

Consolidated Annual Report

March 1, 2017



Northwest Florida Water Management District

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Consolidated Annual Report

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Cover Photo: Apalachicola River

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Executive Summary

This Consolidated Annual Report fulfills section 373.036(7), Florida Statutes (F.S.), which requires the Northwest Florida Water Management District (NFWFMD or District) to annually prepare and submit a report on the management of water resources to the Governor, the President of the Senate, the Speaker of the House of Representatives, and to the Florida Department of Environmental Protection (DEP). Chairs of legislative committees with substantive or fiscal jurisdiction over water management districts, and the governing boards of counties having jurisdiction or deriving funds for operations in the District, also receive copies. The report is available to the public online at nwfwater.com/data-publications/reports-plans/consolidated-annual-reports/.

The March 1, 2017, NFWFMD Consolidated Annual Report includes all elements required by statute, updated in 2016 in accordance with Senate Bill 552, as specified in section 373.036(7)(b), F.S. The report also includes one optional chapter on the District's Surface Water Improvement and Management (SWIM) program. Contents of the report are:

1. Strategic Water Management Plan Annual Work Plan Report
2. Minimum Flows and Minimum Water Levels (MFL) Annual Priority List and Schedule
3. Annual Five-Year Capital Improvements Plan
4. Alternative Water Supplies Annual Report
5. FY 2016-2017 Five-Year Water Resource Development Work Program
6. Florida Forever Work Plan Annual Report
7. Mitigation Donation Annual Report
8. Water Projects in the Five-Year Water Resource Development Work Program
9. Surface Water Improvement and Management (SWIM) Program Annual Report

The elements or chapters that follow provide the status and record of accomplishments of District programs over the previous fiscal year (FY 2015-2016) that contribute to the implementation and success of the District's mission and responsibilities:

*The **mission** of the Northwest Florida Water Management District is to implement the provisions of Chapter 373, Water Resources, Florida Statutes (F.S.), in a manner that best ensures the continued welfare of the residents and water resources of northwest Florida.*

*The District works with state and federal agencies and local governments to achieve its mission through four interrelated **areas of responsibility**: water supply, water quality, flood protection, and natural system protection.*

FY 2015-2016 accomplishments include implementation of numerous spring restoration, stormwater retrofit, and water supply development projects; monitoring of springs water quality and flows; continued development of minimum flow and minimum water level technical assessments; and floodplain risk mapping. Strategic priorities approved by the District's Governing Board, as noted in the Strategic Water Management Plan (Chapter 1), provide guidance and a framework for implementing all District programs and activities.

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Consolidated Annual Report

Chapter 1

Strategic Water Management Plan

Annual Work Plan Report



Strategic Water Management Plan (SWMP) Annual Work Plan Report

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Chapter 1. Strategic Water Management Plan (SWMP) Annual Work Plan Report

Overview

The mission of the Northwest Florida Water Management District (NFWFMD or District) is to implement the provisions of Chapter 373, Water Resources, Florida Statutes (F.S.), in a manner that best ensures the continued welfare of the residents and water resources of northwest Florida. The District works to achieve its mission through four interrelated areas of responsibility: water supply, water quality, flood protection, and natural system protection. Water management plans developed pursuant to section 373.036(2), F.S., guide the implementation of the District's mission and responsibilities.

The District's Governing Board annually approves a [Strategic Water Management Plan](#) (SWMP) for a five-year planning horizon. This element of the District's Consolidated Annual Report is the annual work plan report on the implementation of the Strategic Water Management Plan for the previous fiscal year (section 373.036(2)(e)4.). The FY 2015-2016 SWMP was approved on November 12, 2015 and listed below are the SWMP strategic priorities consistent with those in the District's adopted FY 2015-2016 budget. Addressed in this annual work plan report for each strategic priority are, at a minimum, success indicators, deliverables, and milestones.

Strategic Priorities for Fiscal Years 2016-2020

- **Springs Protection and Restoration:** *Protect and restore water quality and flows within the major spring systems of northwest Florida.*
 - **Minimum Flows and Minimum Water Levels¹ (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.*
-

Summary of FY 2015-2016 Accomplishments

FY 2015-2016 accomplishments include implementation of numerous spring restoration, stormwater retrofit, and water supply development projects; monitoring of springs water quality and flows; continued development of MFL technical assessments; and floodplain risk mapping. Table 1.1 provides a summary of FY 2015-2016 accomplishments for each strategic priority.

¹ In 2016, Senate Bill 552 clarified the definition of MFLs as minimum flows and *minimum water* levels, now noted throughout Chapter 373, F.S., including section 373.042. This change has been incorporated throughout this report.

Table 1.1 Summary Overview of Strategic Priority Performance Measures

Strategic Priority / Goal	Success Indicators^(A)	Milestones	Deliverables
Springs Protection and Restoration: <i>Protect and restore water quality and flows within the major spring systems of northwest Florida.</i>	<ul style="list-style-type: none"> (1) Project accomplishment (2) Trends in nitrate concentrations (3) Trends in spring flows 	Completion of Williford Spring restoration and two years of agricultural BMP projects.	Receiving MIL quarterly reports, evaluation summaries, and water savings calculations.
Minimum Flows and Levels (MFLs): <i>Develop and implement science-based MFLs that protect water resources and associated natural systems.</i>	<ul style="list-style-type: none"> (1) MFL technical assessment accomplishment (2) Waterbodies meeting their adopted MFLs 	Six technical assessments under development; one started one year ahead of schedule.	One technical assessment 50% complete, plus two at 30% completion.
Apalachicola-Chattahoochee-Flint River Basin: <i>Protect Apalachicola River and Bay water quality and freshwater inflow.</i>	<ul style="list-style-type: none"> (1) Cooperative project implementation (2) Area restored (3) Stormwater treatment area 	Three projects under construction (60% complete). 176 treatment acres under construction.	Two cooperative projects completed. More than 25% of planned treatment area completed.
Water Supply: <i>Ensure sufficient water is available for all existing and future reasonable-beneficial uses and natural systems.</i>	<ul style="list-style-type: none"> (1) RWSP water demands met (2) PWS gross per capita water use (3) PWS residential per capita water use (4) Water reuse to offset use of potable quality water (5) Project accomplishment 	58 Water Supply Development (WSD) projects funded with over \$20.6 million.	Twenty-seven of 58; (47%), of all WSD projects completed.
Watershed Protection and Restoration: <i>Protect and restore watershed resources and functions.</i>	<ul style="list-style-type: none"> (1) Balance of released mitigation credits (2) Cooperative project implementation (3) Area restored (4) Stormwater treatment area 	Three St. Andrew Bay and one Apalachicola Bay stormwater retrofit project(s) complete.	Updated draft SWIM plans and wetland mitigation monitoring reports.
Flood Protection and Floodplain Management: <i>Maintain natural floodplain functions and minimize harm from flooding.</i>	<ul style="list-style-type: none"> (1) Area of floodplain protected (fee or less-than-fee acquisition) (2) Percent of District with updated flood maps meeting FEMA standards 	Coastal remapping studies for six counties complete.	100% of District with DFIRMs in 2014. Preliminary flood map updates issued for 4 counties (25% of District) in 2016.

^(A) Not all success indicators are addressed or have accomplishments every year.

1.1 Springs Protection and Restoration

Strategic Priority and Success Indicators

The goal of the Springs Protection and Restoration strategic priority is to protect and restore water quality and flows within the major spring systems of northwest Florida. Success indicators are:

- (1) Project accomplishment (percent completion on schedule)
- (2) Trends in nitrate concentrations
- (3) Trends in spring flows

Current Activities and Accomplishments

Recently accomplished and current activities are focused on improving water quality and flows within the major spring systems of northwest Florida. These activities include:

- Helping producers implement agricultural best management practices (BMPs) for water conservation and water quality improvement within the Jackson Blue Spring basin (Jackson County);
- Assisting Jackson, Wakulla, and Leon counties and municipalities with septic-to-sewer retrofits within the contribution areas of the Jackson Blue and Wakulla springs systems;
- Restoring habitat at Devil’s Hole, Walsingham, and Econfina Blue springs within the Econfina Creek Water Management Area (WMA) and along Holmes Creek (Washington County);
- Acquiring land to protect Jackson Blue Spring, the Gainer Spring Complex on Econfina Creek, and Cypress Spring on Holmes Creek;
- Evaluating potential advanced septic treatment systems for rural areas in Leon and Wakulla counties;
- Evaluating the Claiborne aquifer as a potential alternative water source in the Jackson Blue Spring contribution area; and,
- Monitoring and resource assessments for major spring systems Districtwide.

Evaluation of Indicators

(1) Project accomplishment (percent completion on schedule)

The District had several new and ongoing projects in FY 2015-2016 that contribute to spring protection and restoration. A total of 21 projects were active or completed during the fiscal year within four major watersheds and five counties.

Table 1.2 below lists projects by major watershed from west to east. A map of the seven major watersheds within the district is in Section 1.5: Watershed Protection and Restoration, Figure 1.8.

Table 1.2 Spring Protection and Restoration Projects

Project	Description/Cooperators	Total District Cost (or as noted)	Status	Percent Complete
Choctawhatchee River and Bay Watershed				
Holmes Creek Spring Complex Restoration	Restoration of approximately 500 feet of eroded stream bank at three boat launch sites. Washington County	\$235,000	One of three sites complete; two sites under construction	66%
Holmes Creek Spring Complex Restoration – Cotton Landing	Restoration and stormwater management of 125 feet of shoreline on Holmes Creek, along with compatible public access improvements. DEP	\$193,000	Under construction	60%
Cypress Spring Land Acquisition	Acquisition of up to 302 acres at Cypress Spring along Holmes Creek in Washington County	\$1,100,000	Contracting / Planning	0%
St. Andrew Bay Watershed				
Devil's Hole Spring Streambank Restoration	Restoration and stormwater management of 100 LF at spring on Econfina Creek, along with compatible public access improvements. DEP	\$137,000	Under construction	60%
Walsingham Streambank Restoration	Non-structural stream bank and habitat restoration at Walsingham Park in Washington County	\$64,905	Complete	100%
Land acquisition – Econfina	Acquisition of three acres along Econfina Creek in northern Bay County	\$52,000	Complete	100%
Streambank Restoration – Econfina	Restoration of shoreline and habitat along recent acquisition parcel	\$50,000	Under construction	33%
Gainer Springs Land Acquisition	Acquisition of up to 982 acres and spring bank restoration along Econfina Creek	\$6,000,000	Contracting / Planning	0%
Econfina Blue Spring Camp Improvements	Public access improvements and shoreline restoration along Econfina Creek	\$200,000	Contracting / Planning	0%
Apalachicola River and Bay Watershed				
Mobile Irrigation Laboratory	Technical assistance to producers, primarily within the Jackson Blue Spring contribution area, to improve irrigation efficiency. FDACS, NRCS; West FL RC&D Council	\$72,000 (annual cost)	All funds expended and projects complete for FY 2015-2016	100%
Jackson Blue Spring Agricultural BMP Cost Share Program	Financial assistance to producers in the Jackson Blue Spring contribution area to implement irrigation efficiency and water quality BMPs. Producers, FDACS, NRCS	\$3,239,500	Years 1 and 2 complete; Year 3 in progress and Year 4 in planning.	38%

Project	Description/Cooperators	Total District Cost (or as noted)	Status	Percent Complete
Apalachicola River and Bay Watershed				
Land acquisition – Jackson Blue	Fee simple or less-than-fee simple acquisition of 598 acres in the Jackson Blue Spring area.	\$2,697,192	In progress	5%
Jackson County Septic to Sewer Retrofit – Indian Springs	Convert residential subdivision in Jackson Blue Spring area from septic to sewer to reduce nitrogen loading. Jackson County and City of Marianna	\$1,450,000	Design/Engineering	0%
Jackson County Septic to Sewer Retrofit – Blue Spring Road	Convert county park and residential subdivision in Jackson Blue Spring area from septic to sewer. Jackson County and City of Marianna	\$3,401,200	Contracting / Planning	0%
Claiborne Aquifer Evaluation	Construct test and monitoring wells and conduct modeling to determine the aquifer’s viability to reduce demands on Jackson Blue Spring flows	\$440,000	In progress	5%
St. Marks River and Apalachee Bay Watershed				
Leon County Septic to Sewer Retrofit – Woodside Heights	Convert residential subdivision in Wakulla Spring area from septic to sewer to reduce nitrogen loading. Leon County	\$4,900,000	Design/Engineering	0%
Leon County Septic to Sewer Retrofit – Woodville Phase I	Design to convert residential community in Wakulla Spring area from septic to sewer. Leon County	\$1,500,000	Contracting / Planning	0%
Leon County Septic to Sewer Retrofit – Priority Focus Area 1	Convert residential subdivision in Wakulla Spring area from septic to sewer to reduce nitrogen loading. City of Tallahassee	\$637,000	Contracting / Planning	0%
Advanced Septic Systems Pilot Project	Convert two neighborhoods to advanced septic systems within Leon and Wakulla counties. Leon County; Wakulla County; DEP; FDOH	\$1,500,000	Contracting / Planning	0%
Wakulla County Septic to Sewer Retrofit – Magnolia Gardens	Convert residential subdivision in Wakulla Spring area from septic to sewer. Wakulla County; DEP; USDA	\$7,716,600	Design/Engineering	5%
Wakulla County Septic to Sewer Retrofit – Wakulla Gardens	Convert residential subdivision in Wakulla Spring area from septic to sewer. Wakulla County; DEP; USDA	\$10,396,600	Design/Engineering	5%

(2) and (3) Trends in nitrate concentrations and spring flows

Spring flow and nitrate² concentration data are available for Gainer Springs, Jackson Blue Spring, St. Marks River Rise, and Wakulla Spring. Current information is summarized in Table 1.3 and Figures 1.1-1.4. The table below indicates apparent trends based on examination of changes in flows and concentrations over time. It should be noted that trends are based on visual examination of data and may not be statistically significant. Additional and updated information on major springs in northwest Florida is available at www.nfwfwater.com/water-resources/springs/.

Table 1.3 Trends in Spring Flows and Nitrate/Nitrite Concentrations Indicator

Spring/Spring System	Average Flow ¹ (cfs)/Trend	Nitrate Concentration (mg/L) ²
Gainer Springs Group	155/Variable, stable	0.18/Stable
Jackson Blue Spring	117/Variable ³	3.60/Stable
St. Marks Rise	353/Variable, stable	0.05 – 0.20/Variable ⁴
Wakulla Spring	623/Increasing	0.44/Decreasing ⁵

¹Periods of Record (flow): Gainer Springs, 2002-2016; Jackson Blue Spring, 2003-2016; St. Marks Rise, 1997-2016; Wakulla Spring, 1997-2016.

²Periods of Record (water quality): Gainer Springs, 2002-2015; Jackson Blue Spring, 2005-2016; St. Marks Rise, 1999-2016; Wakulla Spring, 1997-2016. Value presented is the most recent five year median.

³Spring flow from Jackson Blue Spring is influenced by the water level maintained in Merritt’s Mill Pond.

⁴Water quality under the influence of surface water drainage.

⁵Median Nitrate Concentration over the most recent five years of data.

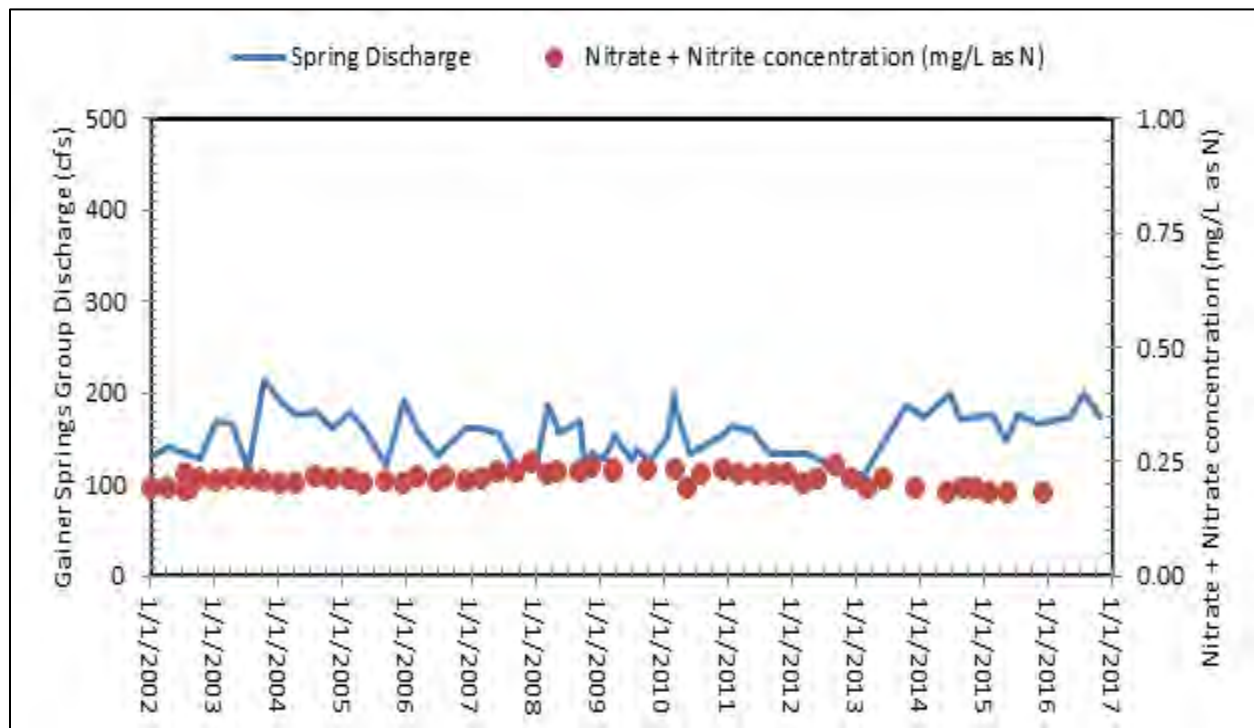


Figure 1.1 Nitrate and Nitrite Concentration and Discharge: Gainer Springs Group (2002-2016)

²Values are measured and reported as nitrate + nitrite. Nitrite (NO₂) is converted into nitrate (NO₃) in the environment.

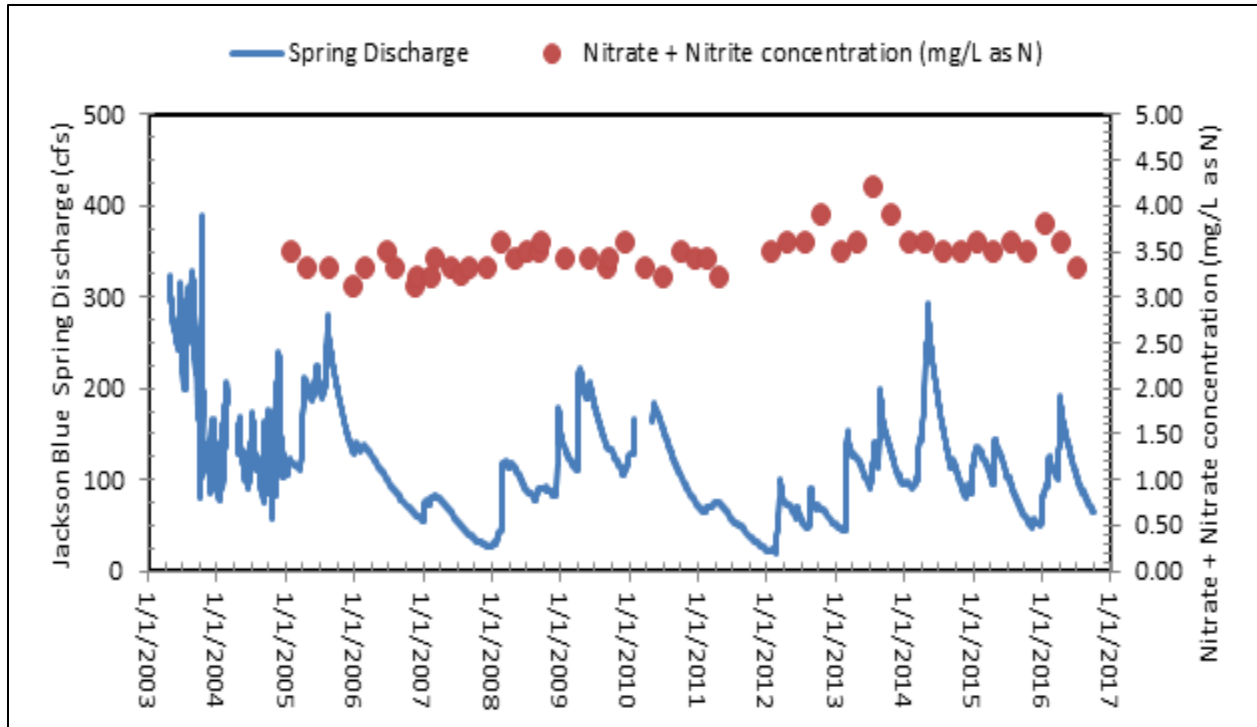


Figure 1.2 Nitrate and Nitrite Concentration and Discharge: Jackson Blue Spring (2003-2016)

