Five-Year

Water Resource Development Work Program

Fiscal Year 2013-2014 Update

Proposed October 2013

Northwest Florida
Water Management District

Program Development Series 2013-01

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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Introduction

In 1997, the Florida Legislature amended the Florida Water Resources Act (Chapter 373, F.S.) to provide direction to the state's five water management districts on regional water supply planning. This amendment provided a two-step process that involves: (1) dividing the jurisdictions of each water management district into water supply planning regions and assessing the water supply needs and sources of each region; and (2) developing regional water supply plans for those regions where existing sources of water are considered inadequate to supply water for all existing and future reasonable-beneficial uses and to sustain water resources and related natural systems over a twenty-year planning period.

Each water management district is required by section 373.536(6)(a)4, Florida Statutes (F.S.), as amended in 2012, to prepare a Five-Year Water Resource Development Work Program to describe the District's implementation strategy and funding plan for the water resource, water supply, and alternative water supply development components of each approved regional water supply plan (RWSP) developed or revised under section 373.709, F.S. 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 constituting each of the five districts. 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, while water supply development projects are more localized and address water treatment, storage, and delivery to end users. Water resource development supports and facilitates future alternative water supply development, which provides for the development of non-traditional water sources. Water management districts are statutorily responsible primarily for water resource development, while water supply development is primarily the responsibility of local governments, water supply authorities, and utilities. The districts do, however, also provide technical and financial assistance for water supply development projects. Alternative water supply and water resource development projects supplement dedicated regulatory efforts to ensure the long-term sustainability of water resources.

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 whether supplies would be sufficient to meet demands through 2020, and it was determined 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 District-wide WSA update was completed in 2008 (approved May 2009), extending 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 (NWFWMD 2008a). The District is in the process of updating the WSA for 2013.

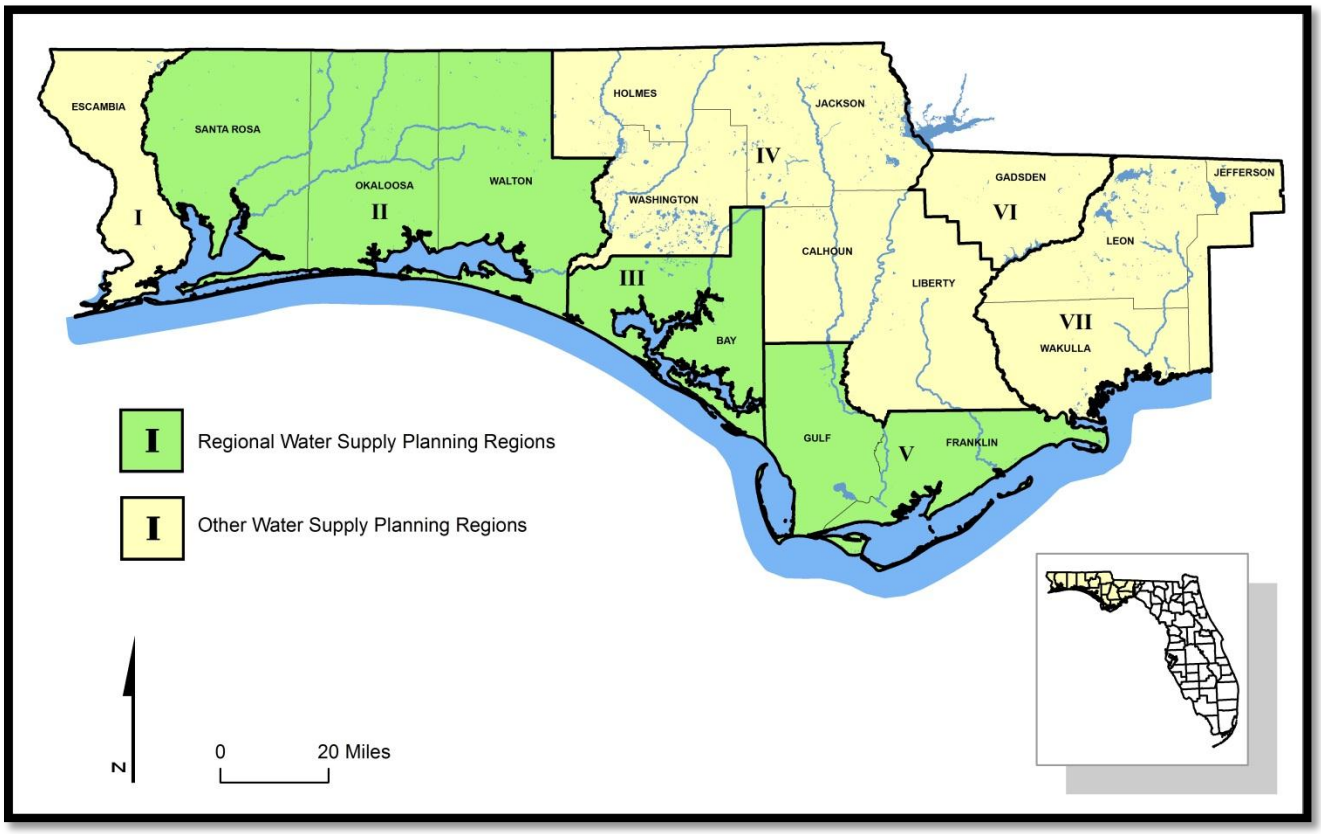

Figure 1. Water Supply Planning Regions

As required by section 373.709(2)(a)1, F.S., the RWSP level of certainty planning goal is to identify and meet existing and future reasonable-beneficial water needs during a 1-in-10 year drought event. While water supply sources can become constrained during drought conditions, demands can increase for certain uses, such as agricultural irrigation and outdoor water use. District RWSPs include strategies to help drought-proof northwest Florida communities through alternative water supply development, the interconnection of water systems, reuse of reclaimed water, and water conservation. The 2008 Water Supply Assessment Update (NWFWMD 2008a) provides a more thorough discussion of the quantification of 1-in-10 year drought demands.

Implementation of strategies detailed in the Water Resource Development Work Program (WRDWP) will make additional water available to meet future needs in a timely manner through the planning period. Sources of water identified include the inland Floridan Aquifer, Sand-and-Gravel Aquifer, reclaimed water, and surface waters. Water conservation is emphasized to improve water use efficiency and long-term water resource sustainability. It should be noted that the consumptive use permitting program also plays a major role in ensuring that water resources are available to meet future demands in a sustainable manner.

Preliminary results from the 2013 WSA update (in progress) indicate that public supply remains the largest use category for the District, accounting for approximately 44 percent of the demand in 2010. It is expected that this will continue to hold true through the 2015-2035 planning period. Public supply accounted for approximately 63 percent of 2010 water use in Region II, with recreational water use comprising an additional nearly 17 percent. In Region III, public supply and industrial-commercial-institutional (ICI) water use together accounted for approximately 70 percent of the water demand, with 36 percent and 34 percent of use respectively. In Region V, public supply and ICI comprised approximately 53 percent and 30 percent of water use respectively in 2010.

Funding for Water Resource and Supply Development

The state constitution limits the NWFWMD to 1/20th (.05 mills) of the *ad valorem* taxing authority afforded the other four water management districts. The District's fiscal year (FY) 2012-2013 ad valorem tax millage rate, as set by the Governing Board, was .04. To fulfill legislatively mandated water supply planning and water resource development activities under this revenue constraint, the District looks to other sources of funding, when available, including the following:

- Water Management Lands Trust Fund;
- Water Protection and Sustainability Program Trust Fund;
- Legislative special appropriations;
- Florida Forever;
- District General Fund;
- Federal grants; and
- Local government and water supply utility cost sharing.

Water resource development in northwest Florida has depended primarily on funding from the Water Management Lands Trust Fund (WMLTF), however no appropriations from the WMLTF for water resource and supply development have been made since FY 2010-2011. To the extent possible, the District is applying limited *ad valorem* funding to accomplish basic water supply planning functions and augmenting these funds using previously encumbered funds and reserves for priority projects. *Ad valorem* funding available to the NWFWMD, however, is inadequate to support implementation of major water resource and supply development projects and initiatives.

