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Sent: Wednesday, February 25, 2015 4:10 PM
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Subject: NWFWMD March 1, 2015 Consolidated Annual Report
Attachments: NWFWMD 2015 Consolidated Annual Report.pdf; Distribution List_2015.pdf

To: Distribution (attached)

RE: NWFWMD Consolidated Annual Report

The Northwest Florida Water Management is pleased to submit its March 1, 2015, Consolidated Annual Report, in accordance with Chapter 373.036(7), Florida Statutes. The report is attached as a PDF file. It is also posted on the District's website at http://www.nwfwmd.state.fl.us/data-publications/reports-plans/consolidated-annual-reports/. The report includes the following elements:

1. Strategic Water Management Plan Annual Work Plan Report;
2. Minimum Flows and Levels Annual Priority List;
3. Annual Five-Year Capital Improvement Plan;
4. Five-Year Water Resource Development Work Program;
5. Alternative Water Supplies Annual Report;
6. Florida Forever Water Management District Work Plan Annual Report;
7. Mitigation Donation Annual Report;
8. Surface Water Improvement and Management Program Summary Report.

To request a hard copy of the report, please contact Karen Kebart at (850) 539-5999 or karen.kebart@nwfwater.com. We welcome any comments or questions you or your staff may have concerning this document.

Sincerely,

Christina Coger, AICP
Program Manager, Resource Planning
Northwest Florida Water Management District
(850) 539-5999

Northwest Florida Water Management District

Consolidated Annual Report

Annual Report 2015-01

March 1, 2015

Northwest Florida Water Management District

Consolidated Annual Report

March 1, 2015

Cover Photo: Mist rising on the Wakulla River (K. Barrios, NWFWMD)

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This report is available at: www.nwfwater.com. For additional information or to request a copy of this report, please contact Christina Coger at Christina.Coger@nwfwater.com or (850) 539-5999.

Executive Summary

This Consolidated Annual Report fulfills the requirement of section 373.036(7)(a), Florida Statutes (F.S.), that the Northwest Florida Water Management District (NWFWMD or District) annually prepare and submit a report on management of water resources to the Governor, the President of the Senate, and the Speaker of the House of Representatives. Copies are provided to the chairs of legislative committees with substantive or fiscal jurisdiction over water management districts and the governing boards of counties with jurisdiction or deriving funds for operations of the District, as well as the Florida Department of Environmental Protection (FDEP). The report is also made available to the public online at www.nwfwater.com/data-publications/reports-plans/consolidated-annual-reports/.

The March 1, 2015, NWFWMD Consolidated Annual Report includes seven required reports, as specified in section 373.036(7)(b), F.S. These are:

- The Strategic Water Management Plan Annual Work Plan Report;
- The Minimum Flows and Levels Annual Priority List (section 373.042(2), F.S.);
- The Annual Five-Year Capital Improvement Plan (section 373.536(6)(a)3, F.S.);
- The Five-Year Water Resource Development Work Program (section 373.536(6)(a)4, F.S.);
- The Alternative Water Supplies Annual Report (section 373.707(8)(n), F.S.);
- The Florida Forever Work Plan Annual Report (section 373.199(7), F.S.); and
- The Mitigation Donation Annual Report (section 373.414(1)(b)2, F.S.).

Also included is one optional element, a Surface Water Improvement and Management (SWIM) Program Summary Report that describes projects implemented to protect and improve water quality and watershed resources.

Together, the reports that follow provide the status of Northwest Florida Water Management District programs that work toward the protection, restoration, and sustainability of northwest Florida's water and related resources. Priorities adopted by the Governing Board in the fiscal year (FY) 2014-2015 budget and outlined in the preliminary FY 2015-2016 budget are springs restoration and protection, Apalachicola-Chattahoochee-Flint River Basin, minimum flows and levels and water resource monitoring, water supply, and watershed resource protection and restoration. Highlights of the reports are:

- **Spring Protection and Restoration –** The Williford Spring restoration project commenced in May 2014. This $1.55 million project involves sediment removal, spring shoreline restoration and protection, providing stabilized public access to the spring, and recreation and access improvements. These include a new pervious parking area, boardwalks, connector and interpretive trails, three picnic pavilions (including one larger pavilion for special events), and a canoe tie-up dock that will help prevent future impacts by directing the tying-up of canoes away from the spring run and spring pool areas. The project is scheduled for completion in or before May 2015. Additionally, a new public access point was developed on Holmes Creek at Burnt Sock Landing in Washington County, providing an upstream improved launching point for canoes, kayaks and small boats. **(Chapter One – Strategic Water Management Plan Annual Work Plan Report)**

- **Minimum Flows and Levels (MFLs)** – The District continues to work expeditiously to develop minimum flows and levels in Northwest Florida. Activities are underway to support MFL development for five water bodies: St. Marks River Rise, Wakulla Spring, Sally Ward Spring system, Jackson Blue Spring and the coastal Floridan aquifer in planning Region II (Okaloosa, Santa Rosa, and Walton counties). Enhanced data collection, including the construction of 15 new monitor wells and nine surface water stations, is ongoing throughout the region and work plans describing the MFL development process, proposed technical analyses, and schedules are being finalized for Jackson Blue Spring and the coastal Floridan aquifer in planning Region II. During 2014-2015, enhanced data collection, including the construction of additional monitor wells, will commence for Jackson Blue Spring and the coastal Floridan aquifer in Region II, and data collection and the development of hydrologic models will continue for the St. Marks River Rise, Wakulla Springs, and Sally Ward Spring system. **(Chapter Two – Minimum Flows and Levels Annual Priority List)**
- **Apalachicola-Chattahoochee-Flint (ACF) Rivers Basin** – District staff provided substantial technical support to the state of Florida in its effort to achieve sufficient interstate freshwater allocations to protect the economic and ecological viability of the Apalachicola River and Bay. The District also continued to help local governments implement stormwater retrofit projects to improve water quality in Apalachicola Bay. **(Chapter One – Strategic Water Management Plan Annual Work Plan Report)**
- **Water Supply Development** – In FY 2013-2014, the District rolled out a competitive grant program, the Water Supply Development Community Assistance Initiative, providing $10 million to local governments and utilities to meet local water supply needs. All 24 funded projects have been initiated, with scheduled completion during FY 2015-2016. Early in FY 2014-2015, an additional $8 million in grant funding was awarded to 26 entities. The resulting projects are expected to be completed by the end of FY 2016-2017. **(Chapter One – Strategic Water Management Plan Annual Work Plan Report; Chapter Four – Water Supply)**
- **Water Supply Assessment (WSA)** – A five-year update to the WSA has been completed and was presented to the Governing Board in February 2014. The report provides a comprehensive assessment of the adequacy of water supplies across northwest Florida and identifies regions that require regional water supply planning. **(Chapter Four – Water Supply)**
- **Regional Water Supply Planning** – The District completed an update to the Region III (Bay County) Regional Water Supply Plan (RWSP) in March 2014. Regional water supply plan implementation continues for Region II (Santa Rosa, Okaloosa, and Walton counties). **(Chapter Four – Water Supply)**
- **Agricultural Best Management Practices (BMPs)** – The District continued cooperative assistance for the Mobile Irrigation Laboratory and Sod-Based Crop Rotation programs that promote water conservation and reduced use of pesticide and fertilizer. The initiative began in FY 2013-2014 and included funding agricultural BMPs and irrigation retrofits in the Jackson Blue Spring basin. The initiative has been very successful and is continuing in FY 2014-2015. **(Chapter One – Strategic Water Management Plan Annual Work Plan Report)**
- **Habitat Restoration** – Extensive restoration activities were completed on District lands and other public lands across northwest Florida. These include streambank restoration, reforestation and groundcover habitat restoration, and hydrologic restoration. **(Chapter Five – Florida Forever Work Plan Annual Report)**

- **Water Quality Protection and Restoration** – The District continues to work with local governments in the Apalachicola River and Bay and St. Andrew Bay watersheds to implement stormwater retrofit projects for water quality improvement. Staff have also assisted with RESTORE Act planning and have completed design of stormwater projects funded by MOEX Offshore, LLC, to benefit St. Andrew and Choctawhatchee bays **(Chapter Seven – Surface Water Improvement and Management Program Summary Report)**
- **Water Resource Monitoring** – Expansion of the District's water resource monitoring network continued. This network is essential for water resource and water supply development, MFLs, and watershed protection and restoration. The District also completed the implementation of an enhanced hydrologic database management system in order to increase staff productivity and improve access. (**Chapter One – Strategic Water Management Plan Annual Work Plan Report; Chapter Four – Water Supply)**
- **Flood Protection and Floodplain Management** – The development of digital flood maps for northwest Florida counties was completed in September 2014. The District continues to assist FEMA with public outreach and stakeholder coordination in the watershed Risk Mapping, Assessment and Planning (Risk MAP) program. District websites provide detailed floodplain information (www.portal.nwfwmdfloodmaps.com), and elevation data (www.nwfwmdlidar.com) for the public. **(Chapter One – Strategic Water Management Plan Annual Work Plan Report)**
- **Environmental Resource Permitting (ERP) Permitting** – In FY 2013-2014, the District reduced the annualized median in-house processing time of all ERP authorizations combined (individuals, exemptions, noticed general permits, extensions, and modifications) by 25 percent and cost per permit by 36 percent. This was largely a result of having pre-application meetings to address issues prior to permit application submittal to minimize the number of Requests for Additional Information (RAIs). The program continues to explore new ways to reduce in-house processing time and improve efficiency to decrease cost to process permits. **(Chapter One – Strategic Water Management Plan Annual Work Plan Report)**
- **Consumptive Use Permitting** – The District reduced the annualized median in-house processing time of all individual water use applications by 22 percent and cost per permit by 48 percent over the last year. Emphasis is on conducting pre-application meetings to address issues prior to the submittal of a permit application thereby minimizing the number of requests for additional information. **(Chapter One – Strategic Water Management Plan Annual Work Plan Report)**
- **Water Use Permitting rule, 40A-2, Florida Administrative Code (F.A.C.)** – The adopted rule was prepared in conjunction with the "CUPCon" (consumptive use permitting consistency) efforts which included the Florida Department of Environmental Protection (FDEP) and all five of the State's water management districts and became effective May 29, 2014. The goals of CUPCon included making programs more predictable, ensuring equitable treatment statewide, providing consistent environmental protection, promoting streamlining and efficiency, and incentivizing behavior that protects water resources. **(Chapter One – Strategic Water Management Plan Annual Work Plan Report)**

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Chapter 1: Strategic Water Management Plan Annual Work Plan Report

1.1 Introduction

Section 373.036(2)(e), Florida Statutes (F.S.), gives the Governing Board the option of substituting an annual strategic plan for the five-year district water management plan (DWMP) and the DWMP annual report. The statute requires the strategic plan to include separately an annual work plan report on its implementation for the previous fiscal year, addressing success indicators, deliverables, and milestones. The Governing Board approved the current Strategic Water Management Plan (SWMP) in 2014 (NWFWMD 2014). The strategic priorities are consistent with those in the District's adopted FY 2014-2015 budget and preliminary FY 2015-2016 budget, and include the following:

- Springs Protection and Restoration – Protect and restore water quality and flows within the major spring systems of northwest Florida.
- Minimum Flows and Levels (MFLs) – Develop and implement science-based MFLs that protect water resources and associated natural systems.
- Apalachicola-Chattahoochee-Flint River Basin – Protect Apalachicola River and Bay water quality and freshwater inflow.
- Water Supply – Ensure sufficient water is available for all existing and future reasonable-beneficial uses and natural systems.
- Watershed Protection and Restoration – Protect and restore watershed resources and functions.
- Flood Protection and Floodplain Management – Maintain natural floodplain functions and minimize harm from flooding.

Elements of the Strategic Plan addressed in this report are:

- Evaluation of progress toward accomplishing strategic priorities;
- Evaluation of indicators specified in the SWMP;
- Accomplishment of milestones and deliverables; and
- Project-based accomplishments from the past fiscal year.

The evaluation of indicators serves several purposes within a strategic plan. Beyond providing an assessment of program implementation, identification and evaluation of indicators helps to further an understanding of resource conditions and to clarify objectives and intended results. Evaluating measures and indicators provides internal and external feedback for ascertaining whether a given project or initiative is achieving intended results and whether the underlying strategy is appropriate or should be revised.

1.2 Springs Protection and Restoration

Current Activities and Accomplishments

Protecting and restoring northwest Florida's springs and their associated systems is continuing priority for the District. Current activities include restoration projects for Williford Spring and Devil's Hole Spring within the Econfina Creek Water Management Area (WMA) and shoreline habitat restoration and protection along the Holmes Creek spring run (Washington County), helping farmers implement agricultural best management practices (BMPs) for water conservation and water quality improvement within the Jackson Blue Spring basin (Jackson County), and monitoring and resource assessment for major spring systems District-wide. The District has also initiated efforts to assist Wakulla and Leon counties with sewer line extensions and elimination of septic systems within the contribution area of the Wakulla Springs system.

All of these activities are focused on advancing the strategic priority established within the SWMP to protect and restore water quality and flows within the major spring systems of northwest Florida. Many of the restoration projects also enhance public access in a manner that is consistent with protecting the unique aquatic, riparian, and wetland ecosystems supported by Florida's springs.

Indicators

The SWMP includes three indicators for Springs Protection and Restoration: project accomplishment, trends in nitrate concentrations, and trends in spring flows. These are summarized below.

The NWFWMD has six ongoing or planned projects that contribute to spring protection and restoration, as outlined in Table 1.1.

Table 1.1 Spring Protection and Restoration Projects

Project	Description	Status	Percent Complete
Mobile Irrigation Laboratory	Technical assistance to farmers, primarily within the Jackson Blue Spring contribution area, to improve irrigation efficiency	Ongoing; funded annually	NA[1]
Agricultural BMP Assistance	Financial assistance to farmers with the Jackson Blue Spring contribution area to implement irrigation efficiency and water quality BMPs	Producer contracts in place; implementation initiated	57[2]
Williford Springs Restoration	Sediment removal, shoreline restoration and stabilization, and development of access features compatible with habitat protection	Under construction	75%
Devil's Hole Spring	Spring and stream bank restoration and protection, providing access compatible with spring and stream protection	Implementation pending	0%
Holmes Creek Coop. Project	Restoration of approximately 500 feet of eroded stream bank at three boat launch sites	Under construction	40%
Wakulla Spring System Wastewater Improvements	Extension of sanitary sewer systems within the Wakulla Springs system contribution area, facilitating removal of septic systems	Contract development with FDEP, Leon Co., and Wakulla Co.	0%

[1] This is an ongoing program with funding allocated annually.
[2] Percent complete for the total of fiscal year 2013-2014 and 2014-2015.

Spring flow and nitrate[1] concentration data are available for Wakulla Springs, Jackson Blue Spring, Gainer Springs, and St. Marks River Rise. Current information is summarized in Table 1.2 and Figures 1.1 through 1.4. The description of trends in the table below indicates a general direction based on visual examination of the data. Additional and updated information on major springs in northwest Florida is available at www.nwfwater.com/water-resources/springs/.

Table 1.2 Trends in Spring Flows and Nitrate/Nitrite Concentrations

Spring/Spring System	Average Flow (cfs)/Trend[1]	Nitrate Concentration (mg/L)[2]
Wakulla Spring	542/Increasing	0.50/Decreasing[3]
Jackson Blue Spring	113/Variable	3.60/Increasing
Gainer Springs Group	147/Variable, stable	0.19/Stable
St. Marks Rise	743/Variable, stable	0.13/Highly variable[4]

[1] Periods of Record (flow): Wakulla Spring, 1997-2013; Jackson Blue Spring, 2003-2014; Gainer Springs, 2002-2013; St. Marks Rise, 1997-2014. Trends are based on visual examination of data and may not be statistically significant.

[2] Periods of Record (water quality): Wakulla Spring, 1997-2014; Jackson Blue Spring, 2005-2014; Gainer Springs, 2002-2012; St. Marks Rise, 1999-2014.

[3] Possible association between spring flow and nitrate concentration.

[4] Water quality under the influence of surface water drainage.

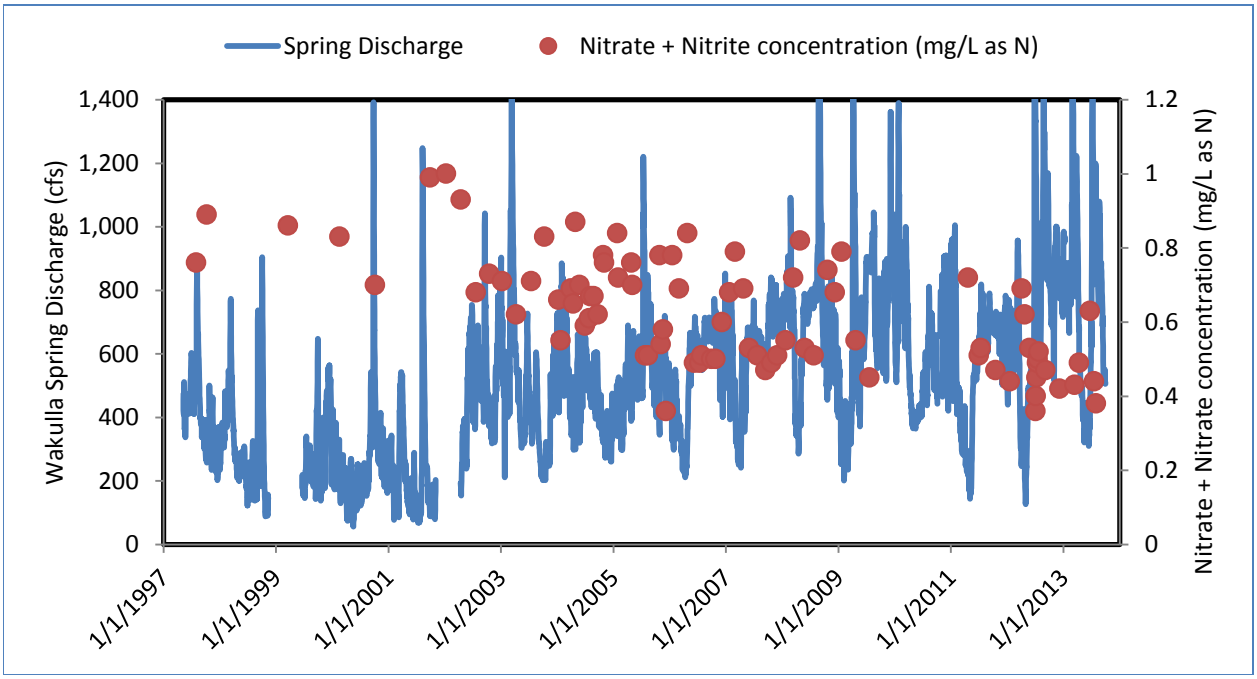

Figure 1.1 $NO2+NO_3$ Concentration and Discharge: Wakulla Spring (1997-2014)

[1] Values are observed and reported as nitrate + nitrite. Nitrite (NO_2) is converted into nitrate (NO_3) in the environment.

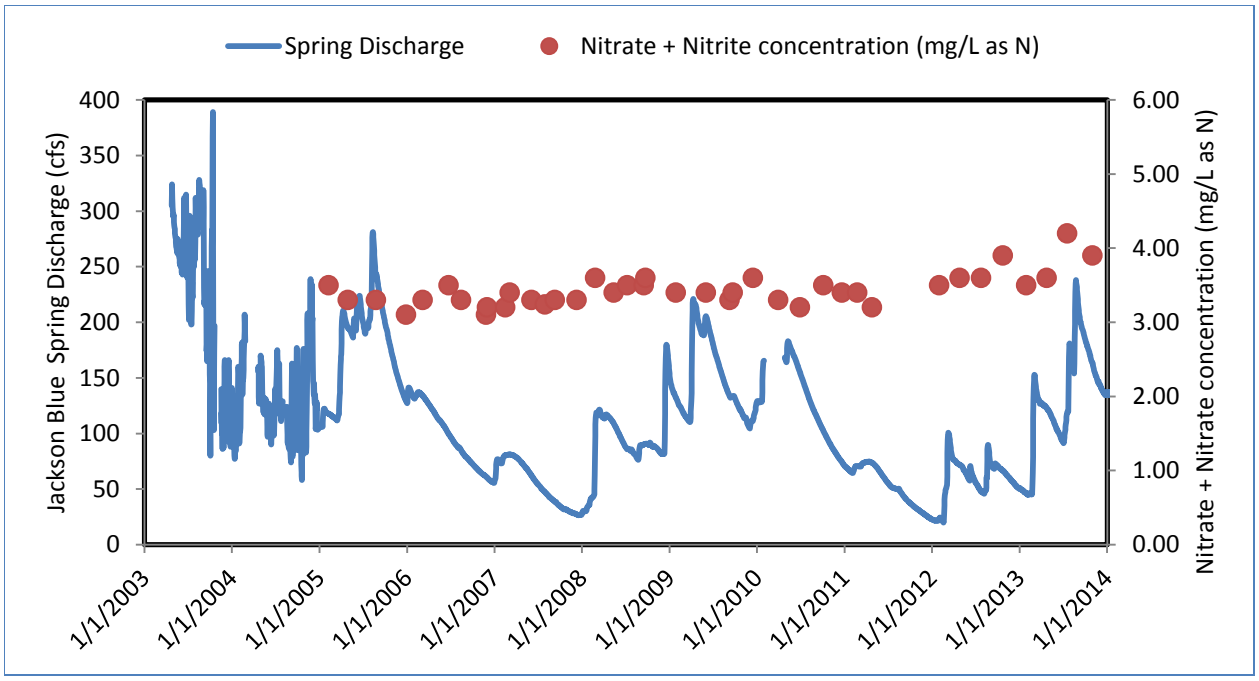

Figure 1.2 $NO2+NO_3$ Concentration and Discharge: Jackson Blue Spring (2003-2014)

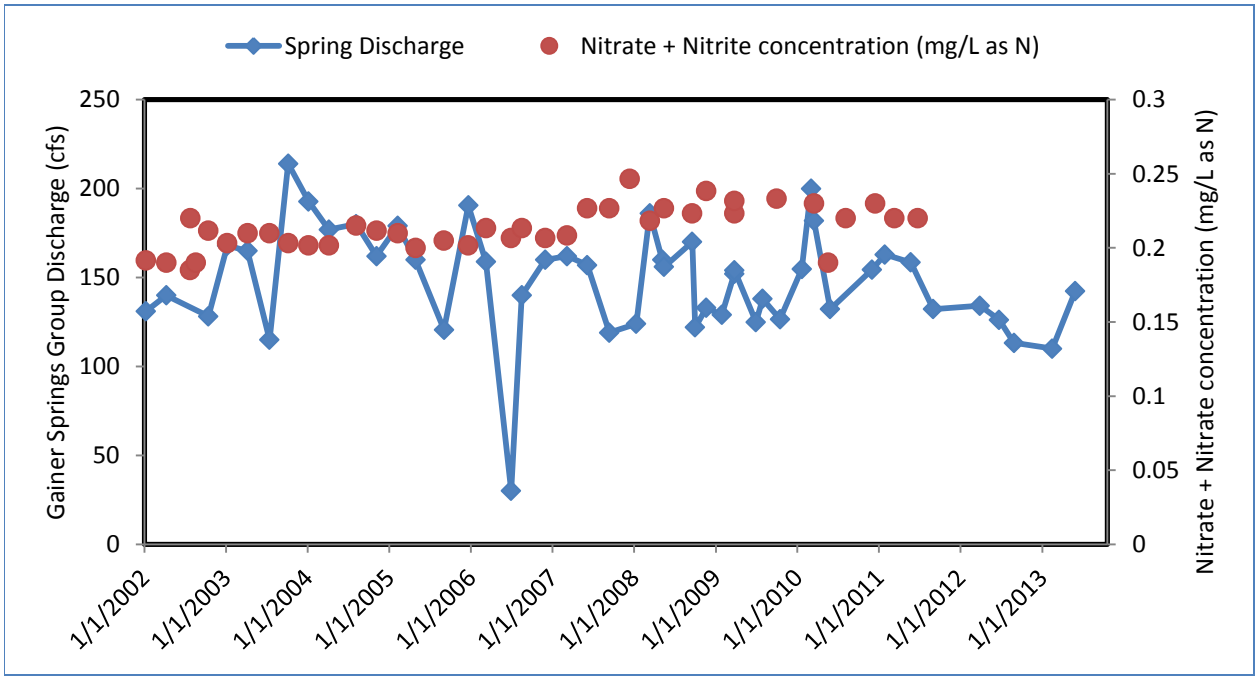

Figure 1.3 $NO2+NO_3$ Concentration and Discharge: Gainer Springs Group (2002-2013)

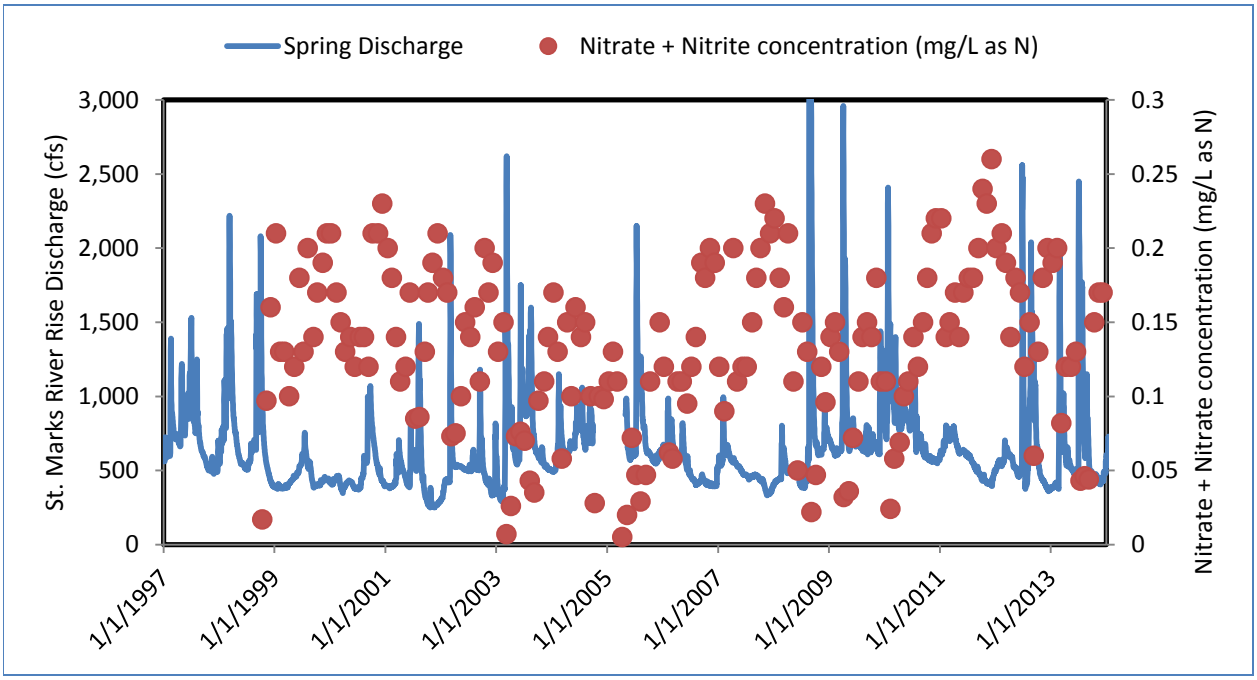

Figure 1.4 $NO2+NO_3$ Concentration and Discharge: St. Marks River Rise (1997-2014)

Deliverables and Milestones

Three deliverables are noted for Springs Protection and Restoration: Mobile Irrigation Lab evaluation reports, water quality data, and spring discharge data. Milestones listed are the target dates for completion of currently planned projects. Table 1.3 shows the status of SWMP deliverables and milestones for Springs Protection and Restoration.

