Five-Year

Water Resource Development Work Program

Fiscal Year 2011-2012 Update

Proposed October 2011

Northwest Florida
Water Management District

Program Development Series 2011-05

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

GOVERNING BOARD

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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 identified as either having, or being likely to develop, future water supply constraints.

Each water management district is required by Section 373.536(6)(a)4, Florida Statutes (F.S.), to prepare a Five-Year Water Resource Development Work Program to describe strategies for implementing the water resource development components of each approved regional water supply plan (RWSP) developed or revised under section 373.709 (formerly section 373.0361), 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 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."

Regional Water Supply Planning in Northwest Florida

The Northwest Florida Water Management District (NWFWMD or District) established seven water supply planning regions in 1998 (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 in Region II is in the coastal area, where long-term pumping has caused a pronounced drawdown in the coastal Floridan Aquifer that could lead to significant saltwater intrusion and damage to public water supply wells. In 2003, water demand projections were updated through 2025.

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

A District-wide Water Supply Assessment update was completed in 2008 (approved May 2009), extending water demand projections and evaluation of sources through 2030. The 2008 WSA confirmed that no additional RWSPs were required and that water supply planning and implementation efforts should continue in regions II, III, and V (NWFWMD 2008a).

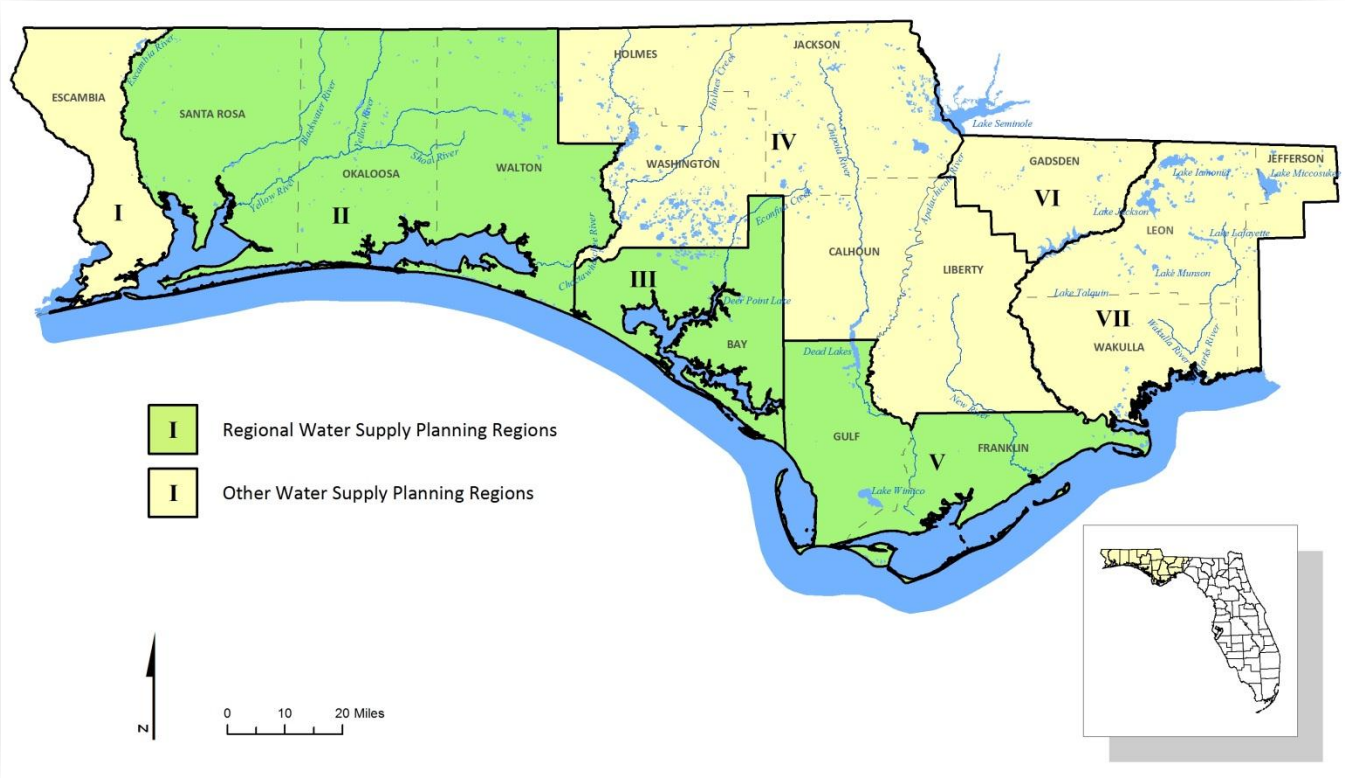

Figure 1. Water Supply Planning Regions

As required by Section 373.709(2)(a)1, F.S., the level of certainty planning goal for identifying water supply needs of existing and future reasonable-beneficial uses in the RWSPs was based on meeting such needs for a 1-in-10 year drought event. Water demand can be expected to increase during drought conditions for certain water uses, such as agricultural irrigation and outdoor water use. A more thorough discussion of the quantification of these demands may be found in the 2008 Water Supply Assessment Update (NWFWMD 2008a). A focus of many of the District's water resource development (WRD) activities is to help drought-proof northwest Florida communities through development and interconnection of alternative water supplies.

Implementation of the strategies detailed in the Water Resource Development Work Program (WRDWP) has resulted in identification of additional water that will be available for reasonable-beneficial uses through the planning period. Sources of water include the inland Floridan Aquifer, Sand-and-Gravel Aquifer, reclaimed water, and surface water sources. Water conservation is also emphasized as a means of improving water use efficiency and further ensuring long-term water resource sustainability. It should be noted that future water demands, including considering 1-in-10 year drought and seasonal water demand fluctuations, are also addressed through the consumptive use permitting program.

Public supply continues to be largest use category for the District, representing 47 percent of the demand in 2005 and projected to grow to 52 percent by 2030 (NWFWMD 2008a). This increasing trend is generally true for Regions II, III, and V and has been a focus of the projects developed through the regional water supply planning process, as discussed in more detail below.

Region II

As noted previously, long-term pumping of the coastal Floridan Aquifer to serve public supply demands in southern Santa Rosa, Okaloosa, and Walton counties has caused formation of a substantial cone of depression. Public supply water use in the region is currently projected to increase 57 percent from 44.91 million gallons per day (MGD) in 2005, to 70.60 MGD in 2030, with a large portion of this increase anticipated to serve demand in the coastal region. Water supply planning and resource management activities have focused on reducing coastal demand during the past two decades, and the District has developed a close working relationship with local governments and utilities to monitor water resources and develop solutions to meet future needs.

The first regional water supply plan developed in northwest Florida was approved for Santa Rosa, Okaloosa, and Walton counties in February 2001 (NWFWMD 2001). The RWSP described the region's water supply needs, identified existing and alternative water sources, and analyzed the ability of these sources to meet future demands to 2020. An update to the Region II RWSP was approved by the Governing Board in October 2006 (NWFWMD 2006). The plan incorporates updated and revised water resource development and water supply development components, specific alternative water supply development projects, and other elements as described in the statute. The next plan update is anticipated during late 2011, updating projects and extending the planning timeframe to 2030.

