Five-Year

Water Resource Development Work Program

Fiscal Year 2015-2016 Update

Proposed October 22, 2015

Northwest Florida Water Management District

PDS-15-1

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Introduction

The Florida Water Resources Act (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 sources of water 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 are governed by section 373.709, Florida Statutes (F.S.), and 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.

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 responsible largely 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 (NWFWMD or "District") established seven water supply planning regions in 1996 (Figure 1). The initial District Water Supply Assessment (WSA) (NWFWMD 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 a pronounced drawdown in the coastal Floridan aquifer caused by long-term pumping.

In 2006, the NWFWMD 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. It is expected that this ratio will remain similar through the 2015-2035 planning period. The Governing Board discontinued regional water supply planning 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.

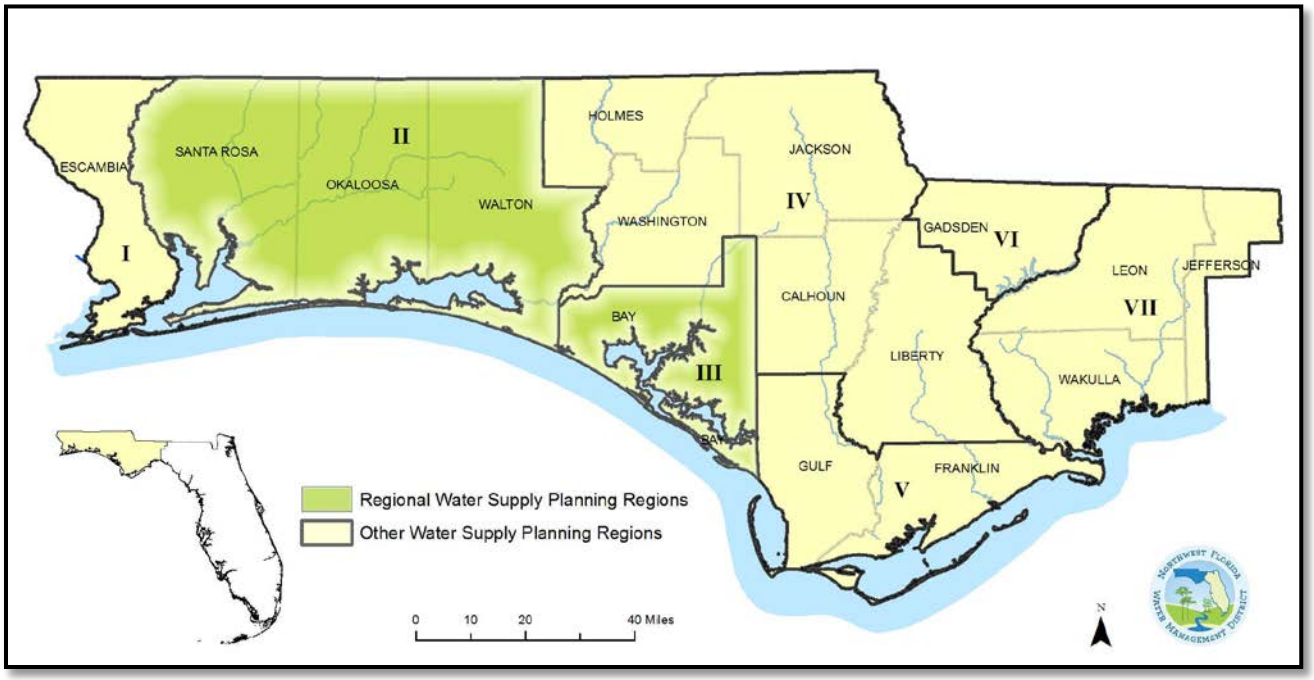

Figure 1. Water Supply Planning Regions

Funding for Water Resource and Supply Development

The state constitution limits the NWFWMD to 0.05 mills of *ad valorem* taxing authority, which is 1/20th of that afforded the other four water management districts. The District's fiscal year (FY) 2014-2015 tax millage rate, as set by the Governing Board, was 0.039. The budget for FY 2015-2016 includes a millage rate of 0.0378. Based on taxable values provided by the 16 counties in the District, tax collections are projected to be $3,433,785 for FY 2015-2016. With a recurring operating budget of $17,276,601, 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 General Fund;
- 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 since FY 2010-2011.

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.

In FY 2014-2015, the District approved $8 million from reserve funds for water supply development assistance grants across northwest Florida. The District extended the grant program another year with approximately $2.3 million dedicated to water supply development assistance during FY 2015-2016.

Funding budgeted for water resource development is listed in summary tables for regions II and III in the following sections (Tables 2 and 5, respectively). The approved water resource development funding for FY 2015-2016 is $2,622,400. The anticipated five year water resource development implementation cost through FY 2019-2020 is $6,793,700.

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. Long-term pumping of the coastal Floridan aquifer caused formation of a substantial cone of depression, creating a risk of significant salt water intrusion and damage to public supply wells. Resource regulation and water supply planning and development 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.

