Northwest Florida Water Management District

Consolidated Annual Report
Fiscal Year 2021-2022
Publication Number: AR-22

Cypress Spring

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Northwest Florida Water Management District

Consolidated Annual Report

March 1, 2022

NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

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Executive Summary

This Consolidated Annual Report fulfills the requirement of section 373.036(7), Florida Statutes (F.S.), that the Northwest Florida Water Management District (NWFWMD or District) 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, the Florida Department of Environmental Protection (DEP), and the Office of Economic and Demographic Research (EDR). 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, 2022, NWFWMD Consolidated Annual Report includes all elements required by section 373.036(7)(b), F.S, as well as 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 2021-2022 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 chapters that follow provide the status and record of accomplishments of District programs over the previous fiscal year (FY 2020-2021) 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.*

Fiscal year 2020-2021 accomplishments prioritized water quality projects with the continuation and implementation of restoration and protection projects for Wakulla and Jackson Blue springs and springs associated with the St. Marks River Rise, Chipola River, Econfina Creek, and Holmes Creek. Additional water quality projects continued, which provided improvements to Apalachicola Bay and St. George Sound. The District also prioritized support for alternative water supply and water resource development projects including funding to expand reuse of reclaimed water in Regions II and III, hydrogeologic investigations in Gulf County, and continued technical assistance for water use efficiency in Jackson County. Additionally, the District implemented continued hydrologic and water quality monitoring; continued development of minimum flow and minimum water level technical assessments

for Jackson Blue Spring, spring groups associated with Econfina Creek, and the Region II Coastal Floridan aquifer; completed minimum flows established for the Wakulla and Sally Ward Spring System; provided floodplain risk mapping assistance for northwest Florida communities; continued management of District lands and recreation sites; and continued progress toward recovery from hurricane related damages. All of these activities were conducted while ensuring staff and public safety in the face of the COVID-19 pandemic. 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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Chapter 1. Strategic Water Management Plan (SWMP) Annual Work Plan Report

Overview

The mission of the Northwest Florida Water Management District (NWFWMD 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 Consolidated Annual Report is the annual work plan report on the implementation of the SWMP for the previous fiscal year (section 373.036(2)(e)4.). The FY 2020-2021 SWMP was approved September 24, 2020. Listed below are the SWMP strategic priorities consistent with those in the District's adopted FY 2020-2021 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 2021-2025

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

Summary of FY 2020-2021 Accomplishments

Fiscal year 2020-2021 accomplishments include implementation of numerous spring restoration and protection, stormwater retrofit, and water supply development projects; monitoring of springs water quality and flows; continued development of MFL technical assessments; floodplain risk mapping; and continued efforts to recover from damages caused by Hurricane Michael. The District maintained a high level of accomplishment across all programs while implementing practices to ensure staff and public health safety during the COVID-19 pandemic.

1.1 Springs Restoration and Protection

Strategic Priority and Success Indicators

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

(1) Project accomplishment (percent complete)
(2) Trends in nitrate concentrations
(3) Trends in spring flows

Current Activities and Accomplishments

Recently accomplished and current activities have been focused on improving water quality for Wakulla and Jackson Blue springs. Additionally, project activities have also been directed toward preserving flows in both spring systems and implementing projects to protect and restore other major spring systems. Specific activities include:

- Helping producers implement agricultural best management practices (BMPs) for water conservation and water quality improvement within the Jackson Blue Spring basin;
- Assisting Jackson and Wakulla counties and municipalities with septic-to-sewer retrofits within the contribution areas of the Jackson Blue and Wakulla springs systems;
- Planning and design for restoration of habitat at Horn Spring in Leon County and public access improvements and spring restoration at Econfina Blue Spring Group on Econfina Creek and at Cypress Spring on Holmes Creek;
- Acquiring land to protect Wakulla Spring, Jackson Blue Spring, the Gainer Spring Group, Cypress Spring, and nearby springs on Econfina Creek; and
- Monitoring and resource assessments for major spring systems Districtwide.

Evaluation of Indicators

(1) Project accomplishment (percent completion on schedule)

The District had several ongoing projects in FY 2020-2021 that contribute to spring restoration and protection. Fifteen projects within four major watersheds and five counties were active or completed during the fiscal year.

Table 1.1 lists projects by major watershed from west to east. Projects listed are current through December 2021. A map of the seven major watersheds within the District is in Section 1.5: Watershed Restoration and Protection.

Table 1.1 Spring Restoration and Protection Projects

Project	Description/Cooperators	Total District Cost (or as noted)	Status	Percent Complete
Choctawhatchee River and Bay Watershed				
Cypress Spring Land Acquisition and Restoration	Acquisition of conservation easement and restoration of up to 303.55 acres at Cypress Spring; Cypress Spring and Holmes Creek Springs Groundwater Contribution Areas	$1,600,000	Conservation easement complete; design in progress	50%
St. Andrew Bay Watershed				
Devils Hole Spring Restoration	Springs restoration project delayed due to impacts from Hurricane Michael	$50,000	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 2020-2021	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	$8,739,500	Years 1 -3 complete, Years 4-6 in progress, and Year 7 in planning	56%
Sod-based Crop Rotation Pilot Project	Four-year pilot project to reduce nutrient application to crops in the Jackson Blue Spring BMAP	$244,732	In progress	50%
Sod-based Crop Rotation Project	Continuation of cost-share program to help agricultural producers improve water quality and reduce water use demands in and around Jackson Blue Spring	$1,106,500	In progress	10%
Chipola River Land Acquisition	Acquisition of a conservation easement on 622.79 acres along Dry Creek and adjacent to Rook Spring; Chipola River Springs Groundwater Contribution Area	$224,205	Complete	100%
Jackson County Septic to Sewer Retrofit – Indian Springs Phases I-II	Convert residential subdivision in Jackson Blue Spring area from septic to sewer to reduce nitrogen loading. Jackson County and City of Marianna	$9,057,303	Construction	40%
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	$3,566,749	Design/Engineering	10%

Project	Description/Cooperators	Total District Cost (or as noted)	Status	Percent Complete
Jackson County Septic to Sewer Retrofit – Tara Estates	Convert residential subdivision adjacent to Chipola River from septic to sewer to reduce nitrogen loading. Jackson County and City of Mariana	$1,125,000	Design/Engineering	10%
Jackson Blue Spring Recreation Area Stormwater Improvements	Design and construct a stormwater management system that captures and treats stormwater at Jackson Blue Spring. Jackson County	$729,200	Complete	100%
St. Marks River and Apalachee Bay Watershed				
Septic Connection to Existing Sewer in the Wakulla BMAP	Convert residential subdivision in Wakulla Spring area from septic to sewer to reduce nitrogen loading. City of Tallahassee	$1,081,000	Construction	25%
Wakulla County Septic to Sewer Retrofit – Magnolia Gardens Phases I-III	Convert residential subdivision in Wakulla Spring area from septic to sewer to reduce nitrogen loading. Wakulla County; DEP; USDA	$8,261,811	Construction	75%
Wakulla County Septic to Sewer Retrofit – Wakulla Gardens Phases I-III	Convert residential subdivision in Wakulla Spring area from septic to sewer to reduce nitrogen loading. Wakulla County; DEP; USDA	$15,992,415	Construction	60%
Horn Spring Restoration	Restoration improvements at second magnitude spring. DEP	$500,000	Design	15%

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

Spring flow and nitrate concentration data are available for Gainer Springs, Jackson Blue Spring, St. Marks River Rise, and Wakulla Spring.[1] Current information is summarized in Table 1.2. Trends in Spring Flows and Nitrate/Nitrite concentrations are presented in 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.nwfwater.com/water-resources/springs/.

Table 1.2 Trends in Spring Flows and Nitrate/Nitrite Concentrations Indicator

Spring/Spring System	Average Flow[1] (cfs)/Trend	Nitrate Concentration (mg/L)[2]
Gainer Spring Group[3]	166/Increasing	0.20/Stable
Jackson Blue Spring[3]	109/Variable[4]	3.67/Stabilizing
St. Marks River Rise	428/Stable	0.03 – 0.31/Variable[5]
Wakulla Spring	588/Increasing	0.39/Decreasing

[1] Periods of record (flow): Gainer Spring Group, 2002-2021; Jackson Blue Spring, 2002-2021; St. Marks River Rise, 1999-2021; Wakulla Spring, 2004-2021.

[2] Periods of record (water quality): Gainer Spring Group, 2002-2021; Jackson Blue Spring, 2002-2021; St. Marks Rise, 2001-2021; Wakulla Spring, 1997-2021. Value presented is the most recent five-year median.

[3] Discharge measurements include only manual measurements

[4] Spring flow from Jackson Blue Spring is influenced by the operation of the dam used to maintain water levels in Merritt's Mill Pond.