Region III

The coastal area in the vicinity of Panama City Beach is an Area of Special Concern due to historic saltwater intrusion in the upper portion of the Floridan Aquifer. While coastal ground water withdrawals have largely been replaced by surface water from Deer Point Lake Reservoir, there remain concerns about the long-term sustainability of water supply resources within the region. Public supply water use in Region III is currently projected to nearly double from 28.92 MGD in 2005 to 56.94 MGD in 2030. Public supply represents approximately 56 percent of the total 2030 projected demand within the region.

In February 2008, the Governing Board directed staff to develop a RWSP for Region III that would diversify long-term public supply, drought-proof the region, and minimize vulnerability of public water supplies to a major hurricane storm surge. The Governing Board approved the Region III RWSP in August 2008 (NWFWMD 2008b).

Region V

The primary concern identified in the Region V RWSP is saltwater intrusion into the Floridan Aquifer within the coastal Area of Special Concern, which has implications for the long-term sustainability of coastal ground water supplies within both Franklin and Gulf counties. Although public supply uses are relatively small, they represent two-thirds of the total projected demand for 2030. To meet projected demands associated with permanent and seasonal population growth, a surface water source has been developed for the City of Port St. Joe and vicinity (Gulf County) and the inland Floridan Aquifer has been evaluated as a long-term source for coastal Franklin County.

The Region V RWSP was approved by the Governing Board in January 2007 (NWFWMD 2007). It is anticipated that an update to the Region V RWSP will be initiated during the 2011-2012 fiscal year.

All Regions

A major District priority is the coastal water systems interconnection initiative. Significant investments in alternative water supplies have resulted in a diverse base of water supply sources from Gulf to Escambia counties. To build upon this effort, the District is working in cooperation with utilities to explore and develop possibilities for strategic interconnections between coastal water supply systems. The interconnection of these systems is expected to significantly enhance the resilience of coastal water supplies by enabling transfer of water between utilities if necessary due to future droughts or other contingencies.

An initial study was completed in January 2009 to evaluate the feasibility and benefits of interconnecting coastal water supply utilities. A basis of design report will be completed in 2011. 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. Work is proceeding on conceptual designs for a western interconnection between Santa Rosa and Okaloosa counties and an eastern interconnection between Walton and Bay counties.

The District has also initiated development of a District-wide reuse plan. The plan will identify opportunities for future reuse projects that enhance resource sustainability and provide environmental benefits, such as improving surface water quality by reducing effluent disposal, offsetting ground or surface water withdrawals from potable supplies, recharging regionally significant aquifers, and sustaining natural systems. The plan will summarize potentially feasible reuse projects for a 20-year timeframe that can be used to support RWSPs, SWIM plan updates, prioritization of grant funding, and other District objectives. Development of this plan will entail creating a GIS mapping application that can be used to view existing and proposed reuse systems including the locations and attributes of wastewater treatment plants; potential reuse customers or reuse demand sites; and reuse pumping, transmission, and storage facilities.

Work Program Implementation

Region II

The Region II WRDWP, as incorporated within the 2006 RWSP update, includes nine projects that build upon the accomplishments of the original RWSP:

1. Floridan Aquifer Sustainability Model Applications and Support;
2. Inland Sand-and-Gravel Aquifer Sustainability Model;
3. Development of Feasible Surface Water Sources;
4. Aquifer Storage and Recovery Feasibility;
5. Water Reuse Coordination;
6. Water Conservation Coordination;
7. Regional Water Supply Planning Strategies;
8. Hydrologic Data Collection and Analysis; and
9. Abandoned Well Plugging.

Model development and calibration have been completed for both the Floridan Aquifer Sustainability Model and the Inland Sand and Gravel Aquifer Model. Work continues to update and refine the aquifer models and further evaluate potential future withdrawals and alternative water sources. A major analysis and feasibility assessment was also completed to evaluate surface water sources in Okaloosa County. Work is proceeding toward development of an optimal surface water source for the county. Additionally, implementation is proceeding for other strategies, including Water Reuse Coordination, Water Conservation, and Hydrologic Data Collection and Analysis.

Region III

Three water resource development (WRD) projects support long-term sustainability and development of alternative water supplies for Bay County:

1. Hydrologic and Water Quality Data Collection, Monitoring, and Analysis;
2. Water Reuse and Conservation Assistance; and
3. Regional Water Supply Coordination and Technical Assistance.

As described below, work is proceeding toward development of an inland ground water source as an alternative water supply.

Region V

The WRD component of the Region V RWSP consists of four projects that support development of sustainable alternative water supplies for Franklin and Gulf counties:

1. Hydrologic and Water Quality Data Collection and Analysis;
2. Regional Water Supply Coordination, Source Protection, and Engineering and Technical Assistance;
3. Water Reuse and Conservation Coordination Assistance; and
4. Regional Water Supply Plan Implementation.

Project descriptions and anticipated funding requirements are provided by region below.

Funding for Water Resource Development

The state constitution limits the NWFWMD to only 1/20th of the *ad valorem* taxing authority afforded the other four districts. Legislative mandates for water supply planning and WRD have required the NWFWMD to use other sources of revenue and to seek grant funds for addressing water supply issues. In the past, the District has identified or secured funding for these activities from numerous sources, including the following:

- Water Management Lands Trust Fund;
- District General Fund;
- Legislative special appropriations;
- Florida Forever (limited water reuse construction only);
- Federal grants;

- Local government and water supply utility cost-sharing; and
- Water Protection and Sustainability Program Trust Fund.

The Water Protection and Sustainability Program Trust Fund (WPSPTF) was established by the 2005 Florida Legislature to provide a dedicated source of revenue for alternative water supply (AWS) development and WRD projects. When funded, the WPSPTF has allowed the District to provide cost-share assistance for construction of AWS development projects that may have otherwise been delayed or placed in competition with other projects for limited funds. Additionally, priority WRD and springs protection activities may be funded given sufficient annual appropriations. Projects funded under the WPSPTF are listed in Appendix A and are described in the March 1 Consolidated Annual Report as required by section 373.036(7), F.S. No new funding has been appropriated by the Legislature for the WPSPTF for FY 2010-2011 or FY 2011-2012.

Implementation of water resource development activities and support functions have depended primarily on funding from the Water Management Lands Trust Fund (WMLTF), augmented by grant funds and other sources as available. These funds have been substantially eliminated for FY 2011-2012. The District will pursue priority water resource development projects to the extent possible, using previously encumbered funding and reserves. Major District expenditures for land acquisition and protection of important recharge lands should also be recognized. Future acquisitions are constrained by the availability of Florida Forever funding. Assistance to Okaloosa County to support land acquisition for surface water source development, however, is anticipated during FY 2011-2012.