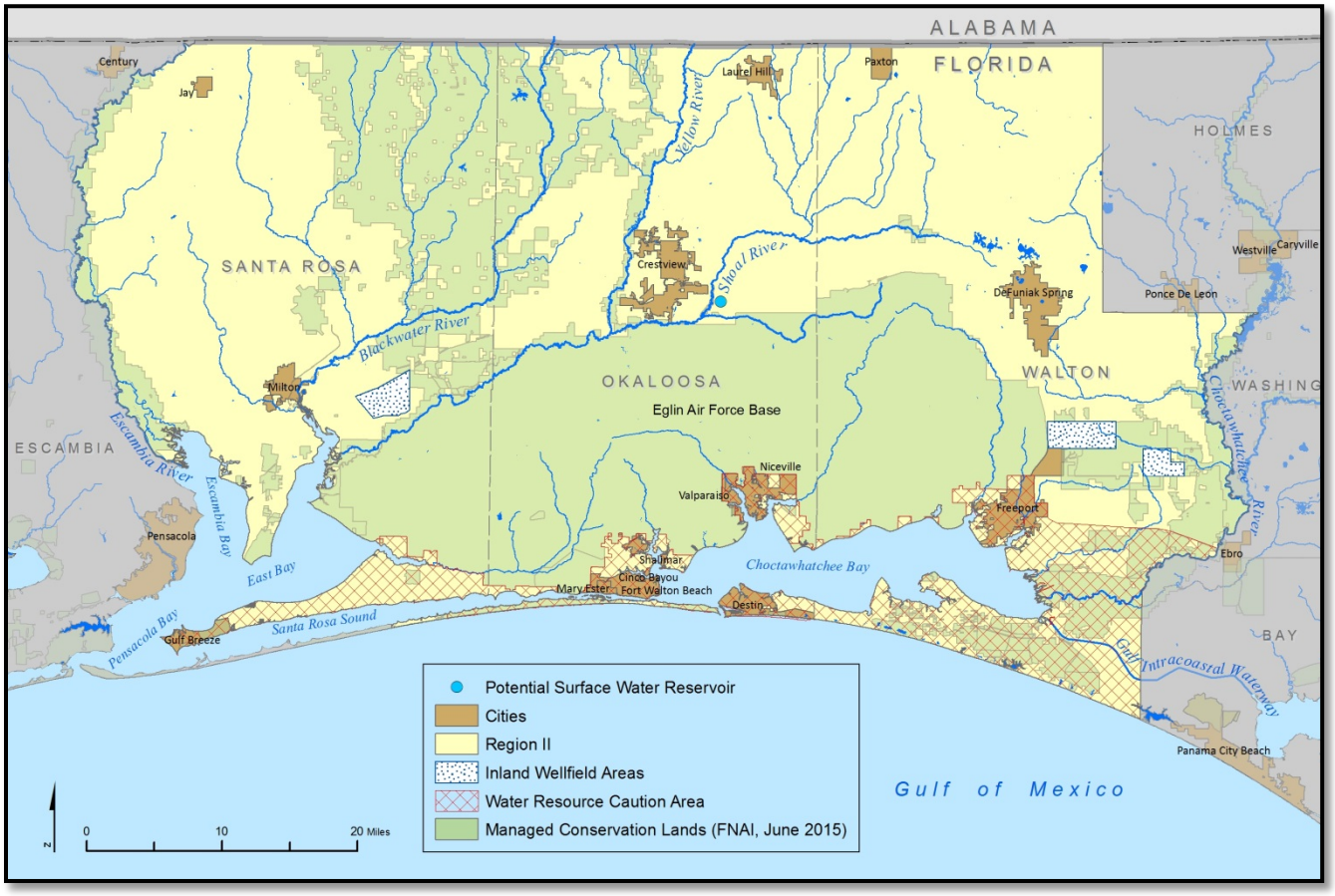

Figure 2. Water Supply Planning Region II

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, or nearly 19 percent (Countryman et al. 2014). It is expected that public supply demand within the region will continue to increase through the planning horizon, although its relative proportion of water use will decline slightly.

Region II Water Resource Development

The Region II RWSP includes ten water resource development projects encompassing strategies for sustaining 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 or updates to the identified activity.

Table 1. Region II Water Resource Development Projects

Project	Activity	Water Identified (mgd)
Floridan Aquifer Sustainability Modeling	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 Sustainability	Development and application of a three-dimensional, transient groundwater flow model.	18
Development of Surface Water Sources	Identification and development of feasible surface water sources and optimal facilities.	25*
Aquifer Storage and Recovery Feasibility	Development of aquifer storage and recovery systems, primarily to support the reuse of reclaimed water.	2
Water Reuse Coordination	Assistance in the development of reclaimed water to offset and conserve potable water resources.	5
Water Conservation Coordination	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 Conveyance 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 Sustainability

Limiting further salt water intrusion into the coastal Floridan aquifer and sustaining the 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 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.

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 to evaluate future withdrawal scenarios by both regulators and permittees.

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 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 Development and Sustainability

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; however, in 2014 withdrawals fell to 3.4 mgd due to a line break across East Bay that rendered it out of service for many months and temporarily increased coastal Floridan 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 model described above.

Development of 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 economically feasible and that its implementation would cause significant environmental impacts and mitigation requirements. Okaloosa County is continuing 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. The county recently completed a major land acquisition and has facilitated public workshops jointly with the U.S. Army Corps of Engineers. The District will continue efforts to support planning for alternative surface water development, including conducting an analysis of the Shoal and Lower Yellow River system through the MFL program.

Aquifer Storage and Recovery Feasibility

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. With a single exception, ASR systems have not been developed within Region II due to hydrogeologic conditions, economic infeasibility, water quality constraints, and other technical constraints. Destin Water Users has developed an ASR system for storage of reclaimed water in the sand-and-gravel aquifer. The reclaimed water facility has a permitted capacity of 2.125 mgd annual average daily flow. This reclaimed water is available to meet irrigation demands, helping to conserve potable water resources and to mitigate any 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. In coordination with evaluations of surface water supply and reclaimed water alternatives and if additional funding becomes available, the District may conduct preliminary groundwater model analyses of the feasibility of additional ASR activities within Region II. A cooperative approach between utilities, the District, and DEP will be sought for any project development.