The Water Protection and Sustainability Program Trust Fund (WPSPTF), established by the 2005 Florida Legislature, allowed the District to provide cost-share assistance for construction of alternative water supply development projects and priority water resource development and springs protection activities. Projects funded under the WPSPTF are listed in Appendix A and are described in the March 1 Consolidated Annual Report. 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 including 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 below in summary tables for regions II, III, and V (tables 2, 5, and 8, respectively). The proposed water resource development funding for FY 2013-2014 is $330,500. The anticipated five year water resource development implementation cost through FY 2017-2018 is $1,657,700. Additionally, the district expects to spend approximately $10 million of reserve funds during FY 2013-2014 for water supply development assistance grants across northwest Florida. This represents approximately 26% of the reserve funds within the District's FY 2013-2014 budget.

Where enhanced monitoring and water resource development needs are identified, District reserve funds are being used to support these activities during the short term. Efforts to identify adequate funding for long-term water resource and supply development will continue.

Region II: Santa Rosa, Okaloosa, and Walton Counties

Since the 1940s, Santa Rosa, Okaloosa, and Walton counties (Figure 2) have been characterized by rapid population growth and a concentration of development and water demands within coastal portions of the region. Long-term pumping of the coastal Floridan Aquifer in southern Santa Rosa, Okaloosa, and Walton counties 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 ground water.

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 (Figure 2). 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.

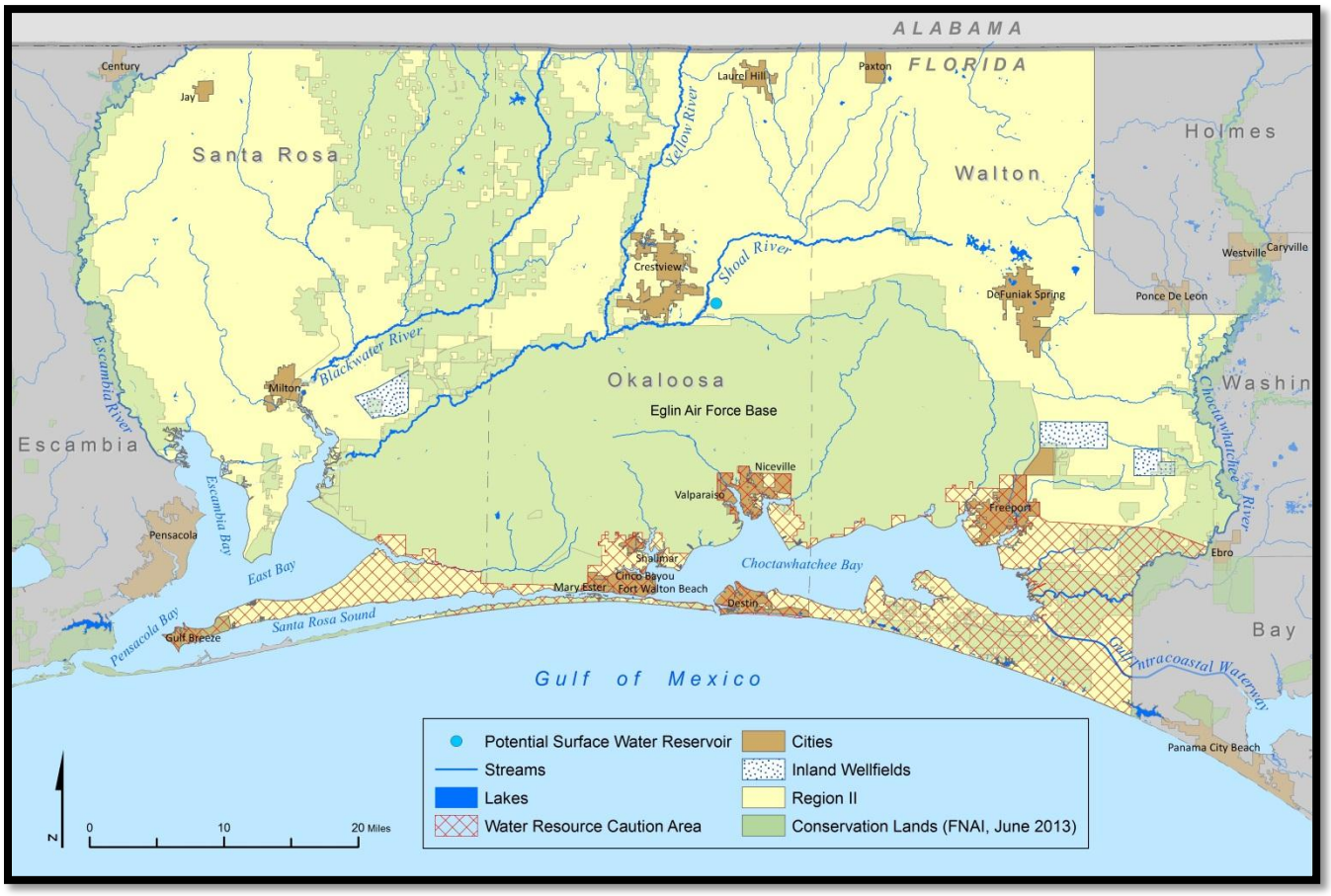

Figure 2. Water Supply Planning Region II

The District's first RWSP was approved by the Governing Board for Region II in February 2001 (NWFWMD 2001). The Region II RWSP described the region's water supply needs, identified traditional and alternative water sources, and analyzed the ability of these sources to meet future demands to 2020. Updates to the plan were approved in 2006 (NWFWMD 2006) and again in 2012 (NWFWMD 2012b). In the process, water resource and water supply development components have been revised, progress on project implementation was described, and water demands were projected to 2030. Preliminary estimates for 2010 indicate that public supply accounted for 46 MGD, or 63 percent of the region's water use. It is expected that the relative importance of public supply within the region will continue to increase through the planning horizon.

Region II Water Resource Development

The Region II RWSP includes ten water resource development projects encompassing strategies for developing water resources in support of alternative water supply development. These are summarized in Table 1. Descriptions of the strategies and their current progress follow.

Table 1. Region II Water Resource Development Projects

Project	Activity	Water Identified or Made Available (MGD)
Floridan Aquifer Sustainability Modeling	Development and application of a regional ground water flow model and salt water intrusion models.	30
Inland Sand-and-Gravel Aquifer Development and Sustainability	Development and application of a three-dimensional, transient ground water 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 ground water data throughout the region.	N/A
Abandoned Well Plugging	Assistance to local governments and utilities in the plugging of abandoned wells.	N/A

* Preliminary update for 2010-2030.

** Additional anticipated quantities to be determined.

Floridan Aquifer Sustainability Modeling

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 RWSP. The Floridan Aquifer Sustainability Model was developed to include a western domain encompassing Santa Rosa and western Okaloosa counties and an eastern domain that includes eastern Okaloosa and Walton counties. The model has been used to evaluate long-term safe yields from the coastal aquifer, pumpage from consumptive use permits, and future withdrawal scenarios to evaluate cumulative impacts.

Model simulations have been run to predict the extent of salt water intrusion through 2100 for the eastern and western model domains. The simulations incorporated historical withdrawals and proposed future pumping rates. Results indicate that salt water intrusion into potable portions of the Floridan Aquifer continue to occur at a slow, manageable rate (HydroGeoLogic, Inc., 2007b, 2007c). 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.

Under current pumping conditions, it is estimated that the coastal Floridan Aquifer is sustainable through 2050 and likely beyond (NWFWMD 2012b). Future model applications will be directed toward analysis of drawdown

effects of increased pumping of the Floridan Aquifer in inland areas and alternative withdrawal scenario development.

Funding reflected over the next two years (Table 2) includes a portion of funding allocated for development and improvement of groundwater models District-wide.