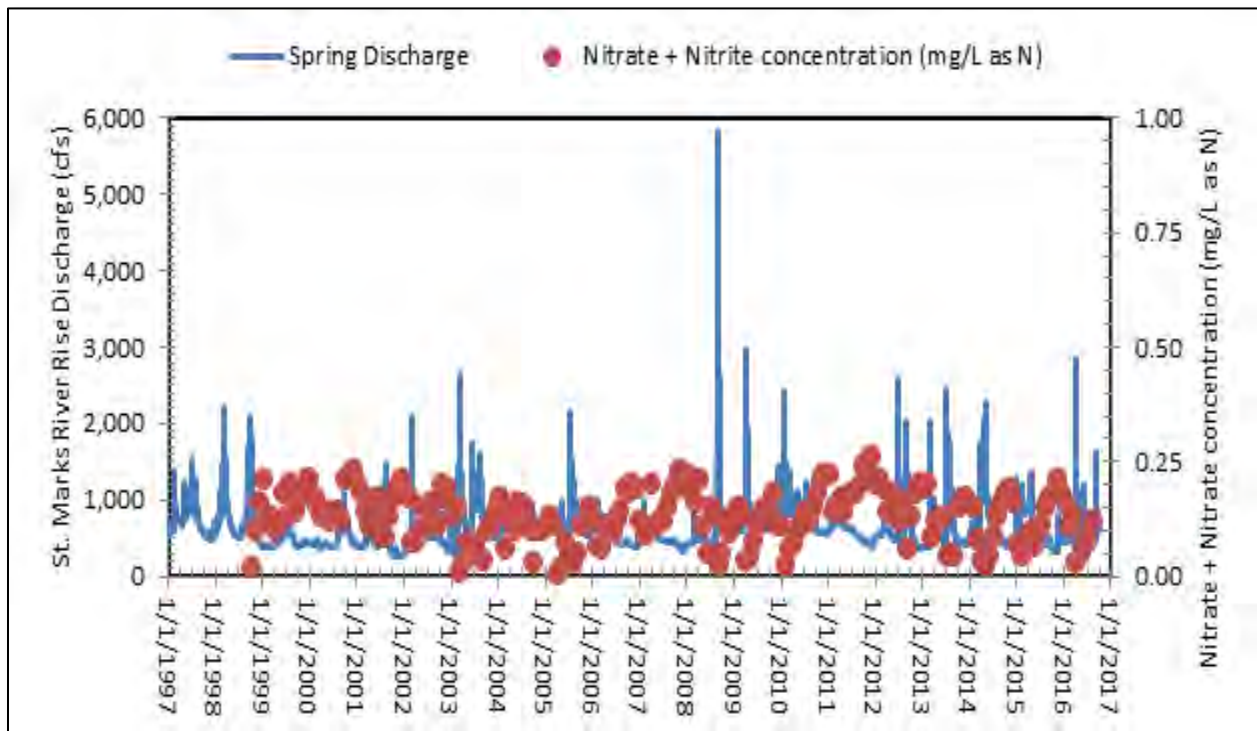


Figure 1.3 Nitrate and Nitrite Concentration and Discharge: St. Marks River Rise (1997-2016)

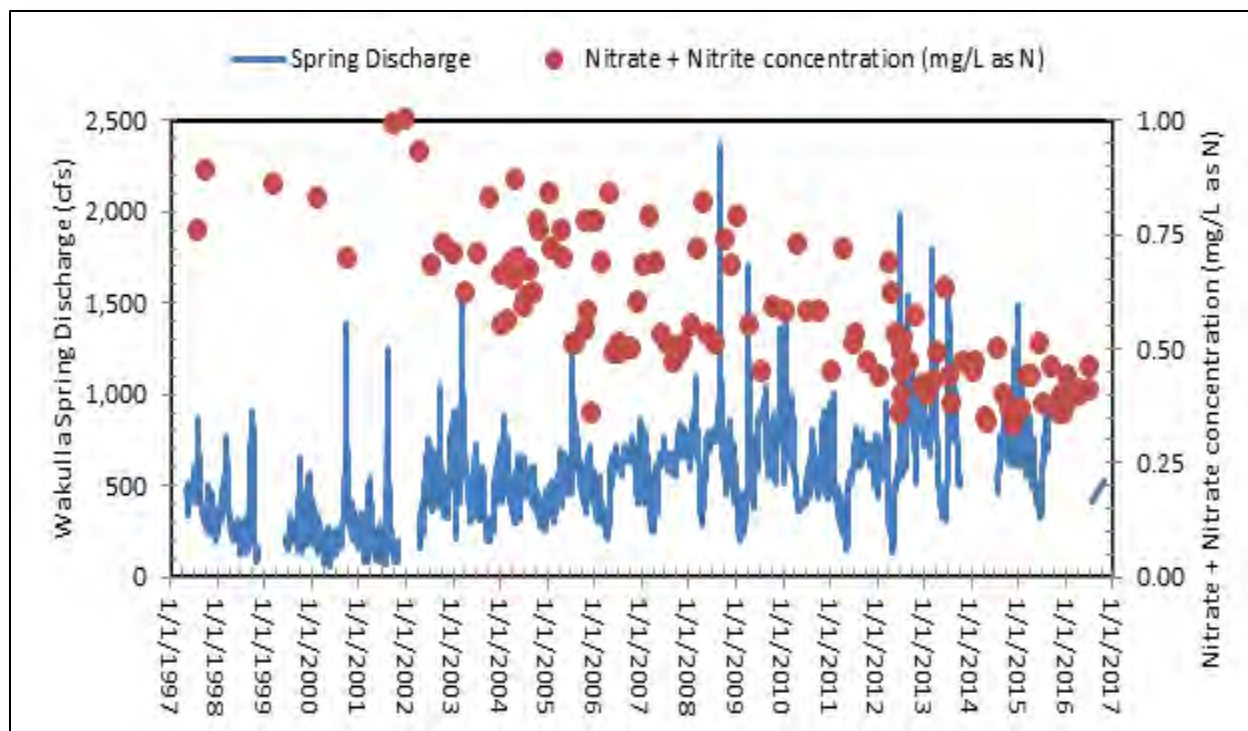


Figure 1.4 Nitrate and Nitrite Concentration and Discharge: Wakulla Spring (1997-2016)

Milestones and Deliverables

Table 1.4 shows the status of SWMP deliverables and milestones for Springs Protection and Restoration.

Table 1.4 Springs Protection and Restoration Milestones and Deliverables

Milestone	Target Date	Status
(1) Completion of Devil’s Hole spring stream bank restoration	2017	Design/Engineering
(2) Completion of Holmes Creek streambank stabilization	2017	In progress
(3) Implementation of funded BMPs for producers in the Jackson Blue Spring basin and Mobile Irrigation Lab evaluations	FY 2016-2017	In progress
(4) Completion of multiple septic-to-sewer retrofit projects in Jackson, Leon and Wakulla counties	FY 2017-2018	In progress

Deliverable	Status
(1) Mobile Irrigation Lab evaluation reports	Receiving quarterly reports and evaluation summaries, water savings calculations, and lists of public outreach and education events attended.
(2) Water quality data	Water quality data collected by DEP and NFWFMD and available from STORET or NFWFMD water quality database.
(3) Spring discharge data	Select water quality, level and flow data is available for direct download from the NFWFMD Hydrologic WebPortal: www.nfwfwater.com/Data-Publications/Hydrologic-Data/Active-Stations-Map

1.2 Minimum Flows and Minimum Water Levels

Strategic Priority and Success Indicators

The goal of the Minimum Flows and Minimum Water Levels (MFLs) strategic priority is to develop and implement science-based MFLs that protect water resources and associated natural systems. Success indicators are:

- (1) MFL technical assessment accomplishment (number and percent complete per the approved schedule)
- (2) Waterbodies meeting their adopted MFLs (number and percentage)

Current Activities and Accomplishments

The District continues to move forward expeditiously to develop minimum flows and minimum water levels (MFLs) in Northwest Florida. The NFWFMD FY 2016-2017 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 Shoal River. Additional waterbodies will be scheduled in future years. The list represents an ambitious yet achievable MFL program, which is being implemented in an efficient and technically sound manner.

FY 2015-2016 Accomplishments

District staff is working concurrently on six MFL waterbodies: St. Marks River Rise, Wakulla Spring, Sally Ward Spring, Jackson Blue Spring, the coastal Floridan aquifer in Planning Region II (Okaloosa, Santa Rosa, and Walton counties), and the Shoal River.

Hydrologic and water quality data are being collected at 58 sites to support MFL development for the Wakulla Spring, Sally Ward Spring, and the St. Marks River Rise system. Floodplain habitat data was collected and analyzed to support the quantification of freshwater needs for fish and wildlife in this system. Channel cross-sections and bathymetric profiles were surveyed to support the development of hydrologic models. The development of a HEC-RAS surface water model was initiated and hydrographic data (temperature, salinity, stage) is being collected to support a hydrodynamic model of estuarine habitat. A deep Floridan aquifer monitor well was installed between Wakulla Spring and the Spring Creek Springs Group to monitor water quality and hydrologic conditions. The development of a regional groundwater flow model for the Eastern portion of the District was also initiated. The technical assessments are on-schedule, with the MFL technical assessment for the St. Marks River Rise to be completed in 2018, and the assessments for Wakulla Spring and Sally Ward Spring in 2020.

To support MFL development for Jackson Blue Spring, a 435-foot geologic core was extracted by the Florida Geologic Survey to enhance our understanding of the hydrogeology near the spring. Claiborne and Floridan aquifer monitor wells were installed at the coring site to monitor hydrologic conditions. A Floridan and surficial monitor well pair were also installed at Cypress Park, on the southern edge of the Jackson Blue Spring contribution area, to provide hydrologic and geologic data. The technical assessment is on schedule to be completed in 2022.

A MFL Work Plan was completed for the coastal Floridan aquifer in Planning Region II (Walton, Okaloosa, and Santa Rosa counties) in FY 2014-2015. The District contracted with a consultant to update

Chapter 1. SWMP Annual Work Plan Report

and expand a groundwater flow model for the western portion of the District. Technical specifications were finalized, an Invitation to Bid was issued, and a well drilling contractor was selected to construct and test four deep Floridan aquifer monitoring wells. Geophysical and video logging was performed at existing wells to assess their suitability for water quality monitoring. The technical assessment is on-schedule to be completed in 2020.

Staff also began developing an MFL Work Plan for the Shoal River, one year ahead of schedule.

Activities Planned for FY 2016-2017

During FY 2016-2017, enhanced hydrologic data collection will continue for all six waterbodies for which MFLs are under development. Hydrologic models will continue to be developed and calibrated for the St. Marks River Rise, Wakulla, and Sally Ward springs system. These include a regional groundwater flow model for the eastern portion of the District, a surface water model of the St. Marks and Wakulla river system, and a hydrodynamic model of estuarine habitats. To support MFL development for Jackson Blue Spring, ecologic and floodplain data will be collected along Merritt's Mill Pond and Spring Creek to assess fish and wildlife habitat. Channel bathymetry and structure elevations will be surveyed to support the development of surface water models of Spring Creek and Merritts Mill Pond.

To support MFL development for the coastal Floridan aquifer in Planning Region II, four deep Floridan aquifer monitor wells will be constructed, tested, and instrumented to determine the position of the saltwater interface and to monitor water quality. Enhanced water quality monitoring will also be conducted at up to 12 existing wells. Analysis of long-term trends in coastal water quality will be performed. The expansion and refinement of a groundwater flow model for this region is also anticipated to be completed in 2017.

Evaluation of Indicators

The number of MFL technical assessments, status, and percent complete are noted in Table 1.5.

(1) MFL technical assessment accomplishment

Table 1.5 MFL Technical Assessment Status

MFL Waterbody	Target Date	MFL Status	Percent Complete
St. Marks River Rise	2018	Under development	50%
Wakulla Spring	2020	Under development	30%
Sally Ward Spring	2020	Under development	30%
Floridan Aquifer, Coastal Region II	2020	Under development	15%
Jackson Blue Spring	2022	Under development	10%
Shoal River	2023	Scheduled for completion 2022-2023	5%
Econfina Creek & Spring complex	2024	Scheduled for completion 2023-2024	0%
Deer Point Lake	2025	Scheduled for completion 2024-2025	0%
Floridan Aquifer, Coastal Bay Co.	2026	Scheduled for completion 2025-2026	0%

(2) Waterbodies meeting their adopted MFLs

This indicator will be utilized after MFL rule adoption. The first MFL rule adoption is scheduled for 2019.

Milestones and Deliverables

Deliverables and milestones for the MFL strategic priority include completed technical assessments according to the approved schedule. Target dates and status are shown in Table 1.6.

Table 1.6 MFLs Milestones and Deliverables

Milestone	Target Date	Status
Completion of technical assessment for the St. Marks River Rise (2018), Wakulla Spring (2020), Sally Ward Spring (2020) and coastal Floridan (2020)	2018-2020	Within the current SWMP horizon, the technical assessment for St. Marks River Rise is scheduled for completion in 2018.

Deliverable	Status
Completed MFL technical assessments according to the approved schedule	All technical assessments currently on schedule. Shoal River technical assessment commenced one year ahead of schedule.

The current District-approved MFL Priority List and schedule can be found in Chapter 2 of this report and on the website: www.nwfwater.com/water-resources/minimum-flows-levels/.

1.3 Apalachicola-Chattahoochee-Flint River Basin

Strategic Priority and Success Indicators

The goal of the Apalachicola-Chattahoochee-Flint River Basin strategic priority is to protect Apalachicola River and Bay water quality and freshwater inflow. Success indicators are:

- (1) Cooperative project implementation (number and percent complete per the planned schedule)
- (2) Area restored (acres)
- (3) Stormwater treatment area (acres)

Current Activities and Accomplishments

The District continues to provide technical assistance to cooperators within the ACF River Basin. These efforts have included agricultural BMPs; an updated Apalachicola Bay hydrodynamic model, including a freshwater flow model for the Apalachicola River, delta, and Tate's Hell Swamp; and resource assessments. In addition, stormwater retrofit projects to improve water quality in Apalachicola Bay have been completed or are underway.

Evaluation of Indicators

(1) Cooperative project implementation

Table 1.7 Status of ACF Cooperative Stormwater Retrofit Projects

Project	Description	Status	Restoration Area (Acres)	Treatment Area (Acres)
Marine Street Basin Retrofit	Stormwater retrofit project in cooperation with the City of Carrabelle	Complete in FY 2015-2016	N/A	11
Prado Outfall Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola	Under construction; on schedule for completion in 2017	N/A	46
US 98 & 16 th Street Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola	Under construction; on schedule for completion in 2017	N/A	76
Avenue I Basin Retrofit	Stormwater retrofit project in cooperation with the City of Apalachicola	Under construction; on schedule for completion in 2017	N/A	54

(3) Stormwater treatment area

With the Battery Park Stormwater Retrofit project completed in FY 2014-2015, cooperative stormwater retrofit projects, noted in Table 1.7, will collectively add about 240 acres of treatment area. Since 2013, sixty-five acres or about 27% of the planned treatment area is now complete.

Milestones and Deliverables**Table 1.8 ACF River Basin Milestones and Deliverables**

Milestone	Target Date	Status
(1) Completion of cooperative stormwater retrofit projects: Marine Street Basin Retrofit (Carrabelle)	2015-2016	Complete
Completion of additional cooperative stormwater retrofit projects with City of Apalachicola: US 98 and 16th Street basin, Prado Outfall basin, and Avenue I basin	2015-2017	In progress; on schedule for completion in 2017
(2) Support to state ACF Basin issues	2015-2020	Ongoing

Deliverable	Status
(1) Grant project completion reports for Marine Street Basin Retrofit (Carrabelle)	Complete

1.4 Water Supply

Strategic Priority and Success Indicators

The goal of the Water Supply strategic priority is to ensure sufficient water is available for all existing and future reasonable-beneficial uses and natural systems. Success indicators are:

- (1) RWSP water demands met (volume [MGD] and percentage)
- (2) Public supply uniform gross per capita water use (GPCD and trend)
- (3) Public supply uniform residential per capita water use (GPCD and trend)
- (4) Water reuse to offset use of potable quality water and to achieve other related beneficial uses (volume [MGD] and trend)
- (5) Project accomplishment (percent completion on schedule)

Current Activities and Accomplishments

A Districtwide Water Supply Assessment (WSA) update projecting water demands and evaluating source sufficiency through 2040 is underway. Regional water supply plans (RWSPs) will subsequently be developed or updated for those regions without a secure water supply future. Update of the Region II RWSP will follow completion of the WSA update.

The District is now compiling average annual water use for all use categories on an annual basis. In addition, enhancements in regulatory compliance requirements have contributed to the availability of additional residential water use and populations served data and information. As a result, public supply uniform gross and residential per capita water use is available annually since 2012.

The District's Water Supply Development (WSD) Grant Program has been ongoing since FY 2013-2014. Through FY 2015-2016, the District has awarded more than \$20.6 million in competitive water supply development grants to local governments and utilities to meet local water supply needs and to help accomplish regional water resource priorities. Funding is distributed across the District, with emphasis on supporting financially disadvantaged communities. Another grant cycle is planned for FY 2016-2017.

Evaluation of Indicators

(1) RWSP water demands met (volume and percentage)

The District has two active RWSPs: Region II (Santa Rosa, Okaloosa and Walton counties), and Region III (Bay County). Both RWSPs include estimates and projections for all water use categories³; however, the public supply water use category is projected to change most significantly in both regions during the planning horizon. WSA and RWSP projections are completed every five years.

This indicator refers to the quantity and percentage of projected public supply water demands within the two RWSP areas that are estimated to be available with existing sources. The 2013 WSA showed a district-wide net increase in public supply water demand from 2010-2030 of 35.41 million of gallons per day (mgd). Regions II and III, combined at nearly 27 mgd, are expected to account for approximately 76% of this increase in demand. Given existing permitted allocations, 87 percent of public supply

³ The 2012 Region II RWSP uses projections from the 2008 WSA Update. The Region III RWSP uses projections from the 2013 WSA Update.

demands are met in the two RWSP regions. Unmet demands will need to be addressed through water conservation, alternative water supply sources, or increased permitted allocations.

Table 1.9 RWSP Public Supply Water Demands Met

Region	2010-2030 Net demand change (mgd)	Future demand met within existing allocation (mgd)	Percent of net demand change met
RWSP Region II	13.43	10.92	81.3%
RWSP Region III	13.50	12.51	92.6%
Total RWSP public supply water demands	26.94	23.43	87.0%

(2) Public supply uniform gross and (3) residential per capita water use (gallons and trend)

Two per capita water use indicators are utilized for water supply planning: gross per capita water use and residential per capita water use. District gross and residential per capita water use values are shown in Table 1.10. The trend in both gross and residential per capita water use has been generally downward, as illustrated in Figure 1.5.

Table 1.10 Public Supply Gross and Residential Per Capita Water Use

Year	Annual public supply uniform gross per capita water use ¹	Public supply uniform residential per capita water use ¹
2010	146	-
2011	140	-
2012	136	80
2013	128	73
2014	126	76
2015	124	75

¹Gallons per person per day.

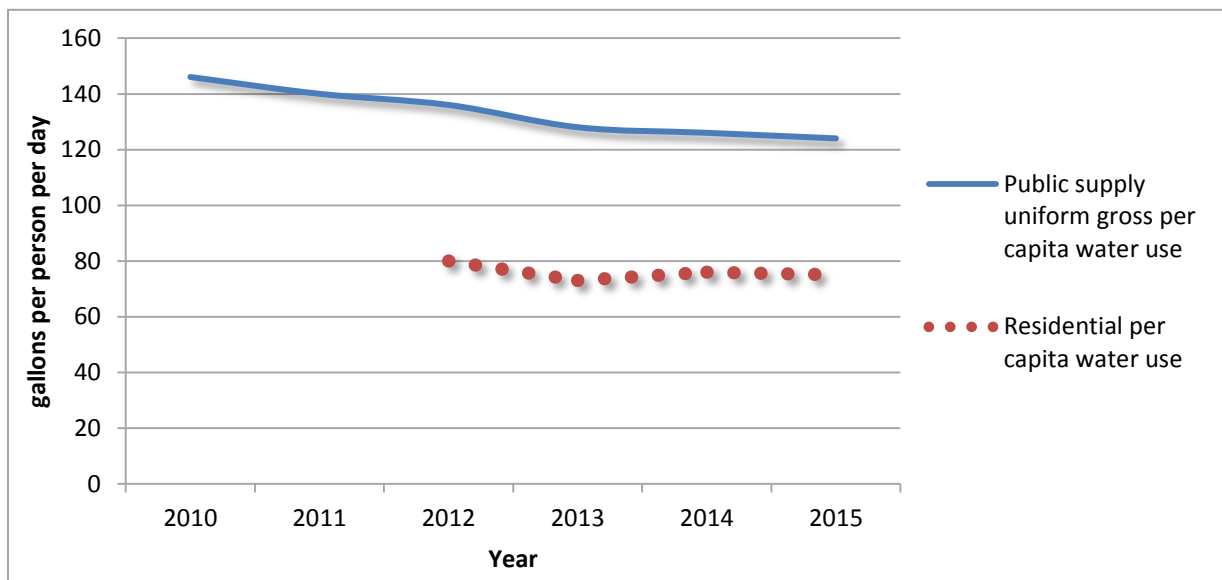


Figure 1.5 Public Supply Gross and Residential Per Capita Water Use Trends

Per capita water use as defined here is consistent with the uniform per capita use metrics set forth by DEP to allow for consistent per capita use metrics throughout Florida (DEP 2008). The gross per capita water use rate apportions all types of customer uses including residential, commercial, institutional, industrial, recreation, aesthetic, agricultural, 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 uses. Gross per capita data was not available on an annual basis prior to 2010, and reliable residential water use data was not available prior to 2012.

(4) Water reuse to offset the use of potable quality water and to achieve other related beneficial uses (volume and trend)

The water reuse indicator refers to the amount of reclaimed water that either offsets (effectively decreases) the use of potable quality water or achieves other resource benefits, such as recharge to potable aquifers or wetland restoration. The volume of water reused in northwest Florida from 2010 through 2015, is listed in Table 1.11. Reclaimed water use has generally increased, nearly doubling in 2011. This increase was largely due to the Emerald Coast Utilities Authority’s Central Water Reclamation Facility, which began providing reclaimed water to International Paper and Gulf Power.