Table 1.3 Springs Protection and Restoration Deliverables and Milestones

Deliverable	Status
Mobile Irrigation Lab Reports	Receiving quarterly reports and evaluation summaries
Water Quality Data	Water quality data collected by FDEP and NWFWMD and available from STORET or NWFWMD water quality database
Spring Discharge Data	Discharge data collected by NWFWMD and available from the NWFWMD discharge database

Milestone	Target Date	Status
Devil's Hole Spring Stream Bank Restoration	2015	Implementation is pending FY 2014-2015
Williford Spring restoration	2015-2016	Project is underway and 75% complete
Implementation of Funded BMPs in the Jackson Blue Spring Basin	2015-2016	Funds for FY2013-2014 are 98% committed through contracts with producers and 30% expended as of12-31-2014; first-year contracts will be complete before 6-30-2015
Mobile Irrigation Lab evaluations	2015-2016	Work for FY2013-2014 100% complete; contracted tasks for FY2014-2015 on schedule
Holmes Creek Coop. Project	2016	Project underway and 40% complete

1.3 Minimum Flows and Levels

Current Activities and Accomplishments

The District continues to move forward expeditiously to develop minimum flows and levels (MFLs) in Northwest Florida. The NWFWMD FY 2014-2015 MFL priority list includes four first-magnitude springs (St. Marks River Rise, Wakulla Spring, the Econfina Creek and Gainer Springs Complex, and Jackson Blue Spring), one second-magnitude spring (Sally Ward Spring), two coastal aquifer systems, Deer Point Lake reservoir, and the Yellow River and Shoal River system. Additional waterbodies will be scheduled in future years. The list represents an environmentally protective MFL program, scheduled to be implemented in a realistic, technically sound, and achievable manner.

Work on five MFL waterbodies is currently underway. A work plan that describes the MFL development process, data needs, and proposed technical assessments was developed for the St. Marks River Rise, Sally Ward Spring, and Wakulla Spring system. In 2014, work was initiated to construct 15 new monitor wells and nine surface water stations to support MFL development for this system. During FY 2014-2015, enhanced hydrologic and water quality monitoring, collection of ecologic and bathymetric data, and conceptual groundwater flow model development are planned for the St. Marks River Rise, Wakulla Spring, and Sally Ward Spring system. Enhanced monitoring will support the development of complex models that are needed to evaluate this system. The technical assessment for the St. Marks River Rise, a first-magnitude spring in southeastern Leon County, will be completed in 2018. Data and hydrologic models developed for the St. Marks River Rise will also support MFL development for nearby Wakulla Spring and Sally Ward Spring.

During FY 2014-2015, work plans will be completed for Jackson Blue Spring and the coastal Floridan aquifer system in planning Region II (Okaloosa, Santa Rosa, and Walton counties). Following completion of the work plans, new monitor wells will be constructed and data collected to support MFL development for Jackson Blue Spring and the coastal Floridan aquifer in Region II. Additionally, the regional groundwater flow model for Region II will be updated and recalibrated to incorporate new hydrologic data.

Indicators

The SWMP includes two indicators for MFLs: MFL technical assessment accomplishment and waterbodies meeting their adopted MFLs. Current data and information with respect to these indicators follow.

Table 1.4 MFL Technical Assessment Status

MFL Waterbody	Target Date	Percent Complete	MFL Status
St. Marks River Rise	2018	10%	Under development
Wakulla Spring	2020	10%	Under development
Sally Ward Spring	2020	10%	Under development
Floridan Aquifer, Coastal Region II	2020	5%	Under development
Jackson Blue Spring	2022	5%	Under development
Floridan Aquifer, Coastal Bay Co.	2023	0%	Scheduled for completion 2022-2023

MFL Waterbody	Target Date	Percent Complete	MFL Status
Econfina Creek & Spring complex	2024	0%	Scheduled for completion 2023-2024
Deer Point Lake	2025	0%	Scheduled for completion 2024-2025
Yellow River and Shoal River	2026	0%	Scheduled for completion 2025-2026

Deliverables and Milestones

Deliverables and milestones listed for MFLs include completed technical assessments according to the approved schedule. Within the current SWMP horizon, the technical assessment for St. Marks River Rise is scheduled for completion in 2018. The current District-approved MFL Priority List and schedule can be found on the website: www.nwfwater.com/system/assets/1557/original/2014-2015_MFL_Priority_List_and_Schedule_3.pdf.

1.4 Apalachicola-Chattahoochee-Flint River Basin

Current Activities and Accomplishments

Management of water resources in the Apalachicola-Chattahoochee-Flint (ACF) basin continues to be a major emphasis of the District in partnership with other agencies and regional stakeholders. The District is therefore engaged in a series of activities that, together, will help achieve the long-term strategic priority: protect Apalachicola River and Bay water quality and freshwater inflow. Current priorities include providing technical assistance to the Executive Office of the Governor and Florida Department of Environmental Protection (FDEP) on an array of issues related to interstate freshwater allocation. The District additionally completed development of an updated three-dimensional hydrodynamic model of Apalachicola Bay. This model will support resource assessments and evaluations of potential actions to improve and maintain a healthy bay environment, including management of freshwater inflows and implementation of cooperative water quality improvement projects in coastal Franklin County. Stormwater retrofit projects are ongoing in cooperation with the City of Apalachicola and the City of Carrabelle to improve water quality in Apalachicola Bay.

Indicators

The SWMP includes three indicators for the ACF River Basin: cooperative project implementation, area restored, and stormwater treatment area. Currently, the District is assisting in the implementation of five cooperative projects with local governments. All of these are stormwater retrofit projects intended to improve the quality of stormwater discharges to Apalachicola Bay. Current data and information with respect to these indicators are included below in Table 1.5.

Table 1.5 ACF Basin Indicators: Cooperative Project Status

Project	Description	Status	Restoration Area (Acres)	Treatment Area (Acres)
Battery Park Stormwater Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; construction completed FY 2014-2015	Completed	N/A[1]	54.3
Prado Outfall Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; completion is scheduled for 2016	Engineering	N/A	47

Project	Description	Status	Restoration Area (Acres)	Treatment Area (Acres)
US 98 & 16th Street Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; completion is scheduled for 2016	Engineering	N/A	119
Avenue I Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; completion is scheduled for 2016	Engineering	N/A	51
Marine Street Basin Retrofit	Stormwater retrofit project in cooperation with the City of Carrabelle; completion is scheduled for 2016.	Engineering	N/A	10.5

[1] Current projects focused on water quality treatment; restoration area not applicable.

Deliverables and Milestones

Deliverables and milestones listed for the ACF River Basin include completion of an updated hydrodynamic model (2014), completion of hydrologic restoration within the Whiskey George Basin in Tates Hell Swamp (2014), and completion of four cooperative stormwater retrofit projects in the City of Apalachicola (2015). The hydrodynamic model and Whiskey George Basin restoration were completed on schedule. The stormwater retrofit projects within the City of Apalachicola, as well as one within the City of Carrabelle, are underway. Construction of the first project (Battery Park basin retrofit) is complete. To incorporate extended public outreach and coordination with the community, completion of the remaining projects are currently anticipated in 2016.

Table 1.6 ACF Basin Deliverables and Milestones

Deliverable	Target Date	Status
Updated hydrodynamic model of Apalachicola Bay	2014	Model completed during FY 2013-2014; will support resource assessments and evaluations of potential actions to improve and maintain a healthy bay environment

Milestone	Target Date	Status
Complete hydrologic restoration in the Whiskey George Basin of Tates Hell Swamp	2014	Project completed on schedule; restoration area approximately 185 acres
Completion of four cooperative stormwater retrofit projects in the City of Apalachicola	2015	Construction of Battery Park retrofit completed; US 98 & 16th Street, Prado Outfall, and Avenue I basin projects in progress; construction expected to continue into 2016

1.5 Water Supply

Current Activities and Accomplishments

The strategic priority for water supply, as defined in the SWMP, is to "ensure sufficient water is available for all existing and future reasonable-beneficial uses and natural systems." This represents a continuing and long-term responsibility. Given this, the District continues to implement water resource development and water supply planning and to invest in water supply development assistance across northwest Florida.

The District updated the Districtwide Water Supply Assessment (WSA) in 2013, projecting water demands and evaluating source sufficiency through 2035 (Countryman et al. 2014). The report showed that public supply remains the largest use category for the District, accounting for approximately 45 percent of the demand in 2010. It is expected that this will continue to hold true through the 2015-2035 planning period. The Region III (Bay County) Regional Water Supply Plan (RWSP) was updated in March 2014, including updated recommended water supply development and water resource development projects. The Governing Board also discontinued regional water supply planning for Region V (Franklin and Gulf counties) given completion of surface water source development in Gulf County and the adequacy of currently identified potable water supplies to meet demands within Franklin County under updated growth projections.

The District is continuing implementation of its Water Supply Development Community Assistance Initiative. Through this initiative, the District is providing competitive grant funding for local governments and utilities, with emphasis on supporting financially disadvantaged communities. Approximately $10 million in grant funding was awarded in 2013 for 24 projects, and nearly $8 million in grant funding was awarded in 2014 for 26 additional projects. Additional current areas of focus include developing and updating groundwater models and supporting in statewide efforts to expand the reuse of reclaimed water and to identify and develop alternative water supply sources.

The District's updated Water Use Permitting rule, 40A-2, F.A.C., became effective May 29, 2014. The rule update was prepared in conjunction with statewide "CUPCon" (**c**onsumptive **u**se **p**ermitting **con**sistency) efforts which included the Florida Department of Environmental Protection (FDEP) and all five of the State's water management districts. The goals of the CUPCon included making programs more predictable, ensuring equitable treatment statewide, providing consistent environmental protection, promoting streamlining and efficiency, and incentivizing behavior that protects water resources.

The District is cooperating with the Florida Department of Agricultural and Consumer Services (FDACS) and the other four water management districts in a study being conducted by the University of Florida Watershed Ecology Lab. This study is examining the management of forests for increased regional water yield.

Indicators

The SWMP includes four indicators for Water Supply: RWSP water demands met (volume in millions of gallons per day and percentage), public supply uniform gross per capita water use (gallons per capita per day [GPCD] and trend), public supply uniform residential per capita water use (GPCD and trend), and water reuse to offset the use of potable quality water and to achieve other beneficial uses (volume and trend). Current data and information with respect to these indicators are included below in Tables 1.7 through 1.9.

"RWSP water demands met" refers to the portion of projected water demand which is met by existing permitted allocations. The 2013 WSA showed a net increase of 60 mgd in RWSP regions II and III over a planning horizon from 2010-2035 (Table 1.7). Given existing permitted allocations, 57 of the 60 mgd (95 percent) are met through 2035. The remaining five percent will need to be achieved either through reduced demands via water conservation, alternative water supply sources, or increased allocation of groundwater withdrawals.

Table 1.7 RWSP Water Demands Met

Indicator	2010-2035 Net demand change (mgd)	Future demand met within existing allocation (mgd)	Percent of net demand change met
RWSP water demands met	60	57	95%

The Region II RWSP identifies preferred alternative water supplies and alternative water supply development projects intended to ensure long-term demands are met. These include the reuse of reclaimed water and surface water supply development. Enhanced water conservation is also supported by the Region II RWSP. Similarly, the Region III RWSP supports reuse of reclaimed water, development of an alternative, upstream surface water pump station, and enhanced water conservation.

Two per capita water use indicators are utilized for water supply planning: gross per capita water use and residential per capita water use. Per capita water use as defined here is consistent with the uniform per capita use metrics set forth by the Florida Department of Environmental Protection (FDEP) to allow for consistent per capita use metrics throughout Florida (FDEP 2008). The gross per capita water use rate apportions all types of customer uses including residential, commercial, institutional, industrial, recreation, aesthetic, agricultural, and fire protection and utility water losses to each permanent resident in the utility's distribution area. Residential per capita excludes large industrial, commercial, institutional, recreational, and other non-residential customers. District gross and residential per capita water use trends from 2010-2013 are shown in Table 1.8. Residential per capita data was only available for 2012 and 2013, as reliable residential water use data were not available prior to 2012. Trends in both gross and residential per capita show declining water use despite increased population served by utilities during this time period. Since a consistent methodology was used to calculate per capita water use in each year, declining per capita use appears likely due to increased efficiency of water use within public water supply systems in the District.

Table 1.8 Trends in Public Supply Gross and Residential Per Capita Water Use

Year	Public supply uniform gross per capita water use[1]	Public supply uniform residential per capita water use[1]
2010	146	n/a
2011	140	n/a
2012	139	83
2013	132	76

[1]Gallons per capita per day

The indicator "water reuse to offset the use of potable quality water and to achieve other related beneficial uses" refers to the amount of reclaimed water that either offsets (effectively decreases) the use of potable quality water, as well as water reuse that achieves other resource benefits, such as reduced wastewater discharges into and pollution of the natural system. This information is compiled as part of Florida's Annual Reuse Inventory (FDEP 2008-2014). Reuse types considered to offset potable quality water and achieve other resource benefits generally include Part III reuse (public access), and Part VII (industrial/commercial reuse), as defined in Chapter 62-610, F.A.C. Other reuse types, such as sprayfields, are not typically considered to offset potable quality water or achieve other resource benefits, and are therefore not included here. However, two exceptions in the District, City of Monticello and Town of Gretna, provide reuse water to nurseries which offset potable quality water and are included.

Trends in water reuse from 2007-2013, as described above, are shown in Table 1.9. A large increase occurred between 2010 and 2011, with stable trends before 2010 and after 2011. The increase can be substantially attributed to the Emerald Coast Utilities Authority's Central Water Reclamation Facility, which began providing significant amounts of reclaimed water to International Paper and Gulf Power in 2011. This facility also replaced Pensacola's pre-existing wastewater treatment plant, eliminating a substantial discharge of wastewater into Pensacola Bay.

Table 1.9 Water Reuse Trends in Northwest Florida[1]

Year	Water Reuse (mgd)[2]
2007	14.52
2008	13.86
2009	14.31
2010	13.36
2011	24.84
2012	27.05
2013	24.72

[1] Water reuse to offset the use of potable quality water and to achieve other related beneficial uses

[2] Million gallons per day

Deliverables and Milestones

Deliverables and milestones listed for water supply include completion of the District WSA (2014), completion of the Region III and Region II RWSP updates (2014 and 2017, respectively), completion of an interim District-wide reclaimed water evaluation (2015), adoption of more consistent rules (statewide) for permitting of individual water use through coordination with FDEP and the other four water management districts (2014), and revision of the well construction rule (2015). The WSA and Region III RWSP updates were completed on schedule, as was adoption of an update to the District's consumptive use permitting rule (40A-2). The interim District-wide reuse evaluation and well construction rule update are proceeding on schedule.

1.6 Watershed Protection and Restoration

Current Activities and Accomplishments

The strategic priority for Watershed Protection and Restoration, as defined in the SWMP, is "protect and restore watershed resources and functions." Reflecting this priority, the District continues to focus on cooperative stormwater retrofit, water quality, water conservation, and habitat restoration projects in the Apalachicola River and Bay and St. Andrew Bay watersheds. Specific efforts include financial support of a Mobile Irrigation Laboratory (MIL) in cooperation with FDACS and the Natural Resources Conservation Service (NRCS); cooperative funding with producers for agricultural BMPs within the Jackson Blue Spring groundwater contribution area; financial support for research and outreach on University of Florida's Institute of Food and Agricultural Services (IFAS) Sod-Based Crop Rotation Program; restoration of Williford Springs; and stormwater retrofit projects to improve water quality in St. Andrew Bay and Apalachicola Bay. District staff are also continuing participation in multi-agency project planning and development across northwest Florida associated with the federal RESTORE Act, which was created as a result of the Deepwater Horizon oil spill in 2010. Additionally, the District

provided engineering services to support stormwater retrofit projects within St. Andrew and Choctawhatchee bays funded by the MOEX Offshore settlement and has provided assistance to the Choctawhatchee Basin Alliance for monitoring and restoration-related activities.

In its ongoing reforestation and groundcover habitat restoration program, the District completed hand planting of 1,483 acres of longleaf pine, wet pine flatwoods, and wiregrass habitat. These habitat restoration activities enhance groundwater recharge, improve wetland functions, and offset wetland losses caused by transportation projects. Approximately 989,500 longleaf pine tubelings were planted within two water management areas (WMAs). The District also reestablished groundcover habitat, planting 108,900 plugs of wiregrass and on disturbed habitat sites at the Sand Hill Lakes Mitigation Bank and the Choctawhatchee River/Holmes Creek WMA.

Seed for District groundcover projects were collected from District land on the Econfina Creek WMA. The District continues to research, refine, and establish new habitat restoration techniques that increase species diversity and ecosystem health.

The District reduced the annualized median in-house processing time of all ERP authorizations combined (individuals, exemptions, noticed general permits, extensions, and modifications) by 25 percent and cost per permit by 36 percent. This was largely a result of having pre-application meetings to address issues prior to permit application submittal to minimize the number of Requests for Additional Information (RAIs). The program continues to explore new ways to reduce in-house processing time and improve efficiency to decrease cost to process permits.

Indicators

The SWMP includes three indicators for Watershed Protection and Restoration: balance of released mitigation credits reflective of net functional lift under the District's Umbrella Mitigation Plan, cooperative project implementation, and contributing area for newly installed stormwater treatment.
Wetland mitigation "credit" refers to the environmental functional lift generated from successful implementation of wetland mitigation projects, and is calculated by the Uniform Mitigation Assessment Method (UMAM), as defined in section 373.4137(18), F.S. The current balance of released credits under the Umbrella Mitigation Plan is 282.33; additional information may be found at: www.nwfwmdwetlands.com/.

Data indicative of cooperative watershed project implementation and stormwater treatment contributing area are found below (Table 1.10).

Table 1.10 Watershed Protection and Restoration

Project	Description	Watershed	Treatment Area (Acres)	Status	Percent Complete
Battery Park Stormwater Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; construction completed FY 2014-2015	Apalachicola	54.3	Complete; pending final approval	100
Prado Outfall Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; construction scheduled for 2016	Apalachicola	47	Engineering	20
US 98 & 16th Street Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; construction scheduled for 2016	Apalachicola	119	Engineering	20
Avenue I Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; construction scheduled for 2016	Apalachicola	51	Engineering	20
Marine Street Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola; construction scheduled for 2015	Apalachicola	10.5	Engineering	15
Spring Avenue Pond	Stormwater retrofit for water quality improvement	St. Andrew Bay	257	Complete	100
Lisenby Pond	Stormwater retrofit engineering, surveying and construction oversight	St. Andrew Bay	125	Project Oversight	90
Panama City - Maple Avenue Baffle Boxes	Placement of 13 baffle boxes to improve water quality in an urban basin	St. Andrew Bay	291	Construction	90
Ed Lee Road Stabilization	Paving of a dirt road for the purposed of sediment abatement	St. Andrew Bay	50	Construction	40
US98 Drainage Improvements	Water Quality/Drainage Improvements and Outfall Improvement in Parker	St. Andrew Bay	181	Bidding	30
Callaway Stormwater Retrofit	Water Quality improvement and flooding abatement	St. Andrew Bay	40	Bidding	25
Mexico Beach Drainage Improvements	Water Quality improvement and flooding abatement	St. Andrew Bay	103	Bidding	30
Tanglewood Pond	Stormwater retrofit engineering, surveying and construction oversight	Choctawhatchee	213	Project Oversight	75
Overbrook Pond	Stormwater retrofit engineering, surveying and construction oversight	Choctawhatchee	175	Project Oversight	75
Monitoring and Restoration Support	Assistance to the CBA for monitoring, restoration, and outreach	Choctawhatchee	N/A	Complete (FY 15 initiated)	100

Deliverables and Milestones

Deliverables for Watershed Protection and Restoration include annual reports for regional mitigation and the SWIM program. Milestones focus on completion of cooperative stormwater retrofit projects, as well as further development and approval of an In-Lieu-Fee Instrument in support of the District's regional mitigation program. These are listed and outlined below in Table 1.11.

Table 1.11 Watershed Protection and Restoration Deliverables and Milestones

Deliverable	Status
Annual Regional Wetland Mitigation Plan and Mitigation Monitoring Reports	Annual monitoring for the regional wetland mitigation plan and FDOT mitigation projects was completed in the fall of 2014; all projects meeting or exceeding success criteria; monitoring reports were completed in accordance with permit requirements and posted to www.nwfwmdwetlands.com/index.php for public review
SWIM Program Summary Report within the Consolidated Annual Report	Report included as Chapter Seven of the Consolidated Annual Report

Milestone	Target Date	Status
In-Lieu-Fee Instrument fully permitted by U.S. Army Corps of Engineers	2014	Approved by the District and transmitted to the U.S. Army Corps of Engineers for execution; final approval anticipated in 2015
Completion of four cooperative stormwater retrofit projects in the Apalachicola River and Bay Watershed: Battery Park Basin, US 98 and 16th Street basin, Prado Outfall basin, and Avenue I basin	2015	Construction of the Battery Park project completed in 2014; remaining projects appear likely to extend into 2016 to accommodate design updates responsive to community needs and preferences
Completion of four cooperative stormwater retrofit projects in the St. Andrew Bay Watershed: Panama City Maple Ave., Bay Co. Ed Lee Rd., Parker Drainage and Water Quality Improvements, and Callaway Stormwater Retrofit	2015	Implementation in progress; it is expected that the Maple Avenue, Ed Lee Road, and Parker projects will be completed during 2015, with the Callaway and Mexico Beach projects extending into FY 2015/2016

1.7 Flood Protection and Floodplain Management

Current Activities and Accomplishments

The SWMP defines the Flood Protection and Floodplain Management strategic priority as "maintain natural floodplain functions and minimize harm from flooding." Long-term activities to maintain natural floodplain functions include land acquisition within most of the major riverine floodplains of northwest Florida and ongoing land management. Additionally, the District continues to work in cooperation with the Federal Emergency Management Agency (FEMA) on flood map modernization and the Risk Mapping, Assessment, and Planning (Risk MAP) program. The final effective digital flood insurance rate maps (DFIRMs) were issued for Franklin and Jefferson counties in February 2014 and in Wakulla County in

September 2014. Detailed coastal remapping studies continue for Escambia, Santa Rosa, Okaloosa, Walton, Bay and Gulf counties.

FEMA has also initiated the Risk MAP program, which is the focus of the District's current effort. This effort includes collaboration with state and local agencies to deliver detailed data to foster informed risk management decisions and actions that mitigate flood risk through a consistent approach to assessing potential vulnerability and losses.

The District continues to support a public website providing detailed Light Detection and Ranging (LiDAR)-based elevation and surface feature data for properties across northwest Florida. The data provided is ten times more detailed than most previous topographic maps. This provides an important tool for many of the District's water resource management and flood protection functions. Residents and technical experts can also use the data to plan for activities including landscaping, resource protection, flood risk evaluation, and construction. The website is available at www.nwfwmdlidar.com/. Additionally, the District makes detailed floodplain information available to the public through www.portal.nwfwmdfloodmaps.com.

Indicators

The SWMP includes two indicators for Flood Protection and Floodplain Management: area of floodplain protected through fee or less-than-fee acquisition and percent of the District with updated DFRIMs meeting FEMA standards and criteria. Current data and information with respect to these indicators are included below in Table 1.12.

Table 1.12 Indicator Status: Flood Protection and Floodplain Management

Indicator	Target Date	Value
Acres of floodplain Protected[1]	Ongoing	177,808
% of District with updated DFIRMs meeting FEMA standards and criteria	2014	100

[1] Floodplain area of current NWFWMD lands (fee and less-than-fee). This represents approximately 78% of the total District managed area.

Deliverables and Milestones

Deliverables for Flood Protection and Floodplain Management include development of DFIRMs for three coastal counties and development of Risk MAP products in accordance with the pertinent discovery processes. Milestones include completion of DFIRM updates for three counties and coastal remapping studies for six counties. These are outlined below in Table 1.13.

Table 1.13 Deliverables and Milestones: Flood Protection and Floodplain Management

Milestone	Target Date	Status
DFIRM completion incorporating coastal studies for Jefferson, Franklin, and Wakulla counties	2014	Complete
Coastal remapping studies for Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties	2016	Coastal studies are underway
Risk Map products for each HUC 8 watershed within the District	2024	Apalachee Bay/St. Marks River watershed is in Discovery; Lower Ochlockonee River, Chipola River, New River, Apalachicola River and Apalachicola Bay have approved Discovery Reports and studies have been initiated; Pensacola Bay and Perdido River and Bay watersheds have Discovery Reports under development

1.8 Mission Support

The District is continuing to make substantial investments to improve operational effectiveness and public service. Significant improvements were made in security, controls, information systems, applications, and organizational performance. Systems implemented include asset management, WEX fleet management, Microsoft SharePoint document management, Aquarius hydrologic software, a new external web site, a new Intranet site, an online web reservation system for District lands, creation of social media sites, implementation of contract management database, and retirement of legacy custom in-house developed applications with industry standard systems. In addition, upgrades were made to accounting systems, geographic information systems, network technologies and server systems. Information technology improvements include relocation of network switches, rewiring of HQ building to support future VOIP capability, improvements to audiovisual systems, and infrastructure improvements to support disaster recovery. Projects underway include adoption of the St Johns River Water Management District e-permitting system, creation of MFL databases, and additional retirement of legacy systems with industry standard applications.

New web pages were created for each District recreation area, and an online reservation system was created to improve public access to improved campsites. In addition, the initial phase of a program to replace and improve signage on District lands was completed.

The first phase of a land management database was completed. This database provides an inventory of pine forest resources and will enable the District to project future growth and yield estimates to forecast long-term timber revenues, and will assist with the planning of timber harvests and other land and timber management activities.

Chapter Two: Minimum Flows and Levels Annual Priority List

Section 373.042, F.S., requires each water management district to develop minimum flows and levels (MFLs) for specific surface and ground waters within their jurisdiction. The MFL for a given waterbody is the limit at which further withdrawals would be significantly harmful to the water resources or ecology of the area. MFLs are established using best available data, and consideration is given to: natural seasonal fluctuations, non-consumptive uses, and environmental values associated with coastal, estuarine, riverine, spring, aquatic, and wetlands ecology as specified in section 62-40.473, F.A.C.