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. Through this project, a three-dimensional, transient ground water flow model has been developed to assess the volume of water sustainably available from the aquifer. The study area for this effort lies between the Blackwater and Yellow Rivers in Santa Rosa and Okaloosa counties. The model includes the transient response of the aquifer to drought and climatic variability. In previous years, considerable data were gathered, which involved constructing project-specific monitoring wells, determining aquifer hydraulic properties, mapping aquifer unit thicknesses, and measuring ground-water levels and stream discharge. The ground water flow model was subsequently developed and calibrated.

Development of an inland Sand-and-Gravel Aquifer wellfield was initiated in 1999 within the Santa Rosa County portion of the study area. Prior to the development of the wellfield, approximately one MGD were being withdrawn from the area for public supply. A pipeline from the inland Sand-and-Gravel Aquifer wellfield to the coastal area was completed in late 2003. Since then, potable water withdrawals from the wellfield and vicinity have increased to over five MGD. Water from the wellfield is being conveyed south to alleviate pumping demand from the Floridan Aquifer along the coast.

Modeling results to date indicate that an additional 12 MGD may be allocated from the inland Sand-and-Gravel Aquifer study area for a ground water production total of approximately 18 MGD. The ability of the aquifer to sustain a production of 18 MGD and avoid or minimize impacts to natural resources will depend on the management of withdrawals. Withdrawals can be managed by the proper placement of wells, variable pumping scenarios, and limiting drawdown in wells.

Preliminary mapping of the extent and quality of wetlands in the study area has been completed. Further investigation is needed to verify wetland quality and assess potential impacts to seepage wetlands and streams sourced by Sand-and-Gravel Aquifer ground water. The District has completed development of backwater models of the Yellow and Blackwater Rivers, which are useful for accurately delineating floodplains of these rivers. In 2012-2013, the District provided technical assistance to Santa Rosa County in its wellfield protection efforts by using the existing inland Sand-and-Gravel aquifer groundwater flow model to delineate capture zones for wells in the wellfield area. Based on the capture zone analysis, Santa Rosa County expanded its wellfield protection ordinance to include additional public supply wells and aquifer recharge areas. It is anticipated that the model will also be applied to the resource assessment portion of the WSA update. Additional application and assessment, including evaluation of potential wetland effects from future withdrawals, may also be conducted depending on funding availability.

As with the Floridan Aquifer Sustainability model, funding reflected over the next two years (Table 2) includes a portion of funding allocated for development and improvement of groundwater models District-wide.

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 various technically and economically feasible alternatives, including direct river withdrawal and riverbank filtration. The District also concurrently reviewed an evaluation of a proposed Yellow River Reservoir and concluded that the proposal is not economically feasible and that its implementation would cause significant environmental impacts and mitigation

requirements. Surface waters in the Yellow and Shoal rivers basins are being further evaluated as potential future water supply sources for Okaloosa County. Potential facilities may include direct withdrawal and treatment systems, as well as offline reservoir or other storage facilities. Funding reflected over the next two years (Table 2) provides for further coordination between District and Okaloosa County staff to fully explore options and needs based on current and projected conditions.

Aquifer Storage and Recovery Feasibility

Aquifer storage and recovery (ASR), depending on the particular hydrogeologic and economic considerations of an area, has the potential to support storage of large quantities of water more effectively and at a lower cost than above ground storage. Aquifer storage and recovery systems have not been developed on a widespread basis within Region II due to hydrogeologic conditions, economic feasibility, the need for water quality evaluations, and other technical constraints. Destin Water Users recently developed an ASR system that is permitted for a 2.125 annual average daily flow capacity. The system consists of seven wells 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.

The use of ASR in the future for storage of reclaimed water or perhaps as a salinity barrier may require a regional approach, since water introduced into a geologic formation could affect the ground water beneath jurisdictions or service areas of multiple utilities. In coordination with evaluations of surface water supply and reclaimed water alternatives, and if additional funding becomes available, the District may conduct preliminary ground water 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

As of 2012, 21 reuse applications associated with 10 reuse systems in Region II were permitted for public access reclaimed water, producing an estimated 8.83 MGD for public access reuse (DEP 2013). These facilities supported landscape irrigation for approximately 2,083 residences, 19 golf courses, eight parks, three schools, and one cemetery.

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. Most of the wastewater utilities serving coastal Santa Rosa, Okaloosa, and Walton counties provide some public access reuse water that offsets potable demand. Past District funding assistance has helped provide for construction of new reuse facilities near Freeport and in north-central Okaloosa County. A District-wide grant program initiated for FY 2013-2014 will make funding available for reuse projects, as well as other priority water supply development assistance projects.

The Region II RWSP previously identified approximately 5 MGD of new beneficial reuse to offset demands on the coastal Floridan Aquifer within Region II. This estimate has been updated to 5.4 MGD for the RWSP 2010-2030 planning horizon. The District will revise this estimate as additional data become available.

Reuse planning activities over the previous year were incorporated into efforts to update reuse and recreation water use portions of the WSA update. Significant progress has been achieved in identifying potential resources for water reclamation and reuse District-wide through 2035. 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. Note that the District has allocated a portion of its reserve funds over the next two years for local water supply development assistance grants. It is anticipated the beneficial reuse projects proposed by local governments and utilities will receive priority consideration for grant funding.

Water Conservation Coordination

A significant effort at water conservation has been underway in Region II for some time, substantially due to regulatory requirements and incentives established within the coastal WRCA. As a result, the estimated potential for additional potable water conservation within the coastal portion of the region is relatively low (estimated previously at 2.5 MGD) (PBS&J 2000a). Water conservation remains a priority, however, to build upon current water use efficiency and resource sustainability.

Under Chapter 40A-2, F.A.C., new 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. The goal for utility conservation measures is to reduce the annual average residential per capita water consumption to 100 gallons per day or lower and to reduce 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, and requirements to report residential per capita values are being phased in. Most utilities reporting these values are achieving the 100 residential gallons per capita per day (gpcd) goal, and overall reported residential per capita use in the District is 100 gpcd or less.

The District's 2013-2014 budget includes a significant investment in information technology (IT) enhancements and improvements, including a complete rebuild of the District's website. The District intends for the website to better educate residents about how they can participate in water management, including providing easy-to-access water conservation tools and educational materials. Budgeted funding is not specific to regions or projects. District staff continue to promote water conservation education and awareness through such activities as the distribution of water conservation brochures and information and through the Water Conservation Hotel and Motel Program (Water CHAMP), which reduces washing of linens and towels. As of August 2013, 32 hotels were participating in the program, including 16 in Region II.

In cooperation with other water management districts, the District participated in the statewide study of the effects of water rate pricing structures on public supply water demand (Whitcomb 2005). The NWFWMD coordinates distribution of the associated water rates model to utilities in cooperation with the author.

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. The District has also assisted local governments and utilities in development of water transmission facilities extending from inland wellfields to the coastal WRCA. District staff also work with local governments and state and regional agencies to enhance coordination of land use and water supply planning. District staff previously distributed guidelines and provided technical assistance to local governments for preparing water supply comprehensive plan amendments and water supply facilities work plans.

In 2012, the District completed an update to the Region II RWSP. Additional activities included coordination of program funding sources and grant agreements. Two major grant funded projects were completed during the year. WRP, Inc. (a partnership between Destin Water Users, Inc., and South Walton Utility Company, Inc.) completed construction of a 15-mile potable water transmission pipeline from the inland wellfield in Walton County, south across Choctawhatchee Bay to the coastal region. Regional Utilities of Walton County also completed construction of over five miles of water transmission pipeline along the U.S. Highway 98 corridor.

These facilities are interconnected with the inland wellfield, conveying inland ground water to meet coastal demand. Additionally, the 2012-2013 WRDWP Annual Report was completed and incorporated into the March 1, 2013, Consolidated Annual Report.

Interconnection of Water Supply Conveyance Systems

The Coastal Water Systems Interconnection Project is a District initiative focused on increasing water supply reliability in coastal communities. The goal of the project is to enhance the resilience of the coastal water systems by enabling transfer of water between utilities should the need arise 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. This is a cooperative effort with local utilities.