Table 1.11 Water Reuse Indicator

Year	Total Wastewater (WWTF) Flow (mgd)	Reclaimed water use offsetting potable water (mgd)
2010	95.54	11.9
2011	91.24	23.2
2012	88.67	25.0
2013	96.87	22.6
2014	104.40	26.0
2015	95.74	24.2

Source: DEP annual reuse inventories 2010 – 2015, www.dep.state.fl.us/water/reuse/inventory.htm

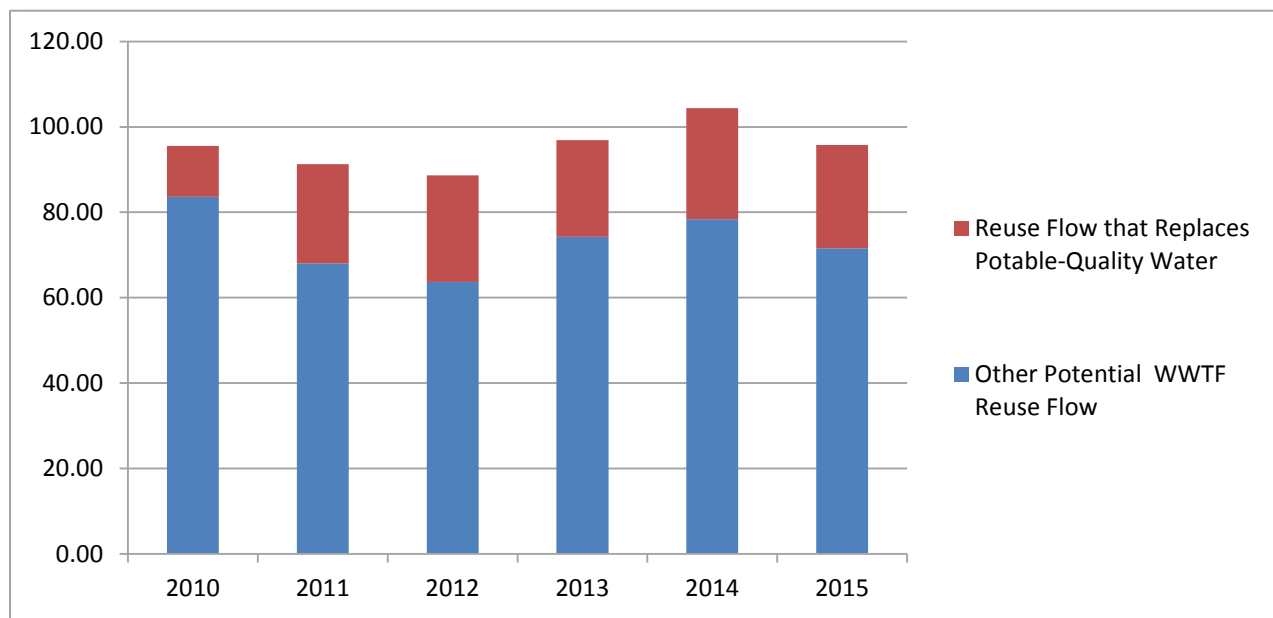


Figure 1.6 Water Reuse That Offsets Potable Water Trends

This water reuse information is compiled by FDEP as part of Florida’s annual reuse inventory. DEP defines reuse flow that replaces potable-quality water as “flows for public access irrigation, irrigation of edible crops, toilet flushing, fire protection, and industrial uses” (FDEP, 2016). Other applications of reclaimed water, including agriculture irrigation of other crops, absorption fields, rapid infiltration basins, wetlands and industrial reuse at treatment plants are not included.

(5) Project accomplishment (percent completion on schedule)

Through September 30, 2016, the District has assisted with water supply development projects awarding more than \$20.6M in financial assistance. Local matching funds have leveraged more than \$8.6M, for a total planned investment of close to \$30M. Twenty-seven (27) or nearly half of these projects are now complete.

Table 1.12 Summary of Water Supply Development Grants

Project Fiscal Year	No. Projects	Award \$	Local Match \$	No. Complete	% Complete
FY 2013-2014	23	\$10,670,576	\$2,689,395	15	65%
FY 2014-2015	25	\$7,939,265	\$4,448,903	11	44%
FY 2015-2016	10	\$1,950,350	\$1,495,314	1	10%
TOTALS	58	\$20,560,191	\$8,633,612	27	47%

Illustrated below in Figure 1.7 is the location and distribution of completed and ongoing WSD grant projects across northwest Florida.

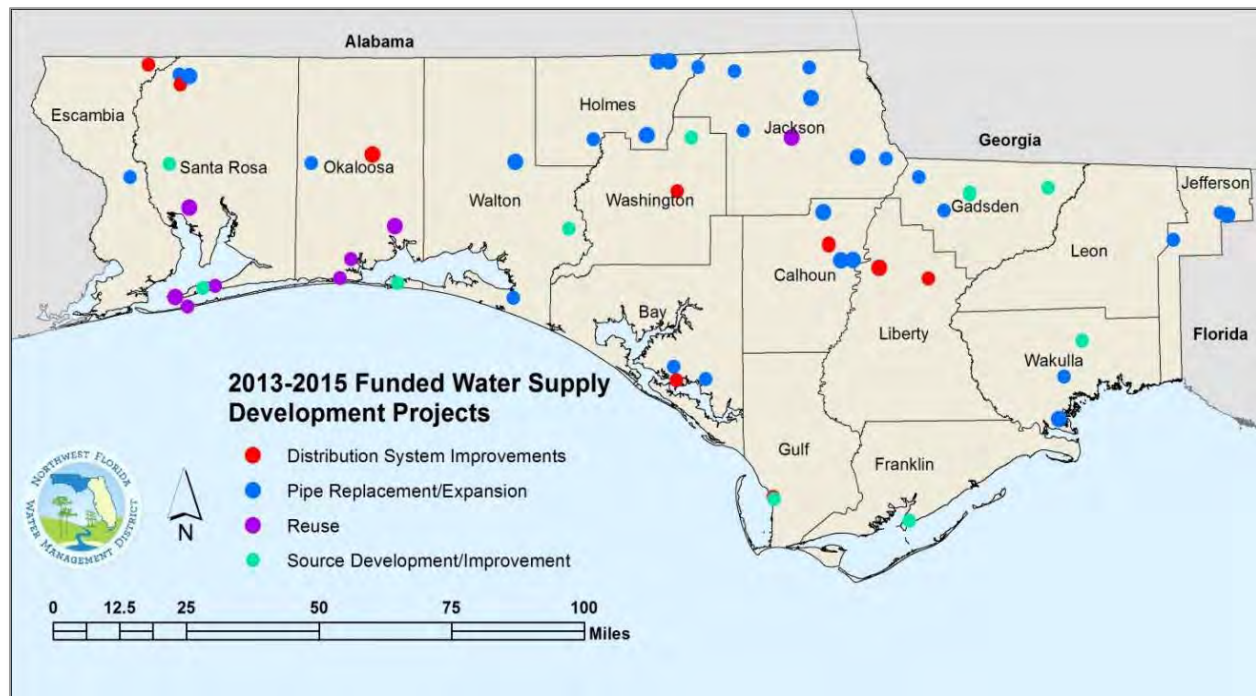


Figure 1.7 Water Supply Development Grant Projects, FY 2013-2014 through FY 2015-2016

Milestones and Deliverables

Table 1.13 Water Supply Milestones and Deliverables

Milestone	Target Date	Status
(1) District-wide Water Reuse Inventory	2018	Delayed; to be updated every 5-years with water supply assessment or regional water supply plan
(2) Conservation Evaluation for Regions II and III	2015	Final draft completed December 2015.
(3) Completion of local government water supply development grant projects	2013-2018	Nearly half of FY 2013-2015 projects complete
(5) Completion of Coastal Groundwater Model	2017	Delayed; Eastern District Model to be completed in FY 2016-2017.
(7) District-wide Water Supply Assessment (WSA) Update	2016-2017	In Progress
(6) RWSP Updates		
- Region II	2017-2018	On schedule to begin in 2017
- Region III	2019-2020	To be updated, if needed

Deliverable	Status
(1) Water use data	Completed annually in September
(4) Grant project completion reports	Completion reports for all 27 completed projects

1.5 Watershed Protection and Restoration

Strategic Priority and Success Indicators

The goal of the Watershed Protection and Restoration strategic priority is to protect and restore watershed resources and functions. Success indicators are:

- (1) Balance of released mitigation credits, reflective of net functional lift achieved under the District's Umbrella Mitigation Plan (credits)
- (2) Cooperative project implementation (number and percent complete per the planned schedule)
- (3) Area restored (acres)
- (4) Stormwater treatment area (acres)

Current Activities and Accomplishments

The District continues to focus on implementation of cooperative stormwater retrofit, water quality, water conservation, and habitat restoration projects. Specific efforts include the following:

- Financial support of a Mobile Irrigation Laboratory (MIL) in cooperation with DACS and the Natural Resources Conservation Service (NRCS);
- Cooperative funding with producers for agricultural BMPs within the Jackson Blue Spring groundwater contribution area;
- Cooperative funding to Jackson County for a septic-to-sewer retrofit project in the Indian Springs subdivision on Merritt's Mill Pond and Jackson Blue Spring;
- Financial support for research and outreach on University of Florida's Institute of Food and Agricultural Services (IFAS) Sod-Based Crop Rotation Program;
- Completion of the Williford Spring restoration project;
- Completion of cooperative stormwater retrofit projects to improve water quality in St. Andrew Bay and Apalachicola Bay watershed; and
- Continuing assistance to local governments to complete stormwater retrofit projects that improve water quality and flood protection in the Apalachicola Bay watershed.

District staff are also continuing participation in multi-agency project planning and development across northwest Florida associated with the federal Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act) and the Gulf Environmental Benefit Fund (GEBF), both of which were created as a result of the Deepwater Horizon oil spill in 2010. Additionally, the District has continued to provide assistance to the Choctawhatchee Basin Alliance for restoration and associated public outreach activities. The District is also continuing efforts to update Surface Water Improvement and Management (SWIM) plans districtwide, with funding from the National Fish and Wildlife Foundation's GEBF.

In its ongoing reforestation and groundcover habitat restoration program, the District completed hand planting of 1,198 acres of longleaf pine habitat. Approximately 830,598 longleaf pine tubelings were planted within two Water Management Areas (WMAs). The District also completed hand planting of 23,000 slash pine and cypress trees on 53 acres of hydric pine flatwoods restoration at the Yellow River Ranch restoration site. These habitat restoration activities enhance groundwater recharge, improve wetland functions, and offset wetland losses caused by transportation projects. Seed for future District groundcover restoration projects was collected from District land on the Econfina Creek and Garcon

Point WMAs. The District continues to research, refine, and establish new habitat restoration techniques that increase species diversity and ecosystem health.

Evaluation of Indicators

(1) Balance of released mitigation credits, reflective of net functional lift achieved under the District’s Umbrella Mitigation Plan (credits)

Wetland mitigation “credit” is a measure of the environmental functional improvement (lift) generated from successful implementation of wetland mitigation projects. Credits are produced by restoration, enhancement, preservation or creation activities and are normally calculated by the Uniform Mitigation Assessment Method (UMAM), as defined in section 373.4137(18), F.S., although other assessment methods, including the Wetland Rapid Assessment Procedure, have also been used. Since the establishment of the District’s wetland mitigation program in 1997 to comply with section 373.4137, F.S., and through the end of FY 2015-2016, 756.68 credits have been developed and released by permitting authorities. A total of 532.21 credits have been used (“debited”) to offset wetland impacts associated with transportation or other projects, leaving an Umbrella Mitigation Plan balance of 224.47 credits at the end of the fiscal year. Additional information may be found at: www.nwfwmdwetlands.com.

(2) Cooperative project implementation (number and percent complete per the planned schedule)

(3) Contributing area for newly installed stormwater treatment (acres)

The status of cooperative watershed project implementation and restoration or stormwater treatment contributing area, if applicable, is found below in Table 1.14. The table lists projects by major watershed identified by the District’s Surface Water Improvement and Management (SWIM) program, illustrated in Figure 1.8 below. Many of the projects are also shared with the springs restoration and protection strategic priority, as shown in Table 1.2.



Figure 1.8 Watersheds of the Northwest Florida Water Management District

Table 1.14 Watershed Protection and Restoration Cooperative Projects

Project	Description/Cooperators	Total District Cost (or as noted)	Restoration or Treatment Area (Acres)	Status	Percent Complete
Choctawhatchee River and Bay Watershed					
Choctawhatchee Basin restoration Program	Shoreline restoration and education and outreach around Choctawhatchee Bay. Choctawhatchee Basin Alliance.	\$41,153	2.13	All funds expended and project complete for FY 2015-2016	100%
St. Andrew Bay Watershed					
Parker US 98 Cross-Drain Stormwater Improvements	Water Quality improvement and flooding abatement. City of Parker	\$1,013,476	181	Complete	100%
Callaway Stormwater Retrofit	Water Quality improvement and flooding abatement. City of Callaway	\$705,217	40	Complete	100%
Mexico Beach Baffle Boxes	Water Quality improvement and flooding abatement. City of Mexico Beach, DEP	\$474,543	103	Complete	100%
Apalachicola River and Bay Watershed					
Apalachicola Water Quality Improvements	Stormwater retrofit project with the City of Apalachicola for three stormwater basins: Prado Outfall, US 98 & 16 th Street and Avenue I	\$1,595,563	184	Construction	60%
Carrabelle Marine Street Basin Retrofit	Stormwater retrofit project in cooperation with the City of Carrabelle; construction scheduled for 2016	\$452,761	11	Complete	100%
Sod-based Crop Rotation Pilot Project	Pilot project within the Jackson Blue Spring basin to complete a four-year rotation cycle to reduce water use and nutrient application rates while increasing crop yields. UF IFAS	\$480,032	NA	Grant awarded; contract under development	0%
Sod-based Crop Rotation Assistance	Technical assistance to producers, primarily within the Jackson Blue Spring contribution area, to reduce water use and nutrient application rates. UF IFAS	\$40,000 (annual cost)	NA	All funds expended and project complete for FY 2015-2016	100%
Districtwide					
NFWF SWIM	Development and update to seven SWIM plans	\$695,000	NA	Implementation	45%

Milestones and Deliverables

Table 1.15 Watershed Protection and Restoration Milestones and Deliverables

Milestone	Target Date	Status
(1) Completion of four cooperative stormwater retrofit projects in the Apalachicola River and Bay Watershed: Marine Street, US 98 and 16th Street basin, Prado Outfall basin, and Avenue I basin	2015-2016	Marine Street complete; other projects under construction to be completed in 2017
(2) Completion of cooperative stormwater retrofit projects in the St. Andrew Bay Watershed: Parker Drainage and Water Quality Improvements, Callaway Stormwater Retrofit and Mexico Beach Stormwater Retrofit	2015-2016	Complete
(3) Completion of updated SWIM plans	2017	In progress; 40% complete

Deliverable	Status
(1) 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 2015 with all projects meeting or exceeding success criteria. Monitoring reports were completed in accordance with permit requirements and posted to www.nfwmdwetlands.com/index.php for public review.
(2) SWIM Program Summary Report within the Consolidated Annual Report	Report included as Chapter 7 of the March 1, 2016 Consolidated Annual Report.
(3) Draft and updated SWIM plans	Draft plans and documents as well as status updates available at: www.nfwwater.com/Water-Resources/SWIM/SWIM-Plan-Updates .

1.6 Flood Protection and Floodplain Management

Strategic Priority and Success Indicators

The goal of the Flood Protection and Floodplain Management strategic priority is to maintain natural floodplain functions and minimize harm from flooding. Success indicators are:

- (1) Area of floodplain protected through fee or less-than-fee acquisition (acres)
- (2) Percent of District with updated DFIRMs meeting FEMA standards and criteria

Current Activities and Accomplishments

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, as well as wetland mitigation for Florida Department of Transportation (DOT). Additionally, the District's environmental resource permitting (ERP) regulatory program seeks to protect floodplain functions and manage surface waters to avoid flood damage to property.

The District continues to work in cooperation with the Federal Emergency Management Agency (FEMA) on Digital Flood Insurance Rate Map (DFIRM) modernization and the Risk Mapping, Assessment, and Planning (Risk MAP) programs. 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 provide 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. Additionally, the District makes detailed floodplain information available to the public through <http://portal.nwfwmdfloodmaps.com>.

Evaluation of Indicators

(1) Area of floodplain protected through fee or less-than-fee acquisition (acres)

Areas of floodplain protected through fee or less-than-fee acquisition is currently at 177,808 acres; representing 78% of total District managed area.

(2) Percent of District with updated DFIRMs meeting FEMA standards and criteria

One hundred (100%) percent of the District had updated DFIRMs meeting FEMA standards and criteria in 2014. Detailed coastal remapping studies were completed in 2016 for Escambia, Santa Rosa, Okaloosa, Walton, Bay and Gulf counties. Preliminary digital flood insurance rate maps (DFIRMs) were issued for Walton County on 3/16/2016, Okaloosa County on 4/29/2016, Gulf County on 5/2/2016, and Santa Rosa County on 7/18/2016. Preliminary DFIRMs are scheduled to be issued for Escambia County on 12/14/2016 and for Bay County on 3/15/2017. Final effective DFIRMs for these six coastal counties

are scheduled to be issue in 2017/2018. DFIRM completion incorporating coastal remapping studies for Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties is scheduled for 2017/2018.

Milestones and Deliverables

Table 1.16 Flood Protection and Floodplain Management Milestones and Deliverables

Milestone	Target Date	Status
(1) Completion of coastal remapping studies for Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties	2016	Complete
(2) Completion of DFIRM updates for Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties	2017/2018	On schedule

Deliverable	Status
(1) Risk MAP regulatory and non-regulatory products according to discovery report for each study area	Implementation
(2) Coastal DFIRMs for Escambia, Santa Rosa, Okaloosa, Walton, Bay, and Gulf counties	2017/2018

References

FDACS/FSAID, 2015. Florida Department of Agriculture and Consumer Services (FDACS). Florida Statewide Agricultural Irrigation Demand (FSAID), FSAID II Final Report, The Balmoral Group. http://www.freshfromflorida.com/content/download/61727/1412341/FSAID_II_Final_Report_The_Balmoral_Group_20150701.pdf

Florida Department of Environmental Protection. 2015. 2014 Reuse Inventory. DEP Water Reuse Program. July 2015. Tallahassee, Florida. www.dep.state.fl.us/water/reuse

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

Northwest Florida Water Management District. 2015. Strategic Water Management Plan. PDS-15-2. Havana, Florida. www.nfwwater.com/data-publications/reports-plans/water-management-plans/

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Consolidated Annual Report

Chapter 2

Minimum Flows and Minimum Water Levels Annual Priority List and Schedule



Minimum Flows and Minimum Water Levels Annual Priority List and Schedule

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Chapter 2. MFLs Annual Priority List and Schedule

Introduction

Section 373.042, F.S., requires each water management district to develop minimum flows and minimum water levels (MFLs) for specific surface and ground waters within its jurisdiction. The MFL for a given waterbody is the limit at which further withdrawals would significantly harm 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 per Chapter 62-40.473, F.A.C.

The multi-year process of MFL establishment involves 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 currently or anticipated within the next 20 years will result in flows or levels below an adopted MFL.

MFL Priority List and Schedule

The NFWMD FY 2016-2017 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 Shoal River system (Table 2.1).

Table 2.1 Northwest Florida Water Management District MFL Priority List FY 2016-2017¹

Waterbody	Type ^{2, 3}	County or Counties	MFL Initiation	Estimated Completion	
				Technical Assessment ^{3, 4}	Rule Adoption
St. Marks River Rise	Spr (1 st)	Leon	2013	2018	2019
Wakulla Spring	Spr (1 st)	Wakulla	2013	2020	2021
Sally Ward Spring	Spr (2 nd)	Wakulla	2013	2020	2021
Floridan Aquifer, Coastal Region II	A	Coastal Santa Rosa, Okaloosa, Walton	2014	2020	2021
Jackson Blue Spring	Spr (1 st)	Jackson	2014	2022	2023
Shoal River system	R	Santa Rosa, Okaloosa, Walton	2017	2023	2024
Econfina Creek & Gainer Springs complex	Spr (1 st & 2 nd) and R	Bay, Jackson, Washington	2019	2024	2025
Deer Point Lake	L	Bay	2020	2025	2026
Floridan Aquifer, Coastal Bay County	A	Bay	2021	2026	2027

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

² WB 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 federally owned lands purchased for conservation purposes, are required to be listed according to section 373.042, F.S.

⁴ It is anticipated that MFLs will be submitted for scientific peer review following the technical assessment.

Chapter 2. MFLs Annual Priority List and Schedule

Additional waterbodies are anticipated to be scheduled in future years (Figure 2.1 and Table 2.2). The priority list represents an ambitious yet achievable MFL program, which is being implemented in an efficient and technically sound manner.

