.1.1	\$5,168	\$14,700	\$7,500	\$30,000	TBD	TBD	\$52,200
TOTAL		\$1,060,914	\$7,743,700	\$1,380,500	\$1,403,000	\$0	\$0	\$10,527,200

¹Preliminary figures; final costs will be provided in the March 1, 2017, Consolidated Annual Report.

²FY 2016-2017 figures based on adopted budget.

³Funding in future years will be budgeted based on RWSP determination to be made in FY 2018-2019.

The FY 2016-2017 budget reflects a substantial increase in expenditures due to two spring restoration projects in the Econfina Creek and groundwater recharge area and a new reuse project in Bay County. The spring restoration projects include \$6 million for land acquisition of property adjacent to Gainer Springs and Econfina Creek as well as restoration improvements at Devil’s Hole Spring, and Econfina Blue Spring within the Econfina WMA. The increase in water reuse is for a \$500,000 grant to Bay County for a major collaborative wastewater reuse pipeline project with Gulf Power Company and Panama City. The grant will go toward construction of pipeline installation, part of a larger initiative to reduce wastewater discharges and improve water quality of St. Andrew Bay, while also providing potable water offset to utility and industrial users.

Other efforts in the region for FY 2016-2017 include: hydrologic data collection reflect expansion of the western district flow model and central district flow model, both of which include portions of Bay County; continuing technical assistance to local governments and utilities, with emphasis on identifying potential reuse projects, identifying the potential for enhanced water conservation, and for continuing hydrologic monitoring and analysis.

Region III Water Supply Development

Water supply development strategies identified in the Region III RWSP Update are listed in Table 7.

Table 7. Region III Water Supply Development Projects

Project	Activity	Estimated Cost	Water Made Available or Anticipated (mgd)
Development of Upstream Intake for Surface Water Supply	Develop an alternative raw water pump station near the mouth of Econfina Creek and nine-mile force main to tie in with existing raw water main.	\$23,425,000 ¹	30 ²
Water Reuse	Construction of water reuse facilities to provide reclaimed water for landscape irrigation and other non-potable uses.	TBD	5
Utility Interconnections	Assist with delivery system interconnections and facility improvements. Specifically includes potential 48" pipeline emergency interconnect between southern Bay and Walton counties.	\$25,700,000	N/A
Water Conservation	Implementation of water conservation and efficiency programs and practices by local utilities.	TBD	TBD

¹ Final cost.

² Capacity of alternate raw water intake.

Bay County completed the development of an upstream intake for Deer Point Lake Reservoir in June 2015. The Deer Point Lake Reservoir is anticipated to be sufficient to meet demands through 2035 under both normal and 1-in-10 year drought conditions and to avoid the adverse effects of competition for water supplies.

During FY 2015-2016, the District worked with Bay County, Panama City, and Gulf Power for the planning and securing funding of reclaimed water in the North Bay area (see Water Resource Development section). Staff also continued to collaborate with other utilities on increasing or enhancing reclaimed water and conservation projects. The Governing Board awarded one water supply grant project for \$168,374 to the City of Callaway for water system improvements (Appendix A, Table 9).

Funding Summary: Region III Water Supply Development Projects

Table 8 displays past year expenditures, current year budget, and anticipated future expenditures for water supply development within Region III.

Table 8. 2017-2021 Region III Water Supply Development Project Funding

Water Supply Development Projects	Budget Activity	FY 15-16 Expenditures ¹	Anticipated Five Year Work Program					FY17-FY21 Cost Estimate
			FY 16-17 Budget ²	FY 17-18	FY 18-19	FY 19-20 ³	FY 20-21	
Development of Upstream Intake for Surface Water Supply ⁴	2.2.2	\$0	\$0	\$0	\$0	TBD	TBD	\$0
Water Reuse	2.2.2	\$0	\$0	\$0	\$0	TBD	TBD	\$0
Utility Interconnections	2.2.2	\$0	\$0	\$0	\$0	TBD	TBD	\$0
Water Conservation	2.2.2	\$99,376	\$78,679	\$4,000	\$52,325	TBD	TBD	\$234,380
TOTAL		\$99,376	\$78,679	\$4,000	\$52,325	TBD	TBD	\$234,380

¹Preliminary figures; final costs will be provided in the March 1, 2017, Consolidated Annual Report.