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

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

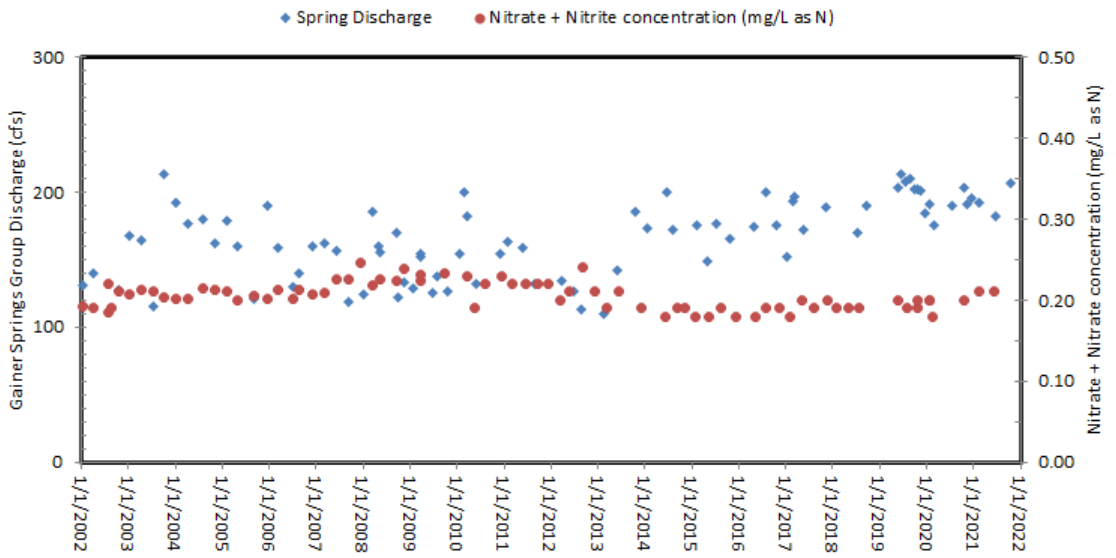


Figure 1.1 Nitrate and Nitrite Concentration and Discharge: Gainer Spring Group (2002-2021)

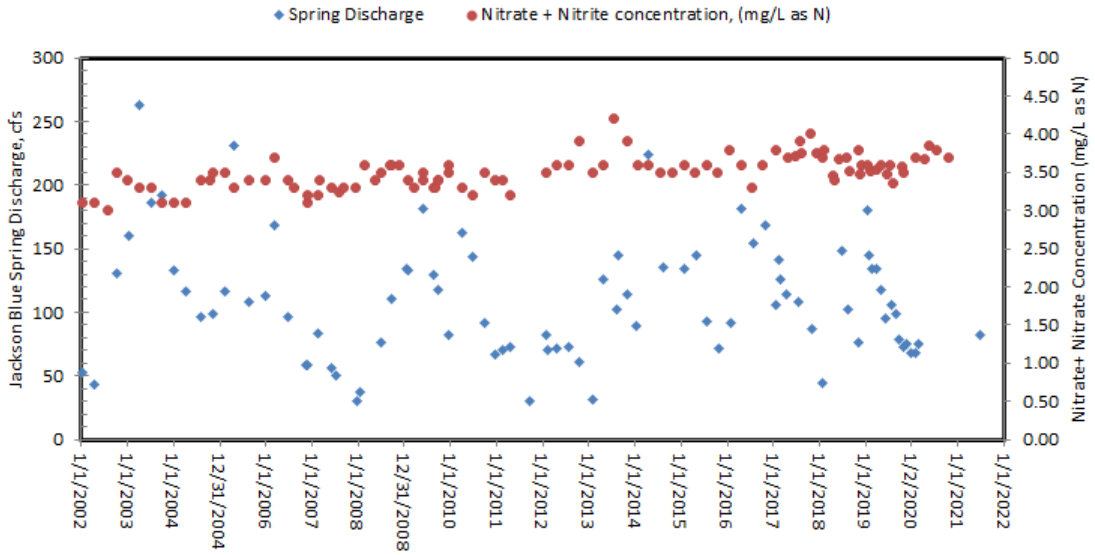


Figure 1.2 Nitrate and Nitrite Concentration and Discharge: Jackson Blue Spring (2002-2021)

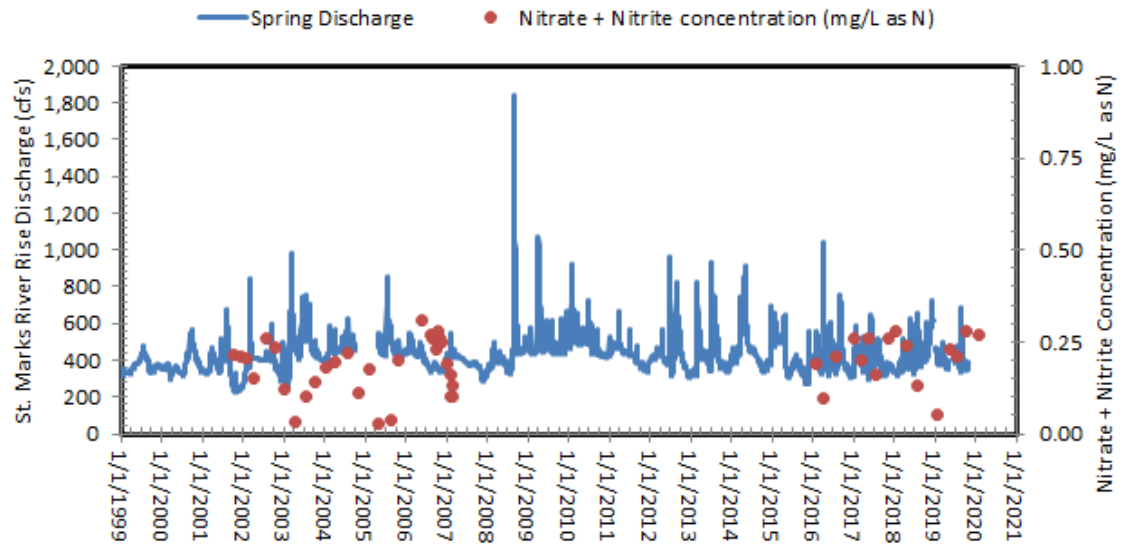


Figure 1.3 Nitrate and Nitrite Concentration and Discharge: St. Marks River Rise (1999-2021)

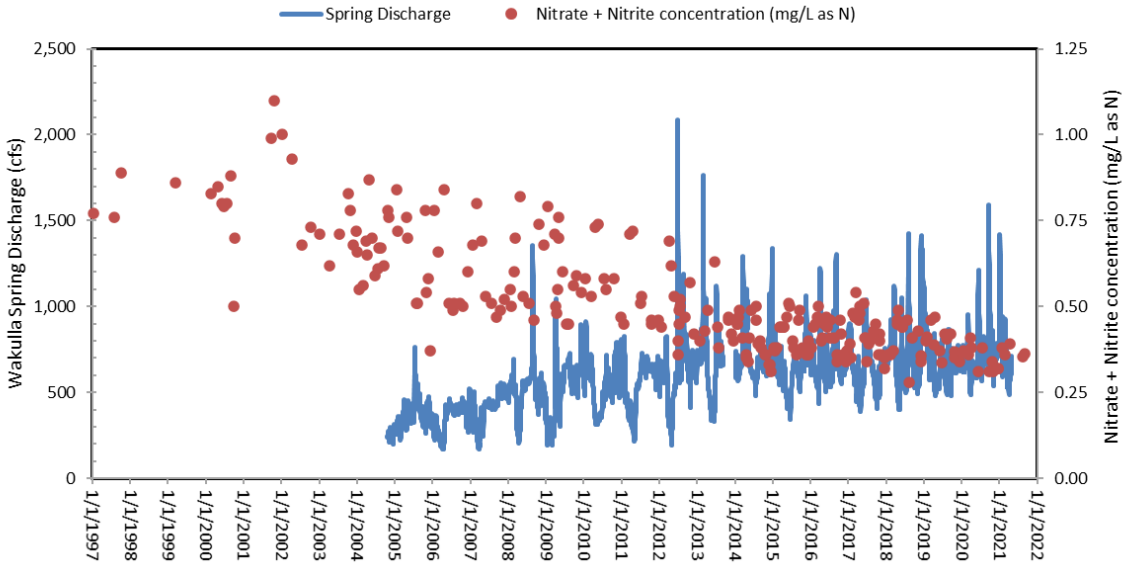


Figure 1.4 Nitrate and Nitrite Concentration and Discharge: Wakulla Spring (1997-2021)

Milestones and Deliverables

Table 1.3 shows the status of SWMP deliverables and milestones for Springs Restoration and Protection.

Table 1.3 Springs Restoration and Protection Milestones and Deliverables

Milestone	Target Date	Status
(1) Completion of spring streambank restoration projects	FY 2021-2024	In progress
(2) Implementation of funded BMPs for farmers in the Jackson Blue Spring basin and Mobile Irrigation Lab evaluations	FY 2021-2022	In progress
(3) Completion of septic-to-sewer retrofit projects	FY 2021-2024	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 by mobile irrigation lab staff.
(2) Water quality data	Water quality data collected by DEP and NWFWMD and available from STORET or NWFWMD water quality database.
(3) Spring discharge data	Select water quality, level and flow data is available for direct download from the NWFWMD Hydrologic Web Portal: www.nwfwater.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 (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 to develop minimum flows and minimum water levels (MFLs) in northwest Florida. The NWFWMD FY 2021-2022 MFL priority list includes two first magnitude springs (Gainer Spring Group and Jackson Blue Spring), two second magnitude springs (Williford Spring Group and Sylvan Spring Group), and one coastal aquifer system (Floridan Aquifer Coastal Region III). 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 2020-2021 Accomplishments

During FY 2020-2021, District staff worked concurrently on five MFL waterbodies: Wakulla Spring, Sally Ward Spring, Jackson Blue Spring, the coastal Floridan aquifer in Planning Region II (Okaloosa, Santa Rosa, and Walton counties), in addition to the Gainer Spring Group, Sylvan Spring Group, and Williford Spring Group located on Econfina Creek.