The Coastal Water Systems Interconnect Project includes a comprehensive Basis of Design Report (BODR) to evaluate potential interconnections that would serve multiple utilities. Existing interconnections were evaluated to determine their capacity and ability to meet the emergency needs of the interconnected utilities. The evaluation was conducted for current and future conditions (2030) and assessed utility emergency production capacities and demands. The evaluation identified two priority major interconnections that would significantly enhance emergency water supplies for coastal communities. An interconnection between southern Walton and Bay counties would improve emergency water system reliability for customers of Bay County Utilities and Regional Utilities in Walton County. A second interconnection between the Fairpoint Regional Utility System in Santa Rosa County and the Okaloosa County West water system would enhance emergency water supply reliability in coastal Santa Rosa and Okaloosa counties.

Participating local governments and utilities will own, operate, and maintain any constructed interconnection pipelines and associated facilities. Implementation would require negotiation of cooperative agreements between utilities to provide for interconnection funding, engineering specifications, and operational requirements.

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 development of 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 will continue to monitor conditions within the coastal WRCA for salt water intrusion and aquifer sustainability. The monitoring network is essential for ensuring that long-term water supply initiatives are successful and sustainable, as well as for refining groundwater models and analyses needed to make future management decisions and to further develop water management strategies.

Details of monitoring conducted as part of the Water Resource Development Work Program, as well as other programs, may be found in the Hydrologic Monitoring Plan (Barrios et al., 2011), available at: www.nwfwmd.state.fl.us/pubs/hydrologic_monitoring_plan/hydrologic_monitoring_plan.html.

The need has been identified to further expand and enhance the District's water resource monitoring network to support resource sustainability and cumulative impact assessments, to develop alternative water supplies, and to establish minimum flows and levels (MFLs). Among the enhancements planned are additional water level, water quality, and rainfall stations, and substantially increased monitoring frequency. Plans for an expanded hydrologic and water quality monitoring network were completed in 2013 with the network expansion for Region II planned for completion in 2014.

Abandoned Well Plugging

The District's resource regulation program includes an active effort to plug abandoned artesian wells. The overall goal of the program is to protect available ground water 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.

The District provides technical assistance and funding to utilities for plugging abandoned wells identified as having the potential to adversely affect ground water quality. Well abandonment is an ongoing effort and is likely to continue as more wells are identified for plugging in the future. The District will continue to implement this project through regulatory programs, where feasible. This project supports District efforts to sustain coastal water supply sources. To date, the District has facilitated the plugging of 4,844 abandoned wells within Region II, 242 of which were plugged in FY 2012-2013.

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. 2014-2018 Region II WRDWP Project Funding

Water Resource Development Projects	FY 12-13[1] Expenditures	Anticipated Five Year Work Program					FY14-FY18 Cost Estimate
		FY 13-14 Budget[2]	FY 14-15	FY 15-16	FY 16-17	FY 17-18	
Floridan Aquifer Sustainability[3]	$0	$11,400	$12,600	$10,000	$15,000	$20,000	$69,000
Inland Sand-and-Gravel Aquifer	$27,658	$24,800	$25,600	$10,000	$15,000	$20,000	$95,400
Surface Water Sources	$1,617	$1,900	$15,000	TBD	TBD	TBD	$16,900
Aquifer Storage and Recovery	$0	$0	$0	$0	$0	$0	$0
Water Reuse	$10,607	$9,000	$15,000	$15,000	$15,000	$15,000	$69,000
Water Conservation[4]	$3,179	$8,200	$5,000	$5,000	$5,000	$5,000	$28,200
Regional Water Supply Planning	$46,816	$18,000	$15,000	$20,000	$25,000	$30,000	$108,000
Interconnect	$2,413	$2,600	$0	$0	$0	$0	$2,600
Hydrologic Data	$60,048	$83,900	$90,000	$90,000	$90,000	$90,000	$443,900
Abandoned Well Plugging[5]	$0	$0	$0	$0	$0	$0	$0
TOTAL	**$152,337**	**$159,800**	**$178,200**	**$150,000**	**$165,000**	**$180,000**	**$833,000**

[1] Preliminary figures; final costs will be provided in the March 1, 2014, Consolidated Annual Report.

[2] FY 14 figures based on adopted budget.

[3] Funding for application of the Floridan Aquifer Sustainability Model during the Water Supply Assessment (WSA) update and subsequent evaluations is captured within budget listed for the Regional Water Supply Planning project

[4] Water conservation expenditures and budgets shown are for resource management and planning activities and do not include significant efforts extended through Resource Regulation.

[5] Funding in future years will be budgeted as assistance needs are identified.

The budget for FY 2013-2014 reflects a decrease in anticipated spending as compared to budgets of previous years. Significant budget items previously accomplished include the major contractual expenses for development of the coastal interconnect BODR, the Floridan Aquifer Sustainability Model, the Sand and Gravel Aquifer model, and earlier contractual work in support of feasibility assessments of surface water sources in Okaloosa County. Staff resources during FY 2012-2013 were shifted substantially toward completion of a District-wide WSA update as well as to the MFL program, support for state efforts with respect to the Gulf of Mexico RESTORE Act, and springs protection and restoration initiatives. Resources over the next five years will be similarly focused on MFL development and water supply development funding.

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	Water Made Available or Anticipated (MGD)
Inland Floridan Aquifer Alternative Water Supply	Development of the inland Floridan Aquifer wellfield and transmission infrastructure to bring inland ground water to serve coastal utilities in Walton County.	$48,100,268	28[1]
Inland Sand and Gravel Aquifer Alternative Water Supply	Development of the Inland Sand and Gravel Aquifer wellfield and associated infrastructure to bring inland ground water 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	25
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 total capacity of inland wellfield. New capacity is approximately 15 MGD. Approximately 13 MGD are currently permitted.

[2] Represents total estimated capacity of the inland wellfield region. Approximately 8 MGD currently permitted.

Major water supply development projects completed to date have included inland ground water sources for 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 an inland Floridan Aquifer wellfield and transmission facilities in Walton County. As stated above, two major construction projects were completed during the past year. WRP, Inc. completed a 15-mile potable water transmission pipeline from the 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. These facilities also convey inland ground water to meet coastal demand.

To date, Region II water supply development projects have made approximately 21 MGD of water available for the region, including 13 MGD from the inland Floridan Aquifer and eight MGD from the inland Sand and Gravel Aquifer. An additional 40 MGD is estimated to be available from these sources for future development, including 10 MGD from the inland Sand and Gravel Aquifer, 25 MGD from surface water, and at least 5 MGD from reclaimed water. These water supplies, together with traditional water supply sources, are anticipated to be sufficient to meet projected demands through 2030 under both normal and 1-in-10 year drought conditions. Additional detail is available in the 2012 Region II RWSP update (NWFWMD 2012b).

Region III: Bay County

The Governing Board approved a RWSP for Region III (Figure 3) in August 2008 (NWFWMD 2008b). 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 to a major hurricane storm surge. The region depends on Deer Point Lake Reservoir as the primary public supply source of water. Major storm surge has been identified as a potential threat to the resource given the possibilities of salt water entering the reservoir and of damage to or loss of the impoundment structure.