MFL establishment involves a series of steps including identification of priority waterbodies, data collection, technical assessments, peer review, public involvement, rule-making, and rule adoption. Adopted MFLs are considered when reviewing consumptive use permit applications. A recovery or prevention strategy must be developed for any waterbody where consumptive uses are currently or anticipated within the next 20 years to result in flows or levels below an adopted MFL.

The NWFWMD FY 2014-2015 MFL priority list and schedule includes four first-magnitude springs (St. Marks River Rise, Wakulla Spring, Econfina Creek and Gainer Springs Complex, and Jackson Blue Spring), one second-magnitude spring (Sally Ward Spring), two coastal aquifer systems, Deer Point Lake reservoir, and the Yellow River and Shoal River system (Table 2.1). This list represents an environmentally protective MFL program, scheduled to be implemented in a realistic, technically sound, and achievable manner. Additional waterbodies will be scheduled in future years (Tables 2.2 through 2.3 and Figure 2.1).

The District continues to move forward expeditiously with MFL development. Work on five MFL waterbodies is underway. A Work Plan, which describes the MFL development process and proposed technical scope of work, has been developed for the St. Marks River Rise, Sally Ward Spring, and Wakulla Spring system. Work plans will be completed in early 2015 for Jackson Blue Spring and the coastal Floridan aquifer in Planning Region II (Okaloosa, Santa Rosa, and Walton counties). The technical assessments for each MFL are expected to require approximately three to five years of data collection and analysis.

During 2014, work was initiated to construct 15 new monitor wells and nine new surface water monitoring sites to support MFL development for Wakulla Spring, Sally Ward Spring, and the St. Marks River Rise. Enhanced monitoring in this region will support the development of hydrologic models that are needed to evaluate the complex system. It is anticipated that the technical assessment for the St. Marks River Rise, a first-magnitude spring in southeastern Leon County, will be completed in 2018. The data and hydrologic models developed for the St. Marks River Rise will also support MFL establishment for nearby Wakulla Spring and Sally Ward Spring. Technical assessments for these two waterbodies are scheduled to be complete in 2020. Completion of each technical assessment will be followed by a rulemaking process.

During FY 2014-2015, enhanced hydrologic monitoring, ecologic and bathymetric data collection, and the development of a conceptual groundwater flow model will be performed to support MFL development for Wakulla Spring, Sally Ward Spring, and the St. Marks River Rise. Following completion of the Work Plans, new monitor wells are anticipated to be constructed and data collected to support MFL development for Jackson Blue Spring and the coastal Floridan aquifer in Planning Region II.

The FY 2014-2015 priority list and schedule are subject to the availability of funds, data collection and analysis needs, climatic conditions, peer review, and rule challenges. The list and schedule will be re-evaluated annually, and adjustments will be made as appropriate.

Table 2.1 Northwest Florida Water Management District MFL Priority List (2015)[1]

Waterbody	Type[2, 3]	County	MFL Initiation	Estimated Completion	
				Technical Assessment[4]	Rule Adoption
St. Marks River Rise	Spr (1st)	Leon	2013	2018	2019
Wakulla Spring	Spr (1st)	Wakulla	2013	2020	2021
Sally Ward Spring	Spr (2nd)	Wakulla	2013	2020	2021
Floridan Aquifer, Coastal Region II	A	Coastal Santa Rosa, Okaloosa, Walton	2014	2020	2021
Jackson Blue Spring	Spr (1st)	Jackson	2014	2022	2023
Floridan Aquifer, Coastal Bay County	A	Bay	2018	2023	2024
Econfina Creek & Spring Complex	Spr (1st & 2nd) and R	Bay, Jackson, Washington	2019	2024	2025
Deer Point Lake	L	Bay	2020	2025	2026
Yellow River and Shoal River	R	Santa Rosa, Okaloosa, Walton	2021	2026	2027

Table 2.2 Waterbodies to be Scheduled in Future Years

Waterbody	Type[2, 3]	County	
Floridan Aquifer – Inland Walton County	A	Walton	MFL Technical Assessments will be initiated as soon as fiscal and staffing resources allow.
Sand and Gravel Aquifer	A	Santa Rosa, Okaloosa	
Morrison Spring	Spr (2nd)	Walton	
Holmes Blue Spring	Spr (2nd)	Holmes	
Blue Hole Spring	Spr (2nd hist.)	Jackson	
Ponce de Leon Spring	Spr (2nd)	Holmes	
Washington Blue & Potter Spring Complex	Spr (2nd)	Washington	
Baltzell Spring group/upper Chipola Spring complex	Spr (2nd) and R	Jackson	
Holmes Creek & Spring complex	Spr (2nd) and R	Washington	
Telogia Creek	R	Liberty, Gadsden	

Table 2.3 Water Bodies Subject to Regulatory Reservations

Apalachicola River	Jackson, Calhoun, Gulf, Gadsden, Liberty, Franklin	The magnitude, duration, and frequency of observed flows are reserved, essentially in total, all seasons for the protection of fish and wildlife of the Chipola River, Apalachicola River, associated floodplains and Apalachicola Bay (40A-2.223, F.A.C.)
Chipola River	Jackson, Calhoun, Gulf	

Footnotes

[1] Priority list and schedule will be re-evaluated on an annual basis.

[2] Waterbody Type: A=aquifer, L=lake, R=river, Spr=spring (1st or 2nd magnitude).

[3] All 1st magnitude springs, and 2nd magnitude springs within state or federal lands purchased for conservation, are required to be listed according to section 373.042, F.S.

[4] It is anticipated that each proposed MFL will be submitted for scientific peer review following the technical assessment.

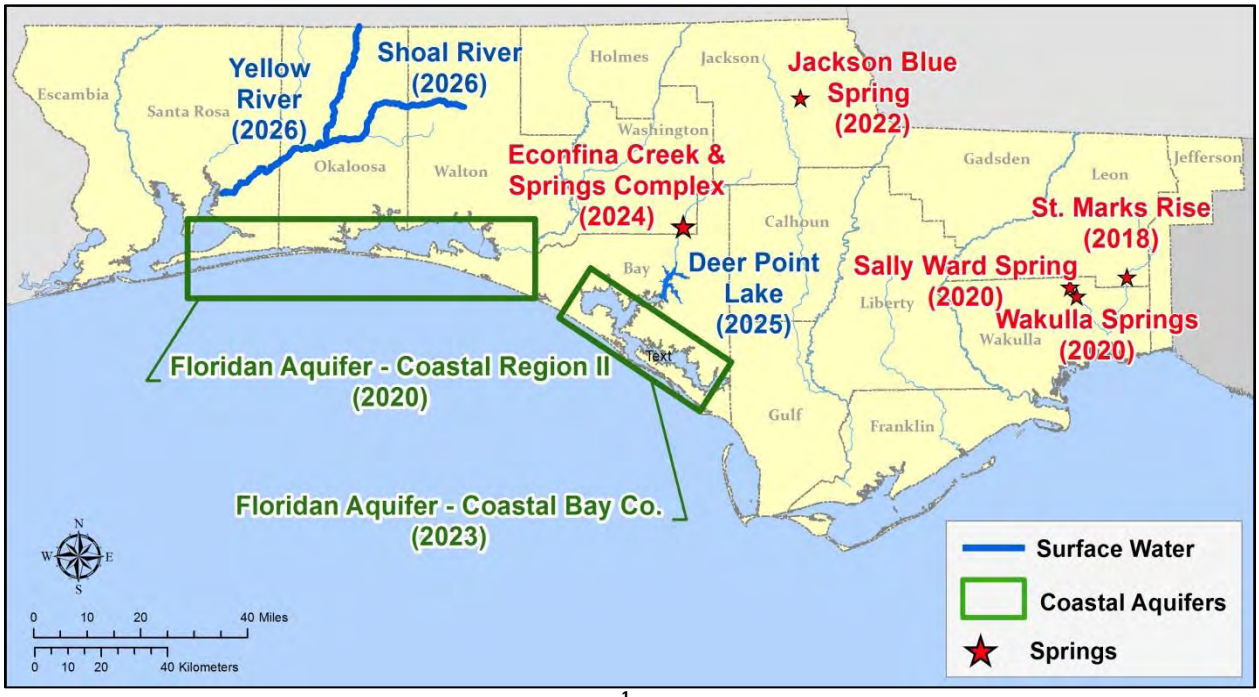

Figure 2.1 NWFWMD MFL Priority Waterbodies[1]

[1]2014-2015 schedule; completion dates of MFL technical assessments shown in parentheses

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Chapter Three: Annual Five-Year Capital Improvements Plan

3.1 Introduction

The five-year capital improvements plan (CIP) includes projected revenues and expenditures for capital improvements from fiscal years 2014-2015 through 2018-2019. As directed by section 373.536(6)(a)(3), F.S., the CIP has been prepared in a manner comparable to the fixed capital outlay format set forth in section 216.043, F.S. The format for this plan is drawn from the standard budget reporting format prescribed by the Executive Office of the Governor. Capital improvement projects may be budgeted in either of two standard program categories. Those programs and their activities and sub-activities are represented below:

2.0 Acquisition, Restoration and Public Works
- 2.1 Land Acquisition
- 2.2 Water Source Development
  - 2.2.1 Water Resource Development Projects
  - 2.2.2 Water Supply Development Assistance
  - 2.2.3 Other Water Source Development Activities
- 2.3 Surface Water Projects
- 2.4 Other Cooperative Projects
- 2.5 Facilities Construction & Major Renovations
- 2.6 Other Acquisition and Restoration Activities

3.0 Operation and Maintenance of Lands and Works
- 3.1 Land Management
- 3.2 Works
- 3.3 Facilities
- 3.4 Invasive Plant Control
- 3.5 Other Operation and Maintenance Activities

The only activities and sub-activities under program *2.0 Acquisition, Restoration and Public Works* that may include capital improvement projects are: 2.1 Land Acquisition, 2.2.1 Water Resource Development Projects, 2.2.3 Other Water Source Development Activities, 2.3 Surface Water Projects, and 2.5 Facilities Construction and Major Renovations. The Northwest Florida Water Management District has projects in each of these categories.

The only activities under program *3.0 Operation and Maintenance of Lands and Works* that may include capital improvement projects are: 3.1 Land Management and 3.2 Works. Of these, the Northwest Florida Water Management District only has capital improvement projects in activity 3.1.

The CIP includes expenditures for basic construction costs (permits, inspections, site development, etc.) and other project costs (land, survey, existing facility acquisition, professional services, etc.).

A district's CIP contains only those projects that will be owned and capitalized as fixed assets by the district. The District does not capitalize construction projects having a total project cost of less than $50,000.

3.2 Five-Year Capital Improvements Plan

The purpose of the Five-Year Capital Improvements Plan (CIP) is to project future needs and anticipate future funding requirements to meet those needs. The CIP includes expenditures for basic construction costs (permits, inspections, site development, etc.), other project costs (land, survey, existing facility acquisition, professional services, etc.) and anticipated changes in program costs, changes in maintenance costs and changes in utility costs. The development and construction of all capital projects are budgeted either under program heading *2.0 Acquisition, Restoration and Public Works* or under program heading *3.0 Operation and Maintenance of Lands and Work*s.

The District's capital improvements projects are categorized according to the following activities:

- Land Acquisition;
- Surface Water Projects;
- Facilities Construction and Major Renovations; and
- Land Management.

The District's Florida Forever Work Plan, Land Acquisition Plan, Five-Year Water Resource Development Work Plan, Land Management Plan and Northwest Florida Umbrella, Watershed-based, Regional Mitigation Plan may also provide valuable insight to the District's long range capital improvements plan.

Table 3.1 NWFWMD Five Year Capital Improvements Plan, Fiscal Years 2014-2018

2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS					
2.1 Land Acquisition					
Revenues ($)	**Fiscal Year**				
	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Water Management Lands Trust Fund	0	0	0	0	0
Florida Forever	0	0	0	0	0
District Land Acquisition Reserve	47,210	70,935	75,000	75,000	75,000
Land Management Fund	0	0			
TOTAL	**47,210**	**70,935**	**75,000**	**75,000**	**75,000**
Expenditures ($)	**Fiscal Year**				
	2014-15	**2015-16**	**2016-17**	**2017-18**	**2018-19**
Florida Forever - Land Acquisitions	0	0	0	0	0
Land Acquisition	47,210	70,935	75,000	75,000	75,000
Water Management Lands Trust Fund	0	0	0	0	0
Land Management Fund	0	0	0	0	
TOTAL	**47,210**	**70,935**	**75,000**	**75,000**	**75,000**

2.2 Water Source Development

Revenues ($)	Fiscal Year 2014-15	2015-16	2016-17	2017-18	2018-19
Florida Forever	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**

Expenditures ($)	Fiscal Year 2014-15	2015-16	2016-17	2017-18	2018-19
Florida Forever - Land Acquisitions	0	0	0	0	0
TOTAL	**0**	**0**	**0**	**0**	**0**

2.3 Surface Water Projects

Revenues ($)	Fiscal Year 2014-15	2015-16	2016-17	2017-18	2018-19
FDOT Mitigation Funds	2,500,000	2,250,000	1,500,000	1,300,000	1,100,000
TOTAL	**2,500,000**	**2,250,000**	**1,500,000**	**1,300,000**	**1,100,000**

Expenditures ($)	Fiscal Year 2014-15	2015-16	2016-17	2017-18	2018-19
FDOT Mitigation	2,500,000	2,250,000	1,500,000	1,300,000	1,100,000
TOTAL	**2,500,000**	**2,250,000**	**1,500,000**	**1,300,000**	**1,100,000**

2.5 Facilities Construction and Major Renovations

Revenues ($)	Fiscal Year 2014-15	2015-16	2016-17	2017-18	2018-19
Florida Forever	0	0	0	0	0
Water Management Lands Trust Fund	0	0	0	0	0
Land Management Fund	80,000	20,000	0	0	0
TOTAL	**80,000**	**20,000**	**0**	**0**	**0**

Expenditures ($)	Fiscal Year 2014-15	2015-16	2016-17	2017-18	2018-19
Marianna Field Office Consolidation	80,000	20,000	0	0	0
TOTAL	**80,000**	**20,000**	**0**	**0**	**0**

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 Land Management

Revenues ($)	Fiscal Year 2014-15	2015-16	2016-17	2017-18	2018-19
Water Management Lands Trust Fund	0	0	0	0	0
Florida Forever	0	0	0	0	0
Land Management Fund	1,080,000	37,500	50,000	50,000	50,000
Line Item 1638A - 2013-2014 GENERAL APPROPRIATIONS ACT.	377,287	0	0	0	0
Line Item 1645 - 2014-2015 GENERAL APPROPRIATIONS ACT.	300,000	150,000	0	0	0
TOTAL	**1,757,287**	**187,500**	**50,000**	**50,000**	**50,000**

Expenditures ($)	Fiscal Year 2014-15	2015-16	2016-17	2017-18	2018-19
Canoe/Small Boat Launch(s)	0	0	0	0	0
Spring Restoration & Protection Project; Phase II - Williford Spring	1,202,287	5,000	0	0	0
Streambank Restoration & Public Recreation – Cooperative with Local Governments	255,000	32,500	0	0	
Public Access Road Construction	0	0	0	0	0
Streambank and Solution Hole Restoration and Protection	0	0	50,000	50,000	50,000
Devil's Hole Spring Restoration	125,000	62,500	0	0	0
Cotton Landing Streambank Restoration and Protection	175,000	87,500	0	0	0
TOTAL	**1,757,287**	**187,500**	**50,000**	**50,000**	**50,000**

TOTAL CAPITAL EXPENDITURES ($)	**4,384,497**	**2,528,435**	**1,625,000**	**1,425,000**	**1,225,000**

3.3 Project Descriptions

The following pages provide a brief description of each capital improvements plan activity.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.1 LAND ACQUISITION

Project Title: Save Our Rivers, Preservation 2000 and Florida Forever Land Purchases - No land acquisitions are anticipated in FY 2014-2015.

Type: Unimproved Land

Physical Location: Undetermined - Within the District's 16-county boundaries

Square Footage/Physical Description: N/A

Expected Completion Date: N/A

Historical Background/Need for Project: To protect and preserve the water resources within the District's 16-county boundaries.

Plan Linkages: Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Purchase price of land is unknown at this time.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): Land acquisition ancillary costs are unknown at this time.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): N/A

Anticipated Additional Operating Costs/Continuing: Varied. Maintenance costs to be determined based on the locations and types of lands ultimately acquired.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.2 WATER SOURCE DEVELOPMENT

Project Title: Save Our Rivers and Florida Forever Land Purchases - No land acquisitions are anticipated in FY 2014-2015.

Type: Unimproved Land

Physical Location: Undetermined - Within the District's 16-county boundaries

Square Footage/Physical Description: N/A

Expected Completion Date: N/A

Historical Background/Need for Project: To protect and preserve the water resources within the District's 16-county boundaries.

Plan Linkages: Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Purchase price of land is unknown at this time.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): Land acquisition ancillary costs are unknown at this time.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): N/A

Anticipated Additional Operating Costs/Continuing: Varied. Maintenance costs to be determined based on the locations and types of lands ultimately acquired.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.3 SURFACE WATER PROJECTS

Project Title: Regional Mitigation for FDOT Wetlands Impacts

Type: Wetlands, waterbodies and buffers that qualify as mitigation for FDOT wetland impacts

Physical Location: Various locations - Watersheds within the District

Square Footage/Physical Description: Land purchases, land management restoration activities (shrub reduction, herbicide, vegetative planting, etc.), and/or construction of various capital restoration structures (e.g., bridges, low water crossings, water control structures).

Expected Completion Date: Program is ongoing, year-to-year.

Historical Background/Need for Project: Section 373.4137, F.S., provides that the districts mitigate for FDOT wetland impacts that are not within the service area of a private mitigation bank or when credits from a mitigation bank are not deemed appropriate.

Plan Linkages: Northwest Florida Umbrella, Watershed-based, Regional Mitigation Plan, Florida Forever Work Plan, SWIM plans

Area(s) of Responsibility: Water Quality, Flood Protection and Natural Systems.

Alternative(s): Specific projects may be excluded from the mitigation plan, in whole or in part, upon the election of the FDOT, a transportation authority if applicable, or the District.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Unknown at this time. Multiple projects. Costs are determined by project type (land acquisition, bridge construction, low water crossing, etc.).

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): An amount equal to 15 percent of the total construction and land acquisition costs are estimated for engineering design work, surveying, land appraisals, environmental audits, etc.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Unknown at this time. Multiple projects. Costs are determined by project type (land acquisition, bridge construction, low water crossing, etc.).

Anticipated Additional Operating Costs/Continuing: Unknown at this time. Multiple projects. Costs are determined by project type (land acquisition, bridge construction, low water crossing, etc.)

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.5 FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

Project Title: Marianna Field Office Consolidation Project

Type: Land Management Field Office

Physical Location: 6418 E. Hwy. 20, Youngstown, Florida 32466

Square Footage/Physical Description: 1,600 square feet (approximate), steel office building

Expected Completion Date: September 30, 2015

Historical Background/Need for Project: Until 2012, the Marianna Field Office (MFO) consisted of up to eight employees in the Resource Regulation and Lands Divisions who were housed in a large steel building and canopy (7,031 sq. ft. in total). Currently the MFO consists of three Lands Division employees (2-FTE + 1-OPS) who manage District lands in the Eastern Land Management Region. In addition, the District's Forestry Operations field office (modular building) located at the Econfina Field Office (EFO) complex is 20 years old, needs expensive repairs and maintenance, and houses three FTEs (2-Lands + 1-Resource Mgt. employees). In an effort to reduce overall land management facility and operational costs, the District is proposing to eliminate the MFO and consolidate the MFO and Forestry Operations employees into one building, which will be located at the EFO.

Plan Linkages: Florida Forever Work Plan, District Strategic Plan, District Budget

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): NWFWMD could delay the potential project, but repair and maintenance costs for the Forestry Operations and MFO facilities will continue to increase and long-term land management facility and operational cost savings will not be realized if these two aging and inadequate facilities are not consolidated into one smaller building at one central location.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Estimated at $100,000, (FY 2014-2015 - $80,000 & FY 2015-2016 - $20,000).

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): $10,000

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): $5,000

Anticipated Additional Operating Costs/Continuing: Estimated at $10,000

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Public Waterway Access

Type: Canoe/Small Boat Launch(s)

Physical Location: TBD

Square Footage/Physical Description: TBD

Expected Completion Date: TBD

Historical Background/Need for Project: Suitable public waterway access, especially in sensitive riparian, lacustrine and floodplain areas on District lands.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): NWFWMD could delay potential projects when sites are identified, however adverse stormwater and shoreline impacts will continue, i.e., erosion, siltation and sedimentation issues, which would adversely impact water quality in stream, lakes and rivers.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): N/A

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): N/A

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): N/A

Anticipated Additional Operating Costs/Continuing: N/A

PROGRAM: 3.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 3.1 FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

Project Title: Econfina Springs Complex - Spring Restoration & Protection Project; Phase II - Williford Spring.

Type: Spring Restoration and Protection Project

Physical Location: Econfina Creek Water Management Area

Square Footage/Physical Description: Ongoing restoration and protection of Williford Spring, a second-magnitude spring. Engineering designs include, but are not limited to, the following: 1) spring vent sediment removal; 2) spring bank and shoreline restoration and protection utilizing geotechnical materials and native vegetation; 3) enhanced spring and spring-run protection with the construction of an elevated mono-pile boardwalk which provides access to a canoe dock/gangway for use by canoeists/kayakers; 4) associated stormwater facilities to prevent sediment from entering the spring pool; 5) spring entry steps and limestone terrace for public access; 6) connector and interpretative trail construction in sensitive karst areas to protect water resources, provide public access and link to Pitt and Sylvan Springs (Phase I); 7) island and shoreline restoration; 8) associated public access and recreation facilities including parking area, picnic pavilions, a compositing toilet, sidewalks, boardwalks, a spring view deck, etc. and; 9) landscape restoration utilizing native species at all sites. Construction was initiated during May 2014.

Expected Completion Date: The project is scheduled for completion by or before April 30, 2015.
A site stabilization and landscape plant grow-in period will occur after facilities construction has been completed and is anticipated to last until May 1, 2016 or for a minimum 12-month period. Signage will be completed during the grow-in period. The site is scheduled to open on or before May 1, 2016, subject to successful landscape plant grow-in, site stabilization, weather factors, etc.

Historical Background/Need for Project: Project will restore and protect a significant second-magnitude spring by removing from one to three feet of sediment, addressing stormwater issues, preventing erosion, enhancing water quality, protecting natural systems and restoring and enhancing riparian and associated aquatic habitats adversely impacted in the past due to unregulated public access and recreational use.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): NWFWMD could delay the project, which would adversely impact Williford Spring and the water quality of Econfina Creek (a Class I Waterbody).

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Currently at $1,550,345.66, subject to construction completion.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): $549,028 to date for engineering services (preconstruction, bidding and construction phase services), biological/geotechnical services, archaeological oversight (surveys and sediment removal), boundary line survey (next to adjacent private landowner), security fencing, purchase of canoe dock and pavilions and for construction contractor. In addition, $75,000 in FY 2014-2015 for resource protection, public safety and interpretive signage.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: Estimated at $10,000 for site security, management and maintenance.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Streambank Restoration and Protection and Repairs and Improvements to Hightower, Spurling and Live Oak Landings – Cooperative Local Government Agreement (Washington County).

Type: Streambank Restoration and Protection and Public Access and Recreation

Physical Location(s): Hightower, Spurling and Live Oak landings (Washington County) – Choctawhatchee River/Holmes Creek WMA.

Square Footage/Physical Description: Restoration and protection of approximately 500 feet of eroded shoreline or streambank at three boat launch locations along Holmes Creek utilizing geotextile bags to create a vegetative retaining wall, as well as repair and improvement of these sites, including but not limited to: 1) construction of four stormwater facilities; 2) demolition, regrading and construction of a boat launch at Live Oak Landing; 3) access road improvements; 4) parking area improvements at all three sites; 5) construction of a bank fishing pier at Live Oak Landing; 6) short boardwalk and spring observation deck at Hightower Landing spring; 7) installation of protective wooden rail fencing at all sites and; 8) development of picnic areas and four primitive campsites at Spurling Landing.

Expected Completion Date: On or before September 30, 2015, subject to water levels and receipt of the Spurling Landing permit. Permits have been received for Live Oak and Hightower Springs landings and construction was initiated at Live Oak Landing in November 2014.

Historical Background/Need for Project: Significant streambank erosion is occurring at all three sites and lack of stormwater treatment facilities are causing siltation and sedimentation issues at all three sites, especially at Hightower and Live Oak landings. In addition, the boat launch at Live Oak Landing cannot be used properly during low-water periods, limiting public access and recreation. Enhanced public access and recreation facilities are also needed, especially at Live Oak and Spurling landings.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): NWFWMD could delay the project and shorelines or streambanks will continue to erode; stormwater will continue to impact the water quality of Holmes Creek; the public will have difficulty accessing Holmes Creek and adjacent District lands for recreation purposes, and; public recreation opportunities will be diminished.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): $200,000.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): $55,000 ($45,000 for District-provided geotextile bags and $10,000 for rail fencing, picnic tables, grills, fire rings, etc. for primitive campsites).

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None. Per the agreement, Washington County will maintain, cleanup sites and provide law enforcement patrols.

Anticipated Additional Operating Costs/Continuing: County responsibility.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Public or Land Management Access Road Construction (Materials Only) Project(s) - No projects are anticipated in FY 2014-2015 due to lack of adequate funds.

Type: Single or Double Lane Paved Public Access Road (Approx. 30-foot wide)

Physical Location(s): St. Andrew's Tract - Section 9 (Hwy. 167, SW Jackson Co.); Altha Tract - Johnny Boy Landing and Look And Tremble Roads (Calhoun County) and; Beaverdam Creek Tract - Harry Donar Road (Liberty County).

Square Footage/Physical Description: – TBD
Expected Completion Date: N/A

Historical Background/Need for Project: Road(s) is (are) currently sand or clay that experience(s) considerable stormwater impacts (erosion/wetland habitat sedimentation and siltation) during heavy rainfall events. Paving the road(s) will lessen stormwater impacts and provide enhanced public/land management access to a portion of the WMA(s).

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): NWFWMD could delay the project, which would allow the road to continue to erode and impact adjacent water resources, hinder vehicular access by the public to District lands, etc.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Cooperative project(s) [Local Govt. Agreements] with Calhoun, Jackson or Liberty Counties – Funding for asphalt only. Counties will provide all labor and equipment.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): N/A.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: County responsibility.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Streambank and Solution Hole Restoration and Protection

Type: Shoreline and/or Solution Hole Restoration and Protection

Physical Location: District-wide - TBD

Square Footage/Physical Description: Shoreline and/or solution hole bank restoration and protection utilizing geotextile bags and providing for public access while protecting water resources, subject to engineering design and permitting.