The MFL Technical Assessment, Scientific Peer Review, and MFL Rulemaking for the Wakulla and Sally Ward Springs System were all completed during FY 2020-2021. In addition, data collection efforts continued at many sites for this system. A regional groundwater flow model for the eastern portion of the District was also completed.

A draft MFL Technical Assessment for the coastal Floridan aquifer in Planning Region II (Okaloosa, Santa Rosa, and Walton counties) was completed during FY 2020-2021. In addition, groundwater flow and transport models were completed and utilized to assess the potential for significant harm from saltwater intrusion associated with groundwater withdrawals. The technical assessment is anticipated to be finalized in FY 2021-2022.

In October 2018, Hurricane Michael caused significant impacts to the Jackson Blue Spring system and the Econfina Creek watershed. As a result, work planned in FY 2019-2020 for Jackson Blue Spring, Gainer Spring Group, Sylvan Spring Group, Williford Spring Group, Econfina Blue Spring Group, and Devils Hole Spring was delayed until debris removal activities could be conducted. As of December 2021, Devils Hole Spring remains largely inaccessible, and treefall continued to obstruct portions of the spring run for Econfina Blue Spring Group. As a result, MFL development for these two second magnitude springs has been deferred to a future date. Data collected for the remaining MFL waterbodies in these areas prior to the hurricane has continued. New surveys for Econfina Creek channel bathymetry have been completed which reflect any changes in channel morphology resulting from Hurricane Michael or the subsequent debris removal. Project schedules were revised to provide time to collect data representative of post-storm conditions. Post-hurricane hydrologic data collection is ongoing to support MFL development for Jackson Blue Spring, and the Gainer, Williford, and Sylvan Spring Groups.

Activities Planned for FY 2021-2022

During FY 2021-2022, hydrologic monitoring for the Jackson Blue Spring MFL evaluation will continue. Once sufficient data and Lidar map layers are available, surface water models will be developed and calibrated. Remaining datasets needed to support groundwater flow modeling of the Jackson Blue Spring contribution area will be completed.

Post-hurricane hydrologic data collection will continue for the Gainer Spring Group, Williford Spring Group, and Sylvan Spring Group in FY 2021-2022. An analysis of the hydrology of Econfina Creek and data required for surface water modeling will be completed and a surface water model developed once new Lidar data is available. This data will reflect changes to floodplain ground elevations following Hurricane Michael. After review of groundwater withdrawals in the area, it was determined that a groundwater model and additional wells were not needed.

Evaluation of Indicators

The status and percent complete of MFL technical assessments are described in Table 1.4, and the status of the District's adopted MFLs is addressed in Table 1.5.

(1) MFL technical assessment accomplishment

Table 1.4 MFL Technical Assessment Status

MFL Waterbody	Target Date for Rule Adoption	MFL Status	Percent Complete
St. Marks River Rise	2019	Minimum flow adopted as part of the new Chapter 40A-8, F.A.C., Minimum Flows and Minimum Water Levels	100%
Wakulla Spring	2021	Minimum flow adopted as part of the Chapter 40A-8, F.A.C., Minimum Flows and Minimum Water Levels	100%
Sally Ward Spring	2021	Minimum flow adopted as part of the Chapter 40A-8, F.A.C., Minimum Flows and Minimum Water Levels	100%
Floridan Aquifer, Coastal Region II	2021	Draft technical assessment under review	90%
Jackson Blue Spring	2025	Under development	30%
Gainer Spring Group	2025	Under development	20%
Williford Spring Group	2025	Under development	20%
Sylvan Spring Group	2025	Under development	20%
Floridan Aquifer, Coastal Bay Co.	2027	Scheduled for completion 2026-2027	0%

(2) Waterbodies meeting their adopted MFLs (number and percentage)

Table 1.5 Adopted MFL Status

MFL Waterbody	Date of Rule Adoption	MFL Status	Number and Percentage Meeting MFLs
St. Marks River Rise	June 12, 2019	Meeting	(1/1) 100%
Wakulla and Sally Ward Spring System	May 18, 2021	Meeting	(1/1) 100%

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 MFL Milestones and Deliverables

Milestone	Target Dates	Status
Adoption of MFLs for Jackson Blue Spring (2025), Gainer Spring Group (2025), Williford Spring Group (2025), and Sylvan Spring Group (2025)	2025	Ongoing
Technical Evaluation of coastal Floridan Aquifer in Bay County	2027	Ongoing

Deliverable	Status
Complete MFL technical assessments and rule adoption according to the approved 2021 MFL Priority List and Schedule	All technical assessments currently on schedule

The current Department-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) Project accomplishment (percent complete)
(2) Area restored or treated (acres)
(3) Pollutant load reduction (pounds per year)

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.

The District provided technical support for the State of Florida's United States Supreme Court trial which ended in FY 2020-21. The District continues intergovernmental and stakeholder cooperation, technical assistance, water quality improvement projects, and supporting initiatives to restore and protect the Apalachicola River and Bay watershed.

Staff are also coordinating with numerous state agencies including the Florida Department of Agriculture and Consumer Services (FDACS), DEP, and the Florida Fish and Wildlife Conservation Commission (FWC), to improve water quality in Apalachicola Bay. As a result, planning for water quality improvement projects is aided by funding through the RESTORE (Resources and Ecosystems Sustainability, Tourism Opportunities and Revived Economies) Act and Natural Resource Damage Assessment (NRDA) process.

The District continued three projects to improve water quality in Apalachicola Bay in FY 2020-21 (Table 1.7). The District completed work with the City of Apalachicola for additional stormwater retrofit projects and continued work with the City of Carrabelle for the connection of existing residential units from onsite to central sewer wastewater treatment.

Evaluation of Indicators

(1) Cooperative project implementation

Table 1.7 Status of ACF Cooperative Septic to Sewer and Stormwater Retrofit Projects

Project	Description	Status	Pollutant Load Reduction (lbs/yr)	Restoration/ Treatment Area (Acres)
Carrabelle Lighthouse Estates Septic to Sewer, Phase I	Septic-to-sewer conversion project to reduce nitrogen runoff into St. George Sound	Design/Engineering	986	NA
Carrabelle Lighthouse Estates Septic to Sewer, Phase II	Phase II of septic-to-sewer conversion project to reduce nitrogen runoff into St. George Sound	Design/Engineering	3000	NA
Construction of Stormwater Retrofit Facilities	Stormwater retrofit project in cooperation with the City of Apalachicola	Complete	NA	20

(2) Acres restored or treated

With the current stormwater project complete, the City of Apalachicola has collectively provided stormwater treatment for about 260 acres since FY 2014-2015.

(3) Pollutant load reduction (pounds per year)

This metric will be calculated upon completion of the septic to sewer projects.

Milestones and Deliverables

Table 1.8 ACF River Basin Milestones and Deliverables

Milestone	Target Date	Status
(1) Completion of Apalachicola Bay water quality projects	2021-2024	In progress
(2) Continued participation in supporting state ACF Basin issues	2021-2024	In progress

Deliverables	Status
(1) Grant project completion reports	As projects are completed

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[2] are:

(1) Water supply made available (volume in Million Gallons per Day [mgd] and trend)
(2) Public water supply demands met (volume [mgd] and percentage)
(3) Public supply per capita water use (Gallons Per Capita Per Day [gpcd] and trend)
(4) Project accomplishment (percent complete)

Current Activities and Accomplishments

The District continues supporting alternative water supply (AWS) development in priority areas of greatest need. Reuse of reclaimed water projects are ongoing in Bay, Escambia, Okaloosa, and Santa Rosa counties.

Table 1.9 Alternative Water Supply Development Projects

Project Name	Brief Description	Water*
PCB Parkway Reuse System Extension	Design, engineering, and construction to support the expansion of reclaimed water system along PCB Parkway to serve residential, recreational, and commercial development.	1.62 mgd
North Bay Wastewater Reuse	Design, permitting, and construction of approximately six miles of reuse line from the North Bay wastewater treatment plant to a future sports complex and other existing users to offset demands needed for irrigation and eliminate effluent discharges to North Bay.	1.5 mgd
Pensacola Beach Reclaimed Water System Expansion	Designing and constructing a 2.5 MG ground storage tank and associated piping (1.25 miles) to expand the Pensacola Beach reclaimed water system.	0.23 mgd 2.5 MG
Okaloosa County/Eglin AFB/Niceville Reclaimed Water Project	Expanding reclaimed water use in partnership with Okaloosa County, Eglin Air Force Base, and Niceville to provide reuse to offset current and future residential and recreational water use.	2.5 mgd
South Santa Rosa County Reuse Initiative	Four-phase multi-year and multi-jurisdictional project to design and construct over 12 miles of reclaimed water transmission mains, WWTP upgrades, RIBs, and reclaimed water storage to offset potable water use and eliminate effluent discharges to Santa Rosa Sound.	1.4 mgd 0.5 MG

*Anticipated water flow (mgd) and/or storage capacity (MG) to be made available at project completion.

The District also developed a grant program in accordance with DEP guidance to solicit AWS development project applications. Grant funding was awarded for the PCB Parkway Reuse System Extension and South Santa Rosa Reuse Initiative Phase I in May 2021.

Total Districtwide water use is estimated annually, and Annual Water Use Reports (AWURs) published. Reported agricultural water use is provided to the FDACS Florida Statewide Agricultural Irrigation Demand (FSAID) project annually. Reported and estimated water use is provided to USGS every five years. The most recent USGS collaboration was with 2015 water use data. It is anticipated that USGS and DEP will require the 2020 AWUR for statewide and relevant national water use reporting.