Water Reuse Coordination

The Region II RWSP previously identified approximately 5 mgd of new beneficial reuse to offset demands on the coastal Floridan. 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.

Water reuse coordination efforts increased in FY 2014-2015 due to the Senate Bill 536 statewide initiative to evaluate the expansion of the use of reclaimed water, as well as stormwater and excess surface water. The District also continues efforts to develop a water reuse evaluation that details wastewater facility characteristics and disposition of effluent in Northwest Florida. This evaluation will identify opportunities for more integrated water management and resource sustainability. Additionally, the District continues to work 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, $1,426,500 has been awarded for seven 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. All recipients in Region II are matching District grant funds.

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.

Water Conservation Coordination

A significant effort at water conservation has been underway in Region II for some time, largely due 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 sustainability. To support this effort, an updated evaluation of water conservation potential will be completed in 2016. It will include 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 withdrawals from the Floridan aquifer for non-potable uses are generally 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) 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.).

In 2014, the District's Governing Board declared April as water conservation month, joining DEP, the other Florida water management districts, and participating local governments in promoting water conservation and recognizing water conservation activity at a statewide level. In addition, funding for projects that achieve quantifiable water savings continue to be eligible for grant funding under the water supply development grant program.

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. District staff continue to work with local governments and state and regional agencies to better coordinate land use and water supply planning. In FY 2013-2014, substantial staff resources were devoted to completion of a Districtwide WSA update (Countryman et al. 2014). Major components of the update included an updated source assessment and revised water demand projections for Region II. During FY 2013-2014 and FY 2014-2015, District staff reviewed the first two 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. District staff have also been working cooperatively with DEP staff to evaluate the status of the coastal WRCA and to improve reuse coordination. Beginning in late 2015, efforts will begin to update the Region II RWSP.

Staff are also assisting communities and utilities through water supply development projects. In FY 2014-2015, six of 25 water supply development grants were awarded to Region II totaling over $1.4 million. Funds were granted in all three Region II counties for purposes of water supply transmission, reuse, interconnection, and modeling. The grant program is discussed further under Districtwide Initiatives and in Appendix A.

Interconnection of Water Supply Conveyance 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 project is complete, the District continues to support local governments and utilities planning interconnect projects that help ensure available and reliable water supplies, particularly in coastal areas.

Hydrologic Data Collection and Analysis

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. In addition, the District continues to monitor conditions within the coastal WRCA for salt water intrusion and aquifer sustainability. 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.

The District continues expansion of 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 2014-2015, an additional salt water intrusion monitoring well was added to the quarterly groundwater quality monitoring network. Also, 20 existing monitoring wells were evaluated for rehabilitation and enhanced data collection with another six locations evaluated for monitor well construction. The data from these additional monitoring sites, as well as additional monitoring sites added in FY 15-16, 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 will continue to implement where feasible in partnership with stakeholders and local governments. To date, the District has facilitated the plugging of 5,223 abandoned wells within Region II, 194 of which were plugged in FY 2014-2015.

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. 2016-2020 Region II WRDWP Project Funding

Water Resource Development Projects	Budget Activity	FY 14-15 Expen-ditures[1]	Anticipated Five Year Work Program					FY16-FY20 Cost Estimate
			FY 15-16 Budget[2]	FY 16-17	FY 17-18	FY 18-19	FY 19-20	
Floridan Aquifer Sustainability	1.1.2 2.2.1	$615,562	$943,200	$500,000	$100,000	$275,000	$150,000	$1,968,200
Inland Sand-and-Gravel Aquifer	1.1.2 2.2.1	$5,312	$5,300	$5,500	TBD	TBD	TBD	$10,800
Surface Water Sources	1.1.2 2.2.1	$0	$0	$50,000	$250,000	TBD	TBD	$300,000
Aquifer Storage and Recovery	2.2.1	$0	$0	$0	$0	$0	$0	$0
Water Reuse	2.2.1	$24,572	$24,700	$25,000	$15,000	$15,000	$15,000	$94,700
Water Conservation	1.1.1	$14,279	$8,000	$8,000	$8,000	$8,000	$8,000	$40,000
Regional Water Supply Planning	1.1.1	$15,943	$58,400	$60,000	$60,000	$25,000	$20,000	$223,400
Interconnect	1.1.1	$0	$0	$0	$0	$0	$0	$0
Hydrologic Data	1.2.0 2.2.1	$67,976	$126,700	$130,000	$90,000	$90,000	$90,000	$526,700
Abandoned Well Plugging[3]	4.2.0	$8,090	$10,000	$8,000	$5,000	$5,000	$5,000	$33,000
TOTAL		$751,734	$1,176,300	$746,500	$528,000	$418,000	$288,000	$3,156,800

[1]Preliminary figures; final costs will be provided in the March 1, 2016, Consolidated Annual Report.
[2]FY 2016 figures based on adopted budget.
[3]Funding in future years will be budgeted as assistance needs are identified.

The budget for FY 2015-2016 reflects an increase in anticipated spending as compared to that presented in the previous WRDWP. This largely reflects the development of an improved groundwater flow model and associated hydrologic monitoring to support water supply planning, water resource development, and consumptive use permitting in Region II. The modeling will principally address the Floridan aquifer, but may also be integrated with the sand-and-gravel aquifer model. Additionally, the budget provides for an increased level of effort to support the Region II RWSP update for water reuse addressing both ongoing District priorities.