Expected Completion Date: TBD

Historical Background/Need for Project: Shorelines and solution holes are experiencing significant bank erosion and sedimentation due to adverse impacts caused by unregulated public use on sensitive slope areas. Projects will stabilize highly erodible slopes while providing public access and recreational use.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): District could delay project(s), which may lead to further degradation of shorelines and/or solution holes, which may cause these areas to be closed to public access and use.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): $\geq$ $50,000.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): The District will utilize in-house staff for engineering design services and in-house staff and Public Works Inmate Crew for construction or enter into cooperative agreements with local governments and provide funding.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): $0

Anticipated Additional Operating Costs/Continuing: None. Public Works Inmate Crew will conduct site cleanup and maintenance.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Devil's Hole Spring Streambank Restoration and Protection

Type: Spring and Streambank Restoration and Protection

Physical Location: Econfina Creek

Square Footage/Physical Description: Spring and streambank restoration and protection utilizing geotextile bags and providing for public access while protecting water resources, subject to engineering design and permitting.

Expected Completion Date: On or before September 30, 2016

Historical Background/Need for Project: Devil's Hole Spring and the adjacent Econfina Creek streambank are experiencing significant bank erosion and sedimentation due to adverse impacts caused by unregulated public use on sensitive slope areas. Project will restore, stabilize and protect highly erodible streambank while providing public access and enhanced recreational use.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): District could delay project(s), which may lead to further degradation of Devil's Hole Spring and the adjacent streambank, which may adversely impact Class I water resources and may cause these areas to be closed to public access and use.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Estimated at $125,000.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): TBD

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): None

Anticipated Additional Operating Costs/Continuing: None. Site security is already being provided and a Public Works Inmate Crew will provide site cleanup and maintenance.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Cotton Landing Streambank Restoration and Protection

Type: Streambank Restoration and Protection

Physical Location: Holmes Creek, approximately three miles northeast of Vernon, Florida.

Square Footage/Physical Description: Streambank restoration and protection utilizing geotextile bags and providing for public access while protecting water resources, subject to engineering design and permitting.

Expected Completion Date: On or before September 30, 2016

Historical Background/Need for Project: The Holmes Creek streambank at Cotton Landing is experiencing significant bank erosion and sedimentation due to adverse impacts caused by prolonged drought, inadequate water access facilities and unregulated public use on sensitive streambank areas. Project will restore, stabilize and protect highly erodible streambanks while providing for enhanced public access and recreational use.

Plan Linkages: District's Florida Forever Work Plan

Area(s) of Responsibility: Water Supply, Water Quality, Flood Protection and Natural Systems

Alternative(s): District could delay the project, which may lead to further degradation of the Holmes Creek streambank and water quality, which may cause these areas to be closed to public access and use.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): estimated at $175,000.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): TBD

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): $0

Anticipated Additional Operating Costs/Continuing: None. Site security is already being provided and a Public Works Inmate Crew will provide site cleanup and maintenance.

3.4 Appendix

Water Management District Standard Format Program Definitions for Programs and Activities Found in the Northwest Florida Water Management District's Capital Improvements Plan.

2.0 Acquisition, Restoration and Public Works

This program includes the development and construction of all capital projects (except for those contained in Program 3.0), including water resource development projects/water supply development assistance, water control projects, and support and administrative facilities construction; cooperative projects; land acquisition (including Save Our Rivers/Preservation 2000/Florida Forever) and the restoration of lands and water bodies.

2.1 Land Acquisition: The acquisition of land and facilities for the protection and management of water resources. This activity category does not include land acquisition components of "water resource development projects," "surface water projects," or "other cooperative projects."

2.2 Water Source Development: The acquisition of land and facilities for the protection and management of water resources. This activity category includes land acquisition components of "water resource development projects," "water supply development assistance projects," or "other water source development activities."

2.3 Surface Water Projects: Those projects that restore or protect surface water quality, flood protection, or surface-water related resources through the acquisition and improvement of land, construction of public works, and other activities.

2.5 Facilities Construction and Major Renovations: Design, construction, and significant renovation of all district support and administrative facilities.

3.0 Operation and Maintenance of Lands and Works

This program includes all operation and maintenance of facilities, flood control and water supply structures, lands, and other works authorized by Chapter 373, F.S.

3.1 Land Management (P2000/Save Our Rivers/Florida Forever): Maintenance, custodial, public use improvements, and restoration efforts for lands acquired through Save Our Rivers, Preservation 2000, Florida Forever or other land acquisition programs.

Chapter Four: Water Supply

4.1 Five-Year Water Resource Development Work Program: FY 2013-2014 Update

Introduction

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

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

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

Implementation of strategies detailed in the WRDWP will help 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.

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 4.1). The initial District Water Supply Assessment (WSA) (NWFWMD 1998) evaluated the sufficiency of supplies to meet demands through 2020 and concluded that only Region II (Santa Rosa, Okaloosa, and Walton counties) required a RWSP. The primary resource concern identified in Region II is a pronounced drawdown in the coastal Floridan aquifer caused by long term pumping.

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

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

The District again updated the WSA in 2013, projecting water demands and evaluating source sufficiency through 2035 (Countryman et al. 2014). The report showed that public supply remains the largest use category for the District, accounting for approximately 45 percent of the demand in 2010. It is expected that this will continue to hold true through the 2015-2035 planning period. The Governing Board discontinued regional water supply planning for Region V due to the completion of surface water source development in Gulf County and adequacy of water supplies in Franklin County under revised growth projections.

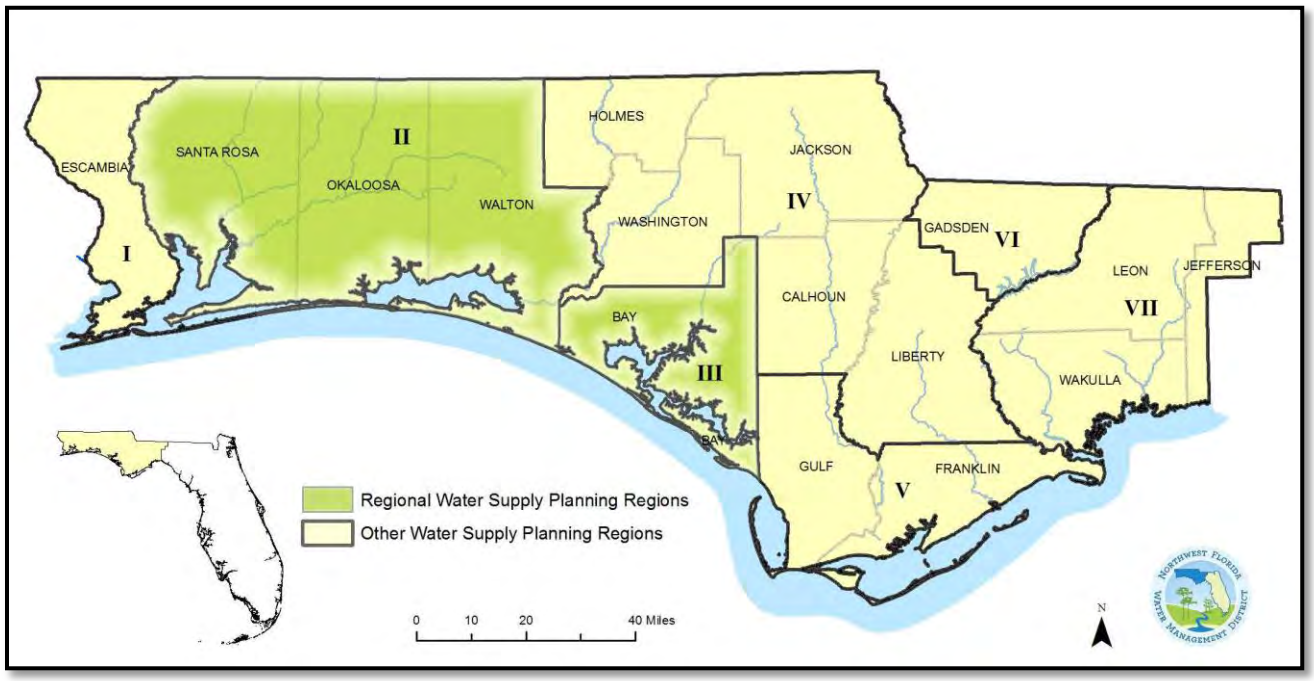

Figure 4.1 NWFWMD Water Supply Planning Regions

Changes from Previous Work Plan Report

As indicated above, regional water supply planning has been discontinued for Region V, given completion of the major alternative water supply development project within the Region V RWSP and the sufficiency of current and anticipated water sources to meet water needs through the 2035 (Countryman et al. 2014). Reflecting this, the FY 2014-2015 WRDWP no longer includes a separate section describing water resource development project implementation within Region V. The District continues to work with Region V communities to address resource needs and concerns and is continuing hydrologic data collection and analysis associated with resource monitoring and development of minimum flows and levels.

Funding for Water Resource and Supply Development

The state constitution limits the NWFWMD to 0.05 mills of *ad valorem* taxing authority, which is 1/20th of that afforded the other four water management districts. The District's fiscal year (FY) 2013-2014 tax millage rate, as set by the Governing Board, was 0.04. The budget for FY 2014-2015 includes a millage rate of 0.039. Based on taxable values provided by the 16 counties in the District, tax collections are projected to be $3,381,733 for FY 2014-2015. With a recurring operating budget of $16,103,937, the Northwest Florida Water Management District must rely on state and other revenue sources to conduct many of its programs. Among those the District looks to for water supply planning and water resource development are the following:

- Water Management Lands Trust Fund;
- Legislative special appropriations;
- District General Fund;
- Federal grants;
- Water Protection and Sustainability Program Trust Fund;
- Florida Forever; 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). To the extent possible, the District applies limited ad valorem funding to augment state appropriations for basic water supply planning functions. Because ad valorem funding is inadequate to support implementation of major water resource and supply development projects and initiatives, the District also applies available encumbered funds and reserves for priority projects.

The Water Protection and Sustainability Program Trust Fund (WPSPTF), established by the 2005 Legislature, enabled the District to provide cost-share assistance for construction of alternative water supply development projects and priority water resource development and springs protection activities. Projects funded under the WPSPTF are listed in Appendix A. 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.

In FY 2013-2014, the District approved $10 million from reserve funds for water supply development assistance grants across northwest Florida. The District extended the grant program another year with approximately $8 million of new and carryover reserve funds dedicated to water supply development assistance during FY 2014-2015. This represents approximately 74 percent of the reserve funds within the District's FY 2014-2015 budget.

Funding budgeted for water resource development is listed below in summary tables for regions II and III (tables 2 and 5, respectively). The approved water resource development funding for FY 2014-2015 is $2,481,500. The anticipated five year water resource development implementation cost through FY 2018-2019 is $7,203,700.

Region II: Santa Rosa, Okaloosa, and Walton Counties

Since the 1940s, Santa Rosa, Okaloosa, and Walton counties (Figure 4.2) have been characterized by significant growth in water demands within coastal portions of the region. Long-term pumping of the coastal Floridan aquifer caused formation of a substantial cone of depression, creating a risk of significant salt water intrusion and damage to public supply wells. Resource regulation and water supply planning and development over the past two decades have focused on reducing coastal withdrawals, constraining coastal demand, and developing inland water supply sources as alternatives to coastal groundwater.

Chapter 40A-2, F.A.C., established the coastal Water Resource Caution Area (WRCA) across the southern reach of all three counties (Figure 4.2). 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.

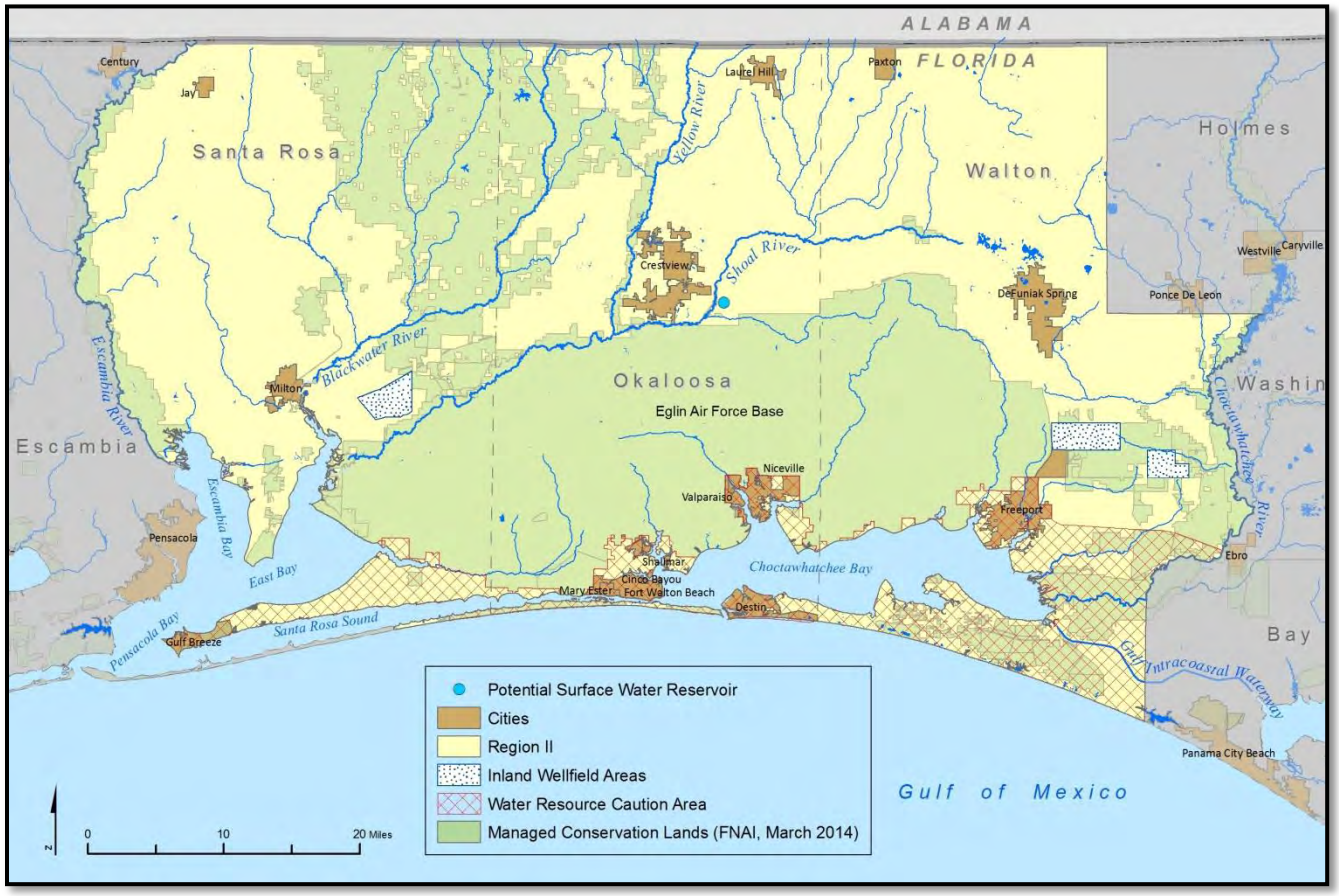

Figure 4.2 Water Supply Planning Region II

The District's first RWSP was approved by the Governing Board for Region II in February 2001 (Bartel et al. 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 (Busen and Bartel 2012). 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.

According to the 2013 WSA Update, public supply accounted for approximately 46 million gallons per day (MGD), or 62 percent of 2010 water use in Region II, with recreational water use comprising an additional 14 MGD, or nearly 19 percent (Countryman et al. 2014). It is expected that public supply demand within the region will continue to increase through the planning horizon, though its relative proportion of water use will decline slightly.

Region II Water Resource Development

The Region II RWSP includes 10 water resource development projects encompassing strategies for developing water resources in support of alternative water supply development. These are summarized in Table 4.1. Descriptions of the strategies and their current progress follow. The quantities of water identified in the table indicate preliminary figures based on regional scale model simulations of groundwater systems, as well as regional planning objectives and application of literature-based factors for reuse and water conservation. The amounts will be refined upon completion of the identified activity.

Table 4.1 Region II Water Resource Development Projects

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

Floridan Aquifer Sustainability

Limiting further salt water intrusion into the coastal Floridan aquifer and sustaining the aquifer as a viable water supply source is a primary focus of the Region II RWSP. Models of the Floridan aquifer were previously developed to include a western domain encompassing Santa Rosa and western Okaloosa

counties and an eastern domain that includes eastern Okaloosa and Walton counties. The model has been used to evaluate alternative withdrawal scenarios from the coastal Florian aquifer.

Model simulations were made to predict the extent of salt water intrusion through 2100 for the eastern and western model domains. Results indicate that salt water intrusion into potable portions of the Floridan aquifer continue to occur at a slow rate (HydroGeoLogic, Inc., 2007b, HydroGeoLogic, Inc. and Hazlett-Kincaid, Inc. 2007). Principal pathways of saline water intrusion identified include lateral intrusion within the upper Floridan aquifer from beneath the Gulf of Mexico, lateral intrusion from the lower to the upper Floridan aquifer around the edge of the Bucatunna Clay confining unit, intrusion of saline waters where the Bucatunna Clay confining unit is absent (easternmost Choctawhatchee Bay area), and downward vertical leakage through the Intermediate System.

The District plans to refine its groundwater models during the next few years to incorporate newer data and information and updated water demand projections. The new models are anticipated to be used to evaluate future withdrawal scenarios as part of the RWSP update due in 2017. The models will also enable analysis of drawdown effects of increased pumping of the Floridan aquifer in inland areas.

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. A three-dimensional, transient groundwater flow model has been developed for a portion of the Sand-and-Gravel 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. Considerable data were gathered, which involved constructing project-specific monitoring wells, determining aquifer hydraulic properties, mapping aquifer unit thicknesses, and measuring groundwater levels and stream discharge. The groundwater flow model was subsequently developed and calibrated.

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 1.0 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, public supply water withdrawals from the wellfield and vicinity have increased to 5.6 MGD in 2013. Water from the wellfield is being conveyed south to alleviate pumping demand from the Floridan aquifer along the coast.

Previous District evaluations indicate that total groundwater production of up to 18 MGD, inclusive of current withdrawals, may be available from the Sand-and-Gravel aquifer. The 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. Applicants may be required to assess potential local-scale drawdown impacts associated with a proposed well distribution and pumping schedule, prior to obtaining or modifying an Individual Water Use Permit.

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 groundwater. 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. Additional application and assessment, including evaluation of potential wetland effects from future withdrawals, may also be needed.

Development of Surface Water Sources

In 2006, the District and its water supply consultants prepared an analysis of potential surface water supply sources in Okaloosa County, presented in the report "Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates" (PBS&J 2006). This study reviewed the technical and economic feasibility of several alternatives, including direct river withdrawal and riverbank filtration. The District also concurrently reviewed an evaluation of a proposed Yellow River Reservoir and concluded that the proposal was not economically feasible and that its implementation would cause significant environmental impacts and mitigation requirements. Okaloosa County is continuing to evaluate surface waters in the Yellow and Shoal rivers basins as potential future water supply sources. Potential facilities may include direct withdrawal and treatment systems, as well as offline reservoir or other storage facilities.

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, with a single exception, have not been developed, within Region II due to hydrogeologic conditions, economic feasibility, the need for water quality evaluations, and other technical constraints. Destin Water Users has recently developed an ASR system for storage of reclaimed water in the Sand-and-Gravel aquifer. The system's seven wells are permitted for a total of 2.125 MGD annual average daily flow capacity. 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 groundwater 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 groundwater model analyses of the feasibility of additional ASR activities within Region II. A cooperative approach between utilities, the District, and FDEP will be sought for any project development.

Water Reuse Coordination

As of 2013, 25 reuse applications associated with 11 reuse systems in Region II were permitted for public access reclaimed water, producing an estimated 9.1 MGD for public access reuse (FDEP 2013). These facilities supported landscape irrigation for approximately 2,341 residences, 19 golf courses, 13 parks, five schools, and two cooling towers.

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 the City of Freeport and in north-central Okaloosa County. A District-wide grant program initiated in FY 2013-2014, the Water Supply Development Community Assistance Initiative, funded three reuse projects. In Okaloosa County, the City of Niceville received $144,000 for a

Highway 285 reclaimed water main upgrade to increase line capacity. In Santa Rosa County, the City of Gulf Breeze was awarded $345,500 to fund a reclaimed water elevated storage tank for the South Santa Rosa Utility System, and Pace Water System, Inc., was awarded $160,000 for a reclaimed water extension to the Santa Rosa Soccer and Horse Complex. Each of these utilities is matching District grant funds. This grant program is anticipated to continue in FY 2014-2015, with reuse projects eligible for funding.

The Region II RWSP previously identified approximately 5 MGD of new beneficial reuse to offset demands on the coastal Floridan aquifer within Region II. There appears to be considerable opportunity to expand the use of reclaimed water to meet non-potable water needs.

The District is developing a reuse evaluation for northwest Florida that details facility characteristics, issues of concern, and priorities for expanding water reclamation and reuse. Assisting utilities and local governments in developing beneficial reuse projects will remain a priority, with implementation depending on funding availability. Future project emphasis will be focused on opportunities that reduce demand for potable water and provide environmental benefit.

Water Conservation Coordination

A significant effort at water conservation has been underway in Region II for some time, substantially due to regulatory requirements and incentives established within the coastal WRCA. As a result, the potential for additional potable water conservation within the coastal portion of the region was thought to be relatively low (estimated previously at 2.5 MGD) (PBS&J 2000a). Water conservation remains a priority, however, so as to build upon current water use efficiency and further enhance resource sustainability. In support of this, an updated evaluation of water conservation potential is under development. This includes a review of existing programs in the region as well as identification of potential water savings achievable from additional water conservation measures. The Conserve Florida Water EZ Guide tool is being utilized to identify cost effective water conservation options and quantify water conservation potential in Region II.

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

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). This report is available on the District's website (see References section below).

In FY 2013-2014, the District made a significant information technology investment, including a redesigned website. There is now a conservation page to provide easy-to-access water conservation tools and educational materials for utilities, residents and other water users. Budgeted funding is not specific to regions or projects. Staff members continue to promote water conservation education and

awareness through the website and through such activities as distribution of water conservation brochures and information and facilitating the Water Conservation Hotel and Motel Program (Water CHAMP) to reduce washing of linens and towels at participating lodging facilities.

Water conservation projects that achieve quantifiable water savings are eligible for grant funding under the District's FY 2014-2015 Water Supply Development Community Assistance Initiative grant program (www.nwfwater.com/water-resources/wsp/grants/).

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 FDEP 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 works with local governments and state and regional agencies to better coordinate land use and water supply planning. The District previously distributed guidelines and provided technical assistance to local governments for preparing water supply comprehensive plan amendments and water supply facilities work plans.

In FY 2013-2014, substantial staff resources were devoted to completion of a District-wide WSA update. A major component of the update included an updated source assessment, as well as revised water demand projections, for Region II. District staff also reviewed the first Florida Statewide Agricultural Irrigation Demand (FSAID) study, developed by the FDACS, and provided additional planning and technical assistance for future updates. Additionally during FY 2013-2014, District staff worked cooperatively with FDEP staff to evaluate the status of the coastal WRCA and to enhance coordination of reuse planning between District staff and wastewater permitting staff.

Seven of 24 water supply development grants were awarded to Region II public supply utilities as part of a new water supply development grant program for the District. Okaloosa County received $1.25 million for a new elevated water tank for their Mid-County water system, and grants were awarded for reuse projects in Okaloosa and Santa Rosa counties. The grant program is discussed further under District-wide Initiatives and in Appendix A.

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 initiative 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.

A comprehensive Basis of Design Report (BODR) was completed in FY 2013-2014 to evaluate potential interconnections that would serve multiple utilities. Existing interconnections were also evaluated to determine their capacity and ability to meet emergency needs of interconnected utilities. The evaluation was conducted for current and future conditions (2030) and assessed 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 water system reliability for 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 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 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 developing an expanded monitoring network for the Sand-and-Gravel and Floridan aquifers where new water sources have been developed or are planned. In addition, the District continues to monitor conditions within the coastal WRCA for salt water intrusion and aquifer sustainability. This monitoring is essential for ensuring the success of long-term water supply initiatives, as well as for refining groundwater models and analyses to support future management decisions.

Increased expenditures over the previous fiscal year reflect continued expansion of water resource monitoring in Region II to support resource evaluations and development of improved modeling tools for both planning and consumptive use permitting. During the year, additional water level, water quality, and rainfall stations were established. In 2014, the District added 10 wells to its quarterly level monitoring network and performed a detailed round of groundwater level measurements in the Fairpoint Regional Utility System (FRUS) wellfield area. Over the long-term, it is also expected that this expanded monitoring will also help support establishment of minimum flows and levels (MFLs). Additionally during FY 2013-2014, a saltwater intrusion monitoring well in Navarre Beach was rehabilitated.

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 groundwater resources from aging, uncontrolled, or improperly constructed wells that are no longer in use. The District achieves proper abandonment of such wells through two methods: requiring contractors to plug abandoned wells found on site during new well construction or initiating a well abandonment contract with a well owner or local government.

The District provides technical assistance and funding to utilities for plugging abandoned wells identified as having the potential to adversely affect groundwater 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 5,029 abandoned wells within Region II, approximately 185 of which were plugged in FY 2013-2014.

Funding Summary: Region II Water Resource Development Projects

Table 4.2 displays past year expenditures, current year budget, and anticipated future expenditures for water resource development within Region II.

Table 4.2 2015-2019 Region II WRDWP Project Funding

Water Resource Development Projects	Budget Activity	FY 13-14 Expenditures	Anticipated Five Year Work Program					FY15-FY19 Cost Estimate
			FY 14-15 Budget[1]	FY 15-16	FY 16-17	FY 17-18	FY 18-19	
Floridan Aquifer Sustainability	2.2.1	$14,226	$360,300	$130,000	$130,000	TBD	TBD	≥ $620,300
Inland Sand-and-Gravel Aquifer	2.2.1	$1,581	$19,000	TBD	TBD	TBD	TBD	≥ $19,000
Surface Water Sources	2.2.1	$0	$0	TBD	TBD	TBD	TBD	$0
Aquifer Storage and Recovery	2.2.1	$0	$0	$0	$0	$0	$0	$0
Water Reuse	2.2.1	$19,623	$22,100	$15,000	$15,000	$15,000	$15,000	$82,100
Water Conservation	1.1.1	$13,975	$10,000	$5,000	$5,000	$5,000	$5,000	$30,000
Regional Water Supply Planning	1.1.1	$55,901	$19,900	$20,000	$40,000	$30,000	$20,000	$129,900
Interconnect	1.1.1	$2,186	$0	$0	$0	$0	$0	$0
Hydrologic Data	1.2.0	$144,146	$117,900	$90,000	$90,000	$90,000	$90,000	$477,900
Abandoned Well Plugging[2]	4.2.0	$7,715	$0	$0	$0	$0	$0	$0
TOTAL		$259,352	$549,200	$260,000	$280,000	$140,000	$130,000	$1,359,200

[1]FY 2015 figures based on adopted budget.