[2] Water supply success indicators were amended with the September 2019 SWMP.

Based on the findings and recommendations of the 2018 Water Supply Assessment (WSA), the regional water supply plan (RWSP) for Region II (Santa Rosa, Okaloosa, and Walton counties) was completed in 2019 and approved by the District's Governing Board on January 23, 2020. Planning has begun for the next WSA which has a projected completion date of 2023. This WSA started in 2021 by estimating 2020 base year water use, projecting water demands to the year 2045, and incorporating adopted minimum flows and minimum levels (MFLs) and ongoing MFL technical assessments into the WSA regional resource evaluations. The 2023 WSA will assess the need for future regional water supply planning.

The District continues water conservation analysis and inter-district water conservation coordination. Also, data is compiled annually on wastewater systems that provide reclaimed water as a potential alternative water supply source and a draft Reuse Summary Report was completed.

State DEP and inter-district coordination on water supply planning data and methods culminated in the Format and Guidelines for Regional Water Supply Planning in July 2019. The guidelines have helped to enhance the consistency of data and methods, statewide reporting, and have provided a framework for ongoing collaboration with the Florida Legislature's Office of Economic and Demographic Research.

Water resource modeling, hydrogeologic evaluations, monitor well construction, aquifer performance testing, groundwater and transient flow models, and MFL technical assessments are all key programmatic components of water resource development and are also the underlying technical tools for WSA resource assessments. See section 1.4 for more information and for current MFL activities and accomplishments.

The District's ongoing water use and well permitting programs are important supporting efforts to facilitate adequate and sustainable water supplies. Conditions of water use permit compliance typically include water conservation requirements, and reuse evaluations are required in specific areas of resource concern. Technical assistance is available for applicants interested in aquifer storage and recovery (ASR). Also, well permitting includes abandoned well plugging to protect water sources.

Evaluation of Indicators

(1) Water supply made available

The availability of sufficient water for all existing and future reasonable-beneficial uses and natural systems can come from traditional and non-traditional (alternative) water sources and may be for public supply or for other water use categories. Methods of quantification vary according to reporting requirements and are refined as information becomes available.

Public water supply demands met are based on permitted allocations that will not cause harm to water resources and are consistent with the public interest pursuant to Chapter 40A-2, F.A.C., and section 373.223, F.S. Current permitted allocations are compared to the most recent WSA demand projections over a 20-year planning horizon (Table 1.10). Chapter 4 of the Consolidated Annual Report outlines the water developed associated with projects funded in whole or in part with the Water Protection and Sustainability Program (WPSP) Trust Fund. The anticipated water from completed WPSP projects is a combination of facility capacities, engineering estimates, permitted allocations, and water resource technical assessments. The District's water supply development (WSD) grant program has supported 70 projects across northwest Florida that include potable water distribution system improvements, replacing aging infrastructure, evaluating and developing AWS projects, and addressing local drinking water quality issues. As of December 2021, 69 projects have been completed and one is under construction. Completed WSD projects, with quantification of water made available, total about 1.6 mgd in reuse flow and 3.8

million gallons (MG) of reuse storage capacity. The WPSP Trust Fund, District WSD grant funds, and additional AWS funding sources have enabled the District to further support AWS development (Table 1.9). These five projects are expected to make 7.25 mgd in reuse flow available and provide an additional 3.0 MG in reuse storage capacity.

(2) Public water supply demands met

Metrics submitted to DEP annually track the quantity (mgd) and percentage of public supply increase in demand that has been met Districtwide, which includes areas with and without RWSPs. The data in Table 1.10 is based on the 2018 WSA demand projections and October 2021 metrics.

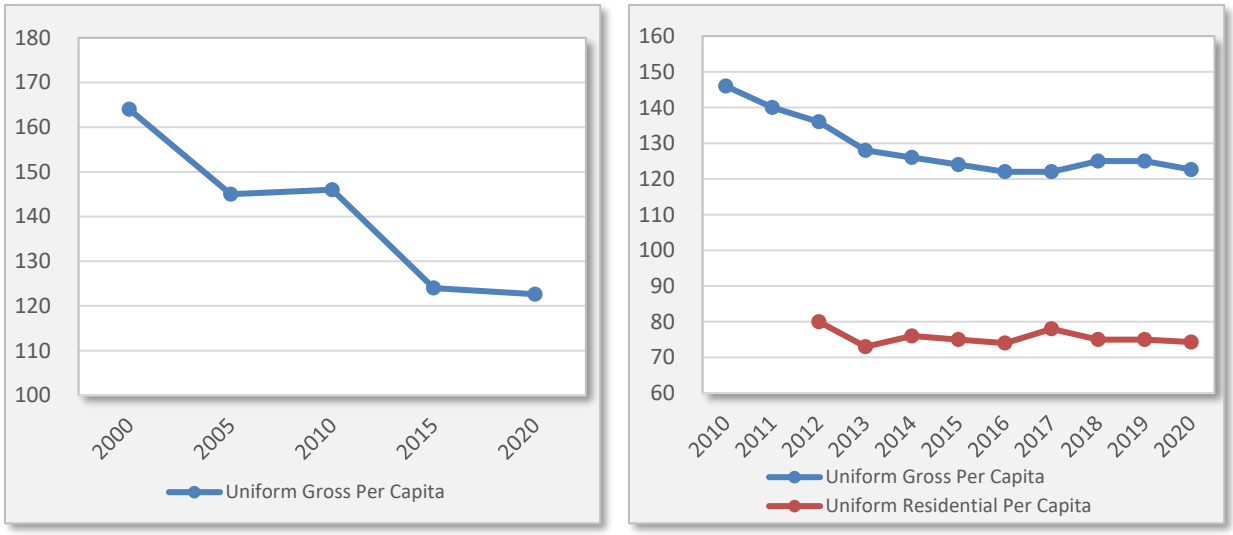
Table 1.10 Public Supply Increase in Demand and Future Demands Met

Planning Region	2015-2040 Net demand change (mgd)	Future demand met (mgd)	Percent of net demand change met
Region II	17.5	17.2	98%
Other Regions	19.3	19.2	99.8%
Total Districtwide	**36.8**	**36.4**	**98.9%**

Region II unmet demands are anticipated to be addressed through water conservation and AWS sources such as reclaimed water, surface water development, and/or aquifer storage and recovery (ASR).

(3) Public supply per capita water use

Public supply per capita water use rates are a function of water use (gross and residential), population estimates, and levels of precipitation. The District experienced droughts in 1999-2000, 2006-2007, and 2011. Population estimating data and methods are in an ongoing process of refinement. Trends in per capita water use rates have been generally downward, as illustrated in Figures 1.5 and 1.6.



Figures 1.5 and 1.6 Districtwide Public Supply Per Capita Water Use Trends

(4) Project accomplishment

The descriptions, benefits, accomplishments, and outcomes of water supply projects from 2006 to date are summarized in Table 1.11, below.

Table 1.11 Water Projects Accomplishments

Program/Project	Brief Description Benefits and Accomplishments	Outcomes	Status / Percent Complete
WPSP Trust Fund 2006-2009 Total of 10 projects	Inland wellfields, surface water development, alternative intake, water source evaluations, reuse of reclaimed water, and springs protection	Over 20 mgd new potable water supply	100%
District WSD Grants (2014-) Total of 70 projects	Infrastructure and water system upgrades, reuse of reclaimed water for potable offset and for non-potable uses, water production wells and wellfield expansions, looped water system interconnections, leak surveys, and reuse feasibility studies	Estimated 1.6 mgd in reuse flow and 3.8 MG in reuse storage capacity	96%
AWS Development (2019-): 1. PCB Parkway Reuse System Extension 2. North Bay Wastewater Reuse 3. Pensacola Beach Reclaimed Water System Expansion 4. Okaloosa County/Eglin AFB/Niceville Reclaimed Water Project 5. South Santa Rosa County Reuse Initiative	Planned activities and anticipated benefits and accomplishments: 1. Reuse expansion for residential, recreational, and commercial irrigation 2. Reuse transmission for commercial irrigation to offset potable demands and remove effluent discharges to North Bay 3. Reuse expansion for residential and commercial irrigation 4. Reuse expansion for residential and recreational irrigation 5. Reuse expansion for potable offset and to remove effluent discharges to Santa Rosa Sound	Estimated 7.25 mgd in anticipated reuse flow and 3.0 MG in reuse storage capacity to be made available	In Process

Milestones and Deliverables

Table 1.12 Water Supply Milestones and Deliverables

Milestone	Target Date	Status
(1) Completion of WSD grant projects	2025	96% of all projects complete
(2) Completion of AWS projects	2026	In progress
(3) Region II RWSP Update	2019	Complete in December 2019

Deliverable	Status
(1) Water use data	Completed annually
(2) Districtwide water supply assessment updates	Update has started for 2023 WSA
(3) RWSP updates	Every 5 years, Region II RWSP approved January 2020
(4) Project completion reports	As projects are completed

1.5 Watershed Restoration and Protection

Strategic Priority and Success Indicators

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

(1) Balance of released mitigation credits
(2) Cooperative project implementation (percent complete)
(3) Area restored (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 and sod-based crop rotation within the Jackson Blue Spring groundwater contribution area;
- Cooperative funding to Jackson County for septic-to-sewer retrofit projects in the Indian Springs subdivision on Merritt's Mill Pond and Jackson Blue Spring;
- Financial support for research and outreach through the University of Florida's Institute of Food and Agricultural Services (IFAS) Sod-Based Crop Rotation Program; and
- Continuing assistance to local governments to complete stormwater and restoration projects that improve water quality and flood protection.