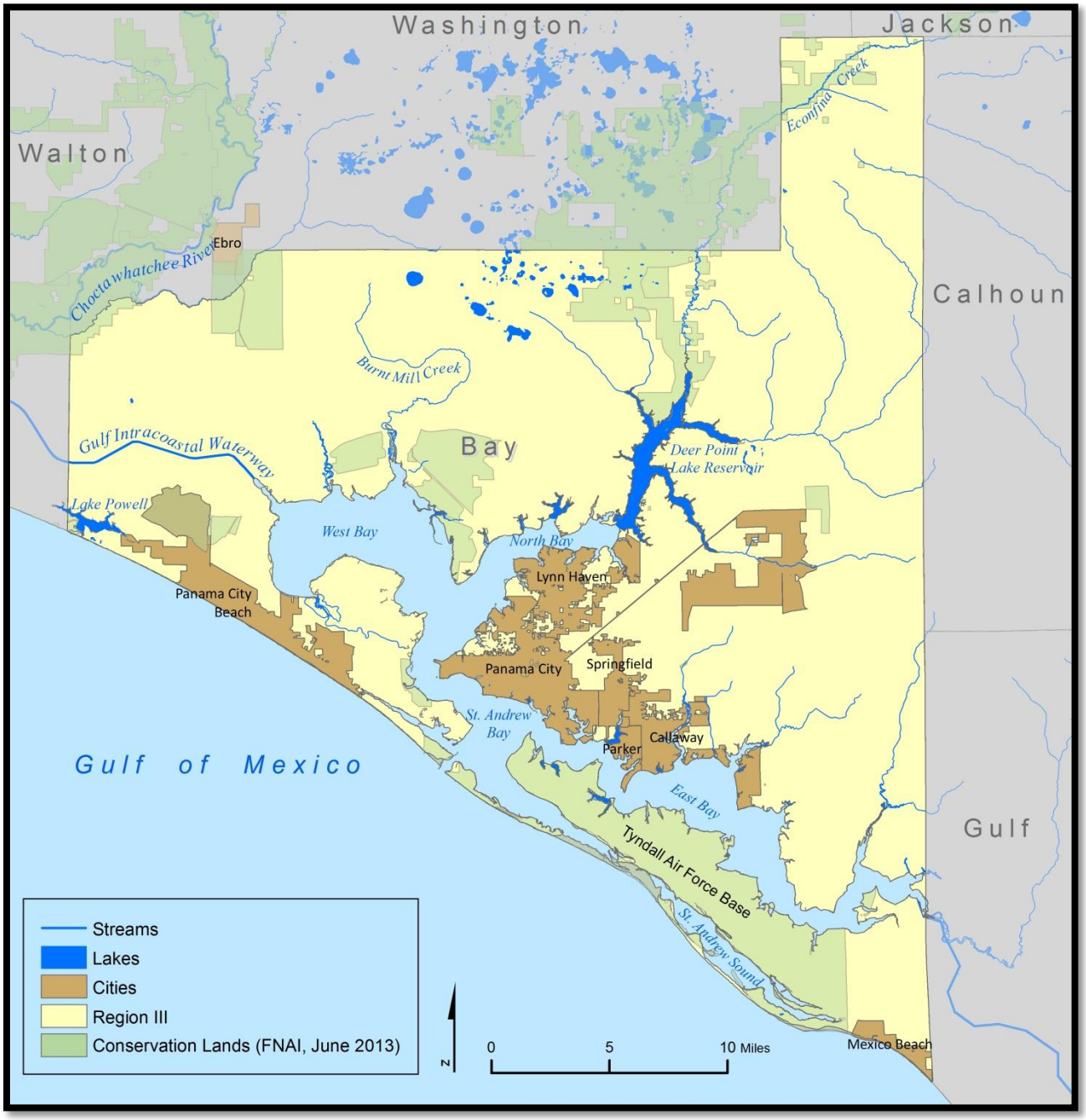

Figure 3. Water Supply Planning Region III

Existing and reasonably anticipated surface water supplies in the region are considered adequate to meet projected water demands through 2030 while sustaining water resources and related natural systems (NWFWMD 2008a). However, the surface water reservoir is the sole source of potable water for most of the region's population, and concerns have been identified about its potential vulnerability to the effects of major hurricanes. The NWFWMD will continue to work with local governments and utilities in the region to address this issue and otherwise ensure the long-term reliability and sustainability of potable water resources. Efforts have been initiated to update the Region III RWSP.

Region III Water Resource Development

The Region III RWSP includes three water resource development strategies. These are summarized in Table 4. Descriptions of the strategies and their current progress follow.

Table 4. Region III Water Resource Development Projects

Project	Activity	Water Identified or Made Available (MGD)
Hydrologic and Water Quality Data Collection, Monitoring, and Analysis	Hydrologic data collection, analysis, and modeling to identify baseline conditions and trends to support alternative water supply development.	TBD
Water Reuse and Conservation Assistance	Assistance to local governments and utilities in developing reclaimed water and to enhance water conservation efforts.	5*
Regional Water Supply Coordination and Technical Assistance	Technical assistance, support for utility interconnections, and development and update of the regional water supply plan.	TBD

* This represents a preliminary estimate of potential potable water offset that may be available from 2010-2030, based on projected wastewater flows compared to current reuse within the region.

Among the water resource development projects, the primary project that would lend itself to additional water being made available is Water Reuse and Conservation assistance. Reuse of reclaimed water and water conservation are activities implemented by local governments and utilities. The District, however, can lend technical, planning, and potentially financial assistance.

Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

Implementation of this project provides the water resource data collection, analysis, and modeling needed for characterizing baseline conditions and subsequently identifying and evaluating future alternative water supply sources. The data collection and analysis developed will also facilitate the long-term monitoring needed to 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.

Details of monitoring conducted as part of the Water Resource Development Work Program, as well as other work programs, may be found in the Hydrologic Monitoring Plan (Barrios et al., 2011), available at: www.nwfwmd.state.fl.us/pubs/hydrologic_monitoring_plan/hydrologic_monitoring_plan.html.

Water Reuse and Conservation Assistance

The reuse of reclaimed water is an important regional strategy, given its potential for reducing and constraining potable water demand, improving efficient use of available resources, and supporting sustainable long-term management. District staff coordinate with DEP as that agency carries out its reuse regulation responsibilities. In 2012, an estimated three MGD of reclaimed water were used for public access reuse in Region III (DEP 2013). This included irrigation of an estimated 980 residences, three golf courses, four parks, and three schools. Based on an analysis of current water reuse (DEP 2013) compared with projected wastewater flows, a preliminary estimate is that reclamation of nearly 10 MGD of additional wastewater (annual average daily flow) may be feasible by 2030. Of that, it is estimated that approximately five MGD of potable water offset could be achieved through beneficial reuse activities, such as landscape irrigation. Successful implementation could assist in the discontinuation of surface water discharges by two wastewater treatment plants into St. Andrew Bay. Additional reuse could be achieved if industrial applications of reclaimed water are identified in the region.

Enhanced water conservation efforts may reduce water use and limit long-term demand. Application of conservation rate structures, conservation measures in local building codes and ordinances, consumptive use permitting conditions, water loss prevention and correction efforts, and public outreach and education are expected to be especially important. The District continues to coordinate the Water CHAMP program and distribute water conservation brochures to utilities and local governments in the region.

Regional Water Supply Coordination and Technical Assistance

Through this strategy, the District provides technical assistance to local governments and water suppliers. Local governments in regions subject to a RWSP must address statutory requirements to effectively coordinate land use and water supply planning. Such local governments are required to amend their comprehensive plans as necessary to include a Water Supply Facilities Work Plan and to otherwise ensure water supplies are planned and developed to meet future growth in a manner consistent with the RWSP.

The coastal water systems interconnection initiative described above also considers interconnections within Region III. Utility interconnections, in concert with continued development of alternative water supply sources, enhance the resilience of water supplies within the coastal regions in the face of droughts, major storms, and other possible events. The initial evaluation included three utilities within Bay County.

It is anticipated that an update to the RWSP for Region III will be developed during 2013. Through this process, the allocation of alternative water supply development funding will be further evaluated based on a current assessment of the optimal strategies for addressing water resource needs identified in the RWSP and WSA.