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

The budget for FY 2014-2015 reflects an increase in anticipated spending as compared to that presented in the previous WRDWP. This substantially reflects a planned effort to develop an improved groundwater flow model to support water supply planning, water resource development, and consumptive use permitting in Region II. The modeling will principally address the Floridan aquifer, but may also be integrated with a Sand and Gravel aquifer model. Additionally, the planned budget provides for an increased level of effort for water reuse and water conservation, addressing both ongoing District priorities as well as support for the statewide reuse planning effort. A focused effort to develop an enhanced hydrologic monitoring network will also continue, as described above.

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 4.3.

Table 4.3 Region II Water Supply Development Projects

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

[1] Represents new inland wellfield pumping capacity; total pumping capacity approximately 28 MGD.
[2] Represents total estimated capacity of the inland wellfield region. Approximately 8 MGD currently permitted.
[3] Okaloosa County pursuing development of specific project options

Major water supply development projects completed to date have included construction of inland groundwater wells and associated facilities serving coastal utilities in all three counties. These include the inland Sand and Gravel aquifer wellfield in Santa Rosa County, inland Floridan aquifer wells and transmission facilities in Okaloosa County, and inland Floridan aquifer wellfield and transmission facilities in Walton County. Recently, WRP, Inc. completed a 15-mile potable water transmission pipeline from an inland wellfield in Walton County, south across Choctawhatchee Bay to serve coastal service areas in Walton and Okaloosa counties. Additionally, Regional Utilities of Walton County constructed over five miles of water transmission pipeline along the U.S. Highway 98 corridor. This pipeline also conveys inland groundwater to meet coastal demand.

To date, Region II water supply development projects have made approximately 21 MGD of water available, including 13 MGD from the inland Floridan aquifer and eight MGD from the inland Sand and Gravel aquifer. Additional water is expected to be available for future needs, including from the inland Sand and Gravel aquifer, surface water, and reclaimed water. These water supplies, together with traditional water supply sources, are anticipated to be sufficient to meet demands through 2030 under both normal and 1-in-10 year drought conditions. Additionally, through the District's competitive grant program for water supply development, funding was awarded for six projects in Region II during FY

2013-2014, increasing reuse storage and transmission capacity and improving the reliability and capacity of potable water supply systems (Appendix A, Table 4.8).

Region III: Bay County

The RWSP for Region III (Figure 4.3) was developed initially in 2008 and updated in 2013 (NWFWMD 2008; Brooks et al. 2014). The plan describes concerns about the long-term sustainability of water supply resources within the region and presents strategies to increase source reliability and minimize vulnerability of Deer Point Lake Reservoir, the region's primary public supply source, to a major hurricane storm surge. Pursuant to the RWSP, the NWFWMD provided more than $5 million in grant funding to Bay County for a $23 million project to develop an alternate intake at the lower end of Econfina Creek, the primary tributary for the reservoir. The location of new facility will minimize vulnerability to storm surge impacts.

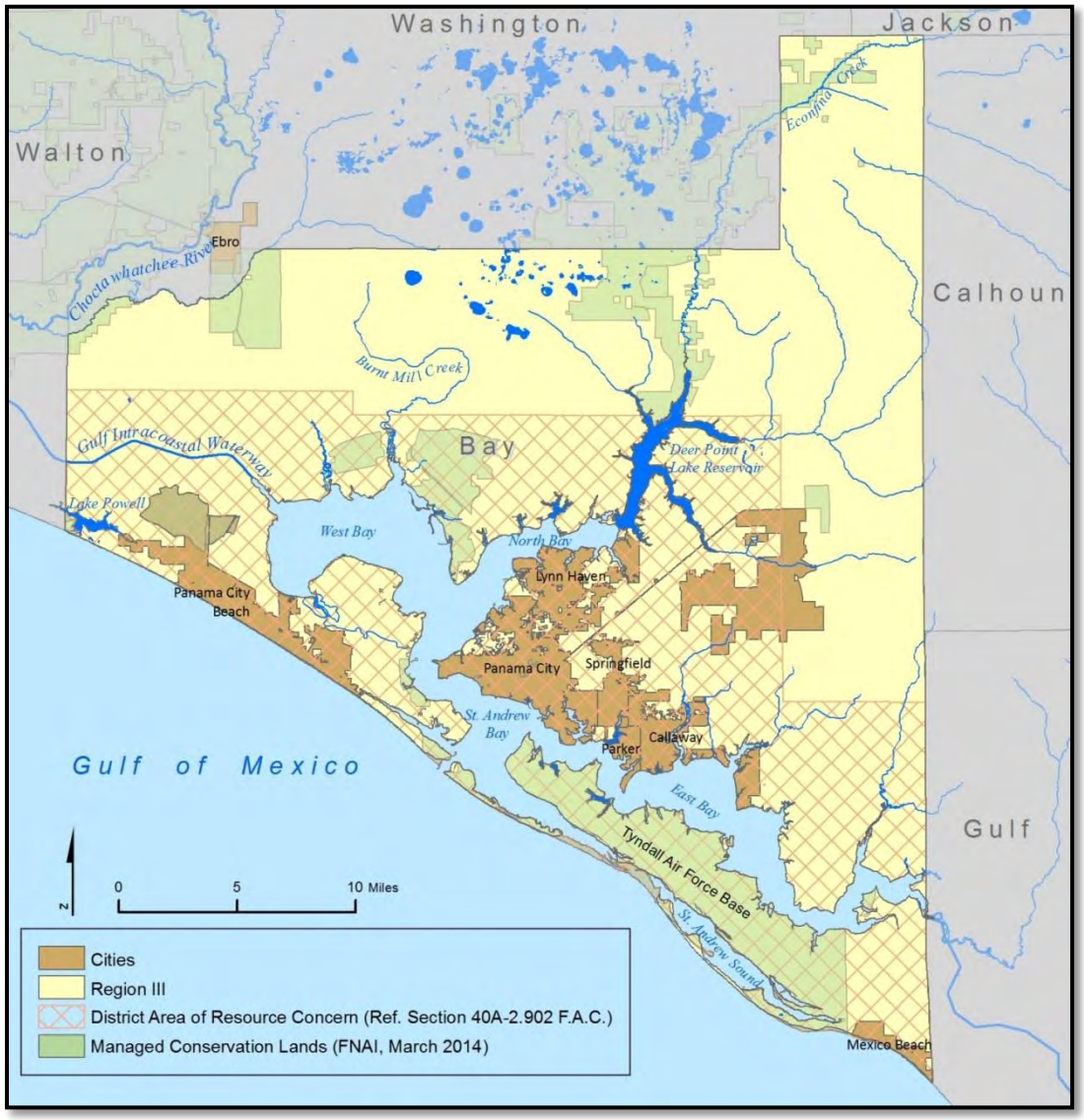

Figure 4.3 Water Supply Planning Region III

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

Region III Water Resource Development

The Region III RWSP update includes five water resource development strategies. These are summarized in Table 4.4. Descriptions of the strategies and progress to date follows.

Table 4.4 Region III Water Resource Development Projects

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

The water resource development project that best lends itself to additional water being made available is Water Reuse Funding and Technical Assistance. Reuse of reclaimed water is implemented by local governments and utilities. The District, however, can lend technical, planning, and potentially financial assistance.

Econfina Creek and Groundwater Recharge Area Protection

This project continues land protection and management of a regionally significant groundwater recharge area, the Econfina Creek Water Management Area (WMA). The District manages more than 43,000 acres in the WMA to protect water and related resources while also providing public access and a resource for compatible public use and recreation. Land management activities include habitat enhancement and restoration, as well as development and maintenance of public access facilities. Additional acquisitions of inholdings and additions may be planned in the future depending on funding availability. These activities are funded and accomplished through the District's Land Management and Acquisition program.

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

In cooperation with Bay County, the District continues implementation of the Deer Point Lake Watershed Hydrologic Monitoring program. This effort includes operation of stream stage/discharge and rainfall monitoring stations that provide a continuous record of precipitation and surface water flows during both dry weather and storm conditions. The District operates additional groundwater level, stream flow, and lake level monitoring sites within the county, all intended to characterize water resource conditions and trends within the region.

Additional evaluations of groundwater flow and salt water intrusion may be conducted to investigate the persistence of a depression in the coastal Floridan aquifer potentiometric surface despite discontinuation of major groundwater withdrawals on the coast. The work would involve review of consumptive uses of water and hydrologic data and would be conducted in coordination with the District's MFL program. A groundwater flow model may be developed and applied if necessary.

Water Reuse Funding and Technical Assistance
In 2013, an estimated 2.4 MGD of reclaimed water were used for public access reuse in Region III (FDEP 2014). This included irrigation of 1,086 residences, two golf courses, four parks, and three schools. The Region III RWSP identifies approximately 5.2 MGD of new beneficial reuse that could offset the use of potable water sources. In addition to extending water supplies, further development of water reuse would help improve water quality in St. Andrew Bay and coastal waters by reducing wastewater discharges to the environment. Projected wastewater flows of almost 20 MGD by 2035 (Countryman et al. 2014), suggest substantial opportunity for additional application of reclaimed water for non-potable needs to reduce the use of potable water.

District staff will work with utilities and local governments to identify opportunities for expanded water reuse to meet non-potable water needs, as well as feasible funding sources and strategies. This may include assessments matching reclaimed water generators with users, feasibility studies, pilot projects, and demonstration projects. Projects of highest priority to the District are those that offset and reduce the consumption of potable quality water, as well as those that protect natural systems and achieve integrated water resource management. Currently, the District is conducting a District-wide reuse planning effort, as well as supporting a statewide reuse initiative.

Water Conservation Funding and Technical Assistance
This project supports conservation and efficiency programs, practices, and measures on the part of local governments and utilities. Water conservation serves the public interest by enhancing efficiency, reducing costs to the public, and limiting impacts to natural resources. An updated evaluation of water conservation potential in Region III is currently being conducted by District staff. This includes a review of existing programs as well as identification of potential water savings achievable from additional water conservation measures. The Conserve Florida Water EZ Guide tool is being utilized to identify cost effective water conservation options and quantify water conservation potential. Staff will work with local governments and utilities to further identify cost effective means of improving water use efficiency for public supply and other water use categories. This strategy may include implementation of pilot and demonstration projects, as well as assistance in identifying funding sources.

Water conservation projects that achieve quantifiable water savings are eligible for grant funding under the District's Water Supply Development Community Assistance Initiative for FY 2014-2015 (www.nwfwater.com/water-resources/wsp/grants/). The District also continues to distribute water conservation brochures to utilities and local governments in the region and to coordinate the Water CHAMP program for participating hotels.

Regional Water Supply Planning, Coordination, and Technical Assistance

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

Funding Summary: Region III Water Resource Development Projects

Table 4.5 displays past year expenditures, current year budget, and anticipated future expenditures for water resource development within Region III.

Table 4.5 2015-2019 Region III WRDWP Project Funding

Water Resource Development Projects	Budget Activity	FY 13-14 Expenditures	Anticipated Five Year Work Program					FY15-FY19 Cost Estimate
			FY 14-15 Budget[1]	FY 15-16	FY 16-17	FY 17-18	FY 18-19	
Econfina Creek & Groundwater Recharge Area	3.1.0	$1,603,092	$1,834,500	$884,500	$884,500	$884,500	$884,500	$5,372,592
Hydrologic Data	1.2.0	$47,353	$59,800	$59,800	$59,800	$59,800	$59,800	$299,000
Water Reuse	2.2.1	$15,944	$18,000	$10,000	$10,000	$10,000	$10,000	$58,000
Water Conservation	1.1.1	$13,975	$10,000	$5,000	$5,000	$5,000	$5,000	$30,000
Regional Water Supply Planning	1.1.1	$44,426	$10,000	$15,000	$15,000	$15,000	$30,000	$85,000
TOTAL		$1,724,791	$1,932,300	$974,300	$974,300	$974,300	$989,300	$5,844,500

[1]FY 2015 figures based on adopted budget

Reduced regional water supply planning funding in FY 2014-2015 reflects completion of the RWSP update during the previous year. Projected funding reflects continuing technical assistance to local governments and utilities, with emphasis on identifying potential reuse projects, identifying the potential for enhanced water conservation, and for continuing hydrologic monitoring and analysis. With the updated RWSP for Region III, the WRDWP recognizes the significant ongoing level of effort for management of the Econfina Creek Water Management Area, which includes the primary recharge area for Floridan aquifer springs contributing to Econfina Creek and Deer Point Lake Reservoir. In addition to land management activities, significant capital expenditures are planned during FY 2014-2015 for restoration projects at Williford and Devils Hole springs along Econfina Creek.

Region III Water Supply Development

Water supply development strategies identified in the Region III RWSP Update are listed in Table 4.6.

Table 4.6 Region III Water Supply Development Projects

Project	Activity	Estimated Cost	Water Made Available or Anticipated (MGD)
Development of Upstream Intake for Surface Water Supply	Develop an alternative raw water pump station near the mouth of Econfina Creek and nine-mile force main to tie in with existing raw water main.	$23,400,000[1]	30[2]
Water Reuse Facilities	Construction of water reuse facilities to provide reclaimed water for landscape irrigation and other non-potable uses.	TBD	5
Utility Interconnections and Infrastructure Enhancements	Assist with delivery system interconnections and facility improvements. Specifically includes potential 48" pipeline emergency interconnect between southern Bay and Walton counties.	$25,700,000[3]	N/A
Water Conservation Projects that Result in Quantifiable Water Savings	Implementation of water conservation and efficiency programs and practices by local utilities.	TBD	TBD

[1] Updated cost estimate

[2] Capacity of alternate raw water intake

[3] Cost for Bay-Walton emergency interconnect project; may be potential for additional interconnections and enhancements within Region III

The District granted $5.47 million to Bay County in FY 2013-2014 for development of the alternate upstream intake for Deer Point Lake Reservoir. Funding was provided from the Water Protection and Sustainability Trust Fund.

District-Wide Initiatives

As noted above, an update to the district-wide Water Supply Assessment was completed in the current fiscal year. This assessment incorporated demand projections through year 2035 for all regions and all water use categories, and evaluated the status and sufficiency of water supply sources.

Water Supply Development Grant Initiative

The District continues to emphasize water supply development assistance for local governments and utilities. The Governing Board approved a $10 million water supply development assistance grant initiative, which was implemented beginning in FY 2013-2014. The Governing Board has approved an additional $8 million in assistance for this program in the FY 2014-2015 budget.

Coastal Interconnects

The Basis of Design Report for the Coastal Water Systems Interconnection Initiative was completed in 2013. The report provides a detailed analysis of coastal water supply interconnect alternatives and design parameters. Two interconnection projects were selected for potential future implementation. The basis of design report includes conceptual designs for a coastal interconnection between Santa Rosa and Okaloosa counties and a coastal interconnection between Walton and Bay counties. The report also

describes key issues and challenges, including utility emergency capacities and water blending analysis. Implementation of the two recommended interconnection alternatives will require significant financial commitment to complete.

Water Reuse

District staff are developing approaches for integrated planning of water and wastewater resources. Projected reuse availability derived from 2035 wastewater projections has been incorporated into the 2013 WSA Update. In FY 2013-2014, staff developed geographic information system (GIS) coverages and attributes of wastewater treatment plants and the associated network of facilities receiving effluent and biosolids, as well as monitoring sites for groundwater, surface water and wetlands. There are multiple uses for this GIS data at the District such as setbacks for well permits, online lookup by non-potable permit applicants, planning and coordination for more integrated water management, environmental monitoring, and more. A District-wide reuse plan is under development to provide detailed information on reclaimed water systems and priorities for future reuse facility development. Assisting utilities and local governments in developing beneficial reuse projects will remain a priority, with implementation depending on future funding availability.

Agricultural Best Management Practices Cost Share Program

Significant efforts are underway to enhance agricultural water use efficiency and to support implementation of associated water quality best management practices (BMPs), targeted primarily for the Jackson Blue Spring basin of the Apalachicola River watershed. For FY 2013-2014, the District budgeted $752,000 of legislatively appropriated spring restoration funding for these activities. The funding was used to provide a 75 percent cost share to help producers retrofit center pivot irrigation systems and to implement fertigation and other more efficient nutrient application systems, as well as to help expand the northwest Florida mobile irrigation laboratory. Together, these efforts are expected to achieve significant reductions in both water use and pollutant loading within the Jackson Blue Spring basin. As of the end of the third quarter (June 30, 2014), 60 percent of the available cost-share funds were under contract to producers for implementation of best management practices. For FY 2014-2015, the District anticipates $927,500 in additional legislatively approved funding to continue this effort. The funding includes $487,500 to support agricultural BMPs and $440,000 to investigate the Claiborne aquifer as a possible alternative water source to offset a portion of withdrawals from the Floridan aquifer.

Well Abandonment

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, 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 FDEP 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 2014, approximately 666 wells were plugged at no cost to the District other than staff time, and one well was plugged at a cost of $240 to the District.

References

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

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

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

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

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

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

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

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

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

Florida Natural Areas Inventory. 2013. Florida Conservation Lands, March 2014. www.fnai.org/gisdata.cfm

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

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

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

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

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

Northwest Florida Water Management District. 2014. Consolidated Annual Report. March 1, 2014. www.nwfwater.com/system/assets/310/original/CAR2014.pdf

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

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

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

Whitcomb, J.B. 2005. Florida Water Rates Evaluation of Single Family Homes. Brooksville, FL: Southwest Florida Water Management District.

4.2 Alternative Water Supplies Annual Report

Table 4.7 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 4.8 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.

Table 4.7 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	$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	Reuse line complete; WWTP upgrade funded	FY 2007	0.4	$500,000	$6,495,000	$6,995,000	93%
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 Pump Station	III	Bay County	Alternative raw water pump station and force main	Under construction	FY 2008; FY 2009	30.0[2]	$5,470,000	$17,930,000	$23,400,000	77%
Total						**62.1**	**$21,470,000**	**$68,012,723**	**$89,482,723**	**76%**

[1]Anticipated water made available rounded to the nearest 100,000 gallons per day
[2]Capacity of alternate raw water intake

Table 4.8 Additional Water Supply Development Assistance Projects

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	District 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
East Okaloosa County Water and Sewer Extension	Okaloosa County	II	Water supply transmission and interconnection	Complete	FY 2010	$750,000	District General Fund
Allanton Peninsula Water and Wastewater Extension Project	Callaway	III	Water supply transmission and distribution system construction	Complete	FY 2010	$100,000	WMLTF
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
Carrabelle-Alligator Point Interconnection Feasibility Study	Carrabelle	V	Interconnection feasibility assessment; enactment of conservation rate structure	Complete	FY 2011	$100,000	WMLTF
Port St. Joe Water Distribution System Improvements	Port St. Joe	V	Water supply improvements	Complete	FY 2011	$50,000	District General Fund
Wewahitchka Water Supply System Improvements	Wewahitchka	V	Water supply development; test production well construction	Complete	FY 2011	$400,000	District General Fund
Water Transmission Line Construction and Interconnection	Freeport	II	Transmission line and interconnection construction	Complete	FY 2012	$800,000	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 Supply Improvements; Preliminary Engineering	Gretna	VI	Preliminary engineering and environmental analysis	Complete	FY 2012	$50,000	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
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
Water Main Construction	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
Pine Island Water Distribution System Expansion	Calhoun County	IV	Preliminary engineering for expansion of water distribution system to unincorporated community	Complete	FY 2013	$98,607	District General Fund

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	District Funding Source
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 2015	$30,500	District General Fund
CWRF Reclaimed Water System Expansion	Emerald Coast Utilities Authority	I	Reuse extension to Scenic Hills Golf Course and UWF main campus	Engineering and permitting	FY 2015	$522,000	District General Fund
Chumuckla Water System Upgrades	Chumuckla Water System	II	Well and SCADA upgrade; equipment acquisition for water line improvements	Construction	FY 2015	$100,721	District General Fund
Water Main Replacement	City of DeFuniak Springs	II	Replacement of asbestos cement water main; installation of additional hydrants	Engineering and permitting	FY 2015	$473,750	District General Fund
Highway 285 Reclaimed Water Main Upgrade	City of Niceville	II	Replacement and upgrade of reuse lines to increase capacity	Construction	FY 2015	$144,000	District General Fund
Mid-County Tank #4	Okaloosa County Water and Sewer	II	Construction of 1 MG elevated water tank for northern wellfield	Engineering and permitting	FY 2016	$1,250,000	District General Fund
Santa Rosa Soccer and Horse Complex Reclaimed Water Extension	Pace Water System, Inc.	II	Reuse transmission main construction	Construction	FY 2015	$160,000	District General Fund
Town of Jay Asbestos Watermain Replacement	Town of Jay	II	Replacement of asbestos cement water main	Bid/award/ procurement	FY 2016	$663,024	District General Fund
Pine Island Water System	Calhoun County BOCC	IV	Development of water distribution system for the Pine Island community	Engineering and permitting	FY 2015	$446,545	District General Fund
State Road 20 Waterline Replacement	City of Blountstown	IV	Construction of water main; installation of hydrants	Construction	FY 2015	$471,690	District General Fund
City of Bonifay Waterline Replacement	City of Bonifay	IV	Replacement of asbestos cement and lead joint water main	Engineering and permitting	FY 2015	$268,900	District General Fund
Water Storage Capacity	City of Bristol	IV	Construction of ground storage tank; installation of high service pumps	Engineering and permitting	FY 2015	$537,500	District General Fund
Highway 77/I-10 Infrastructure Improvements Project	City of Chipley	IV	Construction of new well with transmission system improvements	Bid/award/ procurement	FY 2016	$440,000	District General Fund

Project	Local Sponsor	Region	Activity	Status	Completion	NWFWMD Contribution	District Funding Source
Chipola River Protection and Stormwater Reuse Project	City of Marianna	IV	Expand pond to provide stormwater reuse and provide additional water quality treatment	Engineering and permitting	FY 2015	$671,340	District General Fund
Altha Water System Phase 3	Town of Altha	IV	Construction of water main; installation of hydrants	Engineering and permitting	FY 2015	$540,000	District General Fund
Water Main Replacement	Town of Esto	IV	Water distribution system replacement	Bid/award/ procurement	FY 2015	$149,690	District General Fund
Water Extension to I-10 Interchange	Town of Grand Ridge	IV	Construction of water main extension to I-10 interchange	Bid/award/ procurement	FY 2015	$321,339	District General Fund
Greenwood/Marianna Interconnecting Water Mains	Town of Greenwood	IV	Construct of interconnection; with additional distribution line replacement	Bid/award/ procurement	FY 2015	$230,308	District General Fund
Town of Noma Water Line Replacement Project	Town of Noma	IV	Water distribution system replacement	Bid/award/ procurement	FY 2015	$415,292	District General Fund
Water System Upgrades	City of Gretna	VI	Design and surveying for two new wells with additional transmission and treatment improvements	Engineering and permitting	FY 2015	$150,000	District General Fund
Chipola River Pump #2 Rehabilitation	City of Port St. Joe	V	Rehabilitate pump #2 and add a new diesel electric generator	Procurement	FY 2015	$195,000	District General Fund
Monticello Water Extension	City of Monticello	VII	Extend water main approximately two miles north of the city, abandoning several private systems	Engineering and permitting	FY 2015	$837,000	District General Fund
South Santa Rosa Utility System Reclaimed Water Elevated Storage Tank	City of Gulf Breeze	II	Construction of a 300,000 gallon elevated reclaimed water storage tank	Engineering and permitting	FY 2016	$345,500	District General Fund
Town of Havana Water System Improvements	Town of Havana	VI	Construction of new well, ground storage tank, and treatment facilities	Engineering and permitting	FY 2016	$500,000	District General Fund
Panacea Area Water System - Sopchoppy Water System Interconnect	Panacea Area Water System, Inc.	VII	Construct potable water system interconnection with Sopchoppy	Engineering and permitting	FY 2016	$348,947	District General Fund
			Total			**$21,421,539**	

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Chapter Five: Florida Forever Work Plan Annual Report

5.1 Land Acquisition Work Plan

Introduction

Section 373.199(7), F.S. requires the Northwest Florida Water Management District (District) to annually update the Florida Forever Work Plan. To date, this is the 14th annual update of the 2001 Florida Forever Work Plan. Since 2006 this plan has been presented as a separate chapter in the Consolidated Annual Report as required by section 373.036(7), F.S. This plan contains information on projects eligible to receive funding under the Florida Forever Act and also reports on land management activities, lands surplused and the progress of funding, staffing and resource management of projects for which the District is responsible.

Florida Forever Program

In 1999, the Florida Legislature passed the Florida Forever Act (section 259.105, F.S.) which has continued the state's long-term commitment to environmental land acquisition, restoration of degraded natural areas, and high-quality outdoor recreation opportunities.

While previous programs focused almost exclusively on the acquisition of environmentally sensitive lands, the Florida Forever program is somewhat different in that it authorizes the use of up to half of the program funding for certain types of capital improvement projects. Eligible uses of these funds include water resource development, stormwater management projects, water body restoration, recreation facilities, public access improvements, and removing invasive plants, among others. The remaining 50 percent must be spent on land acquisition.

Since the inception of the District's land acquisition program, the goal has been to bring as much floodplain as possible of our major rivers and creeks under public ownership and protection. The Florida Forever Land Acquisition Program continues to increase the acres of wetland, floodplain and aquifer recharge areas acquired by the District. To date, more than 223,555 acres have been protected for water resource purposes through the land acquisition efforts of the District either in fee simple or through conservation easements. Of this total, land management activities occur on 211,152 acres. A summary of acquisitions and surplusing completed in 2014 is provided below.

Table 5.1 Summary of Acquisitions and Surplusing Completed in 2014

Acquisitions

No acquisitions occurred during 2014.

Surplused Lands

Property	Date Surplused	Acres	Sale Price	Funding Source(s)	Water Management Area
Sandy Creek Landing Road	02/14/14	(38)	$37,620 (land only)	Preservation 2000	Choctawhatchee River
Donation to Bay County for Water Supply Project	05/08/14	(1.42)	Donation	Preservation 2000	Econfina Creek
Donation of Grassy Point to Board of Trustees	08/27/14	(1,176.6)	Donation	Florida Forever/ Save Our Rivers	Yellow River
	TOTAL	**(1,216.02)**			

Exchange of Lands

Property	Date Exchanged	Acreage Exchanged	Funding Source(s)	Water Management Area
District Exchange	01/24/14	61.1 acres for 50 acres	Preservation 2000	Yellow River

Acquisition Planning

The District employs a watershed approach to select and prioritize the important water resource and natural systems within the major river basins of northwest Florida. Primary among the considerations in this process are how specific floodplain or buffer areas help satisfy the District's water resources and natural system protection objectives; the availability of funds; the seller's willingness; how different areas fit into the District's land management scheme; and the size, accessibility and overall condition of each property. Recommendations from interest groups, landowners, local governments, agency representatives and other interested parties are given full consideration in the acquisition process.