District staff continues to participate in multi-agency project planning and development for Gulf of Mexico restoration and protection. These include activities associated with the federal Resources and Ecosystems Sustainability, Tourist Opportunities, and Revived Economies of the Gulf Coast States Act (RESTORE Act), Triumph Gulf Coast, Inc., Gulf Environmental Benefit Fund (GEBF), and Natural Resource Damage Assessment (NRDA). Additionally, the District has continued to fund restoration and associated outreach activities conducted by the Choctawhatchee Basin Alliance.

In its ongoing upland restoration through reforestation program, the District completed hand planting of 964 acres of longleaf pine habitat in January 2021. Approximately 699,864 longleaf pine tubelings were planted within the Econfina Creek and Chipola River Water Management Areas (WMA).

Prescribed burns were conducted on 657 acres at the Sand Hill Lakes Mitigation Bank in Washington County and 70 acres in Escambia County. Shrub reduction was conducted on 120 acres at the Dutex restoration site in Escambia County and 25 acres at the Sand Hill Lakes Mitigation Bank. In addition, 75 pounds of wiregrass seed was collected at the Sand Hill Lakes Mitigation Bank and 33 pounds of toothache grass was collected at Lafayette Creek for future revegetation in 2022. These restoration activities improve wetland functions and offset wetland losses caused by transportation projects.

Evaluation of Indicators

(1) Balance of released mitigation credits

Wetland mitigation "credit" is a measure of the environmental functional improvement (lift) generated from 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 2020-2021, 827.34 credits have been developed and released by permitting authorities. A total of 541.65 credits have been used ("debited") to offset wetland impacts, leaving a Regional Mitigation Plan balance of 285.69 credits at the end of the fiscal year. Over time, the number of mitigation credits developed and used annually through this program has declined as private mitigation banks have come online for parts of northwest Florida. Additional information may be found at: https://www.nwfwater.com/Water-Resources/Regional-Wetland-Mitigation-Program.

(2) Cooperative project implementation (percent complete)

(3) Area restored (acres)

The status of cooperative watershed project implementation and restoration or stormwater treatment contributing area, if applicable, is found in Table 1.7. The table lists projects by major watershed identified by the District's Surface Water Improvement and Management (SWIM) program, illustrated in Figure 1.7. Many of the projects are also shared with the springs restoration and protection strategic priority, as shown previously in Table 1.1.

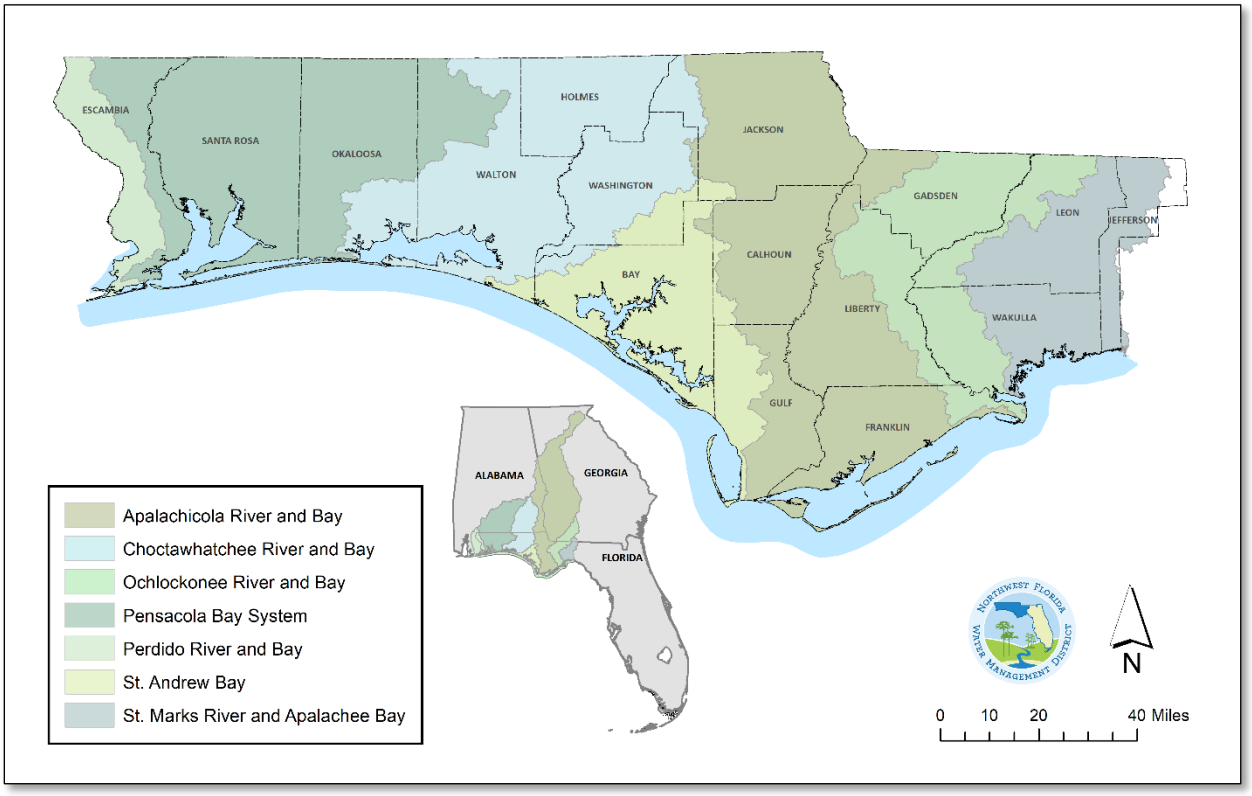


Figure 1.7 Watersheds of the Northwest Florida Water Management District

Table 1.13 Watershed Restoration and Protection Cooperative Projects

Project	Description/Cooperators	Total District Cost (or as noted)	Restoration or Treatment Area (Acres)	Status	Percent Complete
Perdido River and Bay					
Perdido River Paddling Trail	Construction of new and improved public access facilities within the District's Perdido River WMA	$0	NA	Transferred to DEP/The Nature Conservancy	0%
Choctawhatchee River and Bay Watershed					
Choctawhatchee Basin Restoration Program	Shoreline restoration and education and outreach around Choctawhatchee Bay; Choctawhatchee Basin Alliance	$50,000	2.11	All funds expended and project complete for FY 2020-2021	100%
Seven Runs Stream Restoration	Streambank restoration and access improvements	$150,352		Complete	100%
St. Andrew Bay Watershed					
Port St. Joe Stormwater Improvements	Stormwater retrofit and development of stormwater master plan with funding provided by NRDA	$829,250	280	Planning	10%
St. Joe Bay Assessment	Water flow and quality monitoring of bay and canal	$900,100	NA	Data Collection	25%
Grand Lagoon Septic to Sewer	Septic-to-sewer conversion project to reduce nitrogen runoff into Grand Lagoon and the St. Andrew Bay system	$71,975	NA	Planning	10%
Apalachicola River and Bay Watershed					
Construction of Stormwater Retrofit Facilities	Stormwater retrofit project in cooperation with the City of Apalachicola	$400,000	20	Complete	100%
Carrabelle Lighthouse Estates Septic to Sewer, Phase I	Septic-to-sewer conversion project to reduce nitrogen runoff into St. George Sound	$851,000	NA	Design/ Engineering	10%
Carrabelle Lighthouse Estates Septic to Sewer, Phase II	Second phase of septic-to-sewer conversion project to reduce nitrogen runoff into St. George Sound	$2,833,238	NA	Design/ Engineering	10%
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	$8,739,500	NA	Years 1 -3 complete, Years 4-6 in progress, and Year 7 in planning	56%

Project	Description/Cooperators	Total District Cost (or as noted)	Restoration or Treatment Area (Acres)	Status	Percent Complete
Sod-based Crop Rotation Project	Continuation of cost-share program designed to help agricultural producers improve water quality and reduce water use demands in and around Jackson Blue Spring	$1,106,500	NA	In progress	10%
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	$244,732	NA	In progress	50%
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	$64,000 (annual cost)	NA	All funds expended and project complete for FY 2020-2021	100%
St. Marks River and Apalachee Bay Watershed					
Weems Road Pass Phase 2	Design and construction of outfall modifications of stormwater system	$100,000	NA	Complete	100%

Milestones and Deliverables

Table 1.14 Watershed Restoration and Protection Milestones and Deliverables

Milestone	Target Date	Status
(1) Completion of stormwater retrofit and restoration projects	2021-2023	In progress
(2) Completion of Gulf of Mexico restoration projects	2021-2022	Planning

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 2021 with all projects meeting or exceeding success criteria. Monitoring reports were completed in accordance with permit requirements and posted to https://www.nwfwater.com/Water-Resources/Regional-Wetland-Mitigation-Program for public review.
(2) Grant project completion reports	As projects are completed

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 protect floodplain functions for the benefit of human communities and natural systems. Success indicators are:

(1) Area of floodplain protected through land acquisition (acres)
(2) Percent of the 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 manage surface waters and protect floodplain functions to avoid flood damage to property.