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. Recently, WRP, Inc. completed a 15-mile potable water transmission pipeline from an inland wellfield in Walton County, south across Choctawhatchee Bay to serve coastal service areas in Walton and Okaloosa counties. Additionally, Regional Utilities of Walton County constructed over five miles of water transmission pipeline along the U.S. Highway 98 corridor. This pipeline also conveys inland groundwater to meet coastal demand.

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 will continue efforts to make additional water supplies available to meet future needs, particularly focusing on surface water and 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. Additionally, through the District's competitive grant program for water supply development, over $1.4 million in funding was awarded for six projects in Region II during FY 2014-2015, increasing reuse utilization capacity and improving the reliability and capacity of potable water supply systems (Appendix A, Table 7).

Region III: Bay County

The RWSP for Region III (Figure 3) was developed initially in 2008 and updated in 2013 (NWFWMD 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 NWFWMD 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.

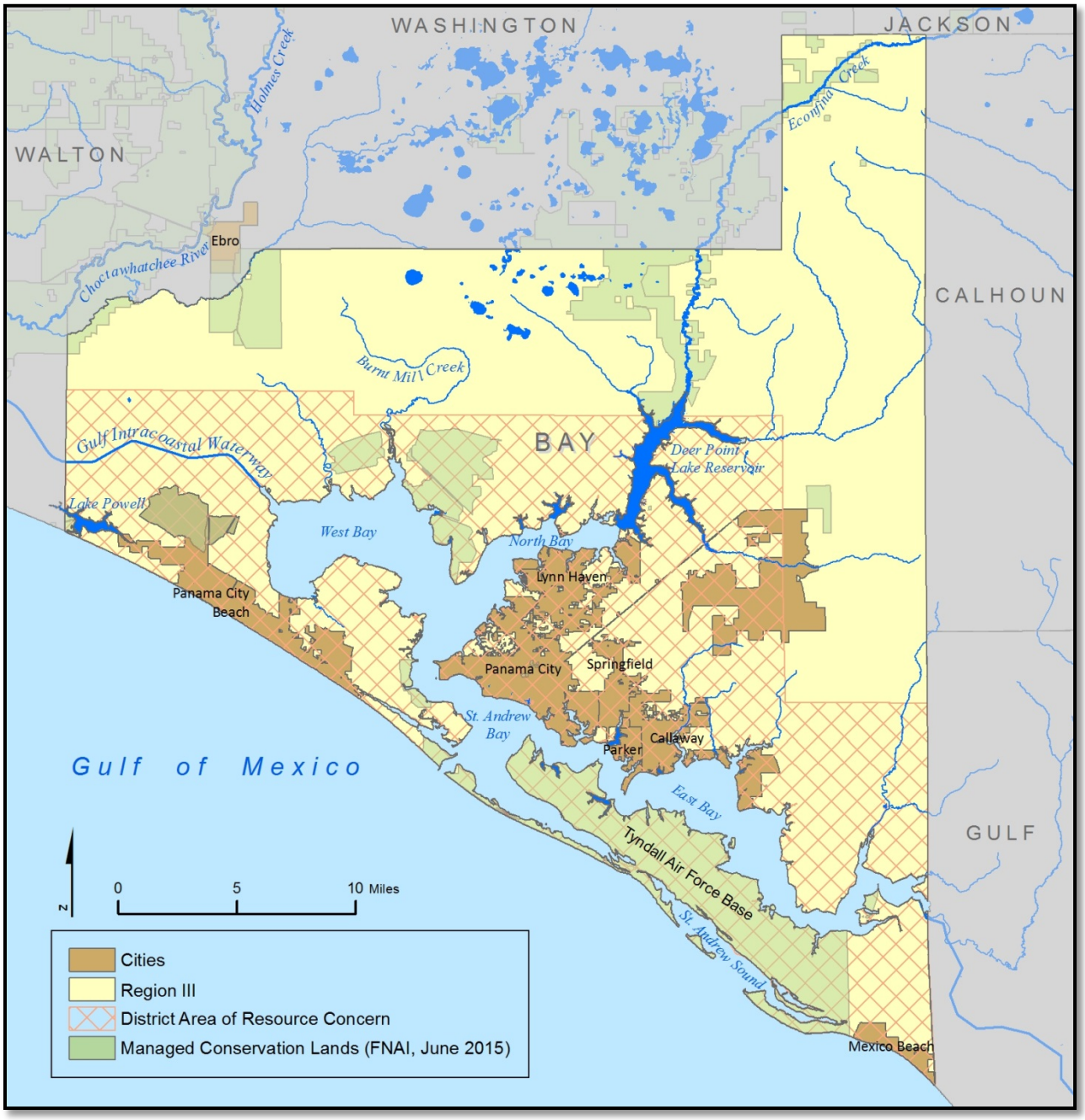

Figure 3. Water Supply Planning Region III

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 el 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 4. Descriptions of the strategies and progress to date follow.

Table 4. 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 will continue efforts to help facilitate and prove 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 over 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 late FY 2014-2015, the Williford Spring restoration project was completed. This was a $2.1 million project that restored and protected the spring shoreline, removed sediment, and implemented stormwater improvements. In addition, to make the area more resilient to public use, the District constructed spring access steps, a deck, boardwalks and trails for enhanced public access, as well as other recreational improvements to further protect the spring thereby enhancing water quality protection of Econfina Creek. Cooperating partners were DEP and the Florida Fish and Wildlife Conservation Commission.