Subject to receiving funding for Florida Forever, the District's acquisition efforts this year will focus on the purchase of inholdings and additions to the existing water management areas (WMAs) as well as Conservation Easements in each of the existing WMA's. Existing WMAs include the Perdido River, Escambia River, Blackwater River, Yellow River, Garcon Point, Choctawhatchee River/Holmes Creek, Econfina Creek, Chipola River, and Apalachicola River. All of these WMAs will be high priority areas for the acquisition of additions and inholdings. Acquisition efforts will be directed toward acquiring those properties which the District adjoins on one, two or three sides (additions) or those parcels which the District surrounds on all sides (inholdings).

In developing the annual update to the District's Florida Forever Five-Year Land Acquisition Work Plan, District staff shall review Florida Forever projects proposed by FDEP's Division of State Lands in order to minimize redundancy and facilitate an efficient and mutually supportive land acquisition effort. FDEP's Florida Forever Priority List is available at: at www.dep.state.fl.us/lands/FFplan.htm.

Approved Acquisition Areas

The approved acquisition areas listed below are not presented on a priority basis. For each of these waterbodies, it is desirable to acquire both the floodplain and a natural buffer zone to provide further water resource protection.

Table 5.2 NWFWMD Approved Land Acquisition Areas

Rivers & Creeks Originating In Florida	Rivers and Creeks Originating Outside Florida	Springs	Lakes & Ponds	Other Ecosystems, Basins and Buffers
Wakulla River	Apalachicola River	St. Marks River near Natural Bridge	Lake Jackson	Southwest Escambia County Ecosystem
St. Marks River	Lower Apalachicola River Wetland	Spring Lake Spring Group Area	Sand Hill Lakes	Garcon Point Ecosystem
Econfina Creek and other Tributaries of Deer Point Lake	Chipola River	Waddell Springs		West Bay Buffer
Lafayette Creek	Choctawhatchee River including Holmes Creek	Bosel Springs		Sandy Creek Basin
	Escambia River	Hays Springs		Apalachicola Bay and St. Vincent Sound Buffer
	Blackwater River including Juniper, Big Coldwater and Coldwater creeks	Gainer Springs		
	Ochlockonee River and its major tributaries			
	Yellow and Shoal Rivers			
	Perdido River and Bay			

Groundwater Recharge Areas	Donated Lands
Such lands may be designated by the District as Recharge Areas for the Floridan, Sand-and-Gravel and other important aquifers.	The District will accept donations of lands within its major acquisition areas if those lands are necessary for water management, water supply and the conservation and protection of land and water resources.

Exchange Lands
The District may exchange lands it has acquired under the Florida Forever program for other lands that qualify for acquisition under the program. The District's Governing Board establishes the terms and conditions it considers necessary to equalize values of the exchange properties. In all such exchanges, the District's goal will be to ensure that there is no net loss of wetland protection and that there is a net positive environmental benefit.

Mitigation Acquisitions
Under Florida law, unavoidable losses of natural wetlands or wetland functions require "mitigation" through the acquisition or restoration of other nearby wetlands. The District is often the recipient of such lands in the form of donations and also serves as the mitigation agent for the Florida Department of Transportation. Whenever possible, the District attempts to acquire mitigation lands contiguous to its existing ownership, but since proximity to the original wetland impact is often paramount, the District will acquire or manage isolated tracts at times.

Surplus
Chapter 373.089, F.S., allows the Governing Board of the District to sell (surplus) lands or interest or rights in lands to which the District has acquired title or to which it may hereafter acquire title. Any lands, or interests or rights in lands, determined by the Governing Board to be surplus may be sold by the District at any time for the highest price, but in no case shall the selling price be less than the appraised value.

Surplus Lands

In the fall of 2012, District staff conducted an evaluation of all District lands to determine if there were any parcels appropriate for surplus. The parcels recommended for surplus were small, non-contiguous, isolated tracts or connected only on a corner. The following tracts were declared surplus by the District's Governing Board.

Table 5.3 Surplus Lands List

WMA	Acres	County	Acquired Date	Status
Escambia River	115	Escambia	April 26, 1994	For Sale
Blackwater River	0.4	Santa Rosa	August 3, 2001	Sold on 12-13-13
Yellow River	1.5	Okaloosa	December 15, 1999	Sold on 12-13-13
Choctawhatchee River	38	Walton	July 31, 1992	Sold on 02-14-14
Choctawhatchee River	38	Walton	July 31, 1992	For Sale
Econfina Creek	8.39	Washington	December 19, 1997	For Sale

Note to Landowners

It is important to note that the District's land acquisition process only involves willing sellers and is usually initiated by landowners offering parcels for sale.

This plan includes a number of areas the District has identified for potential purchase. If your property is included in any of our acquisition areas or maps and you do not desire to sell your land to the District, Florida Statutes require the District to remove your property from the acquisition plan at the earliest opportunity. Please contact the Division of Land Management and Acquisition at (850) 539-5999 at any time if you wish to remove your property from possible purchase consideration. The District will maintain a list of such requests and annually adjust its acquisition plan accordingly.

Less Than Fee Methods of Land Protection

In "less than fee" purchases, the District attempts to acquire only those rights in property (i.e., development and land use conversion rights) that are needed to accomplish specific water resource and environmental protection goals. Such less than fee methods can provide a number of public benefits. First, acquisition funding can be conserved, thereby enabling the protection of more land with limited funds. Also, the property continues in private ownership and thus may remain on local property tax rolls. Moreover, the District does not incur the long-term costs of land management since the property's management and maintenance remains the landowner's responsibility. Not all properties are suitable for less than fee acquisition, but the potential benefits make these kinds of transactions a viable alternative to the District's typical fee-simple land purchases.

Florida Forever Goals and Numeric Performance Measures

As outlined in Chapter 18-24, F.A.C., the District is required to report on the goals and measures for lands to be acquired under the Florida Forever program. The following page summarizes the goals and measures applicable to Northwest Florida Water Management District.

Florida Forever Goals and Numeric Performance Measures

Reported as of October 1, 2014

Rule No. 18-24.0022

(2)(d)1. For proposed acquisitions, see section 5.1, (Florida Forever) Land Acquisition Five-Year Work Plan in the Consolidated Annual Report.

Acquisitions of lakes, wetlands, and floodplain areas to date: 187,112 Total acres
15,255 Florida Forever acres

(2)(d)2. Acquisitions* for water resource development to date: 41,616 Total acres
3,663 Florida Forever acres
**includes fee and less-than-fee parcels*

(3)(a)2. Refer to section 5.2, (Florida Forever) Capital Improvement Work Plan of the Consolidated Annual Report for funded capital improvements identified in SWIM, stormwater, or restoration plans.

(3)(a)3. NWFWMD lands to be treated for upland invasive, exotic plants = <100 acres

The District has not conducted surveys to identify the spatial distribution of invasive exotic plant infestation on District lands. It is known that invasive plant problems exist at varying levels on some District lands, and staff treat with herbicide as needed.

(3)(b) New water to be made available through Florida Forever funding for water resource development -Major water resource development accomplishment provided by additions to Econfina Creek Water Management Area. Additionally, Florida Forever funding contributed to the construction of a 750,000 gallon reuse storage facility for the City of Freeport to serve a 0.6 MGD reuse water service area. Funding for water supply development, including construction of water reuse facilities, is primarily provided through the Water Protection and Sustainability Program Trust Fund, NWFWMD General Fund, and local funding. See the NWFWMD Five Year Water Resource Development Work Program report and Consolidated Annual Report.

(4)(a)1. All NWFWMD lands are in need of and are undergoing management by the District.

Lands in need of restoration:	14,318 acres
Lands undergoing restoration:	1,378 acres
Restoration completed:	19,555 acres
Restoration maintenance:	19,555 acres

(4)(a)3. Refer to section 5.2, (Florida Forever) Capital Improvement Work Plan of the Consolidated Annual Report for capital improvements identified in SWIM, stormwater, or restoration plans.

(4)(a)6. NWFWMD lands under upland invasive, exotic plant maintenance control = <3,500 acres

(4)(b) Refer to section 4.1, Five-Year Water Resource Development Work Program: FY 2014-2015 of the Consolidated Annual Report for quantity of new water made available through regional water supply plans.

(4)(c) See section 5.1, (Florida Forever) Land Acquisition Work Plan (Table 5.2) of the Consolidated Annual Report for resource-based recreation facilities by type.

Land Acquisition Projects

The Florida Forever Act, in particular section 373.199(3) F.S., identifies information that must be included for each Florida Forever Project. Some of the required information is relatively general and applicable to all projects. To reduce the redundancies of this plan, general information is provided separately as part of the District's Five-Year Plan for the Florida Forever Program. Specific land acquisition projects are individually identified and detailed information specific to the project is provided in the following pages.

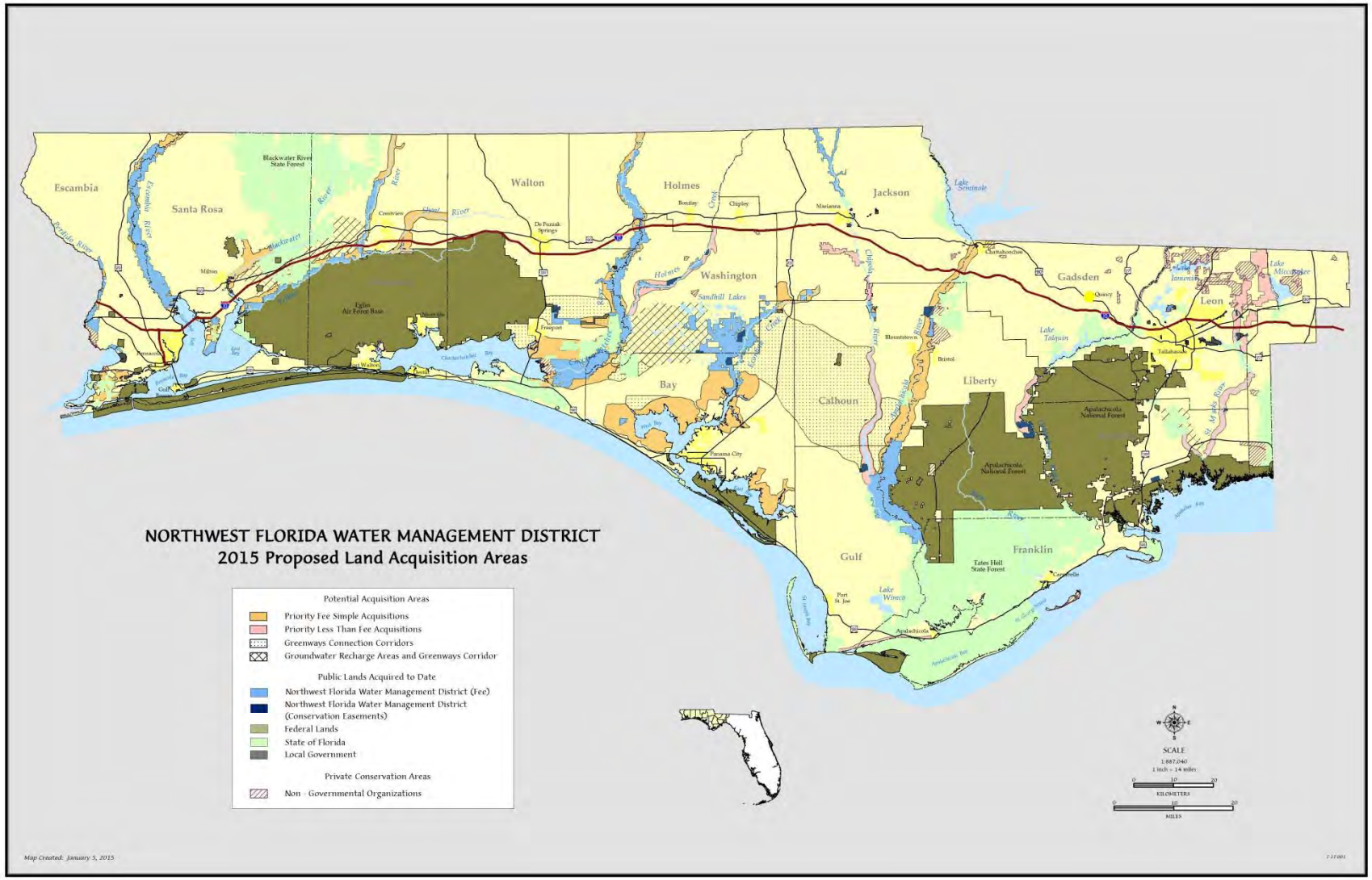

Figure 5.1 2015 Proposed Land Acquisition Areas

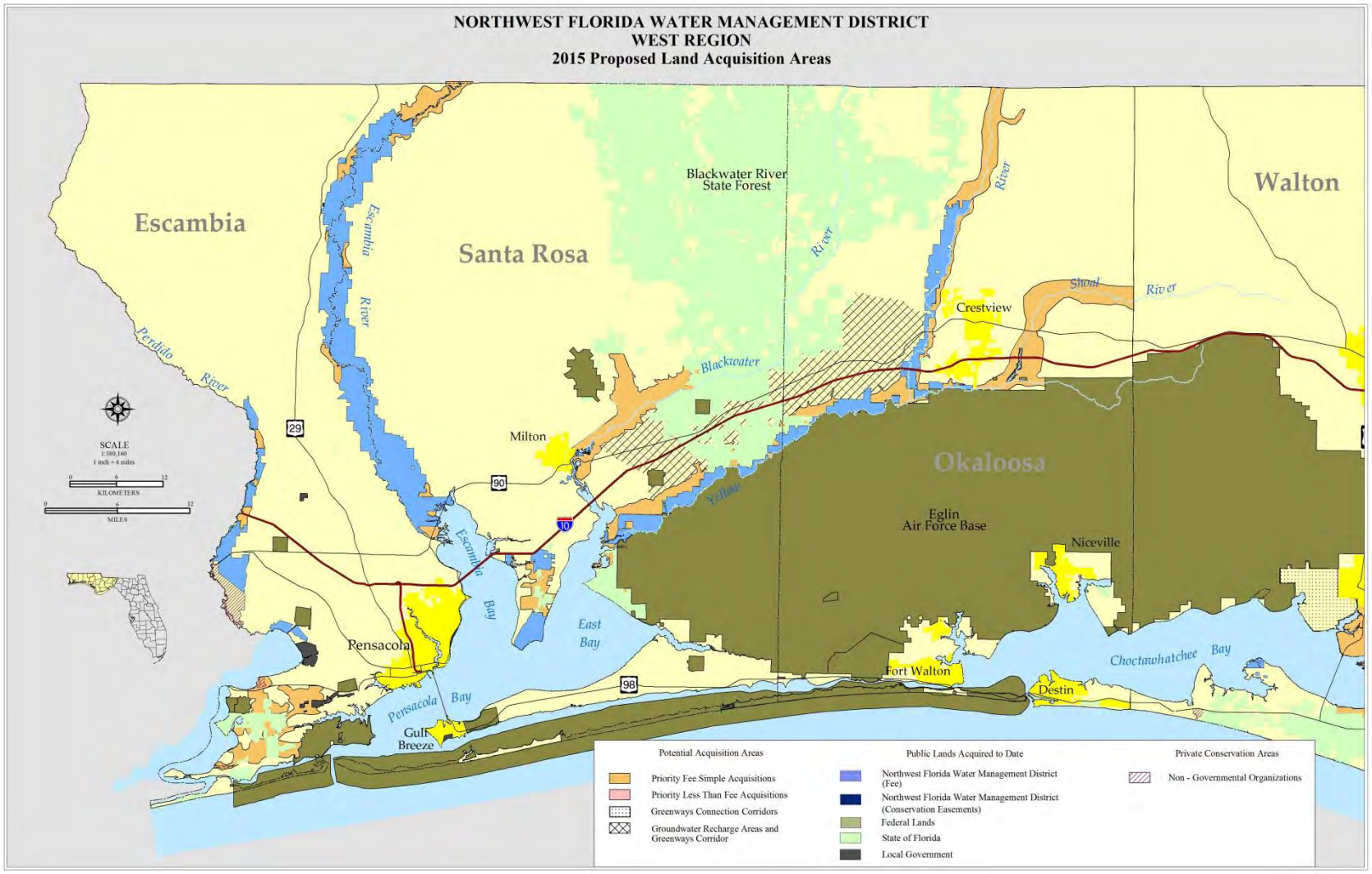

Figure 5.2 2015 Proposed Land Acquisition Areas (West Region)

Florida Forever Land Acquisition Project

Perdido River and Bay Basin

The Perdido River serves as the state line, separating Florida from Alabama. The Perdido River has been designated an Outstanding Florida Water and Special Water system; a canoe trail; and a recreation area. The upper part of the river is a shifting sand river system, unique to portions of Northwest Florida, south Alabama, southern Mississippi and eastern Louisiana, while the lower end of the river is characteristic of a black water stream. The District owns 6,261 acres in fee and 4 acres in less than fee between the Perdido River and Bay.

The project area is mostly undeveloped and contains a diverse list of species. Acquisition of any floodplain area along the Perdido River, whether in fee or less than fee, will significantly protect the water resources of the area as well as enhance water quality protection efforts for the Perdido Bay system.

Priority purchases will be concentrated on parcels adjacent to existing District lands along the river, around the river mouth, and designated tributaries.

The Perdido Bay is an estuarine system which receives fresh water from the Perdido River. Subsidiary embayments within the Perdido Bay estuary include Tarkiln Bay, Arnica Bay, Wolf Bay, Bayou La Launch and Bayou St. John. Perdido Key separates Perdido, Tarkiln, and Arnica bays, Bayou La Launch and Bayou St. John from the Gulf of Mexico. Big Lagoon adjoins Perdido Bay to the east, separating it from Pensacola Bay. Currently, the District owns 810.19 acres along Perdido Bay.

Priority purchases will be concentrated on parcels adjacent to the bay which can enhance water quality protection and mitigate for wetland impacts associated with DOT highway construction in southern Escambia County.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 1,447 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Southwest Escambia County Ecosystem

Several major estuarine drainages including Jones Swamp, Bayou Grande, Big Lagoon, and Tarkiln Bay, intersect in southwest Escambia County. These, in turn, comprise portions of the Pensacola and Perdido bay watersheds. The proposed acquisition borders a major urban area and is experiencing encroachment from residential and commercial development. The project area is characterized by an undulating topography where remnants of ancient dune lines alternate with lower intervening swales that drain east or west, parallel to the Gulf coast. The wet prairies in the area are some of the last examples of what may be one of the most diverse plant communities in the southeast, supporting large stands of white-topped pitcher plants and almost 100 other plant species.

Protecting the ecological integrity of this area is important to the quality of water resources in the Pensacola and Perdido bay systems. Acquisition will help limit nonpoint pollution and untreated stormwater runoff by preventing channelization. Wetlands and upland buffers will also be preserved, and riparian buffer zones will be maintained. Additionally, public access will be improved and fish, wildlife, and estuarine productivity will be protected.

This acquisition is consistent with a number of major initiatives designed to protect environmental and other public resources in the region. These include water quality treatment systems, acquisition programs for the Jones Swamp Wetland Preserve and the Perdido Pitcher Plant Prairie, and efforts to prevent encroachment on NAS Pensacola. Together with nearby state parks, these acquisitions will provide for a major environmental reserve and greenway system within a rapidly urbanizing area.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 11,000 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Groundwater Recharge Area
Designated area has groundwater recharge potential.

Florida Forever Land Acquisition Project

Escambia River Basin

Beginning at the confluence of the Conecuh River and Escambia Creek above the Florida-Alabama border and discharging into Escambia Bay, the Escambia River corridor contains a rich diversity of plant and animal species, as well as many rare fish and waterfowl. The Escambia River basin is broad and well drained in the upper reaches, and swampy below Molino, Florida. While the overall water quality is considered good, many point and non-point pollution sources empty into the river. Currently, the District owns 35,413 acres in fee and 19 acres in less than fee along the river.

Priority purchases will be concentrated on parcels adjacent to existing District lands around the river mouth and designated tributaries.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 6,644 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Garcon Point Ecosystem

This proposed land acquisition project contains most of the Garcon Point Peninsula, which borders Pensacola, Escambia, and East and Blackwater bays. The project area is largely undeveloped and includes a variety of natural communities that are in good to excellent condition. The entire tract provides considerable protection to the water quality of the surrounding estuary, as well as harboring a number of rare and endangered species.

The emergent estuarine marsh that borders several miles of shoreline within the project is an important source of organic detritus and nutrients and serves as a nursery for many of the species found in Pensacola Bay. These wetlands function as both stormwater filtration and a storm buffer area, as well as providing erosion controls to the neighboring uplands. A minimum of 13 endangered or threatened species are known to live in the region including the recently listed federally endangered reticulated flatwoods salamander. The northern wet prairie portion is known to be an outstanding pitcher plant habitat.

Priority purchases will be concentrated on parcels adjacent to existing District lands. Currently the District owns 3,245 acres on Garcon Point.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 3,200 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Blackwater River Basin

Originating in the Conecuh National Forest in Alabama, the Blackwater River has a large portion of its Florida watershed further protected by the Blackwater River State Forest. In all, nearly 50 miles of the river corridor is remote and undeveloped. As a result, the Blackwater River is considered one of Florida's best preserved waterways. Currently the District owns 381 acres along the river.

The acquisition area includes a large area of mature longleaf pine forest; considerable bottomland forest and marsh acreage; upland mixed forest; and blackwater stream and seepage slope communities. Priority purchases will be concentrated on parcels adjacent to existing District lands. Approximately 380 acres have been acquired along the Blackwater River immediately south of Milton in Santa Rosa County.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis prior to acceptance.

Land Acquisition
Approximately 11,449 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over the next five years or more. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Yellow and Shoal River Basin

The Yellow River has its headwaters in Conecuh National Forest in Alabama and forms the northern border of Eglin Air Force Base (AFB) across much of eastern Santa Rosa and western Okaloosa counties. The proposed acquisitions would bring much of the remainder of the Yellow River floodplain in Florida under public ownership. Included in the project is a segment of the lower Shoal River, the largest tributary to the Yellow River. Large private landowners own a majority of the floodplain in this project, but considerable areas of the bordering and buffer lands are being sought to ensure effective management and protection of water resources. Highest priority will be given to tracts in the western portion of the project within the 100-year floodplain. Priority purchases will be concentrated on parcels adjacent to existing District lands. Currently the District owns 16,553 acres along the river.

Although the Yellow and Shoal rivers exhibit good overall water quality, both are fed largely by rainwater runoff and are thus susceptible to pollution from land use activities. The proposed purchase area would provide water quality protection from the Alabama border and encompass roughly 39,000 acres. Purchase of lands northwest of Eglin AFB, along the I-10 corridor, would provide approximately 52,000 acres of land that has the potential for future water resource development to supplement the strained potable water sources in southern Santa Rosa and Okaloosa counties. Acquisitions in this area are recommended by the District Regional Water Supply Plan for Okaloosa, Santa Rosa and Walton counties to protect future supply sources.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 39,140 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Groundwater Recharge Areas
In Escambia and Santa Rosa counties, the Sand-and-Gravel Aquifer is the principal source of potable water for public supply. The Sand-and-Gravel Aquifer is unconfined or poorly confined, making it particularly susceptible to contamination by land uses. Land acquisition along the I-10 corridor between the Yellow and Blackwater rivers in Santa Rosa County would protect recharge areas that are important for future water supply sources.

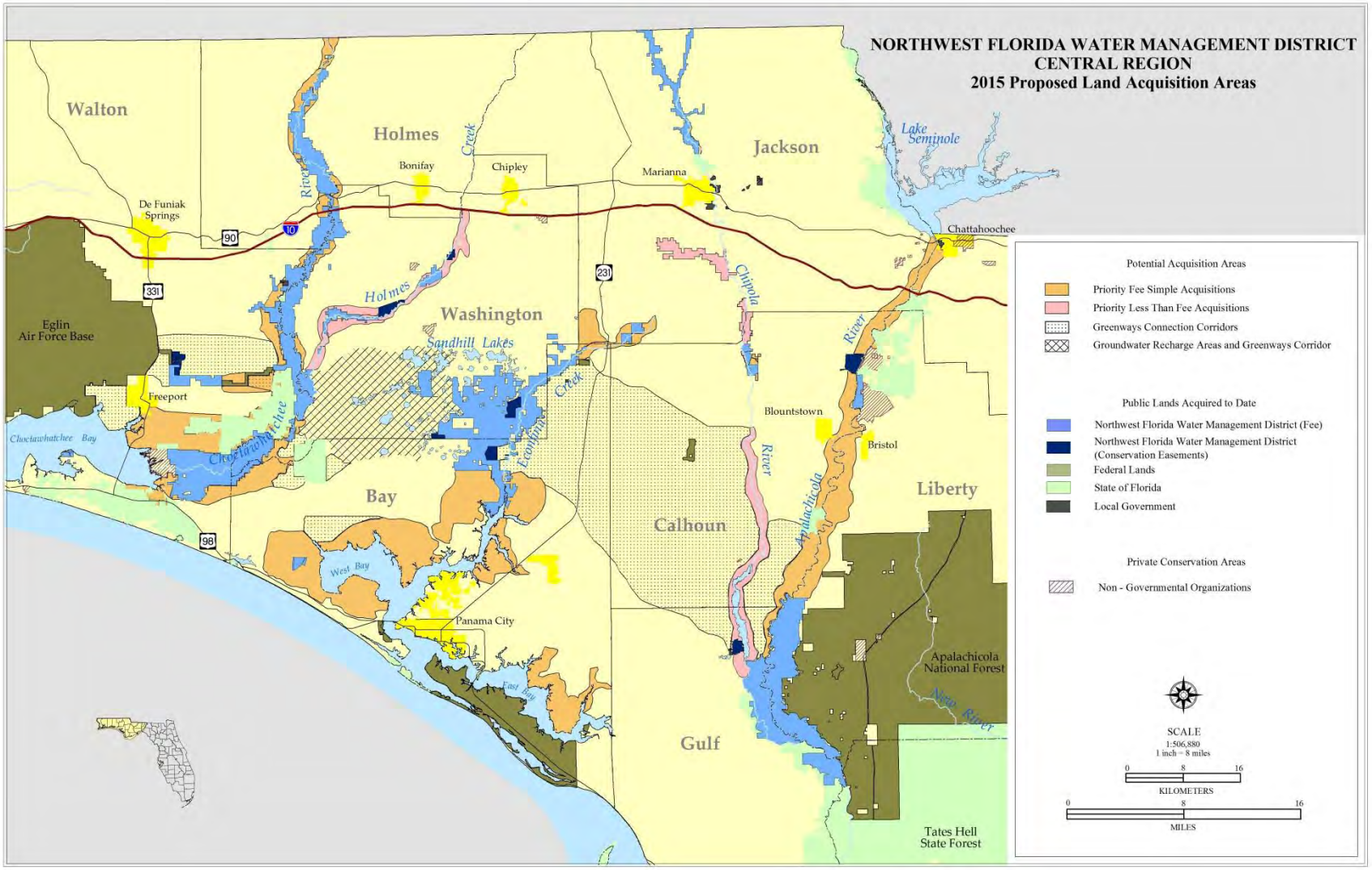

Figure 5.3 2015 Proposed Land Acquisition Areas (Central Region)

Florida Forever Land Acquisition Project

Lafayette Creek

Originating in south central Walton County, the Lafayette Creek drainage basin is located northeast of Freeport, Florida. The main stem of the creek begins about seven miles east of Freeport and runs due west for about six miles before it turns south and empties into LaGrange Bayou/Choctawhatchee Bay. Additional purchases along the creek will protect many diverse natural communities and habitat types. In addition, any proposed acquisitions will also protect a portion of the water resources of Magnolia and Wolf creeks, both of which are significant tributaries to Lafayette Creek. Currently, the District owns 3,160 acres along the creek, including 420 acres for DOT mitigation purposes.