Hurricane Michael very prominently affected flooding and floodplain management during FY 2018-2019. In addition to causing immense damage to structures, communities, and forests, fallen trees and vegetative debris smothered numerous streams, rivers, and accompanying floodplains. This caused flooding to persist for months across much of the region, particularly impacting the Econfina Creek and Chipola River basins. In response, the District conducted and continues to pursue efforts to remove and address debris on District lands, along with other efforts at hurricane recovery. Additionally, the District developed a detailed hydrologic and hydraulic analysis of floodplain alterations affecting Econfina Creek and the Chipola River, with an evaluation of management alternatives. The analysis was provided to the Division of Emergency Management and Department of Environmental Protection to assist in hurricane recovery efforts and future emergency management planning.

The District continues to work in cooperation with the Federal Emergency Management Agency (FEMA) on the Risk Mapping, Assessment, and Planning (Risk MAP) program. 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. Risk MAP projects for the Lower Ochlockonee River, Apalachicola River, New River, Chipola River, Pensacola Bay, Perdido Bay, Perdido River, Apalachee Bay – St. Marks River, Pea River, and Lower Choctawhatchee River watersheds are ongoing and projects for the St. Andrew – St. Joseph Bays, Escambia River, Choctawhatchee Bay, and the Yellow River watersheds are in the planning stage.

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 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 land acquisition (acres)

Areas of floodplain protected through fee or less-than-fee acquisition is currently at 187,112 acres, representing 84% of total District managed area.

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

One hundred percent of the District had updated digital flood insurance rate maps (DFIRMs) meeting FEMA standards and criteria in 2014. Preliminary DFIRMs for the Apalachee Bay-St. Marks Watershed will be completed by the end of FY 2021-22. DFIRMs were effective for the following: Gulf County (March 9, 2021), Okaloosa County (March 9, 2021) and Santa Rosa County (November 19, 2021). Final effective DFIRMs for the remaining coastal counties of Escambia and Bay counties are scheduled to be issued by FY 2022-23.

Milestones and Deliverables

Table 1.15 Flood Protection and Floodplain Management Milestones and Deliverables

Milestone	Target Date	Status
(1) DFIRM completion incorporating coastal remapping studies for Escambia and Bay counties	2022-2023	On schedule

Deliverable	Status
(1) Risk MAP regulatory and non-regulatory products according to discovery report for each HUC 8 watershed within the District	On schedule
(2) Florida Forever Work Plan Annual Report	Annual

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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 specified in 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, rulemaking, 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 NWFWMD FY 2021-2022 MFL Priority List and Schedule includes two first magnitude springs (Gainer Spring Group and Jackson Blue Spring); two second magnitude springs (Williford Spring Group and Sylvan Spring Group); and one coastal aquifer system (Figure 2.1, Table 2.1). The MFL Priority List and Schedule are re-evaluated annually, and adjustments are made as appropriate. Additional waterbodies are anticipated to be scheduled in future years (Table 2.2). The waterbodies comprising the Priority List continue to represent an ambitious yet achievable MFL program, which is being implemented in an efficient and technically sound manner. Technical assessments for two waterbodies (Wakulla Spring and Sally Ward Spring) were completed during FY 2020-2021. Rulemaking for Wakulla and Sally Ward springs (40A-8.041 Minimum Flow for Wakulla Spring and Sally Ward Spring) was completed during 2021. A draft Technical Assessment of Coastal Region II was completed during FY 2020-2021 and is expected to be finalized during FY2021-2022. Rulemaking for Coastal Region II was determined to be unnecessary at this time.

Figure 2.1 NWFWMD FY 2021-2022 MFL Priority Waterbodies

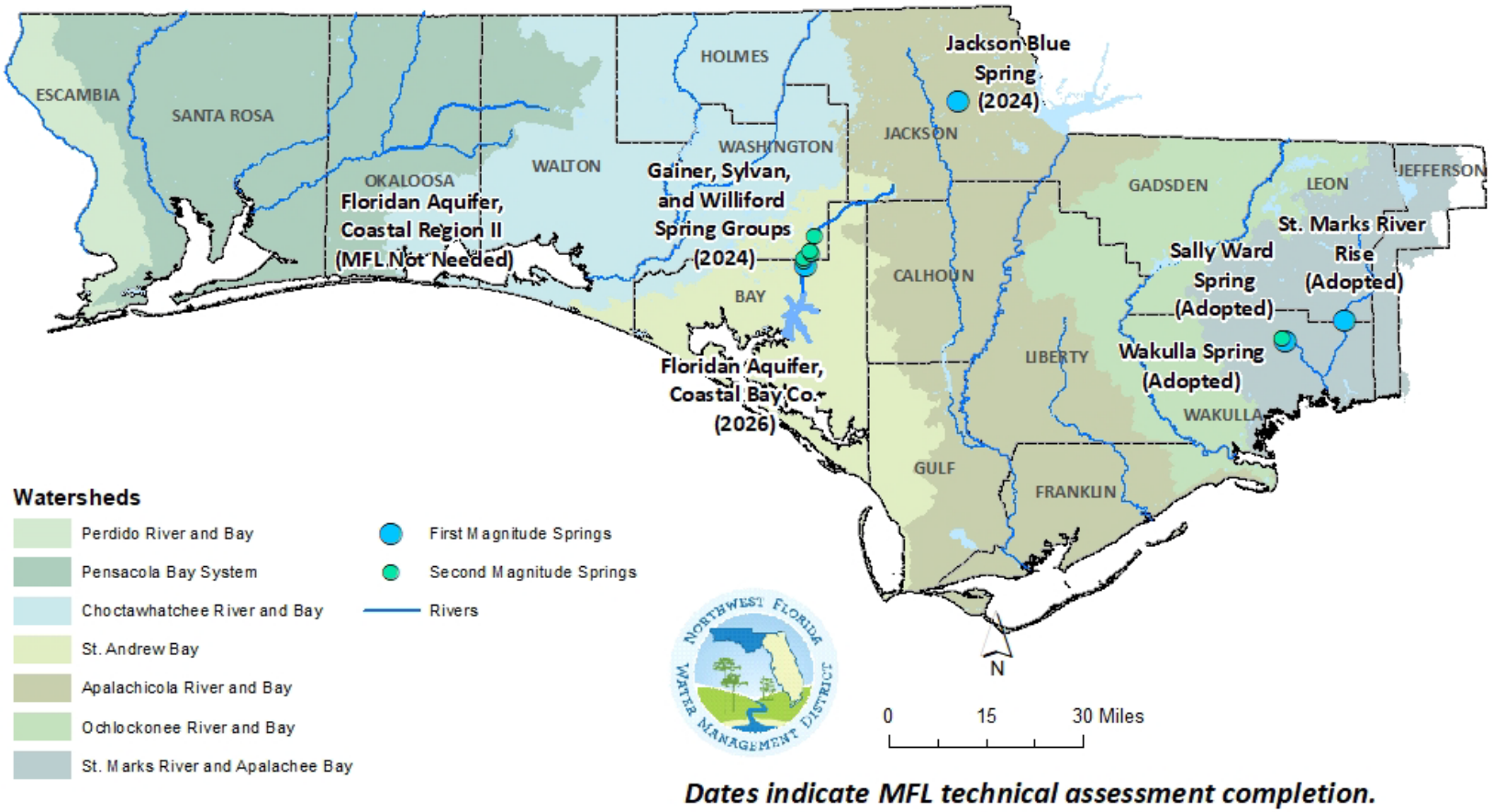

Table 2.1 Northwest Florida Water Management District FY 2021-2022 Priority List and Schedule

NWFWMD Minimum Flows and Levels adopted in 2021

New or Re-Evaluation	Waterbody Name or Compliance Point[1]	System Name[2]	Waterbody Type[3]	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude[4]	Longitude[4]	Rulemaking Status[5]
New	Wakulla Spring	Wakulla Spring	Spring - 1	Wakulla	Yes	No	30.235208	84.302847	Completed May 18, 2021
New	Sally Ward Spring	Sally Ward Spring	Spring - 2	Wakulla	Yes	No	30.237208	-84.303586	Completed May 18, 2021

NWFWMD Minimum Flows and Levels to be adopted in 2025

New or Re-Evaluation	Waterbody Name or Compliance Point[1]	System Name[2]	Waterbody Type[3]	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude[4]	Longitude[4]	Rulemaking Status[5]
New	Jackson Blue Spring	Jackson Blue Spring	Spring - 1	Jackson	Yes	No	30.790333	-85.140175	N/A
New	Gainer Spring Group	Gainer Spring Group	Spring - 1	Bay	Yes	No	30.428594	-85.548020	N/A
New	Sylvan Spring Group	Sylvan Spring Group	Spring - 2	Bay	Yes	No	30.432593	-85.547897	N/A
New	Williford Spring Group	Williford Spring Group	Spring - 2	Washington	Yes	No	30.438556	-85.547997	N/A

NWFWMD Minimum Flows and Levels to be adopted in 2027

New or Re-Evaluation	Waterbody Name or Compliance Point[1]	System Name[2]	Waterbody Type[3]	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude[4]	Longitude[4]	Rulemaking Status[5]
New	Coastal Floridan Aquifer	Coastal Floridan Aquifer	Aquifer	Bay	Yes	No	To be determined	To be determined	N/A

[1]A spring with one vent should be labeled as "Example Spring." A spring with multiple associated vents should be labeled as "Example Springs." Multiple springs grouped together in a system should be labeled as "Example Spring Group." (Please refer to Florida Spring Classification System and Spring Glossary, Special Publication No. 52, for more details.) Include on individual lines, with specific names, if it is known at this time that there will be multiple waterbodies or compliance points (such as springs or multiple river gages) associated with the MFL.