Hydrologic and Water Quality Data Collection and Analysis

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 continues implementation of 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.

Water Reuse Funding and Technical Assistance

In 2013, an estimated 2.4 mgd of reclaimed water were used for public access reuse in Region III (DEP 2014). This included irrigation of 1,086 residences, two golf courses, four parks, and three schools. The Region III RWSP identifies approximately 5 mgd of new beneficial reuse that could offset the use of potable water sources. In addition to extending water supplies, further development of water reuse would help improve water quality in St. Andrew Bay and coastal waters by reducing wastewater discharges to the environment. Projected wastewater flows of almost 20 mgd by 2035 (*Countryman et al. 2014*) provide opportunity for additional application of reclaimed water for non-potable needs to reduce the use of potable water.

District staff will 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. The District will continue working with utilities in Region III 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 remove surface water discharges from wastewater facilities, brackish surface water withdrawals for consumptive and pass-through uses, and to position utilities to better meet future reclaimed water demand.

Other water use projects may include assessments matching reclaimed water generators with users, feasibility studies, pilot projects, and demonstration projects. Projects of highest priority to the District 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 FY 2014-2015, staff continued development of a reuse inventory that can be used for further reuse planning work, and participated in the Senate Bill 536 statewide reuse study.

Water Conservation Funding and Technical Assistance

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. An updated evaluation of water conservation potential in Region III will be completed in 2016. The evaluation will review existing programs and identify potential water savings achievable from additional water conservation measures. Staff will continue to work with local governments and utilities to further improve water use efficiency for public supply and other water use categories.

In 2014, the District's Governing Board declared April as water conservation month, joining DEP, the other Florida water management districts, and participating local governments in promoting water conservation advocacy and recognizing water conservation activity at a statewide level. In addition, funding for projects that achieve quantifiable water savings continue to be eligible for grant funding under the water supply development grant program (www.nwfwater.com/water-resources/wsp/grants/).

Regional Water Supply Planning, Coordination, and Technical Assistance

This project continues 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 2013-2014, substantial staff resources were devoted to completion of a Districtwide WSA update and subsequent Region III RWSP update. Also during FY 2013-2014 and in FY 2014-2015, District staff reviewed the first two 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. Similar efforts in Region III are anticipated through the next WSA Update in 2018.

Funding Summary: Region III Water Resource Development Projects

Table 5 displays past year expenditures, current year budget, and anticipated future expenditures for water resource development within Region III.

Table 5. 2016-2020 Region III WRDWP Project Funding

Water Resource Development Projects	Budget Activity	FY 14-15 Expen-ditures[1]	Anticipated Five Year Work Program					FY16-FY20 Cost Estimate
			FY 15-16 Budget[2]	FY 16-17	FY 17-18	FY 18-19	FY 19-20	
Econfina Creek & Groundwater Recharge Area	2.1.0 2.3.0 2.5.0 2.6.0 3.1.0	$1,714,717	$1,361,800	$1,012,400	$1,012,400	TBD	TBD	$3,130,800
Hydrologic Data	1.1.2 1.2.0 2.2.1	$34,346	$68,300	$50,000	$50,000	TBD	TBD	$168,300
Water Reuse	2.2.1	$7,372	$6,200	$5,000	$5,000	TBD	TBD	$16,200
Water Conservation	1.1.1	$6,907	$4,900	$3,000	$3,000	TBD	TBD	$10,900
Regional Water Supply Planning	1.1.1	$3,986	$4,900	$5,000	$5,000	TBD	TBD	$14,900
TOTAL		$1,767,328	$1,446,100	$957,300	$957,300	TBD	TBD	$3,360,700

[1]Preliminary figures; final costs will be provided in the March 1, 2016, Consolidated Annual Report.
[2]FY 2015-2016 figures based on adopted budget.

Reduced expenditures in all projects except hydrologic data for FY 2015-2016 reflects completion of spring restoration projects and completion of the statewide reuse initiative and draft reuse evaluation. Increases in hydrologic data collection reflect expansion of the western district flow model to include coastal Bay County. Projected funding going forward reflects 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. With the updated RWSP for Region III, the WRDWP recognizes the significant ongoing level of effort for management of the Econfina Creek Water Management Area, which includes the primary recharge area for Floridan aquifer springs contributing to Econfina Creek and Deer Point Lake Reservoir. In addition to land management activities, significant capital expenditures are planned during FY 2015-2016 for restoration at Devils Hole spring along Econfina Creek.

Region III Water Supply Development

Water supply development strategies identified in the Region III RWSP Update are listed in Table 6.

Table 6. 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 Facilities	Construction of water reuse facilities to provide reclaimed water for landscape irrigation and other non-potable uses.	TBD	5
Utility Interconnections and Infrastructure Enhancements	Assist with delivery system interconnections and facility improvements. Specifically includes potential 48" pipeline emergency interconnect between southern Bay and Walton counties.	$25,700,000[3]	N/A
Water Conservation Projects that Result in Quantifiable Water Savings	Implementation of water conservation and efficiency programs and practices by local utilities.	TBD	TBD

[1] Final cost.
[2] Capacity of alternate raw water intake.
[3] Estimated cost for Bay-Walton emergency interconnect project.