The District assists with WRD activities outside of regional water supply planning areas when those efforts help to prevent or address emerging water supply and water resource problems. Current projects include reclaimed water development in Wakulla County and assistance in the extension of water systems in Gadsden and Calhoun counties.

Funding budgeted for WRD is listed within the project descriptions below and in summary tables for regions II, III, and V (Tables 10, 14, and 19, respectively). The total proposed FY 2011-2012 WRDWP budget is $822,590. Additional budgeted funds have been reserved to provide financial assistance for WRD or water supply development projects in other regions and for future projects as needed.

Water Supply Development Assistance

While this report is focused on the WRD component of the approved regional water supply plans, a brief description of the District's technical and financial assistance for water supply development helps illustrate how the combined components of the RWSP work together to ensure sustainable long-term water supplies. A primary purpose of WRD is to support and facilitate future alternative water supply development. The District is, by statutory definition, primarily responsible for WRD projects, while water supply development is primarily the responsibility of local governments, water supply authorities, and utilities. However, the District also provides technical and financial assistance to local governments for water supply development. A basic distinction that can be drawn between the two levels of projects is that WRD projects are typically regional and broad in scope, while water supply development projects are more localized and deal with treatment, storage, and delivery to end users.

Significant AWS development projects constructed to date in Region II have included development of inland water sources for coastal utilities in Santa Rosa (inland Sand and Gravel Aquifer project), Okaloosa (inland Floridan Aquifer wells and transmission facilities), and Walton (Rock Hill inland wellfield development and transmission facilities) counties. Active projects include additional development of the Rock Hill inland wellfield in Walton County, transmission and interconnection support to the City of Freeport, and work in cooperation with Okaloosa County to develop a surface water supply in the central portion of the county.

In Region III, funding has been awarded to Bay County for development of an inland ground water source. The project is currently in the permitting process. In Region V, the District provided substantial assistance to the City of Port St. Joe for the construction of the City's new surface water treatment facility. Assistance was provided over the past year to the City of Port St. Joe for water distribution system repairs and to the City of Carrabelle for evaluation of the feasibility of developing a water system interconnection with the Alligator Point Water Resources District.

Alternative water supply development assistance and water resource development projects funded through the WPSPTF and other sources are listed in Appendix A. All of these efforts complement dedicated regulatory efforts to ensure the long-term sustainability of water resources. Within the coastal Water Resource Caution Area (WRCA) in particular, stringent conservation and reporting requirements are applied, and new allocations of potable Floridan Aquifer water for non-potable uses are prohibited.

Water Resource Development Projects – Region II: Santa Rosa, Okaloosa, Walton Counties

Figure 2. Water Supply Planning Region II

Water Resource Development Project – Region II

Strategy 1.0 Floridan Aquifer Sustainability Model Applications and Support

Ground water flow and solute transport models were developed to analyze Floridan Aquifer withdrawals in Santa Rosa, Okaloosa, and Walton counties. These models are used to evaluate the cumulative effects of Floridan Aquifer withdrawals, to examine water supply alternatives, and to assess the threat of saltwater intrusion to coastal Floridan Aquifer wells.

The regional ground water flow model was completed in May 2000 (HydroGeoLogic, Inc., 2000). The solute transport model required for analyzing saltwater intrusion into the Region II Floridan Aquifer was developed with two domains, western and eastern, to more accurately portray hydrogeologic characteristics and to make the complex data sets manageable. The western model domain is applicable to the major coastal utilities in Santa Rosa and western Okaloosa counties. This includes the City of Fort Walton Beach, Eglin Air Force Base, and water utilities to the west. Results from the western domain sub-region model are summarized in the report "Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Western Domain Model Final Report" (HydroGeoLogic, Inc. 2005). The eastern model domain is applicable to major coastal utilities in Walton and eastern Okaloosa counties including Destin Water Users, South Walton Utility Company, the City of Freeport, and Regional Utilities of Walton County. Results are summarized in the report "Saltwater Intrusion in the Floridan Aquifer in Walton, Okaloosa, and Santa Rosa Counties, Florida: Eastern Domain Model Final Report" (HydroGeoLogic, Inc. 2007a). These reports are available on the District's website.

Model simulations were run to predict the extent of saltwater intrusion through the year 2100 for both the eastern and the western model domains. The simulations incorporated historical withdrawals as well as proposed future pumping rates. Model results indicate that saltwater intrusion into potable portions of the Floridan Aquifer is occurring at a very slow and 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 of the lower portion of the Floridan Aquifer where the Bucatunna Clay confining unit is not present (easternmost Choctawhatchee Bay area), and downward vertical leakage through the intermediate system.

The flow model has been updated using the water level observations applied to the initial model development (HydroGeoLogic, Inc., 2000), and recently compiled water level observations representative of non-pumping conditions (mostly from the 1930s and early 1940s). Annual pumping files were also updated through 2009 and transient simulations were run to verify model response.

Based on evaluation of the data and models cited above, the estimated sustainable amount of water withdrawal from the coastal Floridan Aquifer identified is approximately 30 MGD. Future work accomplished through this project will be directed to analysis of drawdown effects of increased pumping of the Floridan Aquifer in inland areas and alternative withdrawal scenario development, and

investigation of water reservations to protect existing users as an alternative approach to establishing minimum aquifer levels. Current funding expectations are listed in Table 1.

Table 1. Floridan Aquifer Sustainability Model Applications and Support

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 30,430
Estimated 5-Year Cost (FY 12-16):	$150,430
Potential Funding Sources:	WMLTF; District General Fund
Quantity of Water Made Available:	30 MGD
Project Status:	Ongoing

Strategy 2.0 Inland Sand-and-Gravel Aquifer Sustainability Model

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 ground water flow model was developed to assess and identify the volume of water available from the aquifer. The study area for this effort is that portion of Santa Rosa and Okaloosa counties lying between the Blackwater and Yellow rivers. In previous years, significant 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. An aquifer model was then developed and calibrated.

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 have increased to over four MGD. This water is being conveyed south to alleviate pumping demand from the Floridan Aquifer along the coast.

The ground water model is currently being updated to include the transient response of the aquifer to drought and climatic variability. However, more data and analysis of surface water systems is needed to determine if or where the connectivity of the water in the production zone of this aquifer to surficial wetland systems is a significant factor. Future work will include identifying areas for additional well development where potential wetland impacts will not occur or be minimized.

Based on this work and continuing development of the inland wellfield, it is anticipated that the regional and county utilities will continue to increase withdrawals from the Sand-and-Gravel Aquifer, thereby limiting coastal Floridan Aquifer withdrawals.

Table 2. Inland Sand-and-Gravel Aquifer Sustainability Model

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$64,780
Estimated 5-Year Cost (FY 12-16):	$204,780
Potential Funding Sources:	WMLTF, Utilities
Quantity of Water Made Available:	18 MGD
Project Status:	Ongoing

Project funding for District activities has been provided by the WMLTF. Additionally, local utility contributions and approximately $3 million in federal grant funding have been previously applied to development of the inland wellfield.