[2]Include a system name if the waterbody (or compliance point) is a part of a larger system (i.e., river and spring waterbodies belong to one overall system, multiple priority springs represent individual MFLs but belong to one system). If not, then the Waterbody Name and System should be the same.

[3]Aquifer, Estuary, Lake, River, River-Estuary, Spring-1, Spring-2, Spring-3, Wetland. Number indicates spring magnitude.

[4]For rivers, use the coordinates for the most upstream gage used to measure flow. For lakes, use the lake's center point. For springs, use the coordinates for the gage used to measure flow unless the gage is not located on the spring/spring run, in which case, use the spring's vent. For aquifers, wetlands, and estuaries, use the coordinates for the wells or gage used to measure the water source's level. Please use Decimal Degrees (DD) formatting.

[5] Rulemaking Status would be the last action taken: Notice of Rule Development published; Notice of Proposed Rule published; Rule challenge pending; Rule adopted, Ratification not required; Rule adopted, Awaiting ratification; Rule adopted, Ratified. If formal rulemaking has not yet begun, enter N/A.

Table 2.2 Waterbodies for Future Years

New or Re-Evaluation	Waterbody Name	Waterbody Type**	County(s)
New	Shoal River	River	Okaloosa, Walton
New	Sand-and-Gravel Aquifer	Aquifer	Okaloosa, Santa Rosa
New	Horn Spring	Spring - 2	Leon
New	Morrison Spring	Spring - 2	Walton
New	Holmes Blue Spring	Spring - 2	Holmes
New	Ponce De Leon Spring	Spring - 2	Holmes
New	Baltzell Spring Group	Spring - 2	Jackson
New	Blue Hole Spring	Spring - 2	Jackson
New	Mullet Spring	Spring - 2	Washington
New	Telogia Creek	River	Gadsden

**River, Lake, Spring- Magnitude, Wetland, Aquifer.

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	Calhoun, Gadsden, Gulf, Franklin, Jackson, Liberty	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	Calhoun, Gulf, Jackson	

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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 2021-2022 through 2025-2026. 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, 2.2.2 Water Supply Development Assistance, 2.3 Surface Water Projects, 2.5 Facilities Construction and Major Renovations, and 2.6 Other Acquisition and Restoration Activities. The NWFWMD has applicable CIP 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 Land Management and 3.2 Works. The NWFWMD does not have any applicable capital improvement projects in these activities.

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. Therefore, land management activities and small capital projects less than $50,000 may be included in the District's budget, but not reported in the CIP.

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 Work*s.

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

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

District plans that also provide information on long-range capital improvements include: the Florida Forever Work Plan, Five-Year Water Resource Development Work Program, and Northwest Florida Regional Mitigation Plan.

Table 3.1 NWFWMD Five-Year Capital Improvements Plan, Fiscal Years 2021-2025

2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS					
2.1 Land Acquisition					
Revenues ($)	**Fiscal Year**				
	2021-2022	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
DEP General Revenue (Springs)					
Land Management Fund (Reserves)					
Land Acquisition Trust Fund (Springs)	10,390,480	10,524,814	1,000,000	500,000	500,000
Land Acquisition Trust Fund (Land Management)	166,181	168,496			
TOTAL	**10,556,661**	**10,693,310**	**1,000,000**	**500,000**	**500,000**
Expenditures ($)	**Fiscal Year**				
	2021-2022	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
Acquisition of Land	10,140,480	10,274,814	750,000	400,000	400,000
Pre-acquisition Costs	416,181	418,496	250,000	100,000	100,000
TOTAL	**10,556,661**	**10,693,310**	**1,000,000**	**500,000**	**500,000**

2.3 Surface Water Projects						
Revenues ($)				**Fiscal Year**		
	2021-2022	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
FDOT Mitigation Funds	1,543,019	1,207,197	1,000,000	900,000	900,000
TOTAL	**1,543,019**	**1,207,197**	**1,000,000**	**900,000**	**900,000**

Expenditures ($)			**Fiscal Year**		
	2021-2022	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
FDOT Mitigation	1,543,019	1,207,197	1,000,000	900,000	900,000
TOTAL	**1,543,019**	**1,207,197**	**1,000,000**	**900,000**	**900,000**

2.5 Facilities Construction and Major Renovations					
Revenues ($)			**Fiscal Year**		
	2021-2022	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
Florida Forever	0	0	0	0	0
Water Management Lands Trust Fund	0	0	0	0	0
Ad Valorem Tax	0	50,000	100,000	100,000	100,000
Regulatory General Fund	0	0	0	0	0
TOTAL	**0**	**50,000**	**100,000**	**100,000**	**100,000**

Expenditures ($)			**Fiscal Year**		
	2021-2022	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
Construction and Renovations	0	50,000	100,000	100,000	100,000
TOTAL	**0**	**50,000**	**100,000**	**100,000**	**100,000**

2.6 OTHER ACQUISITION AND RESTORATION ACTIVITIES					
Revenues ($)	**Fiscal Year**				
	2021-2022	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
Florida Forever-Capital Improvement	372,230	176,000	0	0	0
Land Management Fund	175,000	0	0	0	0
District General Fund	813,798	813,798	0	0	0
Ecosystem Management Trust Fund	71,975	71,195	0	0	0
Land Acquisition Trust Fund (Springs)	1,182,481	721,520			
TOTAL	**2,615,484**	**1,783,293**	**0**	**0**	**0**
Expenditures ($)	**Fiscal Year**				
	2021-2022	**2022-2023**	**2023-2024**	**2024-2025**	**2025-2026**
Devil's Hole Spring Restoration	50,000	50,000	0	0	0
Cypress Spring Restoration	1,529,118	1,501,518			
TOTAL	**1,579,118**	**1,551,518**	**0**	**0**	**0**
TOTAL CAPITAL EXPENDITURES ($)	**13,678,798**	**13,502,025**	**2,100,000**	**1,500,000**	**1,500,000**

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 costs for land acquisition 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 preserve and protect the water resources within the District's 16-county boundary.

Plan Linkages: Florida Forever Work Plan, Strategic Water Management 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 include appraisals, survey, Phase I ESA, baseline report, legal fees, and other professional services and fees associated with the purchase of lands; specific costs will vary based on individual land acquisition purchases.

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

Anticipated Additional Operating Costs/Continuing: N/A

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

Project Title: Jackson Blue Spring Land Acquisition

Type: Unimproved land approximate to a first magnitude spring

Physical Location: Jackson Blue Spring basin, Jackson County

Square Footage/Physical Description: Acquisition of conservation easements or fee simple purchase of property in Jackson County within the Jackson Blue Spring Basin Management Action Plan area.

Expected Completion Date: On or before June 30, 2023

Historical Background/Need for Project: The proposed Jackson Blue Spring acquisition project will further the District's mission of protecting the water resources of Jackson Blue Spring through the acquisition of fee simple or conservation easements.

Plan Linkages: Florida Forever Work Plan, Strategic Water Management Plan

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

Alternative(s): Fee simple acquisition of each project proposed for conservation easement and less than fee simple purchase of a project proposed for fee simple acquisition.

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 include appraisals, survey, Phase I ESA, baseline report, legal fees, and other professional services and fees associated with the purchase of lands; specific costs will vary based on individual land acquisition purchases.

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

Anticipated Additional Operating Costs/Continuing: Land management costs associated with fee simple ownership and monitoring costs associated with the purchase of a conservation easement are included in the Division of Asset Management's overall responsibilities.

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

Project Title: Chipola River Land Acquisition

Type: Unimproved land within the Chipola River Groundwater Contribution Area

Physical Location: Chipola River basin, Jackson County

Square Footage/Physical Description: Acquisition of conservation easements or fee simple purchase of property in Jackson County within the Chipola River Groundwater Contribution Area.

Expected Completion Date: On or before June 30, 2023

Historical Background/Need for Project: The proposed Chipola River land acquisition project will further the District's mission of protecting the water resources of the Chipola River Groundwater Contribution Area through the acquisition of fee simple or conservation easements.

Plan Linkages: Florida Forever Work Plan, Strategic Water Management Plan

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

Alternative(s): Fee simple acquisition of each project proposed for conservation easement and less than fee simple purchase of a project proposed for fee simple acquisition.

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 include appraisals, survey, Phase I ESA, baseline report, legal fees, and other professional services and fees associated with the purchase of lands; specific costs will vary based on individual land acquisition purchases.

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

Anticipated Additional Operating Costs/Continuing: Land management costs associated with fee simple ownership and monitoring costs associated with the purchase of a conservation easement are included in the Division of Asset Management's overall responsibilities.

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

Project Title: Wakulla Spring Land Acquisition

Type: Unimproved land approximate to a first magnitude spring

Physical Location: Wakulla Spring basin, Leon and Wakulla counties

Square Footage/Physical Description: Properties in Leon and Wakulla counties in Priority Focus Area I and II of the Wakulla Springs Basin Action Management Plan area.

Expected Completion Date: On or before June 30, 2023

Historical Background/Need for Project: The proposed Wakulla Spring acquisition project will further the District's mission of protecting the water resources of Wakulla Spring through the acquisition of fee simple or conservation easements.

Plan Linkages: Florida Forever Work Plan, Strategic Water Management Plan

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

Alternative(s): Fee simple acquisition of each project proposed for conservation easement and less than fee simple purchase of a project proposed for fee simple acquisition.