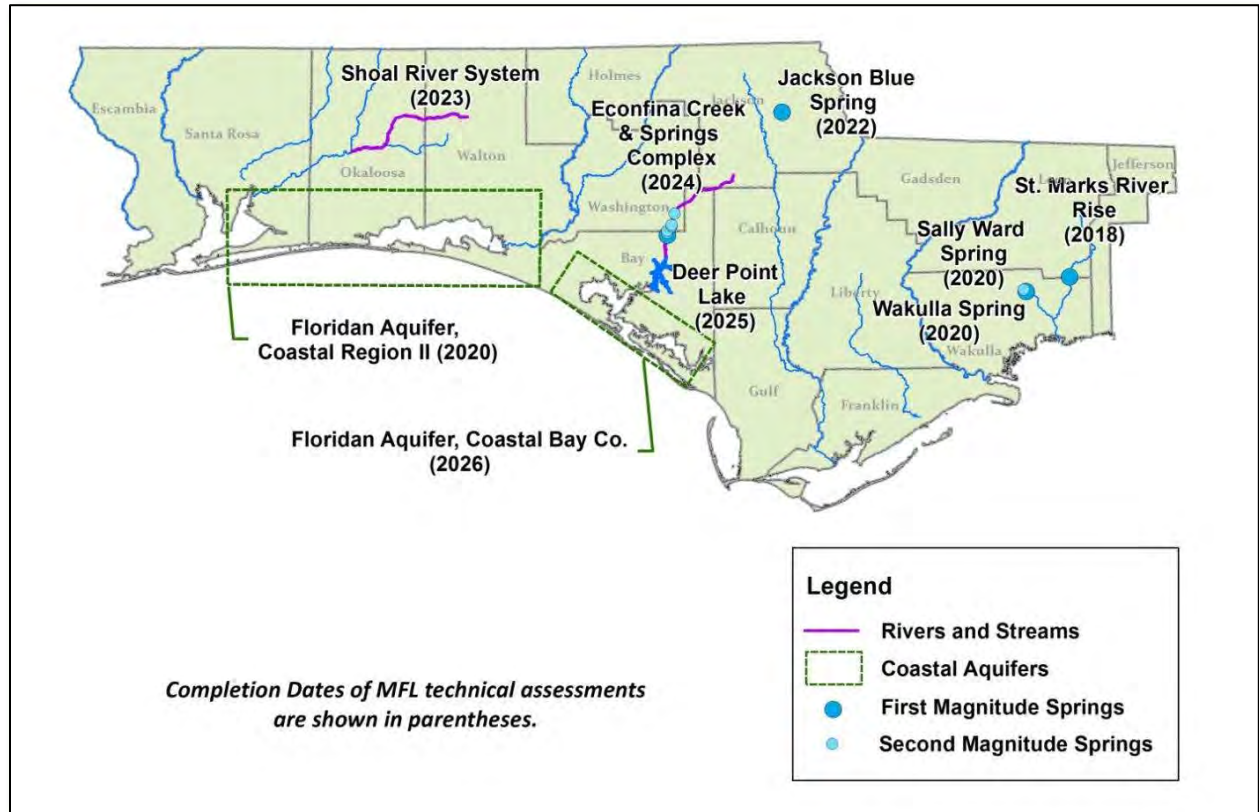


Figure 2.1 NFWMD MFL Priority Waterbodies

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

Table 2.2 Waterbodies for Future Years

Waterbody	WB Type ²	County or Counties
Horn Spring	Spr (2 nd)	Leon
Morrison Spring	Spr (2 nd)	Walton
Holmes Blue Spring	Spr (2 nd)	Holmes
Blue Hole Spring	Spr (2 nd hist.)	Jackson
Ponce de Leon Spring	Spr (2 nd)	Holmes
Baltzell Spring group/upper Chipola Spring complex	Spr (2 nd) and R	Jackson
Holmes Creek & Spring Complex	Spr (2 nd) and R	Washington
Telogia Creek	R	Liberty, Gadsden

² WB Type: R=river, Spr=spring (1st or 2nd magnitude).

Reservations

Regulatory reservations have been established for the Apalachicola and Chipola rivers (Table 2.3).

Table 2.3 Waterbodies Subject to Regulatory Reservations

Waterbody	Counties	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	

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Consolidated Annual Report

Chapter 3

Annual Five-Year Capital Improvements Plan



Annual Five-Year Capital Improvements Plan

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Chapter 3. Annual Five-Year Capital Improvements Plan

Introduction

The five-year capital improvements plan (CIP) includes projected revenues and expenditures for capital improvements from fiscal years 2016-2017 through 2020-2021. 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

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 NFWFMD has projects in categories 2.1, 2.3, 2.5 and 2.6.

Activities under program 3.0 Operation and Maintenance of Lands and Works that may include capital improvement projects are: 3.1 and 3.2. Of these, the NFWFMD 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.

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 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 Works*.

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.

District plans that also provide information on long-range capital improvements include: the Florida Forever Work Plan, Land Acquisition Plan, Five-Year Water Resource Development Work Program, Land Management Plan, Land Acquisition Trust Fund – Specific Appropriation 1639, and Northwest Florida Umbrella, Watershed-based, Regional Mitigation Plan.

Table 3.1 NFWMD Five-Year Capital Improvements Plan, Fiscal Years 2017-2021

2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS					
2.1 Land Acquisition					
Revenues (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Water Management Lands Trust Fund	0	0	0	0	0
Florida Forever	0	0	0	0	0
District Land Acquisition Reserve	0	0	0	0	0
Land Management Fund	0	0	0	0	0
Land Acquisition Trust Fund	9,883,785	77,144	75,000	75,000	75,000
TOTAL	9,883,785	77,144	75,000	75,000	75,000
Expenditures (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Water Management Lands Trust Fund	0	0	0	0	0
Florida Forever – Land Acquisitions	0	0	0	0	0
District Land Acquisition Reserve	0	0	0	0	0
Land Management Fund	0	0	0	0	0
Land Acquisition Trust Fund 37.022 (Pre-acquisition)	97,217	77,144	75,000	75,000	75,000
Land Acquisition Trust Fund 37.05	2,686,568				
Land Acquisition Trust Fund 37.03	7,100,000				
TOTAL	9,883,785	77,144	75,000	75,000	75,000

2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS (cont.)					
2.2 Water Source Development					
Revenues (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Florida Forever	0	0	0	0	0
TOTAL	0	0	0	0	0
Expenditures (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Florida Forever – Land Acquisitions	0	0	0	0	0
TOTAL	0	0	0	0	0
2.3 Surface Water Projects					
Revenues (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
FDOT Mitigation Funds	1,080,192	895,424	900,000	900,000	900,000
TOTAL	1,080,192	895,424	900,000	900,000	900,000
Expenditures (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
FDOT Mitigation	1,080,192	895,424	900,000	900,000	900,000
TOTAL	1,080,192	895,424	900,000	900,000	900,000
2.5 Facilities Construction and Major Renovations					
Revenues (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Florida Forever	0	0	0	0	0
Water Management Lands Trust Fund	0	0	0	0	0
Land Management Fund	0	0	0	0	0
District General Fund	100,000	100,000	100,000	100,000	100,000
TOTAL	100,000	100,000	100,000	100,000	100,000
Expenditures (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
District General Fund	100,000	100,000	100,000	100,000	100,000
TOTAL	100,000	100,000	100,000	100,000	100,000

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS					
3.1 Land Management					
Revenues (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Water Management Lands Trust Fund	0	0	0	0	0
Florida Forever	0	0	0	0	0
Land Management Fund	144,499	0	0	0	0
DEP – State General Fund	300,000	0	0	0	0
FWCC AHRE Section Funds	0	0	0	0	0
Land Acquisition Trust Fund	278,001	100,000	0	0	0
TOTAL	722,500	100,000	0	0	0
Expenditures (\$)	Fiscal Year				
	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Streambank Restoration & Public Recreation – Cooperative with Local Governments	117,500	0	0	0	0
Seven Runs Streambank Restoration	25,000	0	0	0	0
Devil’s Hole Spring Restoration	137,000	0	0	0	0
Cotton Landing Streambank Restoration and Protection	193,000	0	0	0	0
Blue Spring Campsite Restoration	200,000	100,000	0	0	0
Econfina Creek – James Tract Restoration	50,000	0	0	0	0
TOTAL	722,500	100,000	0	0	0
TOTAL CAPITAL EXPENDITURES (\$) Program 2.0 and Program 3.0	11,786,477	1,172,568	1,075,000	1,075,000	1,075,000

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: Pre-acquisition Expenditures for Save Our Rivers, Preservation 2000, Florida Forever, District Land Acquisition Reserve, Land Management Fund, and Land Acquisition Trust Fund Purchases.

Type: N/A

Physical Location: N/A

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 boundary.

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): N/A.

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: 2.1 LAND ACQUISITION

Project Title: Gainer Springs Fee Simple and Less than Fee (Conservation Easement) Land Acquisition

Type: Improved and Unimproved land with pasture adjacent to Gainer Spring Group

Physical Location: Econfina Creek basin, Bay County.

Square Footage/Physical Description: Approximately 150 acres in fee and approximately 802 acres in less than fee (conservation easement)

Expected Completion Date: On or before September 30, 2017

Historical Background/Need for Project: The Gainer Springs Land Acquisition project will further the District's mission of protecting the water resources for first magnitude springs and Econfina Creek. The proposed land acquisition project will be a combination fee and less than fee acquisition of up to 982 acres at a first magnitude springs complex along Econfina Creek in northern Bay County. A conservation easement purchase would also maintain the property on the County's tax rolls.

Plan Linkages: Florida Forever Work Plan

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

Alternative(s): Less than fee simple purchase for the entire project

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Purchase price 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: None anticipated.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS
ACTIVITY: 2.1 LAND ACQUISITION

Project Title: Cypress Spring Less than Fee (Conservation Easement) Land Acquisition

Type: Unimproved land adjacent to a second magnitude spring

Physical Location: Holmes Creek basin, Washington County.

Square Footage/Physical Description: Approximately 302 acres of property adjacent to a second magnitude spring.

Expected Completion Date: On or before September 30, 2017

Historical Background/Need for Project: The proposed Cypress Spring acquisition project will further the District's mission of protecting the water resources of Holmes Creek as well as provide enhanced protection for this second magnitude spring through the acquisition of a conservation easement on approximately 302 acres. Also envisioned as part of the acquisition project will be the ability to conduct future spring restoration and protection measures, as well as enhanced public access (by water) and recreational facilities, subject to funding.

Plan Linkages: Florida Forever Work Plan

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

Alternative(s): Fee simple acquisition for the entire project.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): Purchase price 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 and restoration costs to be determined based on each individual parcel and type 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, vegetation 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 (habitat restoration, hydrologic restoration and enhancement, land acquisition, 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 typically 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 (habitat restoration, hydrologic restoration and enhancement, land acquisition, etc.).

Anticipated Additional Operating Costs/Continuing: Unknown at this time. Multiple projects. Costs are determined by project type (habitat restoration, hydrologic restoration and enhancement, land acquisition, etc.).

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS
ACTIVITY: 2.5 FACILITIES CONSTRUCTION AND MAJOR RENOVATIONS

Project Title: Headquarters Renovations

Type: To be determined.

Physical Location: 81 Water Management Drive, Havana, FL 32333

Square Footage/Physical Description: To be determined.

Expected Completion Date: September 30, 2017

Historical Background/Need for Project: Headquarters office building periodically requires updates or improvements; however, a specific project has not yet been determined.

Plan Linkages: District Strategic Plan, District Budget

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

Alternative(s): To be determined.

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): To be determined.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): To be determined.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): To be determined.

Anticipated Additional Operating Costs/Continuing: To be determined.

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

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: The 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 the repair and improvement of these boat launch sites, including but not limited to: 1) constructing four stormwater facilities; 2) demolishing, re-grading, and constructing a boat launch at Live Oak Landing; 3) access road improvements; 4) parking area improvements at all three sites; 5) constructing a bank fishing pier at Live Oak Landing; 6) a boardwalk and spring observation deck at the Hightower Landing spring; 7) installing protective rail fencing at all sites; and 8) constructing picnic areas and four primitive campsites at Spurling Landing.

Expected Completion Date: By September 30, 2017

Historical Background/Need for Project: Significant streambank erosion is occurring at all three sites and lack of stormwater treatment facilities are causing significant sedimentation issues, 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): None.

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): not to exceed \$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 cooperative agreement, Washington County will maintain 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: Devil's Hole Spring Streambank Restoration and Protection

Type: Spring and Shoreline Restoration and Protection

Physical Location: Located off Walsingham Bridge Road within the Econfina Creek Water Management Area

Square Footage/Physical Description: Spring and shoreline restoration and protection utilizing geotextile bags and other non-structural techniques. Project also enhances public access opposite the spring to protect the spring and the Econfina Creek shoreline, engineering design and permitting underway.

Expected Completion Date: By September 30, 2017

Historical Background/Need for Project: Devil's Hole Spring and the adjacent Econfina Creek shoreline 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 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): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): \$137,000 (DEP State General Fund - \$125,000 for spring and adjacent shoreline protection and restoration and Land Acquisition Trust Fund - \$10,001 for materials only for enhanced public access and recreation and District Land Management Fund - \$1,999 for enhanced public access and recreation).

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): \$53,916 (Total engineering design service cost for Devil's Hole Spring and Cotton Landing - District Land Management Fund).

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 or OPS employee 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 Shoreline Restoration and Protection

Type: Shoreline Restoration and Protection, Stormwater, and Enhanced Public Access and Recreation

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

Square Footage/Physical Description: Shoreline restoration and protection utilizing geotextile bags and landscaping while providing for enhanced public access and recreation while protecting Holmes Creek springs. Engineering design and permitting have been completed.

Expected Completion Date: By September 30, 2017

Historical Background/Need for Project: The Holmes Creek shoreline at Cotton Landing is experiencing significant bank erosion and stream sedimentation due to adverse impacts caused by prolonged drought, stormwater issues, inadequate public water access facilities, and unregulated public use on sensitive shoreline areas. Project will restore, stabilize, and protect highly erodible stream shorelines and address stormwater issues 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): None

Basic Construction Costs (includes permits, inspections, communications requirements, utilities outside building, site development, other): \$193,000 (DEP State General Fund - \$175,000 and Land Acquisition Trust Fund - \$18,000).

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): \$53,916 (Total engineering design service cost for Devil's Hole Spring and Cotton Landing - District Land Management Fund).

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.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS
ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: James Tract Restoration

Type: Spring and Shoreline Restoration and Protection

Physical Location: Southwest corner of the junction of Highway 20 and Econfina Creek, directly south of Pitt Spring in Bay County, Florida within the Econfina Creek Water Management Area.

Square Footage/Physical Description: Spring and shoreline restoration and protection utilizing geotextile bags and other non-structural techniques. The adjacent disturbed floodplain habitat will be planted with native vegetation (trees, scrubs, and groundcover plants) and irrigated for twelve months as needed to ensure long term landscape plant survival.

Expected Completion Date: By September 30, 2017

Historical Background/Need for Project: The James tract has more than 1,000 feet of shoreline along the west bank of Econfina Creek immediately south of State Road 20. It is adjacent to NFWMD property to the north and east and adjoins the Gainer Spring property to the southwest. The property was previously used as a canoe livery with cleared areas that were used for parking. Since the livery closed several years ago, the property experienced significant unauthorized recreational use which has caused shoreline erosion along streambank, sedimentation, and damage to natural vegetation.

Plan Linkages: District's 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): \$50,000 (Land Acquisition Trust Fund for spring and adjacent shoreline protection and restoration.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Tract should require very little staff time once the site is restored.

Anticipated Additional Operating Costs/Continuing: None. Site security is already being provided.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Seven Runs Shoreline Restoration and Protection

Type: Shoreline Restoration and Protection

Physical Location: Located on the northwest side of Highway 81 in Walton County at the junction of Highway 81 and Seven Runs Creek within the Choctawhatchee River Water Management Area.

Square Footage/Physical Description: Shoreline restoration and protection utilizing geotextile bags, native landscape plants and other non-structural techniques.

Expected Completion Date: By September 30, 2017

Historical Background/Need for Project: The Seven Runs Creek recreation area has experienced significant shoreline erosion which has caused adverse impacts to the creek shoreline, natural vegetation and increased sedimentation into the creek. Approximately 100 feet of shoreline along Seven Runs Creek has been impacted and is scheduled for restoration and protection.

Plan Linkages: District's 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): \$25,000 (District Land Management Fund for materials for shoreline protection and restoration.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): None.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Site should require very little management and maintenance once the site is restored.

Anticipated Additional Operating Costs/Continuing: None. Walton County provides management and maintenance of the site and site security is already being provided.

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS
ACTIVITY: 3.1 LAND MANAGEMENT

Project Title: Blue Spring Campsite Restoration

Type: Spring and Spring Shoreline Restoration and Protection

Physical Location: Located off Blue Springs Road in Washington County within the Econfina Creek Water Management Area.

Square Footage/Physical Description: Spring and spring shoreline restoration and protection consisting of sediment removal and the installation of geotextile bags, native landscape plants and other non-structural techniques.

Expected Completion Date: By September 30, 2018

Historical Background/Need for Project: Blue Spring has a long history of significant recreational use and the spring has experienced significant sedimentation and shoreline erosion due to the lack of stormwater facilities and unregulated access. Specific spring and shoreline restoration and protection measures are TBD per design. Nonetheless, anticipated spring and shoreline restoration and protection measures, include, but are not limited to: spring sediment removal, shoreline restoration and protection utilizing geotextile bags and other materials, stormwater abatement measures, the installation of native landscape trees and plants and public access restrictions.

Plan Linkages: District's 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): \$200,000 (Land Acquisition Trust Fund for spring and shoreline restoration and protection, less \$17,000 for survey and design plans (see below).

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): \$17,000 for survey and design plans.

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): Tract should require minimal staff time once the site is restored.

Anticipated Additional Operating Costs/Continuing: None. A public works inmate crew or OPS employee will provide site cleanup and maintenance and site security is already being provided.

Appendix

Definitions for programs and activities used in this Five-Year Capital Improvement Program are included below. These definitions follow the water management district standard budget format.

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 waterbodies.

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: Maintenance, custodial, public use improvements, and restoration efforts for lands acquired through Save Our Rivers, Preservation 2000, Florida Forever or other land acquisition programs.

Consolidated Annual Report

Chapter 4

Alternative Water Supplies Annual Report



Alternative Water Supplies Annual Report

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Table 4.1 Projects Funded Under the Water Protection and Sustainability Program4-2

Chapter 4. Alternative Water Supplies Annual Report

Section 373.707(8)(n), F.S., directs each water management district to submit a report annually on the disbursement of all budgeted amounts for alternative water supply projects funded from the Water Protection and Sustainability Program Trust Fund (WPSPTF).

Table 4.1 on the following page lists District alternative water supply projects completed with funding received in FY 2005-2006 through FY 2008-2009. The Bay County Alternative Pump Station project was the final project to be completed in June 2015. In total, the District and cooperators completed 10 alternative water supply projects generating an estimated 62 mgd from alternative water sources. The majority of the \$90 million total investment is from local contributions, with less than 25 percent (\$21.47M) funded by the District.

If future funding becomes available from the WPSPTF, other specific appropriations or other sources, the District will consider potential projects in accordance with Section 373.707, F.S.

Table 4.1 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	Complete	FY 2008; FY 2009	30.0 ²	\$5,470,000	\$17,914,000	\$23,384,000	77%
Totals						62.1 mgd	\$21,470,000	\$67,996,723	\$89,466,723	76%

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

²Capacity of alternate raw water intake

Consolidated Annual Report

Chapter 5

FY 2016-2017 Five-Year Water Resource Development Work Program



FY 2016-2017 Five-Year Water Resource Development Work Program

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Chapter 5. FY 2016-2017 Five-Year Water Resource Development Work Program

Introduction

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

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

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

Regional Water Supply Planning in Northwest Florida

The Northwest Florida Water Management District (NFWFMD or "District") established seven water supply planning regions in 1996 (Figure 5.1). The initial District Water Supply Assessment (WSA) (NFWFMD 1998) evaluated the sufficiency of supplies to meet demands through 2020 and concluded that only Region II (Santa Rosa, Okaloosa, and Walton counties) required a RWSP. The primary resource concern identified in Region II is drawdown in the coastal Floridan aquifer caused by groundwater pumping.

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

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

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

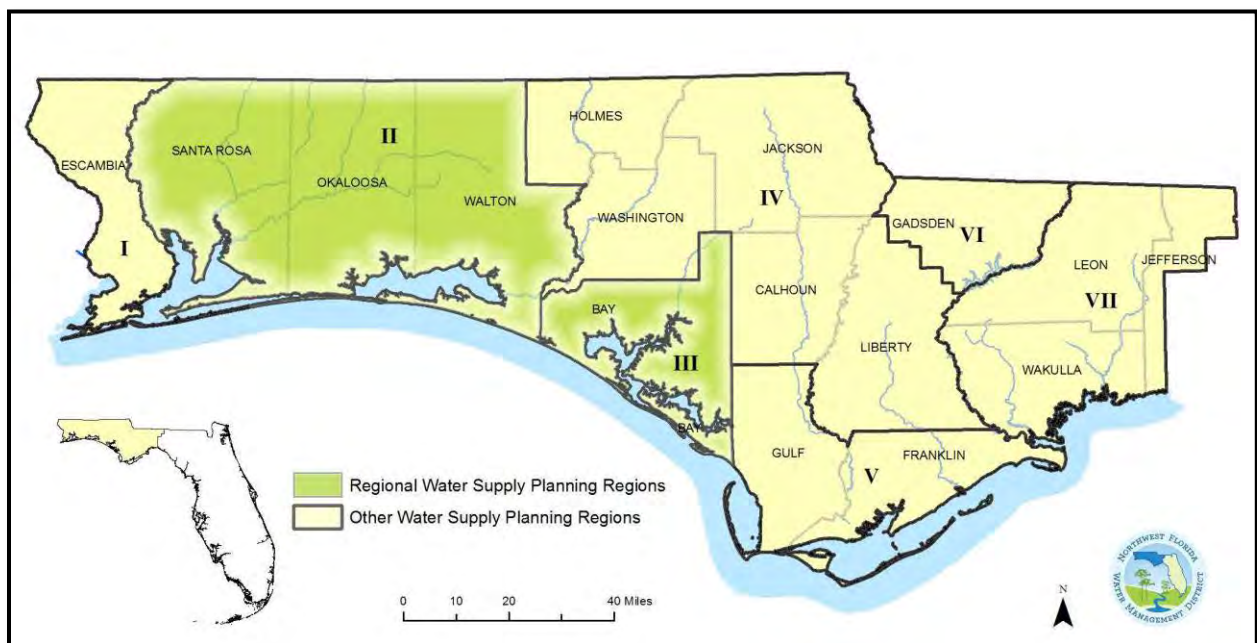


Figure 5.1 Water Supply Planning Regions

Funding for Water Resource and Supply Development

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

- Land Acquisition Trust Fund;
- Direct Legislative appropriations;

- District Fund Balance;
- Federal grants;
- Florida Forever; and
- Local government and water supply utility cost sharing.