Water Resource Development Project – Region II

Strategy 3.0 Development of Feasible Surface Water Sources

Surface water has been identified as a source of AWS to meet future demands beyond 2020, particularly within Okaloosa County. Initial efforts conducted under this water resource development project included collection of hydrologic and water quality data needed to analyze the viability of potential 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 report laid the groundwork for several potential technically and economically feasible AWS development projects, which included direct river withdrawal (with and without offline tributary surface impoundments for storage) and riverbank filtration. The District also concurrently reviewed an evaluation of a proposed Yellow River Reservoir and determined that the proposal is not economically feasible and that its implementation would result in significant environmental impacts and mitigation requirements.

District and Okaloosa County staff have continued to investigate withdrawal methods and alternative surface water supply sources on the Shoal River to narrow down the list of identified feasible alternatives and focus on the most preferred alternatives. Technical assistance to Okaloosa County will continue, such as detailed field assessments of environmental and technical characteristics of preferred surface water project sites. Associated with these activities, the District is evaluating needs and opportunities for watershed resource protection, including land acquisition and restoration.

Table 3. Development of Feasible Surface Water Sources

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$198,500
Estimated 5-Year Cost (FY 12-16):	$758,500
Potential Funding Sources:	WMLTF, District General fund, Local Governments, Utilities
Quantity of Water Made Available:	25 MGD
Project Status:	Ongoing

Significant funding for the next fiscal year and beyond has been allocated to assist Okaloosa County in project development, once a preferred alternative is selected. Assistance may include additional land acquisition funding and the feasibility analysis and preliminary design of a surface water pumped storage facility utilizing the Shoal River as the source. Project funding is provided by the WMLTF and the District's General Fund.

Strategy 4.0 Aquifer Storage and Recovery Feasibility

Large-scale District-funded aquifer storage and recovery (ASR) operations for storing freshwater supplies have not been implemented due to economic feasibility, water quality, and other technical constraints. There is potential for this option in the future and, as discussed below, it is being explored by utilities within the region. The District will work cooperatively with interested parties wherever viable ASR opportunities exist and may provide technical, financial, and educational assistance. Associated activities may also be coordinated closely with ongoing aquifer sustainability efforts and surface water source alternatives analyses. Aquifer storage, when available or where feasible, could be used to store large quantities of water more effectively and at less cost than above ground storage. Possible funding sources for ASR testing and development as a water resource development project include the WPSPTF, WMLTF, federal funds, and coastal public utilities interested in pursuing this alternative.

The District coordinates with DEP and utilities regarding ASR permitting activities. In 2009, Destin Water Users received a permit that provides for a 2.125 annual average daily flow capacity ASR facility. The system consists of seven wells for storage of reclaimed water in the Sand and Gravel Aquifer. The reclaimed water will be available to offset irrigation demands. In coordination with evaluations of surface water supply alternatives and the reuse plan, the District may conduct preliminary ground water model analyses of the feasibility of additional ASR activities within Region II in the future.

Table 4. Aquifer Storage and Recovery (ASR) Feasibility

Implementing Agency:	Local governments, Utilities
Proposed FY Expense (FY 11-12):	$0
Estimated 5-Year Cost (FY 12-16):	$0
Potential Funding Sources:	Utilities, local governments
Quantity of Water Made Available:	2.125 MGD
Project Status:	Ongoing

Strategy 5.0 Water Reuse Coordination

As of 2010, 22 facilities in region II are permitted for public access reuse water, producing an estimated 9.06 MGD of reclaimed water for public access reuse (FDEP 2010). This includes irrigation of an estimated 1,890 residences, 19 golf courses, nine parks, and four schools, and one cemetery.

In response to regulatory and cooperative planning efforts, significant investments in reuse have been made in coastal areas of the region, particularly irrigation of golf courses. Most of the utilities serving coastal Santa Rosa, Okaloosa, and Walton counties provide some type of public access reuse water that offsets potable-quality demand. Additionally, the District has provided technical assistance and funding to reclaimed water projects within Region II. The City of Freeport constructed a wastewater reuse system that will provide approximately 0.47 MGD public access reuse water to irrigate a future residential subdivision and golf course. Construction to expand Okaloosa County's Bob Sikes Water Reclamation Facility has been completed. Approximately 1.0 MGD of reuse water is available from this facility for public access irrigation in the vicinity of Crestview.

The Region II RWSP has identified approximately 5 MGD of new beneficial reuse to be available to offset demands on the coastal Floridan aquifer. As noted previously, work continues on the development of a District-wide reuse plan. The reuse plan will identify future projects to support RWSP implementation and to enhance the sustainability of water resources throughout northwest Florida. The plan will include estimates of ground water offsets and reduction to surface water discharges. Initial data collection stages have been completed and a working inventory has been created. The reuse plan is scheduled to be complete in the fall of 2011.

Table 5. Water Reuse Coordination

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$31,230
Estimated 5-Year Cost (FY 12-16):	$151,230
Potential Funding Sources:	WMLTF, Local Governments, Utilities
Quantity of Water Made Available:	5 MGD to date; More TBD
Project Status:	Ongoing

Planning, coordination, and assessment funding may be provided through the WMLTF, and additional construction funding assistance has been made available through other funding sources (Appendix A).

Strategy 6.0 Water Conservation Coordination

A significant effort at water conservation has been taking place in Region II for some time, substantially due to regulatory requirements and incentives established within the coastal WRCA. As a result, additional potential for conservation to offset current potable water use is relatively low (estimated previously at 2.5 MGD) (PBS&J 2000a). Water conservation remains a priority within Region II, both to sustain and build upon gains made in water efficiency and to ensure that future growth is established in such a way as to maximize long-term water use efficiency and resource sustainability.

District staff therefore continue to emphasize conservation education and awareness. In 2004, a concerted effort began to distribute water conservation brochures to Region II utilities, with 43,150 brochures distributed to date. Other District-wide support activities are ongoing through the water resource education program.

Beginning in FY 2004-2005 and in coordination with the Florida Department of Environmental Protection, the District initiated the Water Conservation Hotel and Motel Program (Water CHAMP) in northwest Florida, with a focus on Region II. This is a towel and linen reuse program through which hotel guests are asked to forego having linens changed daily and to hang up towels that do not need washing. As of September 2011, 38 hotels were participating in the program, including 16 in Region II. Newsletters are regularly distributed to recognize participants and encourage new participation. Participating hotels have reported notable water and cost savings.

In cooperation with other water management districts statewide, the District participated in the statewide study of the effects of water rate pricing structures on public supply water demand (Whitcomb 2005). To act on the findings of this study, the NWFWMD coordinates distribution of the associated water rates model in cooperation with the author. Since October 2005, requests for the model have been sent on to Dr. Whitcomb for 33 utilities.

As with water reuse, District staff emphasize water conservation measures in both resource regulation and in past reviews of comprehensive plan amendments and DRIs. In response to consistent emphasis by the District and other state and regional agencies, most large comprehensive plan amendments and DRIs, particularly within Region II, incorporate water conservation requirements. These typically include drought-tolerant vegetation in landscaping and installation of high efficiency, low volume plumbing fixtures. District staff also encourage local governments to require connection to reclaimed water systems for uses not requiring potable quality water.