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. 2014-2018 Region III WRDWP Project Funding

Water Resource Development Projects	FY 12-13[1] Expenditures	Anticipated Five Year Work Program					FY14-FY18 Cost Estimate
		FY 13-14 Budget[2]	FY 14-15	FY 15-16	FY 16-17	FY 17-18	
Hydrologic and Water Quality Data Collection, Monitoring, and Analysis	$22,274	$50,100	$55,000	$20,000	$20,000	$20,000	$165,100
Water Reuse and Conservation Assistance	$4,238	$10,000	$8,000	$8,000	$8,000	$8,000	$42,000
RWS Coord. and Technical Assist.	$24,089	$28,800	$30,000	$20,000	$20,000	$20,000	$118,800
TOTAL	**$50,601**	**$88,900**	**$93,000**	**$48,000**	**$48,000**	**$48,000**	**$325,900**

[1] Preliminary figures; final costs will be provided in the March 1, 2014, Consolidated Annual Report.

[2] FY 14 figures based on adopted budget.

Increased funding in FY 2013-2014 reflects an anticipated RWSP update and technical assistance to local governments and utilities in the planning region, as well as an increased focus on identifying potential reuse projects within the region and for continuing to develop the District's hydrologic monitoring network. Funding is also expected to increase in FY 2013-2014 for an enhanced monitoring network to support resource sustainability monitoring.

Region III Water Supply Development

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

Table 6. Region III Water Supply Development Projects

Project	Activity	Estimated Cost	Water Made Available or Anticipated (MGD)
Inland Ground Water Source Development and Water Supply Source Protection	Alternative project options currently being explored in cooperation with Bay County.	N/A[1]	TBD
Utility Interconnections and Infrastructure Enhancements	Assist with delivery system interconnections and facility improvements. Specifically identified is a potential 42" pipeline connection between southern Bay and Walton counties.	$25,700,000[2]	TBD
Water Reuse Facilities	Construction of water reuse facilities to provide reclaimed water for landscape irrigation and other beneficial uses.	TBD	TBD

[1] Planning level cost estimates and anticipated quantities of water to be made available will be re-evaluated during the update to the Region III RWSP, scheduled for 2013.

[2] Planning level cost estimate to await alternative project planning and engineering.

From 2009-2012, the District provided water supply development assistance to the City of Callaway for extending a potable water transmission main within the Allanton Peninsula and for a water and sewer systems interconnection with Sandy Creek Utility Services, Inc.

Region V: Gulf and Franklin Counties

The Region V RWSP was approved by the Governing Board in January 2007 (NWFWMD 2007). The primary concern described is salt water intrusion into the coastal Floridan Aquifer, which has implications for the long-term sustainability of coastal ground water supplies within both Franklin and Gulf counties. Although public supply demands are relatively small, they represent three quarters of the total projected demand for 2030. To meet projected demands associated with permanent and seasonal population growth, a surface water supply source has been developed for the City of Port St. Joe and its vicinity in Gulf County, and the inland Floridan Aquifer has been evaluated as a long-term source for coastal Franklin County. Given the completion of the alternative water supply project, the need to continue regional water supply planning for Region V will be re-evaluated based on the 2013 Water Supply Assessment update.

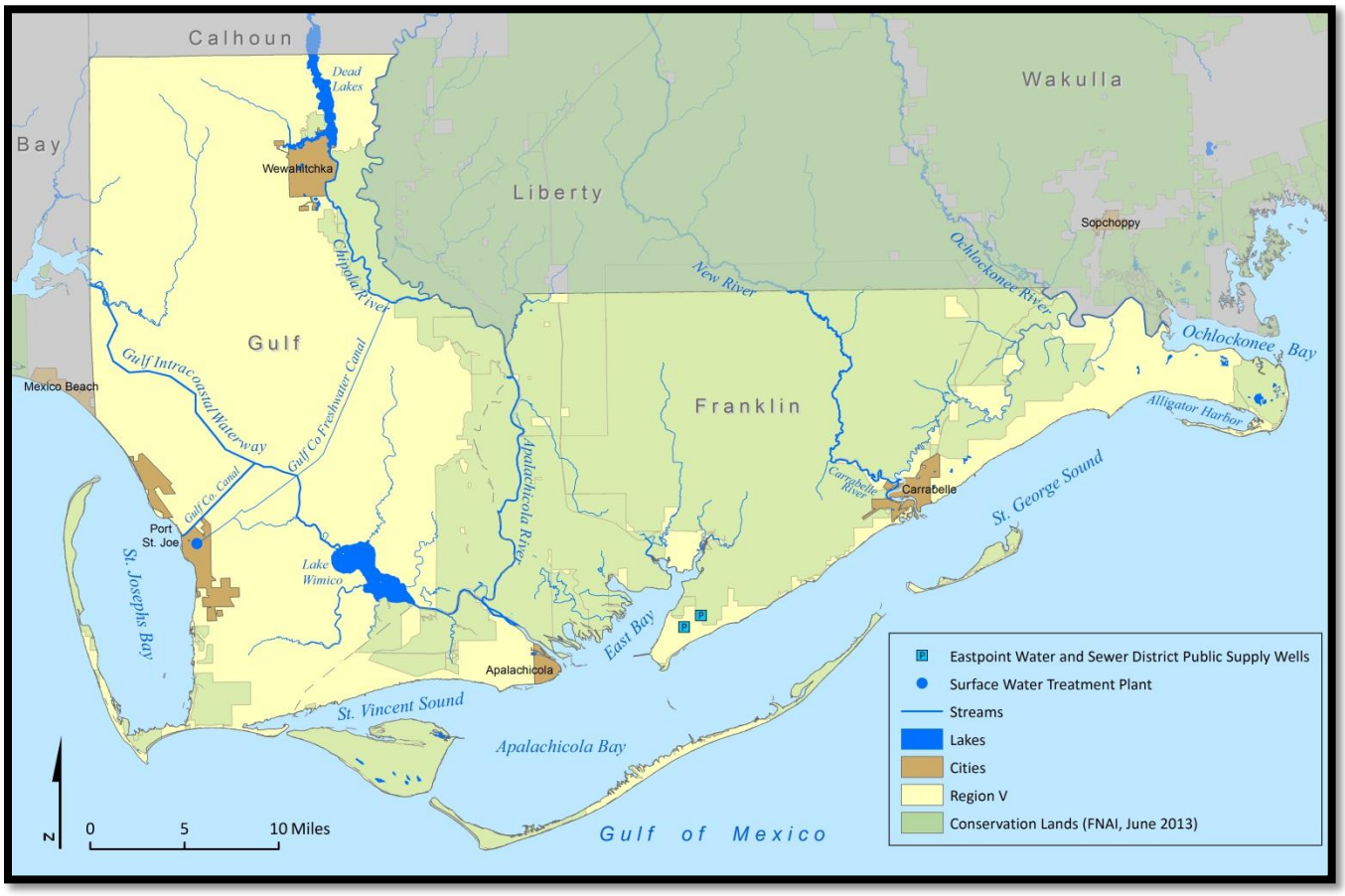

Figure 4. Water Supply Planning Region V

Region V Water Resource Development

The Region V RWSP includes four water resource development projects encompassing strategies supporting alternative water supply development. These are summarized in Table 7. Descriptions of the strategies and their current progress follow.

Table 7. Region V Water Resource Development Projects

Project	Activity	Water Identified or Made Available (MGD)
Hydrologic and Water Quality Data Collection, Monitoring, and Analysis	Water resource data collection, analysis, and modeling to support future alternative water supply development. Inland groundwater resources evaluated in Franklin County.	3
Regional Water Supply Coordination, Source Protection, and Engineering and Technical Assistance	Technical assistance to help local governments and utilities meet water supply-related source protection, project design, and engineering requirements. Assistance provided to Port St. Joe for surface water treatment facility.	6
Water Reuse and Conservation Coordination Assistance	Coordination and assistance to utilities and local governments for development of reclaimed water for beneficial uses.	TBD
Regional Water Supply Plan Implementation	Planning and tracking project implementation, grant administration, fulfilling statutory reporting requirements, and related activities.	N/A

Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

This activity provides for water resource data collection, analysis, and modeling to determine the location and distribution of potential future production wells and other water supply sources to serve Region V communities. Tasks include ground water modeling, water quality sampling and analysis, and hydrologic monitoring and analysis. Long term emphasis includes water quality and hydrologic monitoring to identify and evaluate trends.