Until recently, water resource development in northwest Florida has depended primarily on funding from the Water Management Lands Trust Fund. This trust fund, however, was discontinued by the 2015 Florida Legislature through Senate Bill 2516-A. The bill established the Land Acquisition Trust Fund to accomplish purposes as set forth in Article X, Section 28 of the State Constitution.

To the extent possible, the District applies *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 unencumbered funds and reserves for priority projects.

The Water Protection and Sustainability Program Trust Fund (WPSPTF), established by the 2005 Legislature, enabled the District to provide cost-share assistance for construction of alternative water supply development projects and priority water resource development and springs protection activities. No funding has been appropriated for the WPSPTF since FY 2009-2010.

The Florida Forever Trust Fund has supported acquisition of lands throughout northwest Florida that provide critical water resource functions, including water quality protection and aquifer recharge. Additionally, Florida Forever has been a source of construction funding for reclaimed water storage facilities. Florida Forever, however, has not had significant appropriations for NFWMD programs since FY 2010-2011.

Since FY 2013-2014, the Governor and Florida Legislature have allocated \$165,000,000 statewide in funding for springs restoration and protection. The District has received more than \$35.7 million toward restoration and protection projects, including initiatives that assess, protect, and improve water quality and quantity within the groundwater contribution areas of major spring systems. Additional funding supporting water resource development has also been provided for springs data collection and monitoring.

Local government and utility funding participation is especially important for several types of water resource development projects, notably alternative surface water, reuse of reclaimed water, water conservation, and aquifer storage and recovery. All projects require substantial local investment once they reach the water supply development stage.

Funding budgeted for water resource development is listed in summary tables for water supply planning regions II and III in the following sections (Table 5.2 and Table 5.6, respectively). The approved water resource development funding for FY 2016-2017 is \$9,228,800. The anticipated five year water resource development implementation cost through FY 2020-2021 is \$15,174,300.

Since FY 2013-2014, the District has approved \$20.6 million from reserve funds for water supply development assistance grants across northwest Florida. Per changes to Chapter 373, Florida Statutes, effective July 1, 2016, this report now includes funding budgeted for water supply development

activities in water supply planning regions II and III. Summary tables are included in the following sections (Table 5.4 and Table 5.8, respectively). The approved water supply development funding for FY 2016-2017 is \$2,571,441. The anticipated five year water supply development implementation cost through FY 2020-2021 is \$3,192,837.

In total, this represents a FY 2016-2017 budget for water resource and water supply development activities of \$11,800,241 in Bay, Okaloosa, Santa Rosa, and Walton counties.

Region II: Santa Rosa, Okaloosa, and Walton Counties

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



Figure 5.2 Water Supply Planning Region II

Chapter 40A-2, Florida Administrative Code (F.A.C.), established the coastal Water Resource Caution Area (WRCA) across the southern reach of all three counties (Figure 5.2). Within the coastal WRCA, regulatory approaches to improve 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.

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

Region II Water Resource Development Projects

The Region II RWSP includes 10 water resource development projects encompassing strategies for preserving water resources and supporting alternative water supply development (Table 5.1). The quantities of water identified in the table indicate preliminary figures based on regional scale model simulations of groundwater systems, regional planning objectives, and application of literature-based factors for reuse and water conservation. The amounts will be refined upon completion of updated analyses or project implementation.

Table 5.1 Region II Water Resource Development Projects

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

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

Floridan Aquifer

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

Beginning in FY 2014-2015, the District began a project to refine the current groundwater models. The two models have been combined into a single western district model and expanded to include portions of Escambia and Bay counties, in addition to coastal Region II. The project will incorporate newer monitoring data, updated water demand projections, and it will be calibrated to reflect groundwater withdrawals since inland wellfields have been developed. Additional investigation into the sand-and-gravel aquifer is also planned as part of this model update (see more detail below). The updated model will be used by both regulators and permittees to evaluate future withdrawal scenarios. Additionally, a central district groundwater model is being developed that incorporates the eastern portion of Region II. Work on this model will be ongoing through FY 2016-2017.

The increase in resources for this project is tied to the initiation in 2014 of minimum flows and minimum water levels (MFLs) for the coastal Floridan aquifer in Planning Region II. A work plan for developing and establishing an MFL for coastal Region II, an extensive data review and evaluation, and bid specifications for expanding the number of monitoring wells and rehabilitating existing monitoring wells were completed in 2015. The current NFWFMD MFL Priority List shows the technical assessment for this project is scheduled for completion in 2020, with rule adoption in 2021.

Inland Sand-and-Gravel Aquifer

Due to its high recharge rate, the inland sand-and-gravel aquifer in Region II is capable of providing regionally significant quantities of water. Development of an inland sand-and-gravel aquifer wellfield was initiated in 1999 within Santa Rosa County. Water from the wellfield is conveyed south to alleviate pumping demand from the Floridan aquifer along the coast. Public supply water withdrawals from the inland wellfield and vicinity increased from 1.0 mgd in 1998 to 5.6 mgd in 2013. In 2014, however, withdrawals fell to 3.4 mgd due to a line break across East Bay that rendered it out of service for several months, temporarily increasing coastal Floridan aquifer withdrawals to meet water demands.

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

Surface Water Sources

In 2006, the District and its water supply consultants prepared an analysis of potential surface water supply sources in Okaloosa County, presented in the report “Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates” (PBS&J, 2006). This study reviewed the technical and economic feasibility of several alternatives, including direct river withdrawal, riverbank filtration, and construction of tributary reservoirs. The District also concurrently reviewed an evaluation of a proposed Yellow River Reservoir and concluded that the proposal was not feasible.

Okaloosa County continues to evaluate surface waters in the Yellow and Shoal river basins as potential future water supply sources. Potential facilities may include direct withdrawal and treatment systems, as well as an offline reservoir or other storage facilities. In 2015, the county completed a major land acquisition and has facilitated public workshops jointly with the U.S. Army Corps of Engineers as part of its long-range water supply planning efforts. The District will continue efforts to support planning for alternative surface water development, including accelerating the MFL development schedule for the Shoal and Lower Yellow River system to begin in FY 2016-2017.

Aquifer Storage and Recovery

Aquifer storage and recovery (ASR), depending on the particular hydrogeologic characteristics of an area, has the potential to store large quantities of water more effectively and at a lower cost than above-ground storage. The Destin Water Users utility has developed an ASR system for storage of reclaimed water in the sand-and-gravel aquifer. This reclaimed water is available to meet irrigation demands, helping to conserve potable water resources and mitigate potential impacts associated with groundwater withdrawals.

The use of ASR in the future for storage of reclaimed water or perhaps the use of direct aquifer recharge as a salinity barrier may require a regional approach, since water introduced into a geologic formation could affect the groundwater beneath jurisdictions or service areas of multiple utilities and local governments. There are no current ASR projects included in the District’s FY 2016-2017 Adopted Budget. However, the District will work with utilities on the feasibility of additional ASR activities within Region II, as needed or requested.

Water Reuse

The Region II RWSP previously identified approximately 5 mgd of new beneficial reuse available to offset demands on the coastal Floridan aquifer. In response to regulatory and cooperative planning efforts, significant investments in reuse have been made in the region, particularly for golf course irrigation in coastal areas. As of 2015, 25 reuse applications associated with 11 reuse systems in Region II were permitted for public access reclaimed water, producing an estimated 9.57 mgd for public access reuse (DEP, 2016). These facilities supported landscape irrigation for approximately 2,434 residences, 17 golf courses, 14 parks, four schools, and two cooling towers. Past District funding assistance has helped provide for construction of wastewater infrastructure improvements to facilitate reuse near the City of Freeport and in north-central Okaloosa County.

Statewide water reuse coordination efforts continued in FY 2015-2016 in support of the Senate Bill 536 initiative to evaluate the expanded use of reclaimed water, as well as stormwater and excess surface water. The District is also continuing efforts to further identify opportunities for more integrated water management and resource sustainability in northwest Florida. Additionally, the District works with utilities in the region to expand the use of reclaimed water to meet non-potable water needs through a

Chapter 5. Water Resource Development Work Program

districtwide water supply grant program. Since 2013, \$1,478,423 has been awarded for six reuse projects in Region II that include: expanding and upgrading reuse systems in the cities of Fort Walton Beach and Niceville in Okaloosa County and the City of Gulf Breeze, the Holley Navarre Water System, and Pace Water System in Santa Rosa County. With grant funding from the District, the City of Mary Esther will complete a reclaimed water feasibility study by June 2018.

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

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

Water Conservation

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

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

The District has worked in cooperation with DEP and the Florida water management districts to address public supply water conservation within Florida under section 373.227, F.S. The participating agencies have worked to define a common water conservation planning process for public supply utilities including creating standardized analysis methods and tools, common supporting technical references, and consistent permitting requirements and incentives related to goal-based conservation planning. As part of this initiative, the District established a process to allow for extension of permit duration for utilities which have demonstrated water savings achieved through implementation of a goal-based water conservation plan (Rule 40A-2.321, F.A.C.).

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

Regional Water Supply Planning

Development and refinement of regional strategies, project planning and development, and RWSP updates are essential components of water resource development. Related activities include technical support and coordination with local governments and utilities to ensure a regional focus in the planning and development of alternative water supply projects. Associated administrative activities include project and funding management, coordination with DEP and other agencies, and progress reporting.

The District provides assistance with hydrogeology and related technical evaluations for development of new and alternative water sources including the inland Floridan aquifer, the sand-and-gravel aquifer, surface water, and reclaimed water. Other ongoing efforts include working with local governments and state and regional agencies to better coordinate land use and water supply planning. During FY 2015-2016, District staff continued collaboration with the Florida Department of Agriculture and Consumer Services (DACS) and other water management districts on the Florida Statewide Agricultural Irrigation Demand (FSAID) reports.

Staff began working on the next update to the districtwide water supply assessment in early 2016 and this work will continue through FY 2016-2017. Additionally, work on an update to the Region II RWSP is anticipated to begin in 2017. The timeframes for these two projects differ from last year's Work Program; the revised schedule reflects an approach that streamlines both the WSA Update and the Region II Plan update to maximize efficient use of resources and provide consistent data.

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

Interconnection of Water Supply Systems

Largely focused on Region II, the Coastal Water Systems Interconnection Project was a District initiative focused on increasing water supply reliability in coastal communities in cooperation with local utilities. The goal of the initiative was to enhance the resilience of the coastal water systems by enabling transfer of water between utilities during droughts or other contingencies. The Coastal Water Systems Interconnection Initiative was completed in 2013 with the final report providing a detailed analysis of interconnect alternatives and design parameters. Two interconnection projects were selected for potential future implementation: a coastal interconnection between Santa Rosa and Okaloosa counties and a coastal interconnection between Walton and Bay counties.

No expenditures are planned for this project in the five-year planning horizon. The District will continue to support local governments and utilities planning interconnect projects that help ensure available and reliable water supplies, particularly in coastal areas.

Hydrologic Data Collection and Analysis

The District has a data collection network of rainfall gauges, stream gauges, and monitoring wells throughout Region II. Groundwater and surface water monitoring capabilities have been enhanced by continuing cooperative monitoring programs 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. Data collected through this monitoring

program is essential for ensuring the success of long-term water supply initiatives, as well as for refining groundwater models and analyses to support future management decisions.

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

Abandoned Well Plugging

The District's Regulatory Services Division implements an active effort to plug abandoned artesian wells. The overall goal of the program is to protect available groundwater resources from aging, uncontrolled, or improperly constructed wells that are no longer in use. The District achieves proper abandonment of such wells through two methods: requiring contractors to plug abandoned wells found on site during new well construction or initiating a well abandonment contract with a well owner or local government. Technical assistance and funding is available to local governments and utilities for plugging abandoned wells identified as having the potential to adversely affect groundwater quality. This is an ongoing effort the District implements, where feasible, in partnership with stakeholders and local governments. To date, the District has facilitated the plugging of 7,737 abandoned wells within Region II, 271 of which were plugged in FY 2015-2016.

Funding Summary: Region II Water Resource Development Projects

Table 5.2 displays past year expenditures, current year budget, and anticipated future expenditures for water resource development within Region II.

The budget for FY 2016-2017 reflects an increase in anticipated spending as compared to that presented in the previous WRDWP. This increase reflects the development of an improved groundwater flow model and associated hydrologic monitoring to support water supply planning, water resource development, MFL development, and consumptive use permitting in Region II. The modeling will principally address the Floridan aquifer, but will also be integrated with the sand-and-gravel aquifer model. Work will begin on a central district groundwater model, which includes the eastern portions of Region II. (*Floridan Aquifer* and *Inland Sand-and-Gravel Aquifer* projects)

The increase also reflects the acceleration of the Shoal River system MFL development, which benefits both the *Surface Water Sources* and the *Inland Sand-and-Gravel Aquifer* projects.

Additionally, the budget provides for an increased level of effort in the *Regional Water Supply Planning* project for contractual services to support the WSA Update and Region II RWSP update. This reflects a schedule change from the previous Work Program to complete the WSA Update, then the Region III RWSP Update in FY 2017-2018. The revised schedule reflects an approach that streamlines both updates to utilize similar limited resources and provide consistent data.

Table 5.2 Region II Water Resource Development Project Funding (2017-2021)

Water Resource Development Projects	Budget Activity	FY 15-16 Expenditures ¹	Anticipated Five Year Work Program					FY17-FY21 Cost Estimate
			FY 16-17 Budget ²	FY 17-18	FY 18-19	FY 19-20	FY 20-21	
Floridan Aquifer	1.1.2 2.2.1	\$382,993	\$1,123,100	\$348,750	\$473,750	\$348,750	\$188,750	\$2,483,100
Inland Sand-and-Gravel Aquifer	1.1.2 2.2.1	\$17,867	\$30,500	\$163,750	\$163,750	\$138,750	\$88,750	\$585,500
Surface Water Sources	1.1.2 2.2.1	\$0	\$23,500	\$157,500	\$157,500	\$132,500	\$82,500	\$553,500
Aquifer Storage and Recovery	2.2.1	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Reuse	2.2.1	\$12,505	\$23,300	\$20,000	\$15,000	\$15,000	\$15,000	\$88,300
Water Conservation	1.1.1 2.2.1	\$4,658	\$8,800	\$8,000	\$8,000	\$8,000	\$8,000	\$40,800
Regional Water Supply Planning	1.1.1	\$37,649	\$150,600	\$60,000	\$50,000	\$35,000	\$35,000	\$330,600
Interconnect of Water Supply Systems ³	1.1.1	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Hydrologic Data Collection and Analysis	1.2.0	\$65,561	\$115,300	\$130,000	\$90,000	\$90,000	\$90,000	\$515,300
Abandoned Well Plugging	4.2.0	\$9,485	\$10,000	\$10,000	\$10,000	\$10,000	\$10,000	\$50,000
TOTAL		\$530,718	\$1,485,100	\$898,000	\$968,000	\$778,000	\$518,000	\$4,647,100

¹Final unaudited costs for fiscal year.

²FY 2016-2017 figures based on adopted budget.

³Project completed during FY 2013-2014.

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 5.3.

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

To date, Region II water supply development projects have made approximately 21 mgd of water available, including 13 mgd from the inland Floridan aquifer and 8 mgd from the inland sand-and-gravel aquifer. The District maintains efforts to make additional water supplies available to meet future needs,

particularly focusing on reclaimed water. These water supplies, together with traditional water supply sources, are anticipated to be sufficient to meet demands through 2035 under both normal and 1-in-10 year drought conditions and to avoid the adverse effects of competition for water supplies.

Table 5.3 Region II Water Supply Development Projects

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

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

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

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

Additionally, \$700,902 in funding was awarded for four projects in Region II during FY 2015-2016 through the District’s water supply development grant program. These projects include planning for increased reuse utilization (City of Mary Esther) and improving the reliability and capacity of potable water supply systems (Florida Community Services Corporation dba Regional Utilities, Moore Creek Mount Carmel Utilities, Inc. and the Town of Jay). See Appendix A, **Error! Reference source not found.** for more information.

Funding Summary: Region II Water Supply Development Projects

Table 5.4 displays past year expenditures, current year budget, and anticipated future expenditures for water supply development within Region II.

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

Table 5.4 Region II Water Supply Development Project Funding (2017-2021)

Water Supply Development Projects	Budget Activity	FY 15-16 Expenditures ¹	Anticipated Five Year Work Program					FY17-FY21 Cost Estimate
			FY 16-17 Budget ²	FY 17-18	FY 18-19	FY 19-20	FY 20-21	
Inland Floridan Aquifer Alternative Water Supply	2.2.2	\$268,251	\$1,372,151	\$0	\$0	\$0	\$0	\$1,372,151
Inland Sand-and-gravel aquifer Alternative Water Supply	2.2.2	\$0	\$62,079	\$0	\$0	\$0	\$0	\$62,079
Surface Water Supply Development	2.2.2	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Water Reuse Facilities	2.2.2	\$318,392	\$847,388	\$41,218	\$0	\$0	\$0	\$888,606
Water Supply Management Projects	2.2.2	\$679,976	\$284,917	\$282,383	\$212,470	\$14,500	\$14,500	\$808,770
TOTAL		\$1,266,619	\$2,566,535	\$323,601	\$212,470	\$14,500	\$14,500	\$3,131,606

¹Final unaudited costs for fiscal year.

²FY 2016-2017 figures based on adopted budget.

Region III: Bay County

The RWSP for Region III (Figure 5.1) was developed initially in 2008 and updated in 2013 (NFWMD 2008; Brooks, et al., 2014). The plan describes concerns about the long-term sustainability of water supply resources within the region and presents strategies to increase source reliability and minimize the vulnerability of Deer Point Lake Reservoir, the region’s primary public supply source, to salt water intrusion from a major hurricane storm surge.

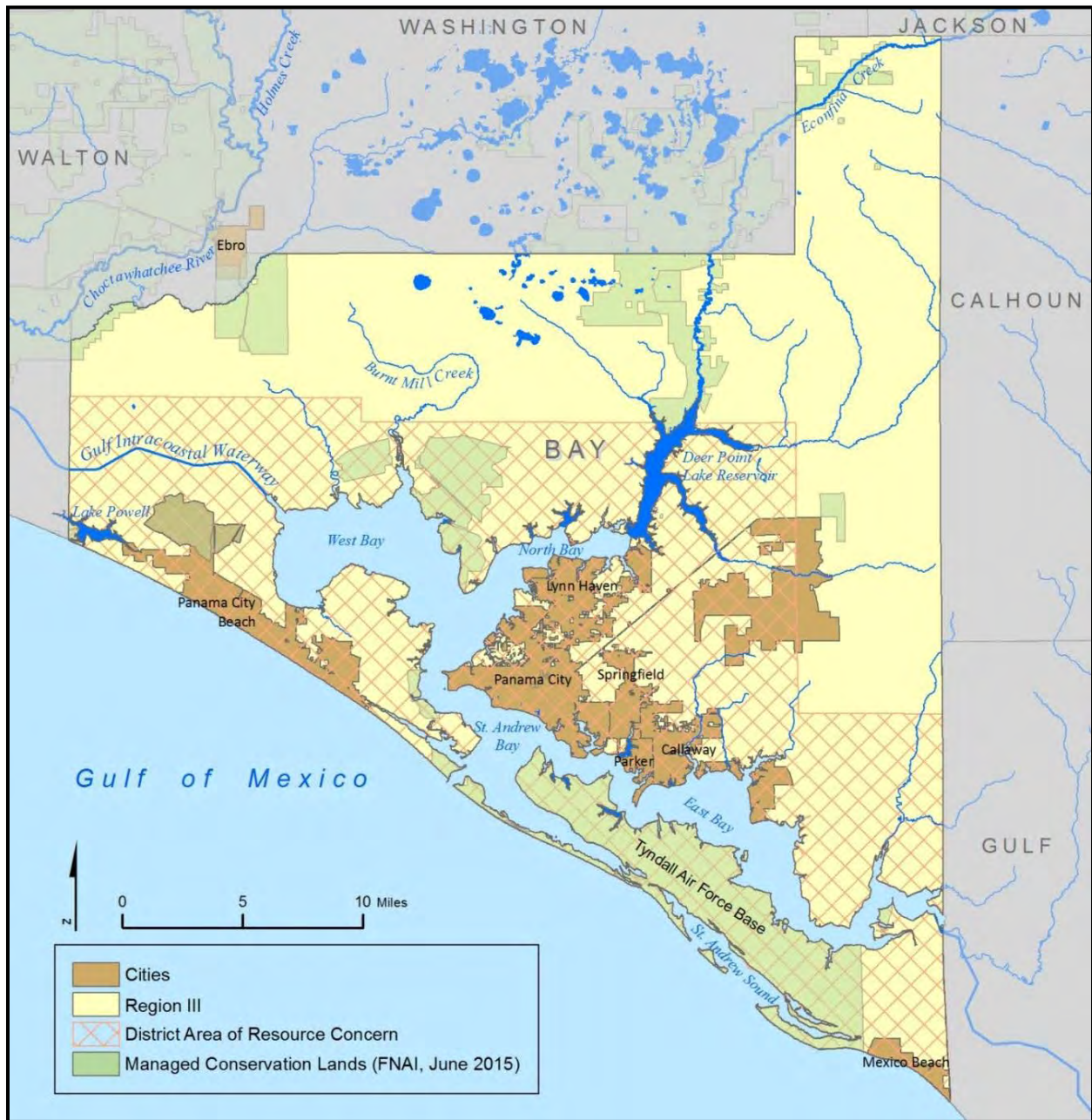


Figure 5.3 Water Supply Planning Region III

Pursuant to the RWSP, the NFWFMD provided over \$5 million in grant funding to Bay County for a \$23 million project to develop an alternate intake at the lower end of Econfina Creek, the primary tributary of the reservoir. The location of the new facility will minimize vulnerability to storm surge impacts.