Under the District's regulation of consumptive uses of water (Chapter 40A-2, FAC), new uses of 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 enhanced use of reclaimed water. Examples include Regional Utilities, South

Walton Utility Company, the City of Fort Walton Beach, and Okaloosa County Water and Sewer, among many others.

Table 6. Water Conservation Coordination

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$8,690
Estimated 5-Year Cost (FY 12-16):	$48,690
Potential Funding Sources:	Local Governments, Utilities, WMLTF
Quantity of Water Made Available:	2.5 MGD
Project Status:	Ongoing

Funding for water conservation efforts is provided through the WMLTF, as well as local sources. Ongoing conservation efforts will continue and additional staff time and outreach activities may be conducted during the Regional Water Supply Plan Update. As other projects are determined to be viable and cost-effective, increased funding may be made available for implementation.

Strategy 7.0 Regional Water Supply Planning Strategies

Development and refinement of regional strategies, project development, and RWSP update are essential components of the WRDWP. Related activities include coordination with and technical support for local governments and utilities to ensure a regional focus in the planning and development of AWS projects. This may include assistance with hydrogeology and related engineering work for development of new and alternative water sources, including the inland Floridan Aquifer, Sand-and-Gravel Aquifer, reclaimed water, and the Shoal River. Associated administrative activities include project and funding management, coordination with FDEP and other agencies, and progress reporting.

As noted previously, a major District priority is the coastal water systems interconnection initiative. In cooperation with local utilities, the goal of the project is to explore and develop possibilities for the interconnection of water supply systems that will significantly enhance the resilience of the coastal water systems by enabling transfer of water between utilities if necessary due to future droughts or other contingencies. An initial study developed a conceptual implementation plan and schedule, identified key issues and challenges, and selected applicable utilities. Ten utilities (with a total of 14 water systems) were evaluated within Santa Rosa, Okaloosa, and Walton counties. Phase 1 of the project is nearing completion, and alternatives for one project within Region II are being considered for connection of two major utilities to ensure sufficient water supply during emergency situations. Completion of this work will complement the reuse plan discussed in Strategy 5.0 in providing a foundation for future RWSP updates.

Also, as discussed in the reuse and conservation sections, District staff work with local governments and state and regional agencies to enhance coordination of land use and water supply planning. District staff distributed guidelines and provided technical assistance to local governments for preparing water supply comprehensive plan amendments and water supply facilities work plans.

During the past year, the District also continued RWSP and WPSPTF implementation tracking and coordination of program funding sources and contracts. The 2010-2011 WRDWP Annual Report was completed and incorporated into the March 1st Consolidated Annual Report (March 2011).

Table 7. Regional Water Supply Planning Strategies

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$86,280
Estimated 5-Year Cost (FY 12-16):	$236,280
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

Strategy 8.0 Hydrologic Data Collection and Analysis

The NWFWMD has a hydrologic data collection network consisting of rainfall gauges, stream gauges, and monitoring wells in Region II. As part of the regional water supply planning process and implementation of the RWSP, the District has enhanced its ground and surface water monitoring capabilities. This includes continuing monitoring operations in cooperation with the U.S. Geological Survey surface water gauging network.

Details of monitoring conducted as part of the Water Resource Development Work Program and, 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.

Table 8. Hydrologic Data Collection and Analysis

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$93,230
Estimated 5-Year Cost (FY 12-16):	$493,230
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

The District anticipates that this will be an ongoing project, both up to and beyond the RWSP's 20-year planning horizon. Funding is primarily reliant upon the WMLTF.

Water Resource Development Project – Region II

Strategy 9.0 Abandoned Well Plugging

To date, the District has facilitated the plugging of 4,303 abandoned wells within Region II. The overall goal of this program is to protect available ground water resources from aging, uncontrolled, or improperly constructed wells that are no longer in use. During FY 2010-2011, the District permitted the proper plugging of 321 wells in Santa Rosa, Okaloosa, and Walton counties. 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.

District staff also provide technical assistance and funding to utilities in the plugging of abandoned wells identified as having the potential to adversely affect ground water quality. Well abandonment is an ongoing project, and it is likely that more wells will be identified for plugging in the future. The District will continue to implement this project through regulatory programs, where feasible.

Table 9. Abandoned Well Plugging

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 75,000
Estimated 5-Year Cost (FY 12-16):	$175,000
Potential Funding Sources:	District General Fund, WMLTF, Local Governments, Utilities
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

This project supports District efforts to sustain coastal water supply sources. Technical assistance may be funded using the District's General Fund or the WMLTF. Additional sources for funding abandoned well plugging include federal or state grant funding, individual well owners, and local governments. When possible, the District anticipates continued use of these sources to fund well plugging that is not associated with regulatory requirements.

Table 10. 2011-2016 Region II WRDWP Project Funding

	Region II Water Resource Development Projects	RWSP Page #	FY 10-11* Expenditures	Plan Implementation Costs					Estimated Five-Year Cost (FY 11/12 – FY 15/16)
				FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	
1	Floridan Aquifer Sustainability	21	$110,594	$30,430	$30,000	$30,000	$30,000	$30,000	$150,430
2	Inland Sand-and-Gravel Aquifer Sustainability	21	$104,524	$64,780	$50,000	$30,000	$30,000	$30,000	$204,780
3	Development of Feasible Surface Water Sources	22	$133,774	$198,500	$180,000	$180,000	$100,000	$100,000	$758,500
4	Aquifer Storage and Recovery Feasibility	23	$0	$0	$0	$0	$0	$0	$0
5	Water Reuse Coordination	24	$26,155	$31,230	$30,000	$30,000	$30,000	$30,000	$151,230
6	Water Conservation Coordination	24	$10,290	$8,690	$10,000	$10,000	$10,000	$10,000	$48,690
7	Regional Water Supply Planning Strategies (incl. Coastal Interconnect Project)	25	$71,782	$86,280	$50,000	$40,000	$30,000	$30,000	$236,280
8	Hydrologic Data Collection and Analysis	26	$150,412	$93,230	$100,000	$100,000	$100,000	$100,000	$493,230
9	Abandoned Well Plugging	27	$37,819	$75,000	25,000	25,000	25,000	25,000	$175,000
TOTAL			$645,350	$588,140	$475,000	$445,000	$355,000	$355,000	$2,218,140

* Preliminary cost figures; final cost information will be provided in the March 1, 2012, Consolidated Annual Report.

Water Resource Development Projects – Region III: Bay County

Figure 3. Water Supply Planning Region III

Water Resource Development Project – Region III

Strategy 1.0 Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

This project supports development of an inland ground water supply source in cooperation with Bay County Utilities to serve all Region III communities. Implementation of this project provides water resource data, analysis, and modeling for determining the location, distribution, and physical characteristics of potential future inland production wells and other alternative water supply sources. The project also provides the monitoring necessary to ensure impacts related to new production wells and other withdrawals are managed to protect the water resource and associated natural systems.