The District has conducted data collection and analysis to evaluate inland ground water sources within Franklin County. Approximately three MGD were identified as potentially being available from the inland Floridan Aquifer. In addition, the coastal Floridan Aquifer in Franklin County has been identified as a resource of concern. Consequently, the District included the resource within the updated MFL priority list. Completion of a technical assessment is planned for 2019. Expanded hydrologic data collection in support of the MFL monitoring effort began in 2013.

The District has also assisted the Eastpoint Water and Sewer District (EPWSD) in test well development and aquifer testing. This effort led to the development of a new water supply production well, located further inland from the immediate coastal area. Expected outcomes include reduced withdrawals from the coastal aquifer and a resulting reduced threat to water supply wells from salt water intrusion.

Regional Water Supply Coordination, Source Protection, and Engineering and Technical Assistance

This project provides for technical assistance to help local governments and utilities meet water supply-related source protection, project design, and engineering requirements. The District helps support regional coordination and planning on the part of regional water supply utilities and local governments. Assistance is focused on protecting ground and surface water sources, water resource engineering, intergovernmental coordination, and other technical assistance.

The District's coastal water systems interconnection planning extends to Gulf County. Such interconnections are intended to enhance the reliability of water supplies within the coastal areas in the face of droughts, major storms, and other possible events.

In addition to providing funding assistance to the City of Port St. Joe for construction of its new surface water supply facility (described below), the District has provided additional assistance for improvements to the city's potable water distribution system.

With District assistance, the City of Carrabelle completed an engineering analysis of a potential interconnection with the Alligator Point Water Resources District. Completion of this interconnection would assist in regional drought-proofing and in ensuring system reliability through summer and holiday heavy use periods. The City of Carrabelle has enacted a conservation-oriented rate structure as part of this effort, thereby improving water use efficiency, particularly for new development. Technical and financial assistance has previously been provided to the City of Wewahitchka for test well development.

Water Reuse and Conservation Coordination Assistance

Water reuse is an important component of the long-term regional water supply strategy and is pursued where feasible as a means of providing non-potable water for beneficial uses, thereby offsetting potable demand, and constraining long-term potable demand. The District's role in developing water reuse includes coordination among utilities, inventorying existing and potential reclaimed water sources and beneficial uses, and providing technical and financial assistance for specific reuse projects. As of 2012, an estimated 0.29 MGD of public access reclaimed water were reused in Region V (DEP 2013). This includes irrigation of one golf course and toilet flushing at the Franklin Correctional Institution. Water reuse needs and opportunities to support RWSP implementation and enhance the sustainability of water resources will continue to be pursued by District staff.

Other conservation assistance provided by the District to Region V has included distribution of the water rates model (Whitcomb 2005) and water conservation brochures to utilities, as well as Water CHAMPS coordination with hotels.

Regional Water Supply Plan Implementation

Implementing the RWSP for Region V encompasses planning and tracking project implementation, grant administration, reporting, and related activities. During the past year, the District continued RWSP implementation tracking, project planning and coordination of program funding sources and contracts. The WRDWP Annual Report and March 1 Consolidated Annual Report were completed. An update to the Region V RWSP has been deferred pending the Water Supply Assessment update in 2013.

While this project does not directly provide water, the efforts encompassed do support the long-term development of alternative water supply sources, including the approximately nine MGD estimated to be available across the region through development of alternative surface water and inland ground water sources.

Funding Summary: Region V Water Resource Development Projects

Table 8 displays past year expenditures, current year budget, and anticipated future expenditures for water resource development within Region V. Expenditures for FY 2012-2013 were somewhat greater than had been anticipated largely due to efforts to enhance monitoring within the region, as well as technical assistance provided to the City of Port St. Joe as that city adjusts its water supply facilities to its new surface water supply source. The five-year funding estimates are based on continued RWSP development and implementation in Region V, with an update to the plan following completion of the District-wide WSA. Funding is expected to increase beginning in FY 2013-2014 to support enhanced monitoring and for development and improvement of groundwater models District-wide.

Table 8. 2014-2018 Region V WRDWP Project Funding

Water Resource Development Projects	FY 12-13[1] Expenditures	Anticipated Five Year Work Program					FY14-FY18 Cost Estimate
		FY 13-14 Budget[2]	FY 14-15	FY 15-16	FY 16-17	FY 17-18	
Hydrologic and Water Quality Data Collection and Analysis	$15,833	$58,600	$55,000	$25,000	$25,000	$25,000	$188,600
Coord., Source Protection, Eng. and Tech. Assist.	$10,293	$3,600	$5,000	$5,000	$10,000	$10,000	$33,600
Water Reuse and Conservation Coord. Assist.	$4,238	$7,300	$5,000	$5,000	$5,000	$5,000	$27,300
Regional Water Supply Plan Implementation	$3,189	$7,200	$8,000	$8,000	$8,000	$8,000	$39,200
TOTAL	**$33,554**	**$76,700**	**$73,000**	**$43,000**	**$48,000**	**$48,000**	**$288,700**

[1] Preliminary figures; final costs will be provided in the March 1, 2014, Consolidated Annual Report.

[2] FY 14 figures based on adopted budget.

Note: The need for regional water supply planning in Region V is being reevaluated through a new update to the Districtwide Water Supply Assessment, currently under development. This five year work program is based on program continuation, as last approved by the Governing Board.

Region V Water Supply Development

Water supply development strategies within the Region V RWSP are listed in Table 9.

Table 9. Region V Water Supply Development Projects

Project	Activity	Estimated Cost	Water Made Available or Anticipated (MGD)
Inland Ground Water Source Development and Water Supply Source Protection	Engineering analysis, facility construction, source protection, and hydrologic restoration.	$1,000,000	3
Alternative Surface Water Treatment and Transport Facility Development	Construction of water treatment and transmission facilities, specifically including alternative water supply development in Gulf County.	$16,737,000	6
Utility Interconnections and Infrastructure Enhancements	Assist with delivery system interconnections and facility improvements.	TBD	TBD
Reclaimed Water Use	Construction of water reuse facilities to provide reclaimed water for landscape irrigation and other beneficial uses.	TBD	<1

With funding assistance and cooperation from the District, the City of Port St. Joe constructed a six MGD surface water treatment plant as an alternative water source to reduce reliance on coastal ground water (Appendix A). Development of the new treatment facility enabled the City to shift its public water supply from naturally constrained ground water sources to surface water derived from the Chipola River via an existing fresh water canal. This will enable the city to meet projected future demands while reducing the stress on local ground water resources. In addition to meeting municipal needs, the city may in the future be able to make this resource available for nearby areas outside of the city limits.

Funding and technical assistance provided to the Eastpoint Water and Sewer District has led to development of a water supply production well located further inland from previously existing water supply wells. Withdrawals in the immediate coastal area and the threat of salt water intrusion are, as a result, being reduced.

During FY 2012-2013, the District provided water supply development funding assistance to the City of Port St. Joe to enable the city to complete repairs and upgrades to its pump station on the Chipola River. Additionally, the District provided additional technical assistance to the City to support efforts to address water quality issues associated with the distribution system.

District-wide Initiatives

As noted above, development of an update to the district-wide Water Supply Assessment is in progress. This assessment will incorporate demand projections to 2035 for all regions and all water use categories. Evaluations of the status and sufficiency of water resources will also be updated as part of the assessment.

The District continues to emphasize water supply development assistance for financially disadvantaged small local governments. Early in the year, the District awarded $106,000 to assist the City of Port St. Joe with a needed upgrade to the Chipola Pump Station surface water withdrawal facility. The District also awarded $235,845 in grant funding to the City of Blountstown, matching City funds needed for the replacement of a major water distribution line along State Road 20. Furthermore, the Governing Board approved a major water supply development assistance grant initiative, scheduled for implementation during FY 2013-2014.