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

Region III Water Resource Development

The Region III RWSP update includes five water resource development strategies. These are summarized in Table 5.5. Descriptions of the strategies and progress to date follow.

Table 5.5 Region III Water Resource Development Projects

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

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

Econfina Creek and Groundwater Recharge Area Protection

The District's Land Acquisition and Management Division manages more than 43,000 acres in the Econfina Creek Water Management Area (WMA) to protect a regionally significant groundwater recharge area and other water resources while also providing public access and a resource for compatible public use and recreation. Land management activities include habitat enhancement, restoration, and development and maintenance of public access facilities. Acquisitions of inholdings and additions may be planned in the future depending on funding availability.

Chapter 5. Water Resource Development Work Program

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

For FY 2016-2017, legislative appropriations for springs restoration and protection were again awarded to the District toward two projects in the Econfina WMA. The Gainer Springs Land Acquisition project provides for the purchase up to 942 acres along Econfina Creek and adjacent to Gainer Springs, a first magnitude springs group in northern Bay County. A combination of fee-simple and conservation easements will be used toward this \$6 million project. Additionally, \$200,000 has been allocated for streambank stabilization at Econfina Blue Spring.

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

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

Water Reuse Funding and Technical Assistance

District staff work with utilities and local governments to identify opportunities for expanded water reuse to meet non-potable water needs, as well as feasible funding sources and strategies. As of 2015, six reuse applications associated with three reuse systems in Region III were permitted for public access reclaimed water, producing an estimated 2.08 mgd for public access reuse (DEP 2016). These facilities supported landscape irrigation for approximately 1,296 residences, two golf courses, four parks, and two schools.

In FY 2015-2016, the District began working with utilities in Region III on a project to determine the feasibility of reclaimed water to serve the needs of Gulf Power's Lansing Smith Generator Plant near Southport. This project has the potential to reduce wastewater discharges to St. Andrew Bay, to eliminate brackish surface water withdrawals for power generation, and to position utilities to better meet future reclaimed water demand. In FY 2016-2017, the District has budgeted \$500,000 in grant funding for Bay County Utilities to facilitate Phase I of the project. Other water reuse projects may include assessments matching reclaimed water generators with users, feasibility studies, pilot projects,

and demonstration projects. Projects of highest priority are those that offset and reduce the consumption of potable quality water, as well as those that protect natural systems and achieve integrated water resource management.

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

Water Conservation 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. A final draft evaluation of water conservation potential in Region III was completed in FY 2015-2016. The evaluation reviews existing programs and identifies potential water savings achievable from additional water conservation measures. More information on the evaluation will be made available once finalized. Staff will maintain efforts with local governments and utilities to further improve water use efficiency for public supply and other water use categories.

Regional Water Supply Planning, Coordination and Technical Assistance

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

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

Funding Summary: Region III Water Resource Development Projects

Table 5.6 displays past year expenditures, current year budget, and anticipated future expenditures for water resource development within Region III.

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

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

hydrologic monitoring and analysis. Increases in the *Regional Water Supply Planning* project reflect anticipated staff time to continue the WSA Update and a potential update to the Region III RWSP in FY 2018-2019.

Table 5.6 Region III Water Resource Development Project Funding (2017-2021)

Water Resource Development Projects	Budget Activity	FY 15-16 Expenditures ¹	Anticipated Five Year Work Program					FY17-FY21 Cost Estimate
			FY 16-17 Budget ²	FY 17-18	FY 18-19	FY 19-20 ³	FY 20-21	
Econfina Creek & Groundwater Recharge Area Protection	2.1.0 2.5.0 2.6.0 3.1.0	\$1,034,504	\$7,150,900	\$1,100,000	\$1,100,000	TBD	TBD	\$9,350,900
Hydrologic & Water Quality Data Collection and Analysis	1.1.2 1.2.0 2.2.1	\$50,264	\$65,000	\$265,000	\$265,000	TBD	TBD	\$595,000
Water Reuse Funding and Technical Assistance	2.2.1	\$5,836	\$508,700	\$5,000	\$5,000	TBD	TBD	\$518,700
Water Conservation Funding and Technical Assistance	1.1.1 2.2.1	\$3,163	\$4,400	\$3,000	\$3,000	TBD	TBD	\$10,400
Regional Water Supply Planning, Coordination, and Technical Assistance	1.1.1	\$5,148	\$14,700	\$7,500	\$30,000	TBD	TBD	\$52,200
TOTAL		\$1,098,914	\$7,743,700	\$1,380,500	\$1,403,000	TBD	TBD	\$10,527,200

¹Final unaudited costs for fiscal year.

²FY 2016-2017 figures based on adopted budget.

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

Region III Water Supply Development

Water supply development strategies identified in the Region III RWSP Update are listed in Table 5.7.

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

During FY 2015-2016, the District worked with Bay County, Panama City, and Gulf Power for the planning and securing funding of reclaimed water in the North Bay area (see Water Resource Development section). Staff also continued to collaborate with other utilities on increasing or enhancing reclaimed water and conservation projects. The Governing Board awarded one water supply grant project for \$168,374 to the City of Callaway for water system improvements (Appendix A, Table 5.9). The City of Callaway project was completed in September 2016.

Table 5.7 Region III Water Supply Development Projects

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

¹Final cost.

²Capacity of alternate raw water intake.

Funding Summary: Region III Water Supply Development Projects

Table 5.8 displays past year expenditures, current year budget, and anticipated future expenditures for water supply development within Region III. There is no water supply development funding included in the District's budget for FY 2016-2017. A project with the City of Lynn Haven was approved the Governing Board in November 2016 and this project should be completed in FY 2018-2019. This project, as well as planning and staff support, is reflected in table above in the *Water Conservation* project.

Table 5.8 Region III Water Supply Development Project Funding (2017-2021)

Water Supply Development Projects	Budget Activity	FY 15-16 Expenditures ¹	Anticipated Five Year Work Program					FY17-FY21 Cost Estimate
			FY 16-17 Budget ²	FY 17-18	FY 18-19	FY 19-20 ³	FY 20-21	
Development of Upstream Intake for Surface Water Supply ⁴	2.2.2	\$0	\$0	\$0	\$0	TBD	TBD	\$0
Water Reuse	2.2.2	\$0	\$0	\$0	\$0	TBD	TBD	\$0
Utility Interconnections	2.2.2	\$0	\$0	\$0	\$0	TBD	TBD	\$0
Water Conservation	2.2.2	\$684,946	\$4,906	\$4,000	\$52,325	TBD	TBD	\$61,231
TOTAL		\$684,946	\$4,906	\$4,000	\$52,325	TBD	TBD	\$61,231

¹Final unaudited costs for fiscal year.

²FY 2016-2017 figures based on adopted budget.

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

⁴Project completed during FY 2014-2015.

District-Wide Initiatives

Water Supply Development Grant Initiative

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

Water Reuse

District staff continue to develop approaches for integrated planning of water and wastewater resources. In FY 2015-2016, staff completed maintenance and development of geographic information system (GIS) data associated with wastewater treatment plants and effluent disposition, focusing on opportunities for water reuse. Staff also continued to collaborate with DEP, utilities, and other stakeholders in the follow-up workgroup to SB 536 legislation. Staff will maintain efforts to develop a Districtwide water reuse evaluation for understanding opportunities and costs for expanding reuse potential, including for the WSA Update currently underway. Assisting utilities and local governments in developing beneficial reuse projects will remain a priority, with implementation depending on future funding availability.

Agricultural Best Management Practices Cost Share Program

Significant efforts are underway to enhance agricultural water use efficiency and to support implementation of associated water quality best management practices (BMPs), targeted primarily for the Jackson Blue Spring basin of the Apalachicola River watershed. Through FY 2015-2016, the District has received \$2,239,500 of spring restoration funding for these activities. The District provides a 75 percent cost-share to help producers retrofit center pivot irrigation systems and to implement more efficient nutrient and water application systems. Together with the Northwest Florida Mobile Irrigation Laboratory, these efforts are expected to significantly enhance efficient use of both water and nutrients within the spring basin. As of June 2016, 89 percent of the available cost-share funds were under contract or distributed to producers for implementation of BMPs. An additional \$1.0 million in legislatively-approved funding to sustain this effort was awarded and is budgeted for FY 2016-2017.

Well Abandonment

The District continues its program to properly plug abandoned or contaminated wells. Well abandonments typically considered for financial assistance from the District include: projects for financially constrained public water systems; wells located within water resource caution areas; and wells within areas identified under Chapter 62-524, Florida Administrative Code (F.A.C.) (Escambia, Santa Rosa, Jackson, and Leon counties). Other projects not meeting the previously listed criteria can also be considered, as appropriate. The program currently pays up to 50 percent of costs to plug and abandon eligible wells. During FY 2015-2016, approximately 1,134 wells were plugged districtwide at no cost to the District other than staff time. The District is working with the City of Marianna for the proper abandonment of three wells of unknown use. The District provided \$5,000 to assist with the abandonment of these wells. The District is also providing funding assistance for the abandonment of a domestic well in an area of groundwater contamination in Jackson County.

References

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

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.nfwwater.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.

nfwwater.com/system/assets/1236/original/Region_II_RWSP_2012_Update_Final.compressed.pdf

Coates, K., C. Cogger, 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.nfwwater.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.nfwwater.com/system/assets/1338/original/WSA2013_Final_Compressed.pdf

Florida Department of Environmental Protection 2016. 2015 Reuse Inventory. May 2016.

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

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

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

Northwest Florida Water Management District. 2008. Region III Regional Water Supply Plan, Bay County, Florida. Program Development Series 08-02. August 2008.

www.nfwwater.com/system/assets/587/original/Region_III_RWSP_08-12-08_FINALweb_version.pdf

Northwest Florida Water Management District. 2016. FY 2016-2017 Adopted Budget. October 1, 2016.

www.nfwwater.com/Business-Finance/District-Budget

PBS&J. 2006. Water Supply Planning Region II Final Report: Conceptual Alternative Water Supply Development Projects and Planning Level Cost Estimates. October 2006.

www.nfwwater.com/system/assets/1333/original/Final_Water_Supply_Study_Report.compressed.pdf

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

Table 5.9 presents additional water supply development assistance and alternative water supply development projects funded in regions II and III since FY 2013-2014. These projects are included in this report to demonstrate how complementary programs and activities, including regional water supply planning, water resource development, alternative water supply development, and water supply development assistance work together to ensure sustainable long-term water supplies.

Additional information on water supply development projects is included in Strategic Water Management Plan Section.

Table 5.9 Water Supply Development Assistance Projects in Regions II and III

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

Chapter 5. Water Resource Development Work Program

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

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

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

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

Basin Management Action Plans have been adopted for three areas within the District: Bayou Chico in Escambia County; the Upper Wakulla River and Wakulla Springs basin in portions of Wakulla, Leon, and Gadsden counties; and Jackson Blue Spring and Merritt's Mill Pond basin in Jackson County. As none of these BMAPs are within Regional Water Supply Planning regions II or III, there are no BMAP projects to include in this five-year work plan update.

The District is currently working to develop MFLs for several waterbodies, including three Outstanding Florida Springs located in northwest Florida. The technical assessment of the first MFL, St. Marks River Rise, will be completed in 2018. Work on development of an MFL for the Floridan aquifer in coastal Planning Region II (Okaloosa, Santa Rosa, and Walton counties) is underway, with the technical assessment scheduled to be completed by 2020. Also, the Shoal and Lower Yellow River system MFL, also in Region II, will be initiated in FY 2016-2017, with the technical assessment completed in 2023. In Region III, there are three MFL waterbodies on the current approved priority list with work initiation dates in future years: Econfina Creek and Spring complex (2019); Deer Point Lake (2020); and the Floridan Aquifer in coastal Bay County (2021).

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

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Consolidated Annual Report

Chapter 6

Florida Forever Work Plan Annual Report



Florida Forever Work Plan Annual Report

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Chapter 6. Florida Forever Work Plan Annual Report

Introduction

Section 373.199(7), F.S. requires the Northwest Florida Water Management District (District) to annually update the Florida Forever Five-Year Work Plan. To date, this is the 16th annual update of the 2001 Florida Forever Five-Year 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 Land Acquisition Trust Fund and also reports on land management activities, lands surplused or exchanged and the progress of funding, staffing and resource management of projects for which the District is responsible. This plan also applies to land acquisition funds deposited into the Land Acquisition Trust Fund pursuant to s.28(a), Art. X of the State Constitution.

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 and the table below illustrates actual expenditures for land acquisition using Florida Forever funding.

Table 6.1 Land Acquisition Expenditures by Water Management Area

Water Management Area	Acres	Dollars Expended
Perdido River	6,044	\$13,535,865
Escambia River	697	\$ 1,231,692
Yellow River	205	\$ 630,046
Choctawhatchee River	4,269	\$ 6,162,350
Econfina Creek	3,663	\$ 7,977,220
Apalachicola River	1,912	\$ 3,981,132
Chipola River	2,440	\$ 5,922,785
St. Marks River	830	\$ 1,862,050
Ochlockonee River	1,529	\$ 1,951,197

Since the inception of the District's land acquisition program, the goal has been to protect the floodplain of our major rivers and creeks. 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.

Acquisition Planning

The District employs a watershed approach to select and prioritize the water resources 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 strategy; 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, 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 and projects that protect the quality and quantity of water that flows into and out of springs. 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 addition, the District’s acquisition efforts will also focus on acquiring fee or less than fee simple interest in properties located within the Jackson Blue and Wakulla Springs Groundwater Contribution Areas.

In developing the annual update, District staff shall review projects proposed by DEP’s Division of State Lands in order to minimize redundancy and facilitate an efficient and mutually supportive land acquisition effort.

Approved Acquisition Areas

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

Table 6.2 Approved 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	Bosel Springs Waddell Springs		West Bay Buffer
Lafayette Creek	Choctawhatchee River including Holmes Creek	Cypress Spring		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	Jackson Blue Spring		
	Yellow and Shoal Rivers	Wakulla Spring		
	Perdido River and Bay			

Groundwater Recharge Areas

Such lands may be designated by the District as Recharge Areas for the Floridan, Sand-and-Gravel and other important aquifers and may be acquired in fee simple or less than fee simple.

Donated Lands

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 on occasion 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

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 6.3 District Surplus Lands

WMA	Acres	County	Acquired Date	Status
Blackwater River	0.4	Santa Rosa	August 3, 2001	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
Econfina Creek	2.6	Bay	April 17, 2006	Sold on 06-12-15
Escambia River	115	Escambia	April 26, 1994	For Sale
Yellow River	1.5	Okaloosa	December 15, 1999	Sold on 12-13-13
Yellow River	61.1	Okaloosa	December 15, 1999	Exchanged 01-24-14

Note to Landowners

It is important to note 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 resource 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 the preferred alternative to the District's typical fee-simple land purchases.

DEP Florida Forever Priority List

The Florida Forever Priority List can be found at <http://www.dep.state.fl.us/lands/FFplan.htm>.

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, 2016

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 (incl. fee and I-t-f)
3,663 Florida Forever acres (incl. fee and I-t-f)

(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. NFWFMD lands to be treated for upland invasive, exotic plants = <5,000 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 has been provided by additions to Econfina Creek Water Management Area (1992-2009). Additionally, Florida Forever funding has in the past 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 (project completed in 2009). Funding for water supply development, including construction of water reuse facilities, is primarily provided through the Water Protection and Sustainability Program Trust Fund, NFWFMD General Fund, and local funding. See the NFWFMD Five-Year Water Resource Development Work Program report and Consolidated Annual Report.

(4)(a)1. NFWFMD lands that are in need of and are undergoing restoration, enhancement or management by the District.

In need of restoration, enhancement and management = 12,707 acres
Undergoing restoration or enhancement = 652 acres
Restoration completed = 21,892 acres
Restoration maintenance = 21,892 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. NFWFMD lands under upland invasive, exotic plant maintenance control = <10,000 acres

(4)(b) Refer to section 4.1, Five-Year Water Resource Development Work Program: FY 2016-2017 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 5.5) 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.

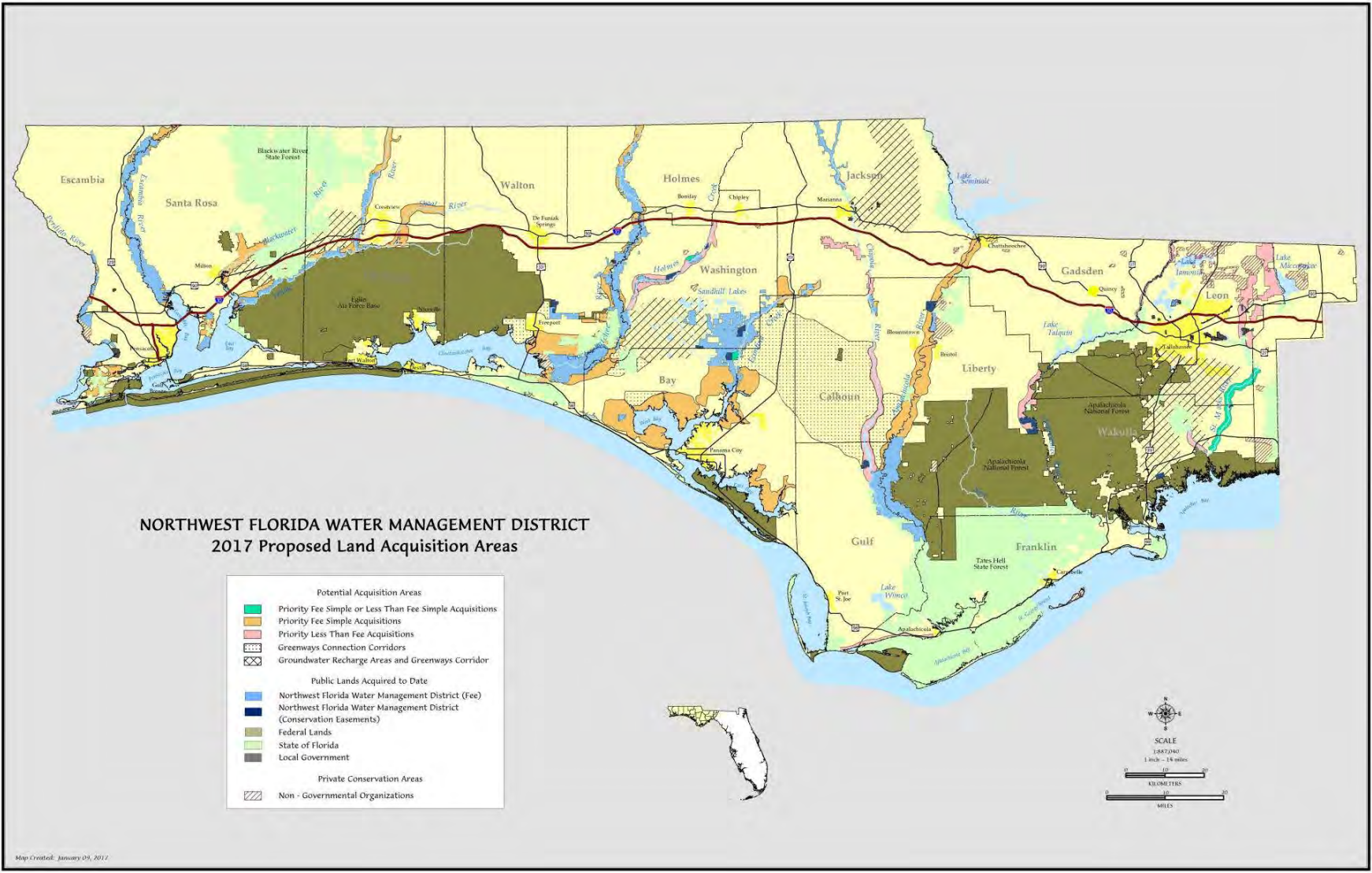


Figure 6.1 Proposed Land Acquisition Areas 2017

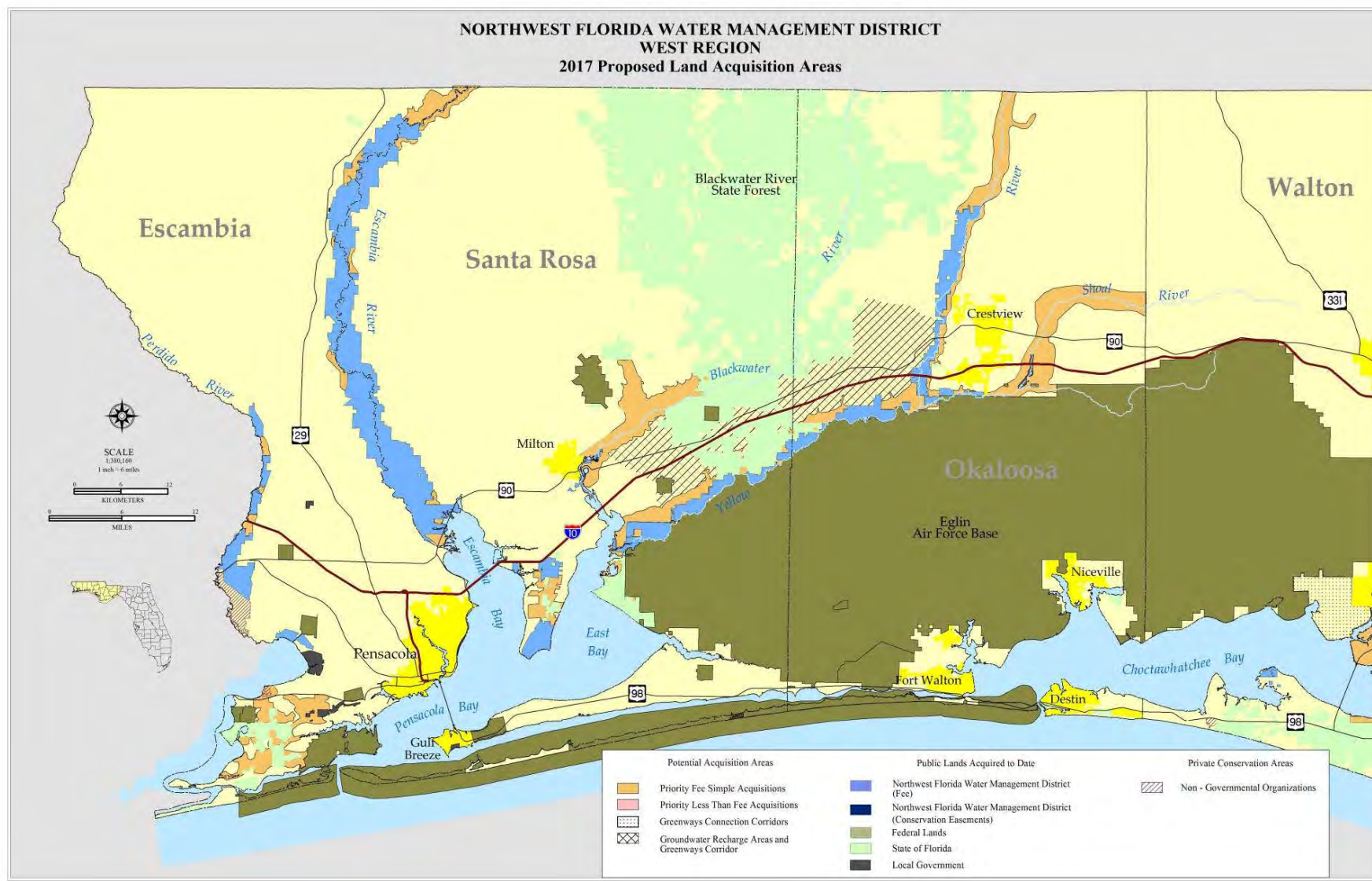


Figure 6.2 Proposed Land Acquisition Areas, 2017, West Region

FLORIDA FOREVER LAND ACQUISITION PROJECT

Perdido River and Bay Basin

The Perdido River serves as the state line, separating Florida from Alabama (see Figure 6.2). 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 blackwater 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 (see Figure 6.2). 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 (see Figure 6.2) 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, East and Blackwater bays (see Figure 6.2). 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 (see Figure 6.2) 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 (see Figure 6.2). 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 approximately 39,140 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. This area encompasses approximately 52,000 acres.