²FY 2016-2017 figures based on adopted budget.

³Funding in future years will be budgeted based on RWSP determination to be made in FY 2018-2019.

⁴Project completed during FY 2014-2015.

The budget for FY 2016-2017 reflects progress toward completion of one previously-awarded water supply development grant project with the City of Callaway. It also includes a portion of the estimated \$1 million in new grant projects anticipated to be awarded in late 2016. Funding for these projects, as well as planning and staff support, is reflected in table above in the *Water Conservation* project.

District-Wide Initiatives

Water Supply Development Grant Initiative

The District continues to provide water supply development assistance for local governments and utilities. Since FY 2013-2014, the Governing Board has approved 58 projects totaling nearly \$20.6 million for the water supply development assistance grant program. An additional final grant cycle for \$1 million in grant funding assistance is planned for 2016-2017.

Water Reuse

District staff continue to develop approaches for integrated planning of water and wastewater resources. In FY 2015-2016, staff completed maintenance and development of geographic information system (GIS) data associated with wastewater treatment plants and effluent disposition, focusing on opportunities for water reuse. Staff also continued to collaborate with DEP, utilities, and other stakeholders in the follow-up workgroup to SB 536 legislation. Staff will maintain efforts to develop a Districtwide water reuse evaluation for understanding opportunities and costs for expanding reuse potential, including for the WSA Update currently underway. 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 2015-2016, the District has received \$2,239,500 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 spring basin. As of June 2016, 89 percent of the available cost-share funds were under contract or distributed to producers for implementation of BMPs. An additional \$1.0 million in legislatively-approved funding to sustain this effort was awarded and is budgeted for FY 2016-2017.

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 2015-2016, approximately 1,134 wells were plugged districtwide at no cost to the District other than staff time. The District is working with the City of Marianna for the proper abandonment of three wells of unknown use. The District provided \$5,000 to assist with the abandonment of these wells. The District is also providing funding assistance for the abandonment of a domestic well in an area of groundwater contamination in Jackson County.

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Many of these references, as well as related historical publications, may be found on the District's website Plans: www.nfwfwater.com/data-publications/reports-plans/.

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Appendix A. Water Supply Development Projects in Regions II and III

Table 7 presents additional water supply development assistance and alternative water supply development projects funded in regions II and III since FY 2013-2014. These projects are included in this report to demonstrate how complementary programs and activities, including regional water supply planning, water resource development, alternative water supply development, and water supply development assistance work together to ensure sustainable long-term water supplies.

Additional information on water supply development projects will be provided with the March 1, 2017, Consolidated Annual Report.

Table 9. Water Supply Development Assistance Projects in Regions II and III (FY 2014 – FY 2016)

Project	Local Sponsor	Region	Activity	Status	Completion	NFWFMD Contribution	District Funding Source
Chumuckla Water System Upgrades	Chumuckla Water System	II	Well and SCADA upgrade; equipment acquisition for water line improvements	Complete	FY 2014-2015	\$100,721	District General Fund
Highway 285 Reclaimed Water Main Upgrade	City of Niceville	II	Replacement and upgrade of reuse lines to increase capacity	Complete	FY 2014-2015	\$95,923	District General Fund
Santa Rosa Soccer and Horse Complex Reclaimed Water Extension	Pace Water System, Inc.	II	Reuse transmission main construction	Complete	FY 2014-2015	\$160,000	District General Fund
Water Main Replacement	City of DeFuniak Springs	II	Replacement of asbestos cement water main; installation of additional hydrants	Complete	FY 2015-2016	\$473,750	District General Fund
Town of Jay Asbestos Watermain Replacement	Town of Jay	II	Replacement of asbestos cement water main	Complete	FY 2015-2016	\$687,024	District General Fund
West Destin Water Supply Analysis	Destin Water Users	II	Develop system model to analyze water system improvements throughout the western and northern service area	Complete	FY 2015-2016	\$40,000	District General Fund
U.S. Hwy 98 Water Line Extension Phase VI	Florida Community Services Corporation of Walton County	II	Phase IV of major upgrade of potable water transmission lines along the U.S. Highway 98 corridor	Complete	FY 2015-2016	\$487,620	District General Fund
Holt-Baker Interconnection	Holt Water Works, Inc.	II	Construct a 1,100 LF 6" interconnection with Baker Water System, Inc.	Complete	FY 2015-2016	\$8,700	District General Fund
Golf Course Re-Use Line Replacement	Holley-Navarre Water System, Inc.	II	Increase size of reclaimed water line serving the Hidden Creek Golf Course and surrounding neighborhood	Complete	FY 2015-2016	\$295,000	District General Fund
South Santa Rosa Utility System Reclaimed Water Elevated Storage Tank	City of Gulf Breeze	II	Construction of a 300,000 gallon elevated reclaimed water storage tank	Construction	FY 2016-2017	\$345,500	District General Fund
Waterline Loop System	Town of Jay	II	Construction of a looped water system to reduce water loss	Construction	FY 2016-2017	\$204,733	District General Fund
Well No. 7 and Transmission Line	Fairpoint Regional Utility System	II	Design, permitting, bidding, and construction administration for future new well, treatment facility, and water transmission line	Design/ Permitting	FY 2016-2017	\$123,947	District General Fund