In cooperation with the District, Bay County has been conducting hydrologic and water quality data collection and analysis since 2006. Inland test wells at three locations have been installed. Multi-well aquifer testing and analysis at these sites has been completed. The evaluation of the hydraulic properties of the Floridan Aquifer in northwest Bay County is being applied to the design, distribution, and operation of production wells so as to provide an alternative water supply while sustaining the water resource and protecting wetlands and other natural systems.

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.

Table 11. Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

Implementing Agency:	Bay County, NWFWMD
Proposed FY Expense (FY 11-12):	$ 50,610
Estimated 5-Year Cost (FY 12-16):	$250,610
Potential Funding Sources:	WMLTF, WPSPTF, Bay County
Quantity of Water Made Available:	10 MGD
Project Status:	Ongoing

Other potential sources of funding include local governments and utilities, District general revenue funds, legislative grants and appropriations, and other state and federal grant programs.

Strategy 2.0 Water Reuse and Conservation Assistance

Reuse is an important component of the regional water supply strategy to reduce demand for potable water, improve water use efficiency, and otherwise sustainably manage water resources. District staff coordinate with DEP as that agency carries out its reuse regulation responsibilities. As of 2010, an estimated 2.62 MGD of reclaimed water was used for public access reuse in Region III (FDEP 2011). This includes irrigation of an estimated 1,013 residences, three golf courses, four parks and two schools.

As described previously, work continues on the development of a District-wide reuse plan that will identify future projects to support RWSP implementation and help enhance the sustainability of water resources throughout northwest Florida. The plan will provide a detailed inventory of reclaimed water systems, projected wastewater flows for utilities in Region III through 2030, an evaluation of current and future growth patterns and geographic information systems (GIS) data. Initial data collection stages have been completed and a working inventory has been created. It is anticipated that the reuse plan will be completed in 2011.

Water conservation opportunities exist that may reduce current water use and limit long-term demand. Application of conservation rate structures, conservation measures in local building codes and ordinances, consumptive use permitting conditions, and outreach and education associated with nontraditional source development projects will help constrain future growth in demand. As one example, there is opportunity within the rental lodging sector serving tourists and seasonal residents to increase water use efficiency. The District has expanded the Water CHAMP program to Region III and has 11 participating hotels in Bay County. Since 2004, the District has distributed approximately 5,900 water conservation brochures to utilities and local governments in the county.

Table 12. Water Reuse and Conservation Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 10,310
Estimated 5-Year Cost (FY 12-16):	$ 42,310
Potential Funding Sources:	WMLTF, District General Fund
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

Water Resource Development Project – Region III

Strategy 3.0 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 covered by a RWSP must abide by state requirements to more directly link land use and water planning. Such local governments are required to amend their comprehensive plans to ensure that water supply will be planned and developed to meet future growth in a manner that is consistent with the RWSP.

The coastal water systems interconnection initiative described in other sections of this report also incorporates Region III. In cooperation with local governments and utilities, the District will explore and develop potential projects to interconnect water supply systems. These interconnections, in concert with continued development of alternative water supply sources, will enhance the resilience of water supplies within the coastal regions in the face of future droughts, major storms, and other possible events. The reconnaissance study completed in 2009 included three utilities from Bay County. Continuing work is expected to result in a conceptual implementation plan and schedule, evaluation of key issues and challenges to be addressed, and development of alternative preliminary designs and cost estimates. This work will complement the reuse assessment discussed in Strategy 2.0 and alternative water supply development in providing a foundation for future RWSP updates.

Table 13. Regional Water Supply Coordination and Technical Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 18,080
Estimated 5-Year Cost (FY 12-16):	$ 90,080
Potential Funding Sources:	WMLTF, District General Fund
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

Table 14. 2011-2016 Region III WRDWP Project Funding

Region III Water Resource Development Projects		RWSP Page #	FY 10-11* Expenditures	Plan Implementation Costs					Estimated Five-Year Cost (FY 11/12 – FY 15/16)
				FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	
1	Hydrologic and Water Quality Data Collection, Monitoring, and Analysis	10	$30,721	$50,610	$50,000	$50,000	$50,000	$50,000	$250,610
2	Water Reuse and Conservation Assistance	10	$11,237	$10,310	$8,000	$8,000	$8,000	$8,000	$42,310
3	Regional Water Supply Coordination and Technical Assistance (incl. Coastal Interconnect Project)	10	$23,797	$18,080	$18,000	$18,000	$18,000	$18,000	$90,080
TOTAL			$67,756	$79,000	$76,000	$76,000	$76,000	$76,000	$383,000

* Preliminary cost figures; final cost information will be provided in the March 1, 2012, Consolidated Annual Report.