Bay County's alternative pump station project was completed in FY 2014-2015 for development of an alternate upstream intake for Deer Point Lake Reservoir. The District provided $5.47 million in funding assistance from the Water Protection and Sustainability Trust Fund. The District also awarded water supply grant funding totaling nearly $780,000 for water system improvements for the cities of Springfield and Parker in FY 2014-2015 (Appendix A, Table 7).

District-Wide Initiatives

Water Supply Development Grant Initiative

The District continues to emphasize water supply development assistance for local governments and utilities. The Governing Board approved 49 projects totaling more than $18 million for the water supply development assistance grant program in the last two fiscal years. The Governing Board has approved an additional $2.3 million in assistance for this program in the FY 2015-2016 budget.

Coastal Interconnects

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 due to droughts or other contingencies. Multi-jurisdictional and regional water conveyance systems will better ensure water availability for emergency response and disaster recovery in the event of water shortages, natural disasters, environmental emergencies, or system failures. 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. Implementation of these two recommendations will require significant financial commitment to complete.

Water Reuse

District staff are developing approaches for integrated planning of water and wastewater resources. In FY 2014-2015, staff continued maintenance and development of geographic information system (GIS) data associated with wastewater treatment plants and effluent disposition, including a new dataset of water use sectors that could be potential reclaimed water recipients. The data can be used to help match reclaimed water supplies with non-potable demands, identify setbacks for well permits, and planning and coordination for more integrated water management. Staff will continue efforts to develop a Districtwide water reuse evaluation to provide detailed information on wastewater systems that is needed 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. Over the past two years, the District budgeted $1,167,500 of legislatively appropriated spring restoration funding for these activities. The funding is being used to provide a 75 percent cost share to help producers retrofit center pivot irrigation systems and to implement fertigation and other more efficient nutrient application systems, as well as to help expand the northwest Florida mobile irrigation laboratory. Together, these efforts are expected to significantly enhance efficient use of both water and nutrients within the Jackson Blue Spring basin. As of the end of the third quarter (June 30, 2015), 93 percent of the available cost-share funds were under contract or distributed to producers for implementation of best management practices. An additional $1.0 million in legislatively-approved funding to continue this effort is planned for FY 2015-2016.

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 the following: 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 at one time had matching funding from DEP and was able to cover 100 percent of costs. The program currently pays up to 50 percent of costs to plug and abandon eligible wells. During 2015, approximately 778 wells were plugged at no cost to the District other than staff time. The District has executed an agreement with the City of Marianna for the proper abandonment of three wells of unknown use. The District will provide matching funds not to exceed $5,000 through the agreement.

References

Many of these references may be found on the District's website under Publications and Data, Reports and Plans: www.nwfwater.com/data-publications/reports-plans/.

Barrios, K., R. L. Bartel, N. Wooten, and M. Lopez. 2011. Hydrologic Monitoring Plan: Version 1.0. Northwest Florida Water Management District, Program Development Series 2011-04. www.nwfwater.com/system/assets/840/original/HydrologicMonitoringPlanPDS11-4.pdf

Bartel, R. L., T. R. Pratt, T. L. Macmillan, R. R. Potts, C. J. Richards, R. D. Womble, J. A. Bonekemper, and R. A. Countryman. 2001. Regional Water Supply Plan for Santa Rosa, Okaloosa, and Walton Counties. Northwest Florida Water Management District. Water Resources Assessment 2000-1. Havana, Florida. nwfwater.com/system/assets/604/original/rwsp2Title_page.pdf

Bonekemper, J. 2003. Northwest Florida Water Management District Water Supply Projections 2005-2025. Northwest Florida Water Management District Water Resources Assessment 03-01. Havana, Florida. www.nwfwater.com/system/assets/647/original/water_supply_projection2003.pdf

Brooks, L., A. Chelette, and P. Thorpe. 2014. 2014 Regional Water Supply Plan Update, Region III, Bay County, FL. Northwest Florida Water Management District. Program Development Series 14-01. Havana, Florida. www.nwfwater.com/system/assets/1189/original/Region_III_RWSP_Update_-_2014.pdf

Busen, K. and R. Bartel. 2012. 2012 Regional Water Supply Plan Update for Santa Rosa, Okaloosa, and Walton Counties, Water Supply Planning Region II. Northwest Florida Water Management District Water Resources Assessment 2012-01. Havana, Florida. nwfwater.com/system/assets/1236/original/Region_II_RWSP_2012_Update_Final.compressed.pdf

Coates, K., C. Coger, R. A. Countryman, M. Pritzl, and C. J. Richards. 2008. 2008 Water Supply Assessment Update. Northwest Florida Water Management District. Water Resources Assessment 08-02. Havana, Florida. www.nwfwater.com/system/assets/645/original/WSA_Final2008.pdf

Countryman, T.C., L. Brooks, K. Busen, E. Chelette, K. Coates, F. Florida, and P. Thorpe. 2014. 2013 Water Supply Assessment Update. Havana: Northwest Florida Water Management District. Water Resources Assessment 13-01. www.nwfwater.com/system/assets/1338/original/WSA2013_Final_Compressed.pdf

DeFosset, K. L. 2004. Availability of Ground Water from the Sand-and-Gravel Aquifer in Coastal Okaloosa County, Florida. Northwest Florida Water Management District, Water Resources Technical File Report 04-1. August 2004. www.nwfwater.com/system/assets/827/original/wrtfr04-01.pdf

Florida Department of Environmental Protection. 2014. 2013 Reuse Inventory. DEP Water Reuse Program. May 2014. Tallahassee, FL. www.dep.state.fl.us/water/reuse

Florida Natural Areas Inventory. 2015. Florida Conservation Lands, June 2015. www.fnai.org/gisdata.cfm

HydroGeoLogic, Inc. 2000. Modeling of Ground Water Flow in Walton, Okaloosa and Santa Rosa Counties, Florida. May 2000. www.nwfwater.com/system/assets/828/original/hgl_gwmodel.pdf

HydroGeoLogic, Inc. 2005. Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Western Domain Model. May 2005.