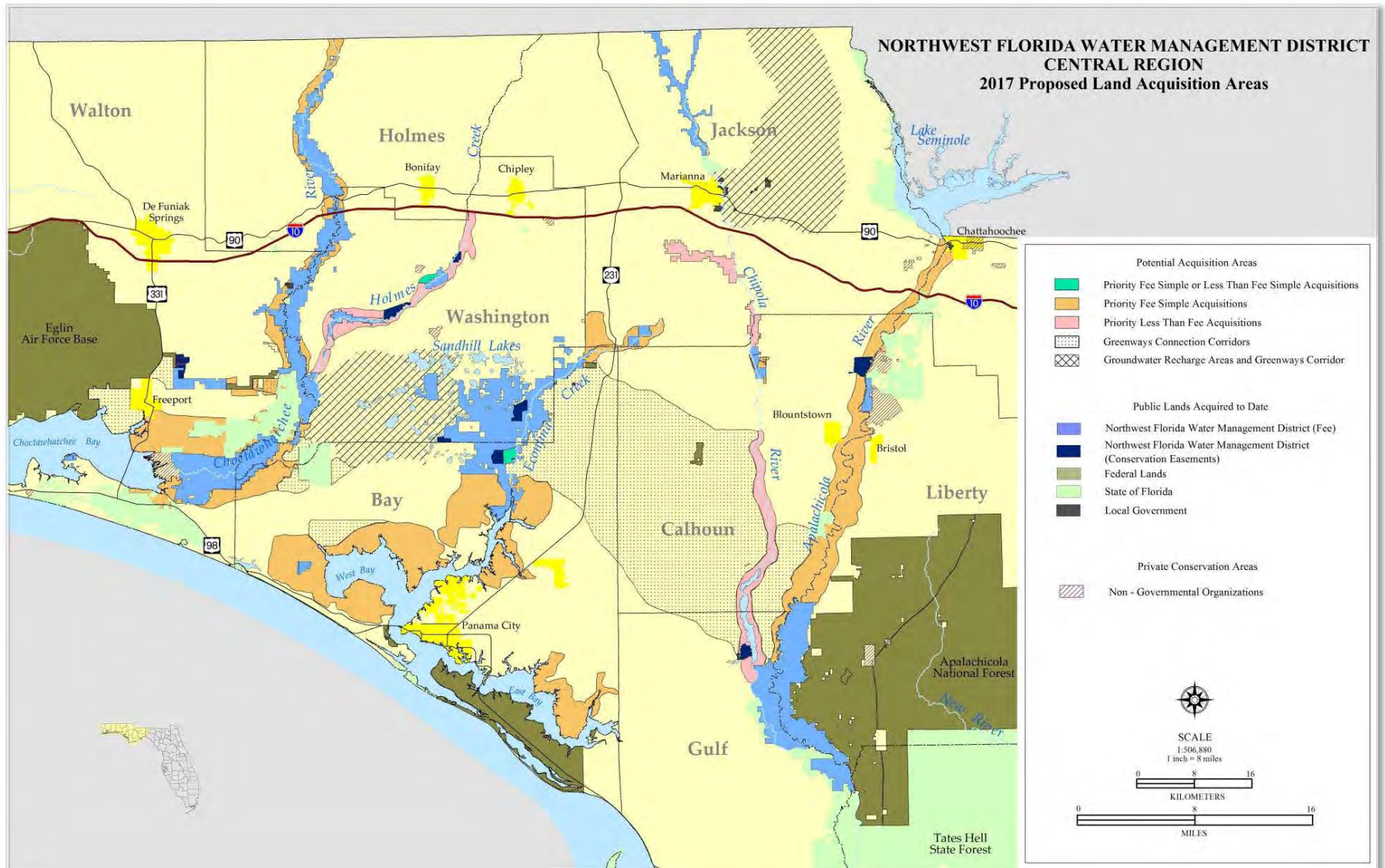


Figure 6.3 Proposed Land Acquisition Areas, 2017, Central Region

FLORIDA FOREVER LAND ACQUISITION PROJECT

Lafayette Creek

Originating in south central Walton County, the Lafayette Creek drainage basin is located northeast of Freeport, Florida (see Figure 6.3). 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. Any proposed acquisitions will protect a portion of Magnolia and Wolf creeks, both of which are significant tributaries to Lafayette Creek. Also, additional purchases along the creek will protect many diverse natural communities and habitat types. 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, which encompasses Lafayette Creek, 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 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 4,540 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 and 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 (see Figure 6.3). 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 57 springs on Holmes Creek 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, creek and bay 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, 7,000 acres have been identified for possible less than fee acquisition on Holmes Creek, and 855 acres have been identified for priority fee simple or less than fee simple 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

West Bay Buffer

West Bay is the westernmost embayment of the St. Andrew Bay estuary (see Figure 6.3). 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. Acquisitions in this area would help prevent such degradation by preserving intact and 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 (see Figure 6.3). 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 project area features high rolling sandhill habitat, 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 39,666 acres have been identified for possible acquisition. Approximately 982 acres have been identified as priority fee simple or less than fee simple 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 (see Figure 6.3). The creek's basin is characterized by extensive wet 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.

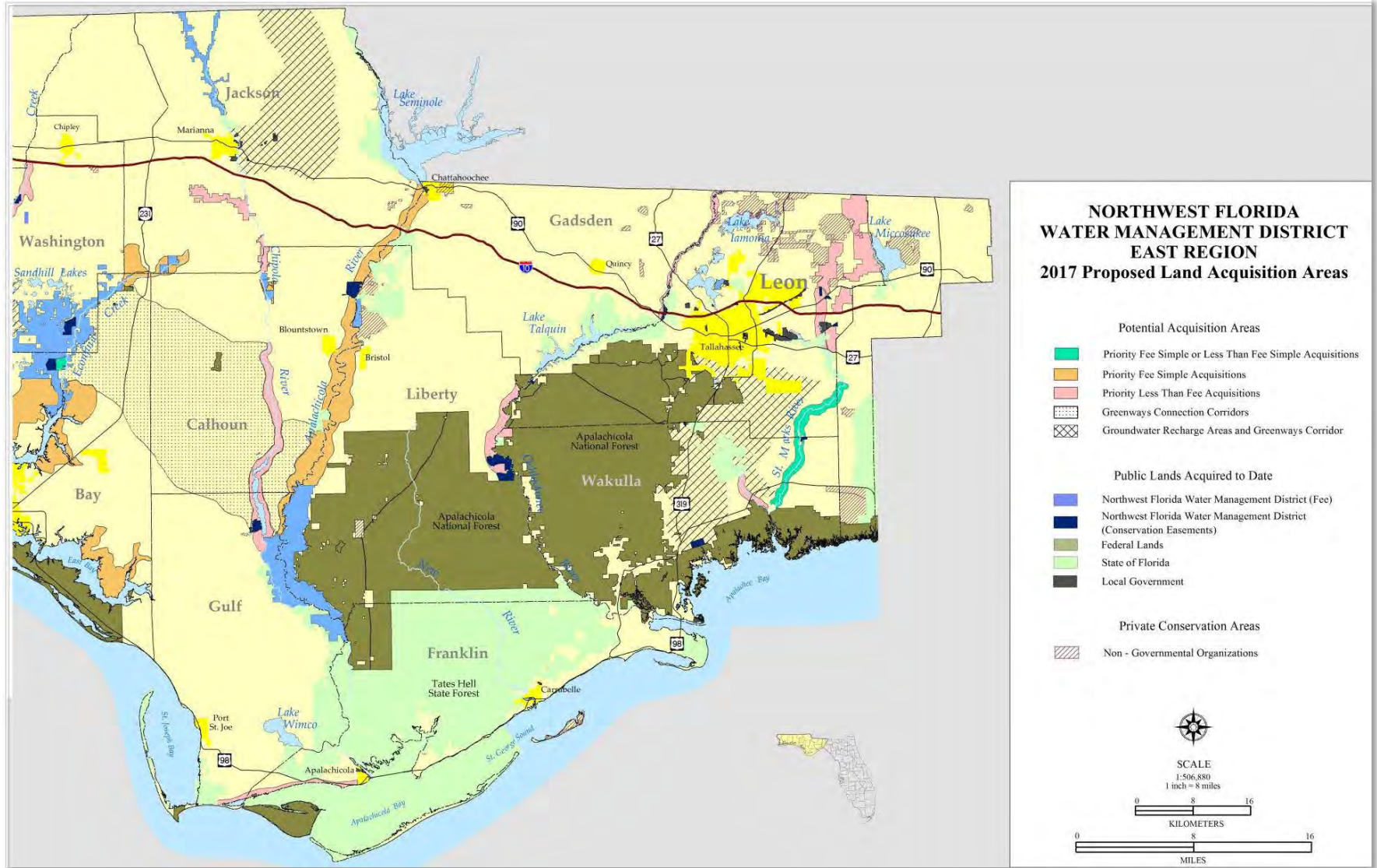


Figure 6.4 Proposed Land Acquisition Areas, 2017, East Region

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 (see Figure 6.4). 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 flow into 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.

Jackson Blue Spring Groundwater Contribution Area

The Jackson Blue Spring Groundwater Contribution Area, east of the Chipola River, has been identified for fee simple or less than fee simple acquisition to provide protection to Blue Spring and the groundwater contribution area in Jackson 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 1,025 acres has been identified for possible fee acquisition and 28,400 acres have been identified for possible less than fee acquisition on the Chipola River and approximately 96,711 acres have been identified for fee simple or less than fee simple acquisition in the Jackson Blue Spring Groundwater Contribution Area. 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 and 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 Bay National Estuarine Research Reserve and the St. Vincent National Wildlife Refuge (see Figure 6.4). State and federal agencies, as well as the NFWMD, 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 some of the most 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 (see Figure 6.4). 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, as well as numerous species of rare fish. 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 (see Figure 6.4). 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 and Wakulla Rivers

The Wakulla River originates at Wakulla Springs and flows south approximately 10 miles to join the St. Marks River at the town of St. Marks in Wakulla County (see Figure 6.4). 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 Spring, 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 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.

Wakulla Springs Groundwater Contribution Area

The Wakulla Springs Groundwater Contribution Area, east of the Apalachicola National Forest, has been identified for fee simple or less than fee simple acquisition to provide protection to the groundwater contribution area in Wakulla County.

Land Acquisition

Approximately 45,456 acres have been identified for fee or less than fee acquisition along the St. Marks and Wakulla rivers and approximately 90,666 acres have been identified for fee simple or less than fee simple acquisition in the Wakulla Springs Groundwater Contribution Area. 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 District Work Plan

As required by section 373.199(2), F.S., a District five-year work plan identifies and includes projects that further the goals of the Florida Forever Act (section 259.105, F.S.). These include priorities identified in approved surface water improvement and management (SWIM) plans, Save Our Rivers land acquisition lists, stormwater management and water resource development projects, springs and water body restoration projects, and other eligible activities that would assist in meeting the goals of Florida Forever.

From 2003 to 2008, the District provided grant funding to local governments for capital improvements that help implement SWIM projects, water resource development projects, and projects included within stormwater master plans. The program awarded more than \$23 million for 55 stormwater retrofit, restoration, and reuse projects. These grants leveraged significant additional funding, with more than \$52 million in local and other match funding allocated to the approved projects.

No significant appropriations of Florida Forever funds have been made since FY 2008-2009. No new projects were undertaken in FY 2015-2016. Table 6.4 lists conceptual projects considered eligible for Florida Forever capital improvement funding.

Table 6.4 Projects Currently Eligible for Florida Forever Funding

Project	Description	Status	Estimated Cost
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	Planning	TBD
Spring habitat restoration	Construction activities to restore and increase public access to riparian and aquatic habitats and shorelines associated with northwest Florida springs	Planning	\$372,480
Stormwater retrofit facilities	Construction of additional cooperative stormwater retrofit projects, providing water quality improvement and improved flood protection, in accordance with approved SWIM plans; funding indicated represents estimated available Florida Forever contribution; total costs to be determined	Planning	TBD
Hydrologic and shoreline restoration	Water resource restoration of shoreline and riparian habitats, and flow regimes, consistent with SWIM plans	Planning	TBD

Project specifics, as noted in section 373.199(2), (3), (4) and (5), F.S., may be provided in the future if projects are able to advance beyond the preliminary planning stage.

Future Florida Forever or special legislative appropriations, and funding from the Land Acquisition Trust Fund, federal grants, local governments, other local matching resources, and potentially other sources may contribute to the implementation of these projects. Final approval of funding for any project requires District Governing Board approval.

Implementation of the 2015-2016 Work Plan

Land Acquisition

The District did not purchase or surplus any land during 2016.

Land Management

The District completed numerous land management activities during Fiscal Year 2015-2016. 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 6.5 and Table 6.6 provide additional information on specific land restoration activities completed during the year. The projected Fiscal Year 2016-2017 staffing and management budget by WMA can be found in Table 6.7.

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 Econfinia 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 Econfinia Creek and form a crucial component of the water contribution to Deer Point Lake Reservoir.

Land Management Accomplishments (FY 2015-2016)

- The District conducted prescribed burns on approximately 6,700 acres of District lands, as well as vegetation management (herbicide) and habitat enhancements on 2,169 acres.
- The District's new land management database was completed along with growth and yield modeling to evaluate future timber management scenarios and develop timber revenue projections for future years.
- 2,070 camping permits were issued at 88 reservation-only sites on District lands.
- 15 special resource area permits were issued for larger events on District property.
- Six timber harvests totaling 2,388 acres were active, removing offsite sand pine and thinning loblolly, longleaf, and slash pine.
- More than 8,898 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 NFWFMD 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)*
- *St. Andrew Bay Watershed SWIM Plan (2000)*
- *Choctawhatchee River and Bay SWIM Plan (2002)*
- *St. Marks River Watershed SWIM Plan (2009)*
- *Tate's Hell State Forest Hydrologic Restoration Plan (2010)*
- *Florida Forever Capital Improvements Plan*

The District is currently updating SWIM plans for all seven watersheds within the district boundaries and this effort is scheduled to be completed in 2017. All plan updates are anticipated to include water restoration information and projects.

Restoration Accomplishments (FY 2015-2016)

- The Williford Spring restoration project that was completed in 2015 remained closed to the public until July 26, 2016, when the District held a grand opening celebration. Costing more than \$2.1 million, this project involved sediment removal, restoring spring shoreline areas, providing stabilized access to the spring, 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 voluntarily asking the public to refrain from paddling canoes into the spring area. Public response to the project has been very positive.
- One of three cooperative projects to restore the eroding shorelines and address stormwater impacts along Holmes Creek was completed. The remaining two projects, i.e. Live Oak and Hightower Springs landings, are scheduled for completion by the end of FY 2016-2017. These projects are being constructed by Washington County with funding assistance from the District.
- After site stabilization and a landscape plant grow-in period, the Devil's Hole swallet in Washington County was opened to the public as a day use recreation area and reservable campsite within the Econfina Creek WMA.
- The streambank restoration project was completed at Walsingham Park in Washington County. This cooperative project, implemented by USFWS and District staff with funding from FFWCC, utilized geotextile bags to stabilize the eroding shoreline. The restored shoreline was landscaped with native vegetation and several tons of rip-rap rock was removed from the creek.
- 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 completed hand planting of 1,198 acres of disturbed longleaf pine habitat. These habitat restoration activities enhance groundwater recharge, improve wetland functions, and offset wetland losses caused by FDOT projects. This project involved the planting of 830,598 longleaf pine tubelings within two WMAs.

Table 6.5 Restoration, Enhancement and Maintenance (2016)

Water Management Area	Acres Burned					Acres Planted					Acres Harvested			Acres Treated	
	Total	Fuel Reduction	Site Preparation	Growing Season	Wiregrass Propagation	Total	Upland/Wetland Wiregrass and Toothache Grass	Longleaf Pine	Slash Pine	Replanted	Total	Restoration	Thinning	Habitat Restoration	For Invasive, Non-native or Off-site Species
Escambia River	50	50				1				1					376
Garcon Point	53				53	2				2					20
Blackwater River															60
Yellow River	463	463													1668
Perdido River	825	825													1042
Choctawhatchee River	1,386	242		1,144							380	380			2,001
Econfina Creek	1,472	856	46	353	217	1116		1,116			574		574		5,602
St. Andrews	379	379													
Carter Restoration	835	55		780											
Ward Creek West															896
Devils Swamp Restoration															
Chipola River	661	661				82		82							896
Apalachicola River															448
Lake Jackson															34
Totals	6,154	3,531	46	2,277	270	1,201		1,198		3	954		380	574	13,043

Table 6.6 Access and Recreation Management (2016)

Water Management Area	Picnic Areas	Day Use Sites	Parking Areas	Reserved Camp Sites	Boat, Canoe/Kayak Landings	Portoilet Stations	Horse Trail	Canoe Trail	Hiking Trail	Nature Trail	Bike Trail	Access Road	Camp Site Reservations	General Purpose (boundary signs)	Information Signs on District Lands	Weather Pavilions and Wildlife Viewing Towers
	Number Maintained						Miles Maintained						Issued	Signs		Installed
Escambia River	6	11	12	28	11	10			1	2		27	388	45	4	2
Garcon Point		2	2						3					5	2	
Blackwater River	1	3	3		2					1				5	1	1
Yellow River		3	3		3			50				42		75		
Perdido River	3	3	4	1	4	10	6	15	6	1		32	101	35	13	1
Choctawhatchee River	12	15	15	21	14	10		15	11			103	270	75	14	8
Econfina Creek (incl. Carter Tract)	13	14	14	25	8	14	56	22	18	2		134	1180	160	84	15
Chipola River	1	4	4	3	2	2	4	6	3			9	54	544	2	1
Apalachicola River	1	2	2	10	2	1						9	77	420	2	2
Lake Jackson	1	2	2			1	7		10		7	5		96	2	2
Totals	38	59	61	88	46	48	73	108	48	6	7	361	2,070	1,460	124	30

Table 6.7 Projected Funding, Staffing and Resource Management for FY 2016-2017

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Western	Escambia	35,413		\$116,532	\$61,870
	Escambia Conservation Easements	19		\$824	\$500
	Garcon Point	3,245		\$74,530	\$28,250
	Yellow	16,553		\$72,265	\$30,000
	Blackwater	381		\$15,034	\$7,150
	Perdido	6,261		\$134,003	\$88,140
	Perdido Conservation Easements	4		\$824	\$500
	Western Region Total	61,876	3	\$414,012	\$216,410
Central	Choctawhatchee	60,810		\$480,732	\$332,030
	Choctawhatchee/Holmes Conservation Easements	2,537		\$15,715	\$13,000
	Econfina	39,182		\$999,589	\$751,660
	St. Andrew/Econfina Conservation Easements	2,433		\$3,737	\$500
	Ward Creek West	719		\$0	\$0
	Carter Restoration	2,155		\$61,000	\$61,000
	Central Region Total	107,836	5	\$1,560,773	\$1,158,190
Eastern	Chipola	9,094		\$125,764	\$60,838
	Apalachicola	36,823		\$65,818	\$20,873
	Apalachicola/Chipola Conservation Easements	2,359		\$2,946	\$500
	Lake Jackson	516		\$104,345	\$78,100
	St. Marks Conservation Easements	1,376		\$3,557	\$500
	Ochlocknee Conservation Easements	3,675		\$3,557	\$500
	Eastern Region Total	53,843	2	\$305,987	\$161,311
Regional Totals	223,555	10	\$2,280,772	\$1,535,911	

Projected Funding, Staffing and Resource Management for FY 2016-2017 (cont.)