Water Resource Development Projects – Region V: Gulf and Franklin Counties

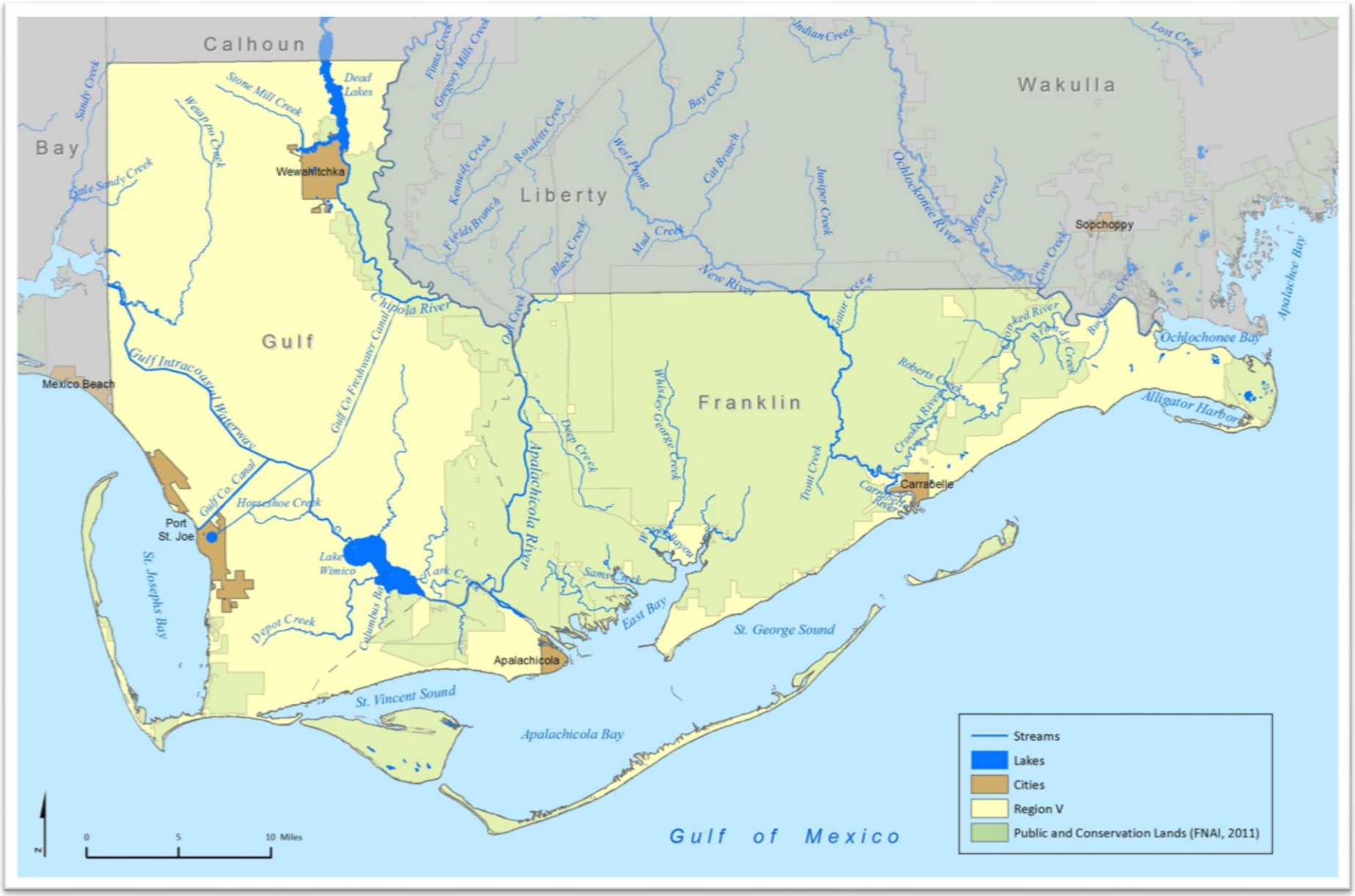

Figure 4. Water Supply Planning Region V

Water Resource Development Project – Region V

Strategy 1.0 Hydrologic and Water Quality Data Collection, Monitoring, and Analysis

This activity provides for essential 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, hydrologic monitoring and analysis, and preliminary well and facility design for regional AWS development. Longer-term monitoring tasks over the next five years may also include water quality and hydrologic monitoring to manage and protect water resources.

The District conducted significant data collection and analysis to evaluate the feasibility of an inland ground water source for Franklin County. The work included test well development, water quality analysis, and aquifer testing. A District consultant has developed a ground water model to support the project. The initial data collection and analysis effort has been completed.

The District has also assisted the Eastpoint Water and Sewer District 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 area and a resulting reduced threat to water supply wells from salt water intrusion. Also pursuant to these efforts, the EPWSD and the District have initiated enhanced monitoring to better assess the long-term sustainability of the ground water resource.

Table 15. Hydrologic and Water Quality Data Collection and Analysis

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 61,290
Estimated 5-Year Cost (FY 12-16):	$301,290
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	3 MGD
Project Status:	Ongoing

It is estimated that up to three MGD of sustainable water supply may be identified and supported through inland ground water source development for Franklin County. Funding is provided from the WMLTF. Additional water resource development funding has previously been provided through the WPSPTF (Appendix A). District general funds could also be used for this purpose.

Water Resource Development Project – Region V

Strategy 2.0 Regional Water Supply Coordination, Source Protection, and Engineering and Technical Assistance

This project provides technical assistance to help local governments and utilities meet water supply-related source protection, project design, and engineering requirements. The District will help support regional coordination and planning on the part of regional water supply entities and local governments. Assistance includes activities related to protection of ground and surface water sources, water resource engineering, coordination with other resource protection and management agencies, and other technical assistance.

The District's coastal water systems interconnection initiative extends to Gulf County. The District will explore and develop potential projects to interconnect water supply systems. These interconnections, in concert with continued development of alternative water supply sources, will enhance the resilience of water supplies within the coastal regions in the face of future droughts, major storms, and other possible events.

With funding assistance and cooperation from the District, the City of Port St. Joe completed a 6 MGD surface water treatment plant as an alternative water source to reduce reliance on the coastal Floridan Aquifer. The Floridan Aquifer can be utilized as a backup emergency supply should the need arise.

As noted above, 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 are being reduced, lessening the threat of salt water intrusion.

Additionally, with District assistance, the City of Carrabelle has 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 initiative, 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.

Table 16. Coordination, Source Protection, and Engineering and Technical Assistance

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 58,220
Estimated 5-Year Cost (FY 12-16):	$298,220
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

These efforts support long-term development and protection of AWS sources, including the approximately nine MGD estimated to be provided across the region through development of alternative surface water and inland ground water sources. These include up to three MGD from the Franklin County inland ground water source described previously and up to six MGD from the Port St. Joe alternative surface water facility constructed with assistance from the WPSPTF (Appendix A).

Strategy 3.0 Water Reuse and Conservation Coordination Assistance

Water reuse is an important component of the long-term regional water supply strategy and is included wherever feasible in Region V as a way to reduce current demand and limit long-term growth in demand for potable water. The District's role in developing public access beneficial reuse includes coordination among utilities, inventorying existing and potential beneficial reuse sources and uses, and providing technical and financial assistance for specific reuse projects. As of 2010, an estimated 0.10 MGD of reclaimed water was used for public access reuse in Region V (FDEP 2011). This includes irrigation for one golf course and a greywater system at the Franklin County Correctional Institution.

As described previously, work continues on the development of a District-wide reuse plan that will identify future projects to support RWSP implementation and that help enhance the sustainability of water resources throughout northwest Florida. The plan will provide a detailed inventory of reclaimed water systems, projected wastewater flows for selected utilities in Region V through 2030, an evaluation of current and future growth patterns and GIS data. Initial data collection stages have been completed and a working inventory has been created. It is anticipated that the reuse plan will be completed in 2011.

Other conservation assistance provided by the District to Region V has been distribution of the water rates model (Whitcomb 2005) to two utilities in the region. The Water CHAMPS initiative has been extended to Region V, with two hotels in Port St. Joe participating as of September 2011.

Table 17. Water Reuse and Conservation Coordination and Assistance

Implementing Agency:	NWFWMD, Local governments, Utilities
Proposed FY Expense (FY 11-12):	$ 9,890
Estimated 5-Year Cost (FY 12-16):	$ 39,890
Potential Funding Sources:	WMLTF, WPSPTF
Quantity of Water Made Available:	TBD
Project Status:	Ongoing

Funding for this project is largely related to the reuse plan development. Funding will be primarily provided from the WMLTF.

Strategy 4.0 Regional Water Supply Plan Implementation

Implementing the RWSP for Region V encompasses coordinating, managing and tracking projects, completing administrative tasks, fulfilling statutory reporting requirements, and related activities. This strategy also allows for technical assistance to local governments and water suppliers. Working cooperatively with utilities and local governments, District coordination indirectly helps to attain the up to nine MGD of AWS estimated as being available during the planning period.

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. It is anticipated that an update to the Region V RWSP may be initiated during FY 2011-2012, depending on the availability of staff resources.