The area between the Choctawhatchee River and Eglin Air Force Base is part of the Northwest Florida Greenway Corridor which serves to protect open space stretching from the Apalachicola National Forest to Eglin Air Force Base. It is intended to preserve environmentally sensitive areas, sustain existing military lands and airspace, maintain the economic viability of forest lands and provide recreation. The District, in cooperation with Eglin Air Force Base, acquired a 1,095.3-acre conservation easement from Nokuse Plantation utilizing the Department of Defense Readiness and Environmental Protection Integration (REPI) funds. Acquisition of this Conservation Easement will ensure the protection of seepage streams within the Magnolia and Lafayette Creeks and buffer Eglin Air Force Base lands to the west.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 5,800 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Choctawhatchee River/Holmes Creek Basin

Originating in Alabama and flowing into Choctawhatchee Bay, the Choctawhatchee River/Holmes Creek basin encompasses the second largest floodplain in the state. Approximately 3,133 square miles of the watershed is in Alabama and 2,052 square miles is in Florida. The river is 170 miles long with about 88 miles in Florida. Although the river basin exhibits localized water quality problems, primarily due to agricultural land use in the upper basin, the overall water quality is considered good. The river basin encompasses several springs and a variety of habitats including bottomland hardwood forests, marshes and Tupelo-Cypress swamps.

Due to the river corridor's undeveloped nature, the basin provides habitat for a variety of native wildlife, including several endangered plant and animal species. The river also serves as a breeding and migratory area for both the Alligator Gar and the Gulf Sturgeon. The District currently owns 63,348 acres along the river and creek in fee and less than fee. Priority purchases will be concentrated on parcels adjacent to existing District lands, around the river's mouth, designated tributaries such as Holmes Creek, and other projects that can mitigate for wetland impacts associated with DOT highway construction.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 55,064 acres have been identified for fee simple acquisition on the Choctawhatchee River and Holmes Creek, and 7,000 acres have been identified for possible less than fee acquisition on Holmes Creek. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

West Bay Buffer

West Bay is the westernmost embayment of the St. Andrew Bay estuary. The bay supports notable shellfish and seagrass communities, important fisheries, and other environmental and economic resources. The West Bay watershed is characterized by extensive pine flatwoods, as well as hardwood forests, cypress wetlands, mixed-forested wetlands, freshwater marshes, wet prairie, and other wetlands. Salt marshes, inland forested wetlands, and associated upland communities are especially prominent in several areas, including the Breakfast Point peninsula and other lands adjacent to the Burnt Mill and Crooked Creek tributaries.

Like other estuaries, the bay is vulnerable to impacts associated with intensive residential and commercial development. Potential impacts include the long-term degradation as a result of nonpoint source pollution, as well as habitat loss and fragmentation. The proposed acquisition would help prevent such degradation by preserving intact an extensive ecosystem of forests, scrub, salt marshes, and freshwater wetlands. Preserving the associated wetland and upland communities in the vicinity of the bay would also protect water quality by providing a substantial riparian buffer and maintaining the natural hydrology in the vicinity of the bay. The District currently owns 719 acres in the West Bay Buffer.

In addition to providing for water resource protection and public use, this acquisition will be consistent with several ongoing initiatives, including the West Bay Sector Plan. These initiatives also include efforts to restore seagrass communities in the bay and to improve the treatment and management of domestic wastewater.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 47,281 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Econfina Creek

Econfina Creek is the major contributor to Deer Point Lake, which serves as the public water supply for Bay County, including Panama City, Panama City Beach and neighboring communities. The proposed purchases along the creek contain several spring-run streams, which are imperiled biological communities. The slope forest communities that border considerable lengths of the creek contain some of the highest species diversity encountered in Florida. The sand hills portion of the project features high rolling pinelands, steephead ravines, and numerous sandhill upland lakes. Much of the sand hills area is of excellent quality, with a nearly intact ground cover of wiregrass and dropseed. At least 18 species of rare or endangered plants inhabit the sand hills area. The District currently owns more than 43,770 acres in fee and less than fee, including the 2,155-acre Sand Hill Lakes Mitigation Bank. Priority purchases will be concentrated on parcels adjacent to existing District lands and parcels with significant aquifer recharge potential.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 39,669 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Groundwater Recharge Areas
The upper portion of the acquisition project is a significant recharge area of the Floridan Aquifer. The majority of the acreage purchased by the District and targeted for future purchase is one of the most important recharge areas for the Floridan Aquifer in northwest Florida. Recharge rates in the area have been estimated at 25 to 40 inches per year, and this recharge drives the spring flows along Econfina Creek, the largest tributary of the Deer Point Lake Reservoir. The reservoir currently provides approximately 50 million gallons per day for residential, commercial and industrial water uses in Bay County.

Florida Forever Land Acquisition Project

Sandy Creek Basin

Sandy Creek is a major tributary of East Bay, the easternmost embayment of the St. Andrew Bay estuary. The creek's basin is characterized by extensive pine flatwoods, as well as hardwood forests, saltmarshes, cypress wetlands, mixed forested wetlands, freshwater marshes, wet prairie, and other wetlands. Salt and freshwater marshes, inland forested wetlands, and associated upland communities are especially prominent along the creek and its tributaries.

Preservation of the Sandy Creek basin will protect a major tributary basin of East Bay. In so doing, it would preserve water quality and a mosaic of interconnected upland, wetland, stream, and estuarine habitats. The acquisition would also protect water quality by providing a substantial riparian buffer and maintaining natural hydrology.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 15,000 acres have been identified for acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

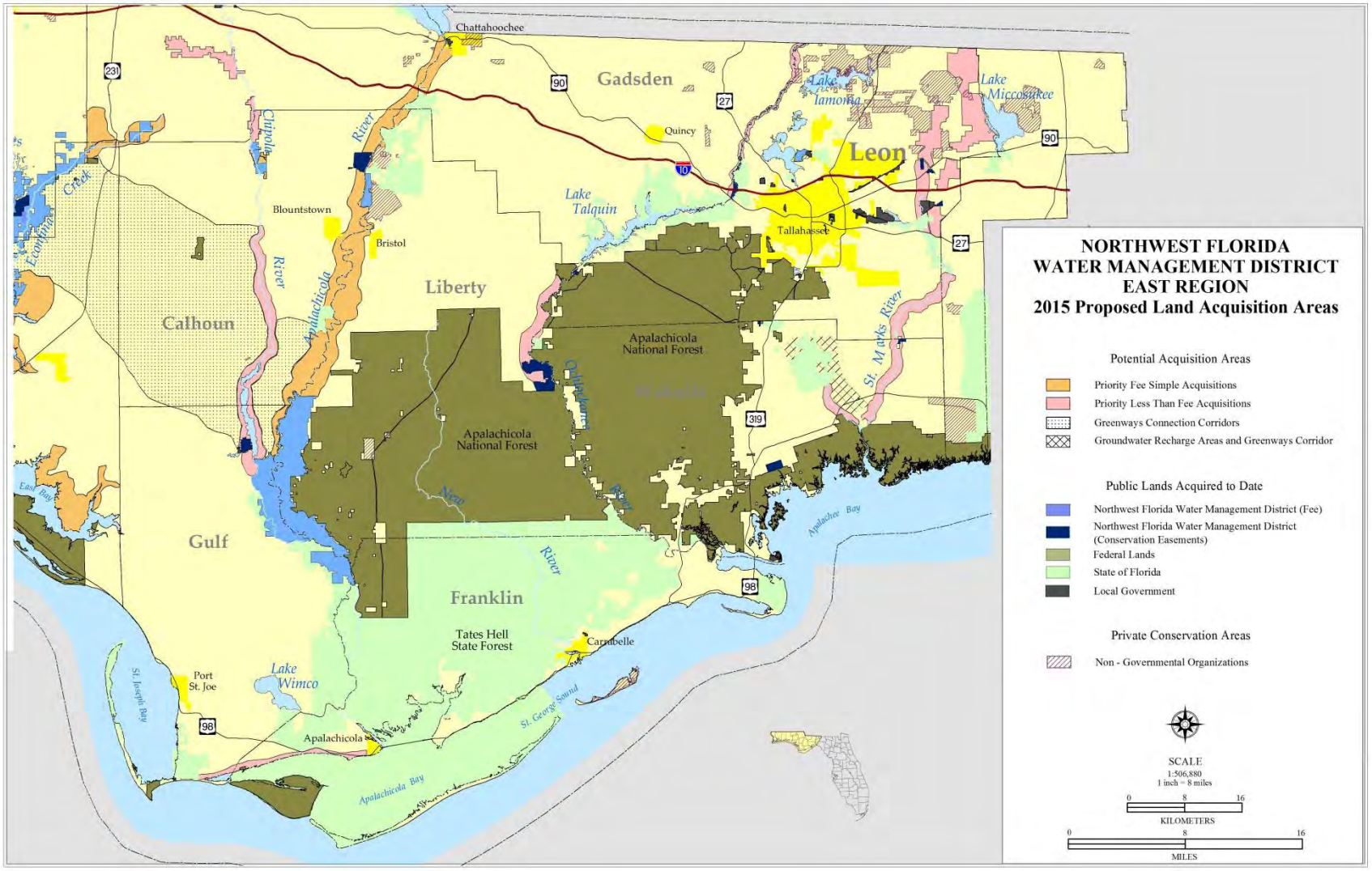

Figure 5.4 2015 Proposed Land Acquisition Areas (East Region)

Florida Forever Land Acquisition Project

Chipola River Basin

A new area along the Middle Chipola River has been identified for less than fee acquisition. The area is comprised of approximately 2,400 acres in northern Calhoun and southern Jackson counties. Acquisition of this tract will help protect more than 3.4 miles of the west bank and 4.25 miles of the east bank of the Chipola, River. In 2009, the District acquired 1,377.76 acres in fee along the Middle Chipola River, including the "Look-N-Tremble" rapids. The District now owns a total of 9,094 acres in fee simple and holds a conservation easement on 810 acres in the Chipola River Basin.

Two additional areas have been identified for less than fee acquisition along the Chipola River. The first is comprised of approximately 6,000 acres in the Spring Lake Spring Group area located in central Jackson County. Acquisition of land in the Spring Lake Spring Group area with its numerous springs, and tributaries which end up in the Chipola River, will provide enhanced water resource protection to the area.

The second proposed less than fee acquisition contains a core tract of roughly 20,000 acres in the river basin in Calhoun and Gulf counties. The Chipola River is the largest tributary to the Apalachicola River and its mostly spring-fed waters make an important and consistent contribution of sediment-free water to the Apalachicola. The degree of biological diversity of the Chipola appears to be nearly as high as that of the Apalachicola. Priority purchases will be focused along the middle reaches of the Chipola River.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 1,025 acres has been identified for possible fee acquisition and 28,400 acres have been identified for possible less than fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Apalachicola Bay/St. Vincent Sound Buffer

Apalachicola Bay has been recognized as a resource of state, federal, and international significance. The bay has extensive fish and shellfish resources, and it supports noteworthy commercial and recreational fisheries and other recreational and economic activities. It has been designated an Outstanding Florida Water, a State Aquatic Preserve, and an International Biosphere Reserve. It includes the Apalachicola National Estuarine Research Reserve and the St. Vincent National Wildlife Refuge. State and federal agencies, as well as the NWFWMD, have made extensive investments in acquiring and protecting lands throughout the basin. This project would provide an important addition to these efforts.

Like other northwest Florida estuaries, Apalachicola Bay is vulnerable to impacts associated with development. Such potential impacts include the long-term effects of non-point source pollution and habitat loss and fragmentation. The proposed acquisition would help prevent such degradation by preserving the integrated forest and wetland community bordering St. Vincent Sound and Apalachicola Bay. The acquisition would limit new sources of pollution, prevent habitat loss and fragmentation, and protect the stability and integrity of littoral vegetation. The acquisition would also protect water quality by providing a substantial riparian buffer which would help prevent channelization from new impervious surfaces.

The land targeted through this project is immediately adjacent to very productive oyster harvesting areas of the Apalachicola Bay system, including the Indian Lagoon, Scorpion and Paradise bars.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 5,200 acres have been identified for less than fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Upper Apalachicola River Basin

The Apalachicola River begins below Lake Seminole at the confluence of Chattahoochee and Flint rivers. It has the largest floodplain in the state and is widely regarded as one of the state's most important natural resources. The Apalachicola River supports the highly productive fishery in Apalachicola Bay, and more endangered plant species can be found along the river's upper stretches than in any comparably sized river in the state. The District owns 36,823 acres of river floodplain and holds a conservation easement on 1,550 acres.

Major habitat types along the Apalachicola River include coastal marshes, freshwater marshes, flatwoods and bottomland hardwood swamp. Water tupelo, Ogeechee tupelo, Bald cypress, Carolina ash and Swamp tupelo have been identified in the floodplain. Several species of federally and state listed fish and mussels are located in the river and basin. Substantial additional acreage of the Apalachicola system is owned by other public agencies and private conservation organizations. Priority purchases will be concentrated on parcels adjacent to existing District lands, other conservation lands and designated tributaries.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 50,132 acres have been identified for possible fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

Ochlockonee River Basin

The Ochlockonee River originates in the coastal plain of Georgia and traverses parts of five Florida counties. Water quality in the river is lowest when it enters Florida and generally improves as it flows closer to the Gulf of Mexico. The Ochlockonee is primarily fed by rainwater runoff, and is therefore susceptible to pollution by land use activities. Large parts of the watershed are publicly owned, including Joe Budd Wildlife Management Area, Lake Talquin State Forest and Apalachicola National Forest. The District's primary focus is to acquire less than fee rights on privately owned floodplain land separating existing federal and state properties. Public ownership of the erosion-prone lands bordering this usually fast flowing river will reduce the likelihood of water quality degradation. The District presently has 3,675 acres in less than fee holdings in the area.

Public Access
All District conservation lands are available for public use. Such uses include fishing, hunting, camping, hiking, boating, swimming, and other recreational and educational activities. Access issues are addressed on a parcel-by-parcel basis.

Land Acquisition
Approximately 11,767 acres have been identified for less than fee acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Florida Forever Land Acquisition Project

St. Marks/Wakulla Rivers

The Wakulla River originates at Wakulla Spring and flows south approximately 10 miles to join the St. Marks River at the town of St. Marks in Wakulla County. The St. Marks River starts east of Tallahassee as a narrow stream, widens considerably below Horn Spring, and then disappears underground at Natural Bridge. After reemerging as a much stronger river at St. Marks River Rise, it flows 11 miles to its confluence with the Wakulla River. While the lower reach of the river below the town of St. Marks is protected and preserved as part of the St. Marks National Wildlife Refuge, much of the remainder of the two river watersheds is threatened by active riverfront development and in the adjacent highlands. The St. Marks supports one of the most heavily used inshore saltwater fisheries in north Florida, the viability of which is largely dependent on the quality of freshwater flowing into the estuarine system. Both the Wakulla Springs State Park and the St. Marks National Wildlife Refuge are major refuges for numerous biological species. The District presently has 1,376 acres under less than fee acquisition in the area.

BluePrint 2000

In December 2003, the Northwest Florida Water Management District and the City of Tallahassee-Leon County BluePrint 2000 Intergovernmental Agency entered into a five-year Memorandum of Agreement (MOA) to work cooperatively to acquire conservation easements to protect and preserve the water resources of the St. Marks River basin in Leon County. Although this MOA has now expired, the District and BluePrint 2000 successfully purchased conservation easements on a 132.62-acre tract and 194.5-acre tract, both located in Leon County.

Land Acquisition

Approximately 45,456 acres have been identified for possible acquisition. Sufficient lands have been identified to allow for a flexible implementation strategy over at least the next five years. The timing of any given acquisition will depend upon such considerations as: Governing Board policy; threats to the resource; availability of willing sellers; tract size; general market conditions; available staff resources, and availability of funds.

Implementation of the 2013-2014 Work Plan

Land Acquisition

The District did not purchase any land in fee simple or less-than-fee simple during 2014; however, the District exchanged 61.1 acres for 50 acres in the Yellow River Water Management Area to protect additional floodplain and acquired land management access to approximately 400 acres of District land which previously had no access.

Land Management

The District completed numerous land management activities during Fiscal Year 2013-2014. Management and restoration efforts including prescribed burns, native species planting and timber harvesting continue across the District's 211,152 managed acres. In addition, the District maintains and improves public access and recreational amenities such as boat ramps, primitive campsites, and swimming and picnic areas. In the pages that follow, Table 5.1 and Table 5.2 provide additional information on specific land restoration activities completed during the year. The projected Fiscal Year 2014-2015 staffing and management budget by WMA can be found in Table 5.3.

To date, the District has conserved and protected 223,555 acres primarily through fee simple acquisition. These lands protect natural systems, wetland and floodplain functions, groundwater recharge, surface and groundwater quality, and fish and wildlife habitat. District-owned lands are all accessible to the public and are managed to protect water resources while providing public access and resource-based recreation.

District lands include the majority of the Escambia and Choctawhatchee river floodplains, as well as extensive lands along the Perdido, Blackwater, Yellow, Shoal, and Apalachicola rivers; Lafayette, Holmes and Econfina creeks; and on Perdido Bay, Garcon Point and Live Oak Point. In addition, the District manages and conducts habitat restoration and maintenance on Yellow River Ranch, Live Oak Point, Ward Creek West and Sand Hill Lakes Mitigation Bank. The District has acquired the majority of the groundwater recharge area for springs that discharge into Econfina Creek and form a crucial component of the water contribution to Deer Point Lake Reservoir.

Land Management Accomplishments (FY 2013-2014)

- The District conducted prescribed burns on approximately 9,400 acres of District lands, as well as vegetation management (herbicide) and habitat enhancements on approximately 1,353 acres.
- The final phase of a cooperative project with Walton County to improve a boat ramp and camping area at Dead River Landing was completed. This popular recreation area now has eight RV-accessible primitive campsites, eight tent campsites, a day use area with covered picnic pavilions and improved parking and boat launching facilities.
- A new public access point was developed on Holmes Creek in Washington County, providing the furthest upstream improved launching point for canoes, kayaks and small boats.
- 556 camping permits were issued at 16 reservation-only sites on District lands.
- 16 special resource area permits were issued for larger events on District property.
- New web pages were created for each District recreation area and an online reservation system was created to improve access to improved campsites. In addition, the initial phase of a program to replace and improve signage on District lands was completed.

- The first phase of a land management database was completed. This database provides an inventory of forest resources and long-term timber revenue estimates, and will assist with the planning of timber harvests and other land and timber management activities.
- Six timber harvests were conducted to remove offsite sand pine and thin loblolly, longleaf, slash pine totaling 2,469 acres.
- More than 7,100 acres of District-owned land were surveyed for invasive exotic plants, and control measures were implemented for all identified problem areas.

Restoration

The District accomplishes water resource restoration through several interrelated programs, primarily Surface Water Improvement and Management (SWIM), Land Management, and Mitigation.

Approved NWFWMD plans with substantial restoration components include the following:

- *Apalachicola River and Bay Management Plan* (1996)
- *Pensacola Bay System SWIM Plan* (1997)
- *Lake Jackson Management Plan* (1997)
- *Choctawhatchee River and Bay SWIM Plan* (2002)
- *St. Andrew Bay Watershed SWIM Plan* (2000)
- *St. Marks River Watershed SWIM Plan* (2009)
- *Tate's Hell State Forest Hydrologic Restoration Plan* (2010)
- *Florida Forever Capital Improvements Plan*

Restoration Accomplishments (FY 2013-2014)

- The Williford Spring restoration project commenced in May 2014. This $1.54 million project involves restoring spring bank areas, providing stabilized access to the spring, sediment removal, and recreation improvements including a new parking area, boardwalks, interpretive trails, pavilions, and a canoe tie-up dock that will help prevent future impacts by limiting the number of canoes that enter the spring area. The project will be completed in 2015.
- Two cooperative projects were commenced to improve recreation areas and restore eroding streambanks on Holmes Creek. These projects are being constructed by Washington County with funding assistance from the District.
- A shoreline stabilization project was started at Devil's Hole swallet in Washington County. This project, being implemented by District staff, utilizes a non-structural approach utilizing geotextile bags to stabilize the eroding shoreline with a vegetated retaining wall.
- Seed from native plants were collected for District groundcover projects from District land on the Econfina Creek WMA. The District continues to research, refine, and establish new habitat restoration techniques that increase species diversity and ecosystem health.
- The District completed hand planting of 1,483 acres of disturbed longleaf pine, wet pine flatwoods, and wiregrass habitat. These habitat restoration activities enhance groundwater recharge, improve wetland functions, and offset wetland losses caused by FDOT projects. Additionally, 989,500 longleaf pine tubelings were planted within two WMAs. The District also reestablished groundcover habitat, planting 108,900 plugs of wiregrass on disturbed habitat sites at the Sand Hill Lakes Mitigation Bank and the Choctawhatchee River/Holmes Creek WMA.

Table 5.4 Summary of Land Restoration, Enhancement and Maintenance Activities (2014)

	Acres Burned					Acres Planted					Acres Harvested			
Water Management Area	**Total**	Fuel Reduction	Site Preparation	Growing Season	Wiregrass Propagation	**Total**	Upland/Wetland Wiregrass and Toothache Grass	Longleaf Pine	Slash Pine	Upland Hardwoods	**Total**	Restoration	Thinning	Habitat Restoration
Escambia River	**24**	24												
Garcon Point	**2076**	2076												
Blackwater River	**278**	278												
Yellow River														
Perdido River	**1363**	1363												
Choctawhatchee River	**1611**	1611				**83**	70	13			**727**	275	452	
Econfina Creek	**2016**	582	363	672	399	**1378**		1378			**250**	250		
St. Andrews	**292**	292				**77**		77						
Carter Restoration	**844**				844	**20**	20							
Ward Creek West	**432**	432												
Devils Swamp Restoration														
Chipola River	**905**	895	10											
Apalachicola River														
Lake Jackson														
Totals	**9841**	**7553**	**373**	**672**	**1243**	**1558**	**90**	**1468**				**525**	**452**	

Table 5.5 Summary of Access and Recreation Management Activities (2014)

Water Management Area	Picnic Areas	Day Use Sites	Parking Areas	Reserved Camp Sites	Boat, Canoe/Kayak Landings	Portolet Stations	Horse Trail	Canoe Trail	Hiking Trail	Nature Trail	Bike Trail	Access Road	Reserved Camp Site Permits	General Purpose	Information Signs on District Lands	Weather Pavilions
	Number Maintained						Miles Maintained						Issued	Signs		Installed
Escambia River	1	11	9	1	9	9			1	2		27	12	40	8	2
Garcon Point		2	2											60		
Blackwater River	1	3	2							1				70		1
Yellow River		3	3		3			50				45		20		
Perdido River	1	3	3	1	3	4	3	15				32	46	60	8	1
Choctawhatchee River	12	15	15		14	10						1			12	1
Econfina Creek	12	13	13	25	8	13	56	22	18	2		130	480	320	65	
Chipola River	1	4	4	3	2	2	4	6	3				18	480	12	
Apalachicola River	1	2	2		2	1								900		
Lake Jackson	1	2	2			1	7		10		7					
Totals	**30**	**58**	**53**	**30**	**40**	**40**	**78**	**93**	**32**	**5**	**7**	**235**	**556**	**1,950**	**105**	**5**

Table 5.6 Projected Lands Management Funding, Staffing, and Activities for FY 2014-2015

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Western	Escambia	35,413		$149,501	$93,050
	Escambia Conservation Easements	19		$825	$500
	Garcon Point	3,245		$81,887	$35,750
	Yellow	16,553		$88,251	$47,750
	Blackwater	381		$32,882	$22,900
	Perdido	6,261		$155,465	$108,370
	Perdido Conservation Easements	4		$825	$500
	Western Region Total	**61,876**	**3**	**$ 509,636**	**$308,820**
Central	Choctawhatchee	60,810		$469,691	$320,250
	Choctawhatchee/Holmes Conservation Easements	2,537		$14,055	$13,000
	Econfina	39,182		$852,623	$641,360
	St. Andrew/Econfina Conservation Easements	2,433		$1,672	$500
	Ward Creek West	719		$0	$0
	Carter Restoration	2,155		$61,000	$61,000
	Central Region Total	**107,836**	**5**	**$1,399,041**	**$1,036,110**
Eastern	Chipola	9,094		$148,462	$72,250
	Apalachicola	36,823		$82,732	$29,050
	Apalachicola/Chipola Conservation Easements	2,359		$1,305	$500
	Lake Jackson	516		$91,562	$54,350
	St. Marks Conservation Easements	1,376		$1,756	$750
	Ochlockonee Conservation Easements	3,675		$1,756	$750
	Eastern Region Total	**53,843**	**2**	**$327,573**	**$157,650**
	Regional Totals	**223,555**	**10**	**$2,236,250**	**$1,502,580**

Table 5.6 Projected Funding, Staffing and Resource Management for FY 2014-2015 (Continued)

Other Projects	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Land Management Administration		4	$944,552	$399,056
IT Initiative			$396,414	$396,414
Land Management Database			$166,743	$146,250
Florida National Scenic Trail - Econfina Creek			$10,000	$10,000
Williford Spring Restoration			$31,900	$0
Live Oak Streambank Restoration			$4,666	$0
Hightower Streambank Restoration			$4,666	$0
Spurling Streambank Restoration			$3,780	$0
Washington County School Board Donation			$340	$340
Grand Total	**223,555**	**14**	**$3,799,311**	**$2,454,640**

5.2 Capital Improvement Work Plan

As required by section 373.199(2), F.S., the five-year work plan includes capital improvement projects that further the goals of the Florida Forever Act (section 259.105, F.S.). These include priorities identified in approved SWIM plans and other restoration plans, water resource development projects, and other eligible Florida Forever projects and improvements to District lands and facilities approved by the Governing Board.

Priority waterbody and water resource descriptions are outlined in approved SWIM plans and RWSPs. These plans respectively are available at www.nwfwater.com/water-resources/swim/ and www.nwfwater.com/water-resources/wsp/.

From 2003-2008, the District offered grant funding to local governments for capital improvements that help implement SWIM projects, water resource development projects, and projects included within stormwater master plans. More than $23 million has been awarded for 55 stormwater retrofit, restoration, and reuse projects under the program. These grants leveraged significant additional funding, with more than $52 million in local and other match funding being allocated to the approved projects. Facility ownership, permitting, and long-term maintenance remain the responsibilities of the grantees, as provided through cooperative grant agreements. Due to the lack of new Florida Forever funding, grant cycles have not been offered for the past several years.