HydroGeoLogic, Inc. 2007a. Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Eastern Domain Model, Final Report. September 2007.

HydroGeoLogic, Inc. 2007b. Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Eastern Domain Forecast Simulations. March 2007.

HydroGeoLogic, Inc. and Hazlett-Kincaid, Inc. 2007. Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Western Domain Forecast Simulations. March 2007.

Northwest Florida Water Management District. 2006. Regional Water Supply Plan for Santa Rosa, Okaloosa, and Walton Counties, Plan Update. Water Resource Assessment 2006-1. September 2006.
www.nwfwater.com/system/assets/585/original/rwspfinal.pdf

Northwest Florida Water Management District. 2007. Regional Water Supply Plan: Region V, Franklin and Gulf Counties. Water Resources Assessment 07-01. January 2007.
www.nwfwater.com/system/assets/583/original/Region_V_RWSP.pdf

Northwest Florida Water Management District. 2008. Region III Regional Water Supply Plan, Bay County, Florida. Program Development Series 08-02. August 2008.
www.nwfwater.com/system/assets/587/original/Region_III_RWSP_08-12-08_FINALweb_version.pdf

Northwest Florida Water Management District. 2015a. Consolidated Annual Report. March 1, 2015.
nwfwater.com/system/assets/1641/original/Consolidated_Annual_Report_2015.pdf

Northwest Florida Water Management District. 2015b. Tentative Budget Submission. August 1, 2015.
nwfwater.com/system/assets/1836/original/Tentative-Budget.pdf

PBS&J. 2000a. Water Conservation Task Summary Report. August 2000.

PBS&J. 2000b. Reuse Task Summary Report. August 2000.

PBS&J. 2006. Water Supply Planning Region II Final Report: Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates. October 2006.
nwfwater.com/system/assets/1333/original/Final_Water_Supply_Study_Report.compressed.pdf

Pratt, T. R. 2001. Results of Floridan Aquifer Drilling Program in Santa Rosa, Okaloosa, and Walton Counties, Florida. Technical File Report 01-1. nwfwater.com/system/assets/1341/original/tfr01-1.pdf

Ryan, P. L., T. L. Macmillian, T. R. Pratt, A. R. Chelette, C. J. Richards, R. A. Countryman, and G. L. Marchman. 1998. District Water Supply Assessment. Northwest Florida Water Management District. Water Resources Assessment 98-2. Havana, Florida. nwfwater.com/system/assets/1235/original/WSA_Final1998.pdf

Whitcomb, J.B. 2005. Florida Water Rates Evaluation of Single Family Homes.
nwfwater.com/system/assets/1331/original/water_rate_report.pdf

Appendix A. Water Supply Projects in the NWFWMD

Table 7 presents additional water supply development assistance and alternative water supply development projects funded 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, 2016, Consolidated Annual Report.

Table 7. Additional Water Supply Development Assistance Projects (FY 2013 – 2015)

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	District Funding Source
Century Water System Leak Survey	Town of Century	I	Conduct leak survey of entire distribution system and prioritize leak repairs to reduce water loss from 22% to 10%	Complete	FY 2014-2015	$44,500	District General Fund
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	$144,000	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
Pine Island Water System	Calhoun County	IV	Development of water distribution system for the Pine Island community	Complete	FY 2014-2015	$446,545	District General Fund
State Road 20 Waterline Replacement	City of Blountstown	IV	Construction of water main; installation of hydrants	Complete	FY 2014-2015	$471,690	District General Fund
Water Extension to I-10 Interchange	Town of Grand Ridge	IV	Construction of water main extension to I-10 interchange	Complete	FY 2014-2015	$347,083	District General Fund
Greenwood/Marianna Interconnecting Water Mains	Town of Greenwood	IV	Construct of interconnection; with additional distribution line replacement	Complete	FY 2014-2015	$230,308	District General Fund
Chipola River Pump #2 Rehabilitation	City of Port St. Joe	V	Rehabilitate pump #2 and add a new diesel electric generator	Complete	FY 2014-2015	$225,870	District General Fund
Monticello Water Extension	City of Monticello	VII	Extend water main approximately two miles north of the city, abandoning several private systems	Complete	FY 2014-2015	$927,000	District General Fund
CWRF Reclaimed Water System Expansion	Emerald Coast Utilities Authority	I	Reuse extension to Scenic Hills Golf Course and UWF main campus	Design/Permitting	FY 2015-2016	$522,000	District General Fund
Water Main Replacement	City of DeFuniak Springs	II	Replacement of asbestos cement water main; installation of additional hydrants	Design/Permitting	FY 2015-2016	$473,750	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	Design/Permitting	FY 2015-2016	$345,500	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	Design/Permitting	FY 2015-2016	$40,000	District General Fund