Table 18. Regional Water Supply Plan Implementation

Implementing Agency:	NWFWMD
Proposed FY Expense (FY 11-12):	$ 26,050
Estimated 5-Year Cost (FY 12-16):	$ 60,050
Potential Funding Sources:	WMLTF
Quantity of Water Made Available:	N/A
Project Status:	Ongoing

While this project does not directly provide water, the efforts encompassed do support the long-term development of AWS sources, including the approximately nine MGD estimated to be provided across the region through development of alternative surface water and inland ground water sources. It is anticipated that funding for this project will continue to be provided primarily through the WMLTF.

Table 19. 2011-2016 Region V WRDWP Project Funding

Region V Water Resource Development Projects		RWSP Page #	FY 10-11* Expenditures	Plan Implementation Costs					Estimated Five-Year Cost (FY 11/12 – FY 15/16)
				FY 11-12	FY 12-13	FY 13-14	FY 14-15	FY 15-16	
1	Hydrologic and Water Quality Data Collection and Analysis	10	$43,379	$61,290	$60,000	$60,000	$60,000	$60,000	$301,290
2	Coordination, Source Protection, and Engineering and Technical Assistance (incl. Coastal Interconnect project)	11	$41,210	$58,220	$60,000	$60,000	$60,000	$60,000	$298,220
3	Water Reuse and Conservation Coordination Assistance	11	$8,066	$9,890	$7,500	$7,500	$7,500	$7,500	$39,890
4	Regional Water Supply Plan Implementation	11	$18,436	$26,050	$10,000	$8,000	$8,000	$8,000	$60,050
TOTAL			$111,091	$155,450	$137,500	$135,500	$135,500	$135,500	$699,450

* Preliminary cost figures; final cost information will be provided in the March 1, 2012, Consolidated Annual Report.

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Appendix A. Water Projects in the NWFWMD (2006 to Present)

Table 20 presents expected Water Protection and Sustainability Program Trust Fund expenditures for alternative water supply development and water resource development projects. For the WPSPTF, if future funding becomes available, the District will consider potential projects in accordance with Section 373.703, F.S.

Table 21 presents additional water supply development assistance projects and alternative water supply development projects. These projects are included in this report to how the combined components of the RWSP (WRD, AWS, etc.) work together to ensure sustainable long-term water supplies.

Additional information will be provided with the March 1, 2012, Consolidated Annual Report.

Table 20. AWSD and WRD Projects Funded under the Water Protection and Sustainability Program

Project	Local Sponsor	Activity	Status	WPSPTF Fiscal Year Appropriation	Anticipated Water (MGD)	WPSPTF Contribution	Local Contribution	Total	Local %
Area-wide Alternative Water Supply Source Expansion	Regional Utilities, South Walton Utility Co., City of Freeport	Inland wellfield expansion	Complete	FY 2006	9.0	$6,500,000	$9,991,891	$16,491,891	61%
Tram Road Public Access Reuse Facility	City of 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	Okaloosa County	Water reuse	Complete	FY 2006	0.7	$2,000,000	$4,000,000	$6,000,000	67%
Inland Floridan Aquifer Source - WRD	NWFWMD; Franklin County Utilities	Inland source evaluation	Complete	FY 2006	3.0	$300,000	$0	$300,000	0%
Ground Water Modeling & Aquifer Testing - WRD	Bay County	Inland source evaluation	Complete	FY 2006; FY 2007	*	$350,000	$800,000	$1,150,000	70%
Surface Water Treatment Plant	Port St. Joe	Surface water	Complete	FY 2007	6.0	$4,000,000	$12,736,700	$16,736,700	70%
City of Chipley Reuse Project	Chipley	Water reuse	Complete	FY 2007	1.20	$500,000	$4,500,000	$5,000,000	90%
Wakulla County Reuse Project	Wakulla County	Water reuse	Construction	FY 2007	0.35	$500,000	$750,000	$1,250,000	60%
Advanced Wastewater Treatment & Water Reuse Facilities	City of Tallahassee	Water resource development/ springs protection	Complete	FY 2007	4.5	$500,000	$5,800,000	$6,300,000	92%
Inland Ground Water Source Development	Bay County	Inland source development	In progress	FY 2008	10.0	$5,470,000	$9,670,000	$15,140,000	64%
			Total		**35.95**	**$21,470,000**	**$53,498,591**	**$74,968,591**	**71%**

*Ground water modeling and aquifer testing was used to determine that about 10.0 mgd of water may be available for the Inland Ground Water Source Development project.
Local construction costs for the Chipley and Wakulla County facilities are inclusive of anticipated State Revolving Fund contributions to be repaid by the local governments.

Table 21. Additional Water Supply Development Assistance Projects

Project	Local Sponsor	Activity	Status	Estimated Completion	NWFWMD Contribution	Funding Source
Port St. Joe Fresh Water Canal	Port St. Joe	Land acquisition of freshwater canal as alternative water supply source	Complete	FY 2002	$350,000	District General Fund
Inland Ground Water Supply Development	Fairpoint Regional Utility System	Construction of inland Sand-and-Gravel aquifer wellfield and transmission facilities	Complete	FY 2006	$3,178,700	U.S. EPA
City of Freeport Reuse Project	Freeport	Water reuse	Complete	FY 2010	$3,000,000	SWIM, Florida Forever
Allanton Peninsula Water and Wastewater Extension Project	Callaway	Water supply transmission and distribution system	Complete	FY 2010	$100,000	WMLTF
East Okaloosa County Water and Sewer Extension	Okaloosa County	Water supply transmission and interconnection	Complete	FY 2010	$750,000	District General Fund
Walton County Phase II Regional Water Supply	Regional Utilities, Inc.	Transmission and Storage Facilities	In progress	FY 2011	$2,550,000	EMRTF; District General Fund
Wewahitchka Water Supply System Improvements	Wewahitchka	Water supply development	Complete	FY 2011	$400,000	District General Fund
Water Transmission Line Construction and Interconnection	Freeport	Water supply development	In progress	FY 2011	$800,000	District General Fund
Port St. Joe Water Distribution System Improvements	Port St. Joe	Water supply improvements	Complete	FY 2011	$50,000	District General Fund
Carrabelle-Alligator Point Interconnection Feasibility Study	Carrabelle	Interconnection feasibility assessment	Complete	FY 2011	$100,000	WMLTF
Pine Island Water Distribution System Expansion	Calhoun County	Expansion of water distribution system to unincorporated community	In progress	FY 2012	$98,607	District General Fund
Gretna to Greensboro Watermain Extension	Gretna; Gadsden County	Water supply transmission and distribution Facility Construction	In Progress	FY 2012	$569,888	District General Fund
Test Well Development	Panacea Area Water System	Test well development and data analysis	In Progress	FY 2013	$30,500	District General Fund
Potable Water Transmission Facility Construction	WRP, Inc.	Construction of transmission facilities and subaqueous pipeline from inland wellfield.	In Progress	FY 2013	$2,000,000	District General Fund
Okaloosa County AWS - Surface Water	Okaloosa County	Land acquisition for surface water reservoir site	Planned	FY 2015	$2,000,000	District General Fund
				Total	**$15,977,695**	