Performance measures for restoration projects are incorporated within the Strategic Water Management Plan (www.nwfwater.com/data-publications/reports-plans/water-management-plans/) and described in Chapter 1 of the Consolidated Annual Report. Cooperative local grant project accomplishment is also described in this section and in Chapter 7 by SWIM watershed and jurisdiction.

Implementation of the 2013-2014 Five Year Work Plan

Implementation of the Apalachicola River and Bay/Tates Hell Swamp wetland restoration project continued through hydrologic restoration within the Whiskey George Creek basin of Tate's Hell State Forest. Construction completed included six hardened low water crossings, 15 earthen ditch plugs, and four culvert modifications. The project was completed with $124,940 in construction funding from Florida Forever, with additional grant funding provided by the National Oceanic and Atmospheric Administration.

Bay County completed the Spring Avenue Pond stormwater retrofit facility in September 2014. This facility provides water quality treatment to 257 acres of the Watson Bayou basin, improving water quality within the bayou and St. Andrew Bay and furthers the objectives of the St. Andrew Bay watershed SWIM plan. The project was completed with $200,000 in construction funding from Florida Forever. Additional funding was provided by Bay County, FDEP, and the MOEX settlement. Overall costs were approximately $1,075,307. Construction costs were more than $985,000.

Toward the end of 2014, the City of Apalachicola completed the construction phases of the Battery Park stormwater treatment facility, treating stormwater runoff from 54 acres that drain to Apalachicola Bay. The overall construction cost was $496,612, with $53,612 being provided from Florida Forever. Additional construction and engineering funding was provided from the Ecosystem Management and Restoration Trust Fund (SWIM).

During the previous year, Blueprint 2000 and the City of Tallahassee completed watershed restoration components of the Cascades Park Watershed Restoration Project. Project features include major stormwater ponds, retaining walls, utility relocations, landscaping to support littoral vegetation, and stream reconstruction, all within the St. Marks River watershed. The park is now open and the education component completed. Bay County completed the Spring Avenue stormwater treatment facility, providing water quality treatment to benefit Watson Bayou and St. Andrew Bay.

Fiscal Year 2015-2018 Capital Improvement Work Plan

Table 5.6 lists projects considered eligible for Florida Forever capital improvement funding. Such funding is limited, however, as significant appropriations have not been made since fiscal year 2008-2009. Funding from the Ecosystem Management and Restoration Trust Fund, Water Management Lands Trust Fund, Legislative special appropriations, federal grants, local governments, and potentially other sources may contribute to accomplishment of these projects, augmented by Florida Forever to the extent possible. Where implementation is precluded due to current funding limitations, projects are identified here to assist in long-term project planning and prioritization. Final approval of funding for any project requires specific Governing Board approval.

Table 5.7 Currently Approved Florida Forever Capital Improvement Projects

Project	Description	Status	Estimated Cost[1]
Apalachicola River and Bay Stormwater Retrofit Projects	Implementation of stormwater retrofit projects that improve water quality in the Apalachicola River and Bay watershed; cooperative projects with local governments, consistent with SWIM plan and stormwater master plan	Battery Park facility completed; engineering in progress for facilities for four other basins	$496,612
Tates Hell Swamp Hydrologic Restoration	Continued implementation of the Tate's Hell State Forest Hydrologic Restoration Plan; Provides water quality, hydrologic, and habitat restoration. Includes construction of low water crossings, earthen ditch plugs, and improved culverts, as well as other habitat and hydrologic restoration activities; cooperative effort with FWC, FDEP, USDA, and NOAA	Completed restoration activities within the Whiskey George basin	$124,940
Unpaved Road sedimentation abatement	Unpaved road stabilization to reduce sedimentation and nonpoint source pollution; supports water quality improvement and habitat restoration objectives of SWIM plans for all District watersheds	Current project ongoing in cooperation with Bay County	$1,220,000
Spring Habitat Restoration	Construction activities to restore riparian and aquatic habitat associated with northwest Florida springs	Projects underway to benefit Williford, Devils Hole, the Holmes Creek spring run	$300,000
Stormwater Retrofit Facilities	Construction of additional cooperative stormwater retrofit projects, providing water quality improvement and improved flood protection, in accordance with approved SWIM plans; current anticipated focus with Pensacola, Choctawhatchee, and St. Andrew Bay watersheds; funding indicated represents estimated available Florida Forever contribution; total costs to be determined	Preliminary planning and in progress	$368,447
Shoreline and Tidal Marsh Restoration	Restoration of intertidal habitat consistent with SWIM plans to include salt marsh and seagrass habitat, oyster reef and living shorelines projects, and associated breakwaters	Preliminary planning and in progress	TBD

[1] Funding may be allocated from legislative special appropriations; Ecosystem Management and Restoration, Florida Forever, and Water Management Lands trust funds; local governments; and other state or federal sources.

Figure 7.2 (in Section 7.2) illustrates the distribution of current and past capital improvement projects District-wide. Additional preservation, enhancement, and restoration projects accomplished to meet regional mitigation needs are described in the Northwest Florida Umbrella, Watershed-based, Regional Mitigation Plan ("Umbrella Plan"), available at www.nwfwmdwetlands.com/.

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Chapter Six: Mitigation Donation Annual Report

Section 373.414(1)(b)2, F.S., requires the District and FDEP to report by March 1 of each year, as part of this report, all cash donations accepted as mitigation for use in duly noticed environmental creation, preservation, enhancement, or restoration projects that offset impacts permitted under Chapter 373, Part IV, F.S., Management and Storage of Surface Waters. The report is required to include a description of the endorsed mitigation projects and, except for projects governed as mitigation banks or regional offsite mitigation, must address, as applicable, success criteria, project implementation status and timeframe, monitoring, long-term management, provisions for preservation, and full cost accounting. The report specifically excludes contributions required under section 373.4137, F.S. (regional mitigation for specified transportation impacts).

The Northwest Florida Water Management District implemented Environmental Resource Permitting (ERP) Phase II (wetland resource permitting), jointly with FDEP, beginning on November 1, 2010. The ERP and Management and Storage of Storm Water (MSSW) programs were combined during FY 2012-2013 as a result of the adoption of the Statewide Environmental Resource Permitting (SWERP) rules in Chapter 62.330, F.A.C. Any cash donations accepted by the District as mitigation during the current fiscal year will be reported annually in this report. No cash donations were received in FY 2013-2014.

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Chapter Seven: Surface Water Improvement and Management Program Summary Report

7.1 Introduction

Section 373.036(7)(d), F.S., provides that districts may include in the Consolidated Annual Report additional information on the status or management of water resources as deemed appropriate. The NWFWMD has a long-term program to protect and restore watershed resources. The Surface Water Improvement and Management (SWIM) program provides the framework for watershed and project planning for the major riverine-estuarine watersheds indicated below (Figure 7.1).

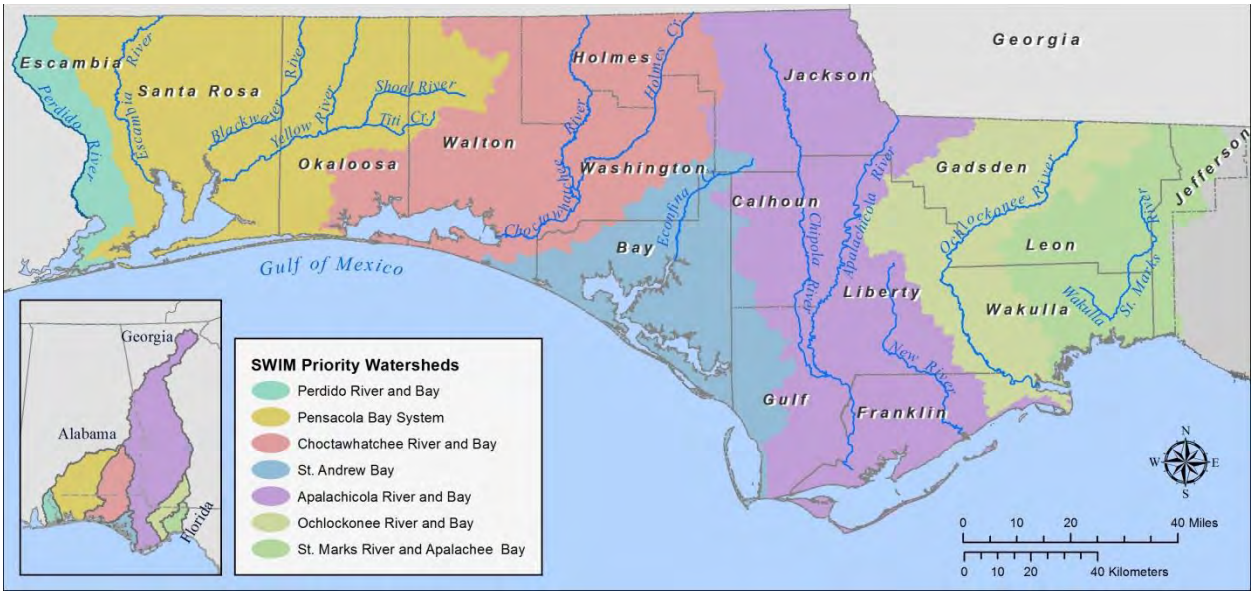

Figure 7.1 NWFWMD SWIM Priority Watersheds

7.2 SWIM Priority List

The Northwest Florida Water Management District's SWIM Priority list is provided in Table 7.1. Pursuant to section 373.453, F.S., the SWIM priority list may be periodically reviewed with updates reflected in this section. In addition to respective watersheds, the list identifies major tributaries and waterbodies. All other tributaries, sub-embayments, and contributing basins are also considered as being within the listed priority waterbodies.

Table 7.1 NWFWMD SWIM Priority List

Watershed		SWIM Plan Status
Apalachicola River and Bay Watershed		
Apalachicola River Apalachicola Bay Chipola River	New River Lake Seminole	Plan update approved 1996
Pensacola Bay System		
Escambia River Blackwater River Yellow River Shoal River East Bay River Pensacola Bay	Escambia Bay East Bay Blackwater Bay Santa Rosa Sound (west) Big Lagoon	Plan update approved 1997
Choctawhatchee River and Bay Watershed		
Choctawhatchee River Holmes Creek Choctawhatchee Bay	Santa Rosa Sound (east)	Plan update approved 2002
St. Andrew Bay Watershed		
Sand Hill Lakes St. Andrew Bay North Bay West Bay	East Bay St. Joseph Bay Deer Point Lake Reservoir Econfina Creek	Plan approved 2000
St. Marks River and Apalachee Bay Watershed		
St. Marks River Wakulla River Lake Miccosukee	Lake Lafayette Lake Munson Apalachee Bay	Plan update approved 2009
Ochlockonee River and Bay Watershed		
Ochlockonee Bay Ochlockonee River	Lake Jackson Lake Iamonia	Draft plan completed 2011; Lake Jackson plan update approved 1997
Perdido River and Bay Watershed		
Perdido River	Perdido Bay	Draft plan completed 2011

SWIM plans are developed to address cumulative anthropogenic impacts on water quality and aquatic habitats. They incorporate comprehensive strategies to both restore and to protect watershed resources. Implementation is accomplished through a variety of activities such as planning and

constructing stormwater retrofits to improve water quality and flood protection; restoring wetland and aquatic habitats; assessing freshwater needs and other resources; protecting springs; and public outreach and awareness. The SWIM program also supports coordination of state and federal grants and implementation of cooperative capital improvement projects with local governments.

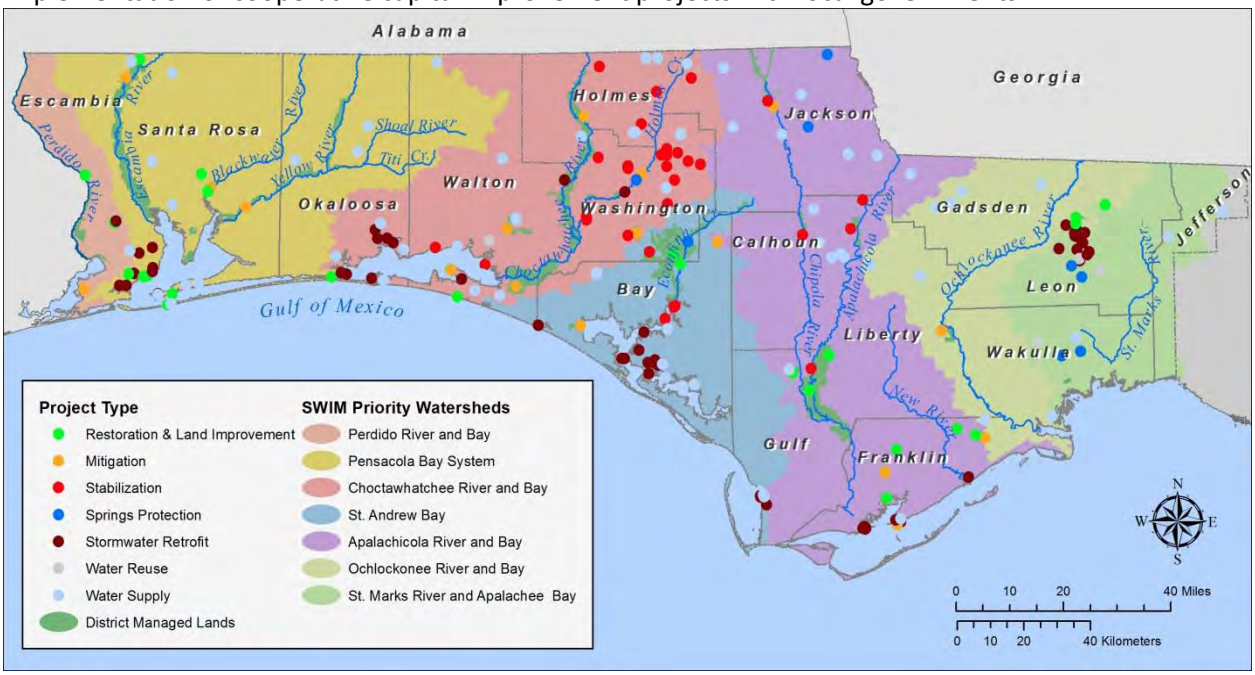

Figure 7.2 Watershed Protection and Water Resource Projects

Figure 7.2 above illustrates the distribution of past watershed protection and water resource projects implemented across the District with SWIM program planning and coordination and other funding sources.

Historically, SWIM plan implementation has integrated and leveraged a variety of funding sources, including SWIM (sections 373.451-373.459, F.S.), the Water Management Lands Trust Fund (section 373.59, F.S.), the Ecosystem Management and Restoration Trust Fund (section 403.1651, F.S.), Florida Forever (section 259.105 and section 373.199, F.S.), legislative special appropriations, the Water Protection and Sustainability Program (section 403.890, F.S.), state and federal grants, and funding through local government partnerships. Cumulatively, the overall effort has resulted in significant protection and improvement of water resources District-wide.

7.3 Current Project Priorities

In 2012, the District established a renewed focus on the Apalachicola River and Bay and St. Andrew Bay watersheds, applying remaining Ecosystem Management and Restoration Trust Fund revenues appropriated by past legislatures to address acute problems apparent within these two systems. Additionally, significant legislative funding has been appropriated to implement priority water quality improvement projects and to update the three dimensional hydrodynamic model for Apalachicola Bay. It is expected that this funding will further leverage and build upon local resources, as well as additional state and federal grant funding.

Springs protection and restoration is carried out through the District's Surface Water Improvement and Management (SWIM), MFL, Land Management and Acquisition, Consumptive Use Permitting, and Environmental Resource Permitting programs. Current initiatives and priorities include efforts to improve conditions in Wakulla Spring, Jackson Blue Spring, and springs associated with the Holmes Creek and Econfina Creek systems. The District is continuing water quality monitoring at Wakulla, Jackson Blue, Pitt, Econfina Blue, and Williford springs and measuring continuous spring flows at Jackson Blue and Wakulla springs and the Spring Creek springs group in coastal Wakulla County. A major initiative to help agricultural producers in the Jackson Blue Spring basin is underway to facilitate the integration of an array of best management practices (BMPs) into their farming operations. These practices are expected to conserve water and improve water quality without compromising production yields. Restoration activities have been initiated for Williford Spring and Devil's Hole Spring, within the Econfina Creek Water Management Area (WMA) and Live Oak, Hightower Springs, and Spurling landings along Holmes Creek within the Choctawhatchee River and Holmes Creek WMA.

Projects completed over the past year include the Battery Park Stormwater Retrofit (Apalachicola Bay watershed) and the Spring Avenue stormwater retrofit facility (St. Andrew Bay watershed). Several stormwater retrofit projects are underway to benefit the Apalachicola Bay and St. Andrew Bay watersheds, as are projects to protect and restore major spring systems. Additionally an updated hydrodynamic model has been completed for Apalachicola Bay. This model will support resource assessments and evaluations of potential actions to improve and maintain a healthy bay environment, including management of freshwater inflows and implementation of cooperative water quality improvement projects in coastal Franklin County.

Table 7.2 lists priority SWIM projects currently underway or in the planning stages. Note that there is overlap between the project priorities listed here and those within the Florida Forever Capital Improvement Plan Table 5.6, particularly for construction projects requiring multiple funding sources for completion. Additional funding sources, including from local governments and state and federal grant sources, may be identified to complement the funding indicated below.

Table 7.2 Current SWIM Projects

Project	Cooperators	Estimated Cost	Description
Apalachicola River and Bay Watershed			
Mobile Irrigation Lab	FDACS; USDA NRCS; West FL RC&D Council	$72,000	Continued/enhanced implementation within the Jackson Blue Spring basin and other agricultural areas. Cost listed is FY 2014-2015 annual cost.
Sod-based Crop Rotation Program	UF IFAS	$40,000	Continued development and implementation of agricultural BMPs. Cost listed is annual cost for FY 2014-20154.
Additional Data Collection	USGS	$50,000	Continued hydrologic data collection. Project funded for FY 2014-2015.
Apalachicola River and Bay Stormwater Retrofit Projects	City of Apalachicola and Carrabelle; Other local governments	$3,565,112	Implementation of cooperative stormwater retrofit projects that improve water quality in the Apalachicola River and Bay watershed

Project	Cooperators	Estimated Cost	Description
Apalachicola Bay Strategic Plan	Watershed stakeholders	$250,000	Multi-agency coordination to identify current needs and priority actions to improve bay water quality
Claiborne Aquifer Water Supply Investigation	NWFWMD	$460,000	Evaluation of aquifer's viability as an alternative water source to offset Floridan Aquifer consumptive use
Jackson Blue Spring Agricultural BMP Program	Producers, FDACS, NRCS	$2,072,255	Agricultural BMP Equipment Cost Share Grant Program
St. Andrew Bay Watershed			
Ed Lee Road	Bay County	$671,000	Paving of Ed Lee Road to provide sedimentation abatement within the St. Andrew Bay watershed.
Maple Avenue Baffle Boxes	Panama City	$978,500	Stormwater retrofit to improve water quality
US98 cross-drain	City of Parker	$1,013,500	Stormwater retrofit to improve water quality and provide flood abatement
Callaway water quality	City of Callaway	$705,000	Stormwater retrofit to improve water quality and provide flood abatement
Mexico Beach baffle boxes	City of Mexico Beach, FDEP	$428,000	Stormwater retrofit to improve water quality
Williford Springs Restoration	NWFWMD	$1,550,000	Implementation of aquatic and riparian habitat restoration components of the overall project.
Lisenby Avenue Pond	Panama City, FDEP	$84,651	Engineering design and surveying for stormwater retrofit. MOEX funding with construction coordinated by FDEP.
Devil's Hole Spring Protection	FDEP	$145,750	Stream bank stabilization to improve water quality and prevent further habitat destruction
Choctawhatchee River and Bay Watershed			
Overbrook Pond	Okaloosa County, FDEP	$40,089	Engineering design and surveying for stormwater retrofit. MOEX funding with construction coordinated by FDEP.
Tanglewood Pond	Okaloosa County, FDEP	$29,294	Engineering design and surveying for stormwater retrofit. MOEX funding with construction coordinated by FDEP.
Holmes Creek Coop. Project	FDEP	$200,000	Stream bank stabilization, stormwater treatment, and, provide public access
St. Marks River and Apalachee Bay Watershed			
Lake Munson Target Area sewer connection	Leon County; FDEP, USDA	$500,000	Wastewater improvement project that will reduce total nitrogen loading to Wakulla Spring by about 2250 lbs/year

Project	Cooperators	Estimated Cost	Description
Lake Bradford Mobile Home Park sewer connection	Leon County; FDEP, USDA	$500,000	Wastewater improvement project that will reduce total nitrogen loading to Wakulla Spring by about 2250 lbs/year
Magnolia Gardens sewer connection	Wakulla County; FDEP, USDA	$2,300,000	FDEP funding to complete two wastewater improvement projects that will reduce total nitrogen loading to Wakulla Spring by about 4000 lbs/year
Wakulla Gardens sewer connection	Wakulla County; FDEP, USDA	$2,300,000	FDEP funding to complete two wastewater improvement projects that will reduce total nitrogen loading to Wakulla Spring by about 4000 lbs/year

7.4 Potential Funding Related to the Deepwater Horizon Oil Spill

District staff are continuing to assist state agencies, local governments, and other stakeholders in identifying project priorities and participating in project development for potential funding related to the Deepwater Horizon Oil Spill. The District's SWIM plans and associated watersheds provide the planning context for this evaluation. Federal RESTORE Act, National Fish and Wildlife Foundation, Natural Resource Damage Assessment, MOEX Offshore penalties, and other associated funding have the potential to help address current problems and challenges. This may be particularly important for those watersheds that currently have no available SWIM funding.

The District cooperated with FDEP in the preparation of two projects submitted for consideration by the Gulf Coast Ecosystem Restoration Council. These are the Apalachicola Bay Watershed Restoration Proposal and the Northwest Florida Estuaries Restoration Proposal. Should these projects be selected for implementation by the council, implementation of them may entail cooperative efforts with District participation.

Chapter Eight: References

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

Bartel, R.L., K. Barrios, M. Pritzl, and K. Coates. 2011. Jackson Blue Spring: Water Resources Assessment. Water Resources Assessment 2011-01. Northwest Florida Water Management District. www.nwfwater.com/system/assets/900/original/WRA11-01.pdf

Busen, K. and R. Bartel. 2012. 2012 Regional Water Supply Plan Update for Santa Rosa, Okaloosa, and Walton Counties, Water Supply Planning Region II. Northwest Florida Water Management District Water Resources Assessment 2012-01. Havana, Florida. www.staging.nwfwater.net/water-resources/water-supply-planning/rwsp/region-ii/

Coates, K., C. Coger, R. A. Countryman, M. Pritzl, and C. J. Richards. 2008. 2008 Water Supply Assessment Update. Northwest Florida Water Management District. Water Resources Assessment 08-02. Havana, Florida.

Countryman, T.C., L. Brooks, K. Busen, E. Chelette, K. Coates, F. Florida, and P. Thorpe. 2014. 2013 Water Supply Assessment Update. Havana: Northwest Florida Water Management District. Water Resources Assessment 13-01. www.staging.nwfwater.net/system/assets/650/original/WSA2013_final_smallpdf.com_.1-94.pdf

Florida Department of Environmental Protection (FDEP). 2008. Guidance on Per Capita Water Use: Uniform Definitions and Performance Measures.

Florida Natural Areas Inventory. 2014. Florida Conservation Lands, March 2014. www.fnai.org/gisdata.cfm

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

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

Northwest Florida Water Management District. 1996. The Apalachicola River and Bay Management Plan. www.nwfwater.com/system/assets/640/original/SWIM_Plan_(3).pdf

Northwest Florida Water Management District. 1997. The Pensacola Bay System Surface Water Improvement and Management Plan. www.nwfwater.com/system/assets/575/original/Pensacola_SWIM_Plan_Update_1997.pdf

Northwest Florida Water Management District. 1997. Lake Jackson Management Plan Addendum (Update and Extension of the1994 Lake Jackson Management Plan). www.nwfwater.com/system/assets/639/original/LakeJackson_ManagementPlan_Addendum1997_Final_smallpdf.com.pdf

Northwest Florida Water Management District. 2000. St. Andrew Bay Watershed Surface Water Improvement and Management Plan. www.nwfwater.com/system/assets/70/original/St.AndrewBay_SWIM_Plan.pdf

Northwest Florida Water Management District. 2002. Choctawhatchee River and Bay System Surface Water Improvement and Management Plan. www.nwfwater.com/system/assets/1541/original/Choctawhatchee_Plan_Update_2002.pdf

Northwest Florida Water Management District. 2006a. Surface Water Improvement and Management Program Priority List. Program Development Series 2006-02. Havana, Florida. www.nwfwmd.state.fl.us/rmd/swimpriority%20list%202-06.pdf

Northwest Florida Water Management District. 2006b. Regional Water Supply Plan for Santa Rosa, Okaloosa, and Walton Counties, Plan Update. Water Resource Assessment 2006-01. September 2006 (approved October 26, 2006). Havana, Florida. www.nwfwmd.state.fl.us/pubs/RWSP_Region2/2006_plan/rwsp.htm

Northwest Florida Water Management District. 2007. Regional Water Supply Plan: Region V, Franklin and Gulf Counties. Water Resources Assessment 07-01. January 2007 (approved January 25, 2007). Havana, Florida. www.nwfwmd.state.fl.us/pubs/rwsp/plan.htm

Northwest Florida Water Management District. 2008. Region III Regional Water Supply Plan, Bay County, Florida. Program Development Series 08-02. August 2008. Havana, Florida. www.nwfwmd.state.fl.us/rmd/water_supply_planning/region_III_wsp.html

Northwest Florida Water Management District. 2009. St. Marks River Watershed Surface Water Improvement and Management Plan Update. www.nwfwater.com/system/assets/57/original/St__Marks_SWIM_plan_Update_FINAL_2009.pdf

Northwest Florida Water Management District. 2013. 2013 Water Supply Assessment Update. Water Resources Assessment 14-01. www.nwfwater.com/system/assets/1340/original/WSA2013_Final_Compressed.pdf

Northwest Florida Water Management District. 2014. Strategic Water Management Plan. Program Development Series 2010-03. Havana, Florida. www.nwfwater.com/data-publications/reports-plans/water-management-plans/

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

PBS&J. 2006. Final Report: Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates. October 2006. www.nwfwmd.state.fl.us/pubs/RWSP_Region2/RWSP_Region2.htm

Pratt, Thomas R. 2001. Results of Floridan Aquifer Drilling Program in Santa Rosa, Okaloosa, and Walton Counties, Florida. Technical File Report 01-1. www.nwfwmd.state.fl.us/pubs/tfr01-1/tfr01-1.htm

Whitcomb, J.B. 2005. Florida Water Rates Evaluation of Single Family Homes. Brooksville, FL: Southwest Florida Water Management District.