It is expected that the Basis of Design Report for the Coastal Water Systems Interconnection Initiative, as described above, will be completed in 2013. The report will provide a detailed analysis of interconnect alternatives and design parameters. Candidate interconnection projects will be described, as will key issues and challenges, including utility emergency capacities and water blending analysis. The basis of design report will include conceptual designs for a coastal interconnection between Santa Rosa and Okaloosa counties and a coastal interconnection between Walton and Bay counties.

Significant progress has been achieved in identifying potential expansion of wastewater reclamation and water reuse District-wide through 2035. This information is being incorporated into the 2013 WSA update. Assisting utilities and local governments in developing beneficial reuse projects will remain a priority, with implementation depending on future funding availability.

Significant efforts are underway to enhance agricultural water use efficiency and support implementation of associated water quality best management practices, targeted primarily for the Jackson Blue Spring basin of the Apalachicola River watershed. For FY 2013-2014, the District has budgeted $752,000 of legislatively appropriated springs restoration funding for these activities. The funding will provide a 75 percent cost-share to help producers retrofit center pivot irrigation systems, support expansion of the northwest Florida mobile irrigation laboratory program, and provide cost-share funds to implement fertigation and other efficient fertilization systems. Together, these efforts are expected to achieve significant reductions in both water use and pollutant loading within the Jackson Blue Spring basin.

The District continues its program to properly plug abandoned or contaminated wells for financially constrained public water systems, in water resource caution areas, in areas identified under Chapter 62-524, Florida Administrative Code (F.A.C.) (Escambia, Santa Rosa, Jackson, and Leon counties), and in other areas as necessary. 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 2013, 242 wells were plugged at no cost to the District.

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Many of these references may be found on the District's website under Publications & Data, Technical Publications: www.nwfwmd.state.fl.us/pubsdata/techpubs.html.

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Appendix A. Recent Water Supply Projects in the NWFWMD

Table 10 presents expected Water Protection and Sustainability Program Trust Fund expenditures for alternative water supply development and water resource development projects. If future funding becomes available from the WPSPTF or other sources, the District will consider potential projects in accordance with Section 373.703, F.S.

Table 11 presents additional water supply development assistance and alternative water supply development projects. 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, water supply development assistance, and the district-wide water supply assessment, work together to ensure sustainable long-term water supplies.

Additional information will be provided with the March 1, 2014, Consolidated Annual Report.

Table 10. Projects Funded under the Water Protection and Sustainability Program

Project	Region	Local Sponsor	Activity	Status	WPSPTF FY Approp.	Anticipated Water (MGD)[1]	WPSPTF Contribution	Local Contribution	Total	Local %
Area-wide Alternative Water Supply Source Expansion	II	Regional Utilities, South Walton Utility Co.	Inland wellfield expansion	Complete	FY 2006	15.1	$6,500,000	$9,991,891	$16,491,891	61%
Tram Road Public Access Reuse Facility	VII	Tallahassee	Water reuse/ spring protection	Complete	FY 2006; FY 2007	1.2	$1,350,000	$5,250,000	$6,600,000	80%
Bob Sikes Reuse Project	II	Okaloosa County	Water reuse	Complete	FY 2006	0.7	$2,000,000	$4,509,132	$6,509,132	69%
Inland Floridan Aquifer Source - WRD	V	NWFWMD; Franklin County Utilities	Inland source evaluation	Complete	FY 2006	3.0	$300,000	$0	$300,000	0%
Ground Water Modeling & Aquifer Testing - WRD	III	Bay County	Inland source evaluation	Complete	FY 2006; FY 2007	0.0[2]	$350,000	$800,000	$1,150,000	70%
Surface Water Treatment Plant	V	Port St. Joe	Surface water	Complete	FY 2007	6.0	$4,000,000	$12,736,700	$16,736,700	76%
City of Chipley Reuse Project	IV	Chipley	Water reuse	Complete	FY 2007	1.2	$500,000	$4,500,000	$5,000,000	90%
Wakulla County Reuse Project	VII	Wakulla County	Water reuse	Construction	FY 2007	0.4	$500,000	$750,000	$1,250,000	60%
Advanced Wastewater Treatment & Water Reuse Facilities	VII	Tallahassee	Water resource development/ springs protection	Complete	FY 2007	4.5	$500,000	$5,800,000	$6,300,000	92%
Alternative Water Supply Facilities[2]	III	Bay County	Alternative raw water pump station and force main[2]	Under review	FY 2008	TBD	$5,470,000	$14,530,000	$20,000,000[2]	73%
			Total			**32.1**	**$21,470,000**	**$58,867,723**	**$80,337,723**	**73%**

[1]Anticipated water made available rounded to the nearest 100,000 gallons per day.

[2]Bay County alternative water supply facilities entry represents preliminary, planning level information. Total costs reflect preliminary estimated costs.

Table 11. Additional Water Supply Development Assistance Projects

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	Funding Source
City of Freeport Reuse Project	Freeport	II	Water reuse storage and transmission system construction	Complete	FY 2010	$3,000,000	SWIM, Florida Forever
Allanton Peninsula Water and Wastewater Extension Project	Callaway	III	Water supply transmission and distribution system construction	Complete	FY 2010	$100,000	WMLTF
East Okaloosa County Water and Sewer Extension	Okaloosa County	II	Water supply transmission and interconnection	Complete	FY 2010	$750,000	District General Fund
Walton County Phase II Regional Water Supply	Regional Utilities	II	Construction of transmission and Storage Facilities; associated with inland wellfield AWSD	Complete	FY 2011	$2,000,000	EMRTF; District General Fund
Port St. Joe Water Distribution System Improvements	Port St. Joe	V	Water supply improvements	Complete	FY 2011	$50,000	District General Fund
Carrabelle-Alligator Point Interconnection Feasibility Study	Carrabelle	V	Interconnection feasibility assessment; enactment of conservation rate structure	Complete	FY 2011	$100,000	WMLTF
Wewahitchka Water Supply System Improvements	Wewahitchka	V	Water supply development; test production well construction	Complete	FY 2011	$400,000	District General Fund
Water and Sewer Systems Interconnections	Callaway	III	Interconnections of water systems and sewer systems between Callaway and Sandy Creek Utility	Complete	FY 2012	$53,998	District General Fund
Water Transmission Line Construction and Interconnection	Freeport	II	Transmission line and interconnection construction	Complete	FY 2012	$800,000	District General Fund
Gretna to Greensboro Watermain Extension	Gretna; Gadsden County	VI	Water supply transmission and distribution Facility Construction	Complete	FY 2012	$449,888	District General Fund
Water Supply Improvements; Preliminary Engineering	Gretna	VI	Preliminary engineering and environmental analysis	Complete	FY 2012	$50,000	District General Fund

Table 11. Additional Water Supply Development Assistance Projects (continued)

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	Funding Source
Pine Island Water Distribution System Expansion	Calhoun County	IV	Expansion of water distribution system to unincorporated community	Complete	FY 2013	$98,607	District General Fund
Water Main Construction (South Walton County)	WRP, Inc.	II	Construction of transmission facilities and subaqueous pipeline from inland wellfield to serve coastal Walton and Okaloosa counties.	Complete	FY 2013	$2,500,000	District General Fund
U.S. Highway 98 Water Line Extension	Regional Utilities	II	Water main extension along U.S. Highway 98 in Walton County	Complete	FY 2013	$750,000	District General Fund
Chipola Pump Station Repairs	Port St. Joe	V	Complete repairs to existing pump station; including diesel power supply replacement	Complete	FY 2013	$106,000	District General Fund
Test Well Development	Panacea Area Water System	VII	Test well development and data analysis	Planning	FY 2013	$30,500	District General Fund
Okaloosa County AWS - Surface Water	Okaloosa County	II	Assistance to Okaloosa County for surface water development.	Planning	FY 2015	TBD	District General Fund
State Road 20 Water Line Replacement	Blountstown	IV	Installation of approximately 5,500 LF of new 12-inch water main.	Engineering, Permitting	FY 2015	$235,845	District General Fund
			Total			**$11,474,838**	