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	District Funding Source
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 2015-2016	$123,947	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	Construction	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.	Design/Permitting	FY 2015-2016	$8,700	District General Fund
Town of Jay Asbestos Watermain Replacement	Town of Jay	II	Replacement of asbestos cement water main	Construction	FY 2015-2016	$663,024	District General Fund
Water System Improvements - Gate Valve Replacement	City of Parker	III	Replace the City's 30 non-functioning gate valves	Construction	FY 2015-2016	$278,500	District General Fund
City of Bonifay Waterline Replacement	City of Bonifay	IV	Replacement of asbestos cement and lead joint water main	Construction	FY 2015-2016	$268,900	District General Fund
Water Storage Capacity	City of Bristol	IV	Construction of ground storage tank; installation of high service pumps	Design/Permitting	FY 2015-2016	$537,500	District General Fund
Highway 77/I-10 Infrastructure Improvements Project	City of Chipley	IV	Construction of new well with transmission system improvements	Design/Permitting	FY 2015-2016	$440,000	District General Fund
2014 Water Improvements Project	City of Cottondale	IV	Replace cast iron and asbestos concrete pipe with PVC water line	Design/Permitting	FY 2015-2016	$284,580	District General Fund
Chipola River Protection and Stormwater Reuse Project	City of Marianna	IV	Expand pond to provide stormwater reuse and provide additional water quality treatment	Design/Permitting	FY 2015-2016	$671,340	District General Fund
Hosford Water System Upgrades	Liberty County	IV	Various activities to ultimately increase well production capacity	Design/Permitting	FY 2015-2016	$263,000	District General Fund
Altha Water System Phase 3	Town of Altha	IV	Construction of water main; installation of hydrants	Construction	FY 2015-2016	$540,000	District General Fund
2014 Water Improvements Project	Town of Campbellton	IV	Replace aging waterline	Construction	FY 2015-2016	$322,062	District General Fund
Water Main Replacement	Town of Esto	IV	Water distribution system replacement	Design/Permitting	FY 2015-2016	$703,543	District General Fund
Town of Noma Water Line Replacement Project	Town of Noma	IV	Water distribution system replacement	Construction	FY 2015-2016	$415,292	District General Fund
Booster Pump Installation	Town of Wausau	IV	Install booster pumps to improve potable water service and fire protection	Design/Permitting	FY 2015-2016	$250,800	District General Fund

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	District Funding Source
Water Main Replacement	Town of Westville	IV	Replace aging water line	Design/Permitting	FY 2015-2016	$491,100	District General Fund
Lime Feed System and Water Main Replacement	City of Port St. Joe	V	Install lime addition system to improve drinking water quality and replace aging cast iron pipe with PVC	Bid Phase	FY 2015-2016	$358,920	District General Fund
Water System Upgrades	City of Gretna	VI	Design and surveying for two new wells with additional transmission and treatment improvements	Design/Permitting	FY 2015-2016	$150,000	District General Fund
Transmission Line Replacement	Rosedale Water Association	VI	Replace aging water transmission line	Contract Development	FY 2015-2016	$272,978	District General Fund
Asbestos Cement Pipe Replacement Project	Town of Greensboro	VI	Replace asbestos concrete pipe with PVC water line	Bid Phase	FY 2015-2016	$222,044	District General Fund
Town of Havana Water System Improvements	Town of Havana	VI	Construction of new well, ground storage tank, and treatment facilities	Implementation	FY 2015-2016	$500,000	District General Fund
Panacea Area Water System - Sopchoppy Water System Interconnect	Panacea Area Water System, Inc.	VII	Construct potable water system interconnection with Sopchoppy	Design/Permitting	FY 2015-2016	$379,447	District General Fund
Pensacola Beach Reclaimed Water System Expansion - Phase 2	Emerald Coast Utilities Authority	I	Install ground storage tank, pump station and other components to expand reclaimed water system	Contract Development	FY 2016-2017	$425,000	District General Fund
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	Implementation	FY 2016-2017	$482,000	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	Construction	FY 2016-2017	$295,000	District General Fund
Mid-County Tank #4	Okaloosa County Water and Sewer	II	Construction of 1 MG elevated water tank for northern wellfield	Implementation	FY 2016-2017	$1,250,000	District General Fund
Water System Improvements 2015	City of Springfield	III	Install approximately 6,300 LF of 6” to 8” water line	Bid Phase	FY 2016-2017	$499,192	District General Fund
Catalyst Site/Industrial Park Water Improvements	Calhoun County	IV	Install new water line and complete upgrades and repairs to an existing elevated storage tank	Bid Phase	FY 2016-2017	$182,232	District General Fund

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	District Funding Source
Planning for Reuse of Reclaimed Water	City of Bonifay	IV	Conduct planning and geotechnical evaluation for a reclaimed water system	Design/Permitting	FY 2016-2017	$350,000	District General Fund
Water System Improvements	City of Graceville	IV	Replace water line and associated components	Design/Permitting	FY 2016-2017	$426,729	District General Fund
2014 Water Improvements Project	Town of Sneads	IV	Replace water line and associated components	Construction	FY 2016-2017	$402,354	District General Fund
Water System Improvements	Eastpoint Water and Sewer District	V	Install new inland well and transmission line to existing treatment and storage system; abandon two coastal wells	Design/Permitting	FY 2016-2017	$346,669	District General Fund
Hayfield Spur Road Extension Loop	Jefferson Communities Water System, Inc.	VII	Construct water line and fire hydrants to provide looping and potential connections for future customers	Design/Permitting	FY 2016-2017	$164,203	District General Fund
Wakulla Regional Water System Improvements	Talquin Water and Wastewater, Inc.	VII	Install new water treatment systems and storage improvements to improve water quality within the drinking water system	Bid Phase	FY 2016-2017	$350,000	District General Fund
			Total			**$18,285,643**	