Other Projects	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Land Management Administration		4	\$913,504	\$330,260
IT Initiative			\$388,601	\$355,586
Land Management Database			\$68,610	\$54,200
Florida National Scenic Trail - Econfina Creek			\$10,000	\$10,000
Brunson Landing Tract	348		\$17,352	\$12,360
Devils Hole Spring Streambank Restoration			\$10,619	\$0
Cotton Landing Streambank Restoration			\$10,619	\$0
Seven Runs Streambank Restoration			\$7,801	\$0
Washington County School Board Donation			\$340	\$340
Grand Total	223,903	14	\$3,708,218	\$2,298,657

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Consolidated Annual Report

Chapter 7

Mitigation Donation Annual Report



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Chapter 7. Mitigation Donation Annual Report

The Northwest Florida Water Management District implemented Environmental Resource Permitting (ERP) jointly with DEP beginning on November 1, 2010. Consolidated under ERP during FY 2012-2013 was the Management and Storage of Surface Water (MSSW) program due to the adoption of the Statewide Environmental Resource Permitting (SWERP) rules in Chapter 62-330, F.A.C.

Section 373.414(1)(b)2, F.S., requires the District and DEP 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). Any cash donations accepted by the District as mitigation during the preceding fiscal year are reported annually.

The District received no cash donations in FY 2015-2016.

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Chapter 8

Water Projects in the Five-Year Water Resource Development Work Program



Water Projects in the Five-Year Water Resource Development Work Program

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Chapter 8. Water Projects in the Water Resource Development Five-Year Work Program

Section 373.036, Florida Statutes (F.S.), was amended in 2016 by the adoption of Senate Bill 552. The legislation added two new sections to the consolidated annual report required pursuant to section 373.036(7)(b). The two additional elements include the following:

1. Information on all projects related to water quality or water quantity as part of a 5-year work program, including:
 - a. A list of all specific projects identified to implement a basin management action plan or a recovery or prevention strategy;
 - b. A priority ranking for each listed project for which state funding through the water resources development work program (section 373.536(6), F.S.) is requested, which must be made available to the public for comment at least 30 days before submission of the consolidated annual report;
 - c. The estimated cost for each listed project;
 - d. The estimated completion date for each listed project;
 - e. The source and amount of financial assistance to be made available by the department, a water management district, or other entity for each listed project; and,
 - f. A quantitative estimate of each listed project's benefit to the watershed, water body, or water segment in which it is located.

2. A grade for each watershed, water body, or water segment in which a project is located representing the level of impairment and violations of adopted minimum flow or minimum water levels. The grading system must reflect the severity of the impairment of the watershed, water body, or water segment.

Water Projects Approach

The District's Water Resource Development Work Program (WRDWP) applies to the two water supply planning regions in northwest Florida that have regional water supply plans: Okaloosa, Santa Rosa and Walton counties (Region II) and Bay County (Region III). The other 12 counties within the District's jurisdiction do not have a regional water supply plan and are therefore not included in the current WRDWP. This chapter includes all water resource development (WRD) and water supply development (WSD), including alternative water supply, projects within the WRDWP. Note that the projects from the WRDWP document are also linked to the District's budget. As such, what constitutes a "project" within the plan may actually be a combination of several individual projects to be consistent with the budget structure and guidelines. For example, the WRDWP includes a WSD project for "Water Reuse Facilities" in Region II that includes portions of three separate reuse projects with the cities of Fort Walton Beach, Gulf Breeze, and Mary Esther.

Basin Management Action Plans have been adopted for three areas within the District: Bayou Chico in Escambia County; the Upper Wakulla River and Wakulla Springs basin in portions of Wakulla, Leon, and Gadsden counties; and Jackson Blue Spring and Merritts Mill Pond basin in Jackson County. As none of these BMAPs are within Regional Water Supply Planning regions II or III, no BMAP projects are included in the WRDWP. See Chapter 9 (Table 9.3) for additional information on BMAP projects.

Section 373.036(7)(b)(9), F.S. requires a grade representing the impacted waterbody level of impairment and violations of adopted MFLs. As the District is currently developing MFLs for northwest Florida with none yet adopted, the water projects listed only include a grade for level of impairment. The grade was provided by DEP and is represented as follows:

- **Impaired—High:** This grade is assigned if the waterbody is impaired for one or more parameters other than mercury and based on a consideration of other factors, including the number of impairments, the presence of Outstanding Florida Waters, the proximity to ongoing or planned restoration activities, the ecological priority of the water for endangered and threatened species, environmental justice concerns, the amount of anthropogenic land use, and local aquifer vulnerability.
- **Impaired:** This grade is assigned if the waterbody is impaired for one or more parameters other than mercury.
- **Not impaired:** This grade is assigned if the waterbody is not impaired for any parameters other than mercury.

WRDWP projects are also required to be ranked if state funding may be requested. As the District relies on state funding for operations and implementation of projects, a ranking is included for projects in Table 8.1 below. The projects are ranked as high, low or complete. High represents projects that are currently or planned to be underway, are ongoing efforts, or that represent a priority for the five-year planning timeframe. Projects ranked low are those that have limited activities planned or funding budgeted by the District in the planning timeframe, but that remain applicable activities should funding become available.

Project Ranking and Waterbody Grade

Table 8.1 Ranking and Grades for WRDWP Projects in the NFWFMD

Project Name	Project Type ¹	Priority Ranking	Watershed, water body, or water segment	Level of Impairment
Region II (Okaloosa, Santa Rosa and Walton counties)				
Floridan Aquifer	WRD	High	Floridan aquifer	N/A
Inland Sand-and-Gravel Aquifer	WRD	High	Sand-and-gravel aquifer	N/A
Surface Water Sources	WRD	High	Shoal River	Impaired
Aquifer Storage and Recovery	WRD	Low	Floridan aquifer; sand-and-gravel aquifer	N/A
Water Reuse	WRD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Water Conservation	WRD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Regional Water Supply Planning	WRD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Interconnect of Water Supply Systems	WRD	Complete	Floridan aquifer; sand-and-gravel aquifer	N/A
Hydrologic Data Collection and Analysis	WRD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Abandoned Well Plugging	WRD	Low	Floridan aquifer; sand-and-gravel aquifer	N/A

Project Name	Project Type ¹	Priority Ranking	Watershed, water body, or water segment	Level of Impairment
Region II (Okaloosa, Santa Rosa and Walton counties)				
Inland Floridan Aquifer Alternative Water Supply	WSD	High	Floridan aquifer	N/A
Inland Sand-and-Gravel Aquifer Alternative Water Supply	WSD	High	Sand-and-gravel aquifer	N/A
Surface Water Supply Development	WSD	High	Shoal River	Impaired
Water Reuse Facilities	WSD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Water Supply Management Projects	WSD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Region III (Bay County)				
Econfina Creek and Groundwater Recharge Area Protection	WRD	High	Floridan aquifer	N/A
Hydrologic and Water Quality Data Collection and Analysis	WRD	High	Floridan aquifer; Deer Point Lake	Not Impaired
Water Reuse Funding and Technical Assistance	WRD	High	Floridan aquifer; Deer Point Lake; North Bay	Impaired (North Bay)
Water Conservation Funding and Technical Assistance	WRD	High	Floridan aquifer; Deer Point Lake	Not Impaired
Regional Water Supply Planning, Coordination, and Technical Assistance	WRD	High	Floridan aquifer; Deer Point Lake	Not Impaired
Development of Upstream Intake for Surface Water Supply	WSD	Complete	Floridan aquifer; Deer Point Lake	Not Impaired
Water Reuse	WSD	High	Floridan aquifer; Deer Point Lake; North Bay	Impaired (North Bay)
Utility Interconnections	WSD	Low	Floridan aquifer; Deer Point Lake	Not Impaired
Water Conservation	WSD	High	Floridan aquifer; Deer Point Lake	Not Impaired

¹ WRD = Water Resource Development; WSD = Water Supply Development; both are defined in sections 373.019 and 373.705, F.S.

Public Review Period

Florida law requires the projects within the work plan seeking state funds be available for public comment at least 30 days before being finalized. The District's Fiscal Year 2016-2017 Five-Year WRDWP Update was proposed on October 21, 2016. The proposed work plan was submitted to the Governor, the President of the Senate, the Speaker of the House of Representatives, the Secretary of DEP, chairs of legislative committees with substantive or fiscal jurisdiction over the district, the governing boards of counties within the districts jurisdiction, and posted on the district website for public review. The finalized version incorporating any comments received is included as Chapter 5 of this report. No projects were added or deleted between October 2016 and March 2017.

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Consolidated Annual Report

Chapter 9

Surface Water Improvement and Management (SWIM) Program Annual Report



SWIM Program Annual Report

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Chapter 9. Surface Water Improvement and Management (SWIM) Program Summary Report

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 NFWMD 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 in Figure 9.1 below.



Figure 9.1 NFWMD SWIM Priority Watersheds

SWIM Priority List

The Northwest Florida Water Management District’s SWIM Priority list is provided in Table 9.1.

Table 9.1 NFWMD SWIM Priority List* (West to East)

Perdido River and Bay Watershed
Pensacola Bay System
Choctawhatchee River and Bay Watershed
St. Andrew Bay Watershed
Apalachicola River and Bay Watershed
Ochlockonee River and Bay Watershed
St. Marks River and Apalachee Bay Watershed

* Includes all named waterbodies within each watershed.

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 waterbodies, tributaries, sub-embayments, springs, and contributing basins are considered as being within the listed watersheds as priority waterbodies.

SWIM Plans and Updates

SWIM plans are developed to address cumulative anthropogenic (human induced) impacts to water quality, aquatic habitats, and related public benefits within the District’s priority waterbodies. The plans incorporate comprehensive strategies to both restore and protect watershed resources and functions. Implementation is accomplished through a variety of activities, such as retrofitting stormwater management systems to improve water quality and flood protection; restoring wetland and aquatic habitats; evaluating water resources and freshwater needs; 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.

Since the late 1980s, the District has developed SWIM plans for all major watersheds, although two plans (for the Perdido and Ochlockonee river and bay watersheds) remain in a draft status (Table 9.2).

Table 9.2 NFWFMD SWIM Plans

Watershed	Plan Approval Date
Deer Point Lake	1988 (Superseded)
Apalachicola River and Bay	1996
Lake Jackson	1997
Pensacola Bay System	1997
St. Andrew Bay Watershed	2000
Choctawhatchee River and Bay	2002
St. Marks River/Apalachee Bay	2009
Perdido River and Bay	2011 (Draft)
Ochlockonee River and Bay	2012 (Draft)

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 (former section 373.59, F.S.), the Ecosystem Management and Restoration Trust Fund (former section 403.1651, F.S.), Florida Forever (sections 259.105 and 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. The Land Acquisition Trust Fund (section 375.041, F.S.) has funded spring protection and restoration projects that further SWIM plan objectives. Cumulatively, the overall effort has resulted in significant protection and improvement of water resources Districtwide.

In 2015, the District was awarded grant funding from the National Fish and Wildlife Foundation’s Gulf Environmental Benefit Fund (GEBF) to support updates to SWIM plans for each of the District’s major watersheds. Work on these updates began in FY 2015-2016 and the plans are scheduled to be completed in 2017. More information on updates to the SWIM Plan Updates can be found at: <http://www.nfwwater.com/Water-Resources/SWIM/SWIM-Plan-Updates>.

This work is associated with a multi-agency effort, also funded by the GEBF, to develop an integrated restoration strategy to prioritize and develop projects that address Gulf of Mexico restoration needs in Florida. In addition to the NFWFMD, participating agencies include the Florida Fish and Wildlife Conservation Commission, Florida Department of Environmental Protection, and the Suwannee River Water Management District.

Current Project Priorities

In 2012, the District established a renewed focus on restoration activities within 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 within these two systems. Additionally, significant legislative funding has been appropriated to implement priority water quality improvement projects and to update a three dimensional hydrodynamic model for Apalachicola Bay.

Springs protection and restoration is carried out through the District's 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 Holmes Creek and Econfina Creek. Projects include continued implementation of agricultural best management practices (BMPs) with producers in the Jackson Blue Spring basin; land acquisition projects to protect and restore water quality in the Jackson Blue Spring and springs along Econfina and Holmes creeks; conversion of areas currently served by septic systems to central sewer within the Wakulla Spring and Jackson Blue Spring contribution areas; spring restoration projects on District lands along Econfina and Holmes creeks; and water quality monitoring at first magnitude and other springs.

Several stormwater retrofit and nonpoint source pollution abatement projects have been completed in the St. Andrew Bay and Apalachicola River and Bay watersheds over the last several years. In FY 2015-2016, three stormwater retrofit projects were completed in Bay County within the cities of Callaway, Mexico Beach and Parker. Additionally, the City of Carrabelle completed a water quality improvement project on Marine Street in June 2016. Additional water quality projects are underway and planned in Franklin County. For a list of priority SWIM projects currently underway or in the planning stages, please refer to Chapter 1 of this report. Note that there is overlap between the project priorities listed there and within other chapters in this report, particularly for construction projects requiring multiple funding sources to complete. Additional funding sources, including from local governments and state and federal grant sources, may be identified to complement District-provided funding.

Note also that many of the projects listed in Chapter 1 help implement Basin Management Action Plans (BMAPs). BMAPs have been adopted by the Department of Environmental Protection for three areas within the District: Bayou Chico in Escambia County; the Upper Wakulla River and Wakulla Springs basin in portions of Wakulla, Leon, and Gadsden counties; and Jackson Blue Spring and Merritts Mill Pond basin in Jackson County. Table 9.3 provides additional information on current BMAP projects.

Potential Funding Related to the Deepwater Horizon Oil Spill

District staff continue to assist state agencies, local governments, and other stakeholders in identifying project priorities and participate in project development for potential funding related to the Deepwater Horizon Oil Spill. The Federal RESTORE Act, GEBF, Natural Resource Damage Assessment, and associated funding sources have the potential to significantly address current problems and challenges affecting the region's coastal waters and contributing watersheds. The District's SWIM plans provide a planning context for project development and prioritization, and their update, as described above, will be an important part of this effort.

Table 9.3 Current BMAP Projects in the NFWMD

Cooperator	Project Name	County	Project Type	Five-Year Total Costs	State Requested Funding*	Benefit Description	Water Resource or TMDL Waterbody	Watershed/ Waterbody Grade	Project Status
Bayou Chico (Pensacola Basin) BMAP									
Bayou Chico Association	Clean Marina Pensacola Yacht Club	Escambia	Other NPS Pollution	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
Bayou Chico Association	Bayou Chico Channel Dredging	Escambia	Stormwater	\$68,000	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	On hold
Bayou Chico Association	Aeration Systems in Tributary (Jones Creek)	Escambia	Stormwater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	On hold
Bayou Chico Association	Floating Islands	Escambia	Stormwater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	On hold
City of Pensacola; Emerald Coast Utilities Authority, Inc. (ECUA)	West Avery St. Drainage Improvements	Escambia	Stormwater	\$1,400,000	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Complete
ECUA	FOG Program	Escambia	Wastewater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
ECUA	I&I Reduction	Escambia	Wastewater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
ECUA	SSO Response Plan	Escambia	Wastewater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
ECUA	Lift Station Upgrades	Escambia	Wastewater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
Escambia County	Stormwater Treatment	Escambia	Stormwater	\$1,100,000	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Complete
Escambia County	Stormwater Pond Inspection & Maintenance Program	Escambia	Stormwater	\$300,000	\$300,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
Escambia County Health Department	Healthy Beaches Program	Escambia	Wastewater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing

*Projects with state funding requested may include match or contributing funding from local, federal or other sources.

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Current BMAP Projects in the NFWMD (cont.)

Cooperator	Project Name	County	Project Type	Five-Year Total Costs	State Requested Funding*	Benefit Description	Water Resource or TMDL Waterbody	Watershed/ Waterbody Grade	Project Status
Bayou Chico (Pensacola Basin) BMAP									
Escambia County Health Department	OSTDS Permitting	Escambia	Wastewater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
Escambia County Health Department	Septic to Sewer Enforcement Program	Escambia	Wastewater	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
Escambia County; Bay Area Resource Council; Bayou Chico Association	Public Education and Outreach	Escambia	Education & Outreach	\$10,000	\$10,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
Escambia County; Florida Department of Transportation	Illicit Discharge Detection	Escambia	Stormwater	\$50,000	\$50,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing
Escambia County; US Navy	Retrofit Projects (Planned) Corry Field	Escambia	Stormwater	\$500,000	\$500,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Planning
Escambia County; US Navy	Bayou Chico/Jones Creek Stormwater Retrofit - West Side of Corry Station	Escambia	Stormwater	\$500,000	\$500,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Planning
Escambia County; US Navy; Gulf Coastal Plain Ecosystem Partnership	Jackson's Branch Headwater Restoration	Escambia	Stormwater	\$500,000	\$500,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Planning
Florida Fish and Wildlife Conservation Commission	Compliance and Inspection Sweeps	Escambia	Other NPS Pollution Prevention	Unknown	\$0	Reduced fecal coliform loading	Bayou Chico	Impaired-High	Ongoing

*Projects with state funding requested may include match or contributing funding from local, federal or other sources.

Current BMAP Projects in the NFWWMD (cont.)

Cooperator	Project Name	County	Project Type	Five-Year Total Costs	State Requested Funding*	Benefit Description	Water Resource or TMDL Waterbody	Watershed/ Waterbody Grade	Project Status
Jackson Blue Spring and Merritts Mill Pond BMAP									
NFWWMD; Jackson County	Indian Springs Sewer Extension Phase I	Jackson	Wastewater	\$1,950,000	\$0	Reduced nutrient loading	Jackson Blue Spring	Impaired-High	In progress
NFWWMD	Claiborne Aquifer Water Supply	Jackson	Study	\$440,000	\$0	Alternative water supply	Jackson Blue Spring	Impaired-High	In progress
NFWWMD	Lakeshore Farms II, LLC Land Acquisition	Jackson	Preservation	\$2,686,568	\$0	Natural systems protection	Jackson Blue Spring	Impaired-High	In progress
NFWWMD	Jackson Blue Spring Agricultural BMP Producer Cost Share Grant Program	Jackson	Water Quality	\$1,333,333	\$1,000,000	Reduced nutrient loading	Jackson Blue Spring	Impaired-High	In progress
NFWWMD; Florida Department of Agriculture and Consumer Services	Mobile Irrigation Laboratory	Jackson	Water Quantity	\$673,938	\$71,125	Water conservation	Jackson Blue Spring	Impaired-High	Ongoing
NFWWMD; University of Florida Institute of Food and Agricultural Sciences (IFAS)	Sod-Based Crop Rotation	Jackson	Water Quality	\$806,032	\$326,000	Reduced nutrient loading and water conservation	Jackson Blue Spring	Impaired-High	In progress
NFWWMD; IFAS	Sod-Based Crop Rotation	Jackson	Water Quality; Education & Outreach	\$415,000	\$64,000	Reduced nutrient loading and water conservation	Jackson Blue Spring	Impaired-High	Ongoing

*Projects with state funding requested may include match or contributing funding from local, federal or other sources.

Current BMAP Projects in the NFWMD (cont.)

Cooperator	Project Name	County	Project Type	Five-Year Total Costs	State Requested Funding*	Benefit Description	Water Resource or TMDL Waterbody	Watershed/ Waterbody Grade	Project Status
Upper Wakulla River and Wakulla Springs BMAP									
City of Tallahassee	Public Education & Outreach	Leon	Education & Outreach	\$1,700,000	\$0	Reduced nutrient loading	Wakulla Spring	Impaired	Ongoing
City of Tallahassee	Eastgate Flood Relief Project Phase II	Leon	Stormwater	\$2,700,000	\$0	Reduced nutrient loading	Wakulla Spring	Impaired	In progress
City of Tallahassee	Gaines St. – Madison St. Supplemental SW Outfall 2	Leon	Stormwater	\$300,000	\$0	Reduced nutrient loading	Wakulla Spring	Impaired	In progress
City of Tallahassee	SPI – Bradford Road Stormwater Outfall	Leon	Stormwater	\$325,000	\$0	Reduced nutrient loading	Wakulla Spring	Impaired	In progress
City of Tallahassee	SPI – Limerick Drive Stormwater Outfall Improvements	Leon	Stormwater	\$60,648	\$0	Reduced nutrient loading	Wakulla Spring	Impaired	In progress
City of Tallahassee	Street Sweeping	Leon	Stormwater	\$1,500,000	\$0	Reduced nutrient loading	Wakulla Spring	Impaired	Ongoing
City of Tallahassee	Assessment and Rehabilitation of Sewer Collection System	Leon	Wastewater	\$10,000,000	\$10,000,000	Reduced nutrient loading	Wakulla Spring	Impaired	Ongoing
Leon County	Street Sweeping	Leon	Stormwater	\$75,500	\$0	Reduced nutrient loading	Wakulla Spring	Impaired	Ongoing
Leon County	Florida Yards and Neighborhoods Program	Leon	Stormwater; Education & Outreach	\$55,000	\$0	Reduced nutrient loading	Wakulla Spring	Impaired	Ongoing
Leon County	Water Quality Sampling	Leon	Study; Water Quality	\$250,000	\$250,000	Reduced nutrient loading	Wakulla Spring	Impaired	Ongoing

*Projects with state funding requested may include match or contributing funding from local, federal or other sources.