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	District Funding Source
Reclaimed Water System Improvements	City of Fort Walton Beach	II	Install booster pump station, pressure and storage tanks, and appurtenances to provide reclaimed water to cemetery and athletic complex	Design/Permitting	FY 2016-2017	\$482,000	District General Fund
Mid-County Tank #4	Okaloosa County Water and Sewer	II	Construction of 1 MG elevated water tank for northern wellfield	Design/Permitting	FY 2016-2017	\$1,250,000	District General Fund
Water Production Wells	Moore Creek Mount Carmel Utilities	II	Construction of 1 MG elevated water tank for northern wellfield	Design/Permitting	FY 2016-2017	\$151,020	District General Fund
Nokuse Well Field Expansion	Florida Community Services Corporation of Walton County	II	Construction of two inland potable water production wells	Design/Permitting	FY 2016-2017	\$245,149	District General Fund
Reclaimed Water Feasibility	City of Mary Esther	II	Planning and feasibility study evaluating reclaimed water reuse program and partnership with Fort Walton Beach.	In progress	FY 2017-2018	\$100,000	District General Fund
Alternative Inland Pump Station	Bay County	III	Construction of alternative surface water intake for the Deer Point Lake Reservoir.	Complete	FY 2014-2015	\$5,470,000	WPSPTF
Water System Improvements - Gate Valve Replacement	City of Parker	III	Replace the City's 30 non-functioning gate valves	Complete	FY 2015-2016	\$271,481	District General Fund
Water System Improvements 2015	City of Springfield	III	Install approximately 6,300 LF of 6" to 8" water line	Complete	FY 2015-2016	\$499,192	District General Fund
Highway 2297 Bridge Water Line Relocation	City of Callaway	III	Relocation and replace water main serving Laird Bayou.	Construction	FY 2016-2017	\$168,374	District General Fund
Total				21		\$11,660,134	

*WPSPTF = Water Protection and Sustainability Program Trust Fund (See Section 403.891, F.S.)

Appendix B. BMAP and Recovery and Prevention Strategies in Regions II and III

In 2016, the Florida legislature amended section 373.036, F.S. relating to information required in the Consolidated Annual Report and potentially the Five-Year Water Resource Development Work Program. To meet the statutory intent of these changes, as well as to ensure consistency with the other water management districts, this new appendix has been added to describe the Basin Management Action Plan (BMAP) projects and minimum flows and minimum water levels (MFLs) recovery and prevention strategy projects.

Basin Management Action Plans (BMAPs) 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 Merritt's 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 2018. Work on development of an MFL for the Floridan aquifer in coastal Planning Region II (Okaloosa, Santa Rosa, and Walton counties) is underway, with the technical assessment scheduled to be completed by 2020. Also, the Shoal and Lower Yellow River system MFL, also in Region II, will be initiated in FY 2016-2017, with the technical assessment completed in 2023. In Region III, there are three MFL waterbodies on the current approved priority list with work initiation dates in future years: Econfina Creek and Spring complex (2019); Deer Point Lake (2020); and the Floridan Aquifer in coastal Bay County (2021).

With no MFLs adopted to date, there are no recovery and prevention strategy projects to include in this five-year work plan update.