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 include appraisals, survey, Phase I ESA, baseline report, legal fees, and other professional services and fees associated with the purchase of lands; specific costs will vary based on individual land acquisition purchases.

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

Anticipated Additional Operating Costs/Continuing: Monitoring costs associated with the conservation easement are included in the Division of Asset Management's overall responsibilities. If fee simple ownership were acquired, the District would request land management activities be provided by another agency in the local area.

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

Project Title: Econfina Creek Land Acquisition

Type: Unimproved land within the Econfina Creek Groundwater Contribution Area

Physical Location: Econfina Creek, Bay and Washington counties

Square Footage/Physical Description: Properties in Bay and Washington counties within the Econfina Creek Groundwater Contribution Area.

Expected Completion Date: On or before June 30, 2023

Historical Background/Need for Project: The proposed Econfina Creek acquisition project will further the District's mission of protecting the water resources of Econfina Creek and Gainer Springs through the acquisition of fee simple or conservation easements.

Plan Linkages: Florida Forever Work Plan, Strategic Water Management Plan

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

Alternative(s): Fee simple acquisition of a project proposed for conservation easement and less than fee simple purchase of a project proposed for fee simple acquisition.

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 include appraisals, survey, Phase I ESA, baseline report, legal fees, and other professional services and fees associated with the purchase of lands; specific costs will vary based on individual land acquisition purchases.

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

Anticipated Additional Operating Costs/Continuing: Land management costs associated with fee simple ownership and monitoring costs associated with the purchase of a conservation easement are included in the Division of Asset Management's overall responsibilities.

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, habitat restoration activities (hydrologic restoration, shrub reduction, planting, prescribed fire, herbicide, etc.), to include construction of various capital restoration structures (e.g., low water crossings and 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 mitigation bank or when credits from a mitigation bank are not deemed appropriate.

Plan Linkages: Northwest Florida Regional Mitigation Plan, Florida Forever Work Plan, SWIM plans, Strategic Water Management Plan, Sand Hill Lakes Mitigation Bank Instrument, In-Lieu Fee Mitigation Program Final Instrument

Area(s) of Responsibility: Water Supply, 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): Variable; 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): Variable; multiple projects. Costs are determined by project type (habitat restoration, hydrologic restoration and enhancement, land acquisition, etc.).

Anticipated Additional Operating Costs/Continuing: Variable; 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: Renovations

Type: No renovations scheduled during FY 21-22.

Physical Location: N/A

Square Footage/Physical Description: No renovations scheduled during FY 21-22.

Expected Completion Date: N/A

Historical Background/Need for Project: No projects scheduled during FY 21-22.

Plan Linkages: Strategic Water Management 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): No funds budgeted for Renovations in FY 21-22.

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

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

Anticipated Additional Operating Costs/Continuing: None.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS
ACTIVITY: 2.6 OTHER ACQUISITION AND RESTORATION ACTIVITIES

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 utilizing structural and non-structural techniques and public access improvements.

Expected Completion Date: By September 30, 2022

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 to restore, stabilize, and protect highly erodible streambank while providing enhanced public access and recreational use was initially completed in December 2017. Due to impacts from Hurricane Michael in October 2018, this additional restoration is needed to correct damage and re-stabilize some areas of the site.

Plan Linkages: Florida Forever Work Plan, Strategic Water Management 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 for spring and adjacent shoreline restoration and protection, and materials for enhanced public access and recreation.

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): To be determined. A new survey of the site may be required.

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

Anticipated Additional Operating Costs/Continuing: None. Maintenance costs for law enforcement and sanitation services are already provided by the District.

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS
ACTIVITY: 2.6 OTHER ACQUISITION AND RESTORATION ACTIVITIES

Project Title: Cypress Spring Restoration and Protection

Type: Spring and Shoreline Restoration and Protection

Physical Location: Located off Cypress Springs Rd/Hwy 79 within the Choctawhatchee River Water Management Area.

Square Footage/Physical Description: Spring and shoreline restoration utilizing structural and non-structural techniques and public access improvements.

Expected Completion Date: By June 30, 2023

Historical Background/Need for Project: The Cypress Springs recreation area has a significant number of recreational users access the spring by boat, canoe and kayak from nearby Culpepper Landing and Cotton Landing. Intensive use by the public has adversely impacted the spring's shoreline, aquatic, and floodplain habitats. The Cypress Spring Restoration Project will design and construct shoreline restoration and access improvements to protect the spring run and Holmes Creek from continued degradation.

Plan Linkages: Florida Forever Work Plan, Strategic Water Management 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):

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): Limited costs for construction planning and management.

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

Anticipated Additional Operating Costs/Continuing: None.

Appendix

Definitions for programs and activities used in this Five-Year Capital Improvement Program are included below. The 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 management and protection 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 management and protection 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.

2.6 Other Acquisition and Restoration Activities: Restoration and protection of springs, spring shorelines, and creek and river shorelines located on District lands while allowing for public access and recreation.

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.

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Alternative Water Supplies
Annual Report

Alternative Water Supplies Annual Report

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Chapter 4. Alternative Water Supplies Annual Report

Section 373.707, F.S., directs each water management district to submit a report annually on the disbursal of all budgeted funds for the purpose of alternative water supply (AWS) development. This report describes AWS projects receiving State alternative water supply grant funding, as well as funding from the Water Protection and Sustainability Program (WPSP) Trust Fund, the District's general fund, and cooperators.

Table 4.1 lists District AWS projects through the end of FY 2020-2021. The majority of these projects were completed with $21.57 million in WPSP funds from FY 2005-2006 through FY 2008-2009 which leveraged more than $78 million in local contributions. More recent projects have received funding from DEPs AWS funding program, the WPSP, and the District's general fund.

Section 373.707(8)(b), F.S., provides that ten percent of state revenues dedicated to WPSP be distributed to the NWFWMD, and in 2019 $100,000 was allocated to the District. This funding was committed to the South Santa Rosa Reuse Initiative in the District's water supply planning Region II (Okaloosa, Santa Rosa, and Walton counties). An additional $180,000 in WPSP funds was appropriated in FY 2020-21 to provide further support for alternative water supply development.

Additionally, the District and cooperators have contributed funding for multiple agricultural programs that have resulted in water conservation and water quality improvements by improving irrigation efficiency, conserving water, and reducing nutrient loading. These include the Precision Agriculture Strategies and Systems (PASS) agricultural BMP cost share program, sod-based crop rotation cost share program, and mobile irrigation laboratory program. The PASS program has resulted in average annual growing season water savings (120 days) of 0.90 million gallons per day (mgd) and total estimated nitrogen savings of 2.9 million pounds. Specific funding for these programs can be found in Chapter 1.

Table 4.1 Alternative Water Supply Projects (through September 2021)

Project	Region	Local Sponsor	Activity	Status	Funding Source[1]	Anticipated Water[2]	NWFWMD Contribution	Total
Area-wide Alternative Water Supply Source Expansion	II	Regional Utilities, South Walton Utility Co.	Inland wellfield expansion	Complete	WPSP	15.1 mgd	$6,500,000	$16,491,891
Tram Road Public Access Reuse Facility	VII	Tallahassee	Water reuse/ spring protection	Complete	WPSP	1.2 mgd	$1,350,000	$6,600,000
Bob Sikes Reuse Project	II	Okaloosa County	Water reuse	Complete	WPSP	0.7 mgd	$2,000,000	$6,509,132
Inland Floridan Aquifer Source - WRD	V	NWFWMD; Franklin County Utilities	Inland source evaluation	Complete	WPSP	3.0 mgd	$300,000	$300,000
Ground Water Modeling & Aquifer Testing - WRD	III	Bay County	Inland source evaluation	Complete	WPSP	0.0	$350,000	$1,150,000
Surface Water Treatment Plant	V	Port St. Joe	Surface water	Complete	WPSP	6.0 mgd	$4,000,000	$16,736,700
City of Chipley Reuse Project	IV	Chipley	Water reuse	Complete	WPSP	1.2 mgd	$500,000	$5,000,000
Wakulla County Reuse Project	VII	Wakulla County	Water reuse	Complete	WPSP	0.4 mgd	$500,000	$6,995,000
Advanced Wastewater Treatment & Water Reuse Facilities	VII	Tallahassee	Water resource development/ springs protection	Complete	WPSP	4.5 mgd	$500,000	$6,300,000
Alternative Pump Station	III	Bay County	Alternative raw water pump station and force main	Complete	WPSP	30.0 mgd[3]	$5,470,000	$23,384,000
PCB Parkway Reuse System Extension	III	City of Panama City Beach	Water reuse	Construction	GF/ AWS	1.62 mgd	$544,900	$1,100,420
North Bay Wastewater Reuse	III	Bay County	Water reuse	Design/ Engineering	GF	1.5 mgd	$500,000	$7,656,968
Pensacola Beach Reclaimed Water System Expansion	I	Emerald Coast Utilities Authority	Water reuse	Construction	WSD	0.23 mgd 2.5 MG	$947,000	$7,972,800

Okaloosa County/ Eglin AFB/Niceville Reclaimed Water Project	II	Okaloosa County	Water reuse	Construction	AWS	2.5 mgd	$2,500,000	$10,500,000
South Santa Rosa County Reuse Phase I	II	Santa Rosa County; Holley-Navarre Water System	Water reuse	Construction	AWS	1.4 mgd 0.5 MG	$2,600,000	$10,600,000
					Totals	**69.35 mgd 3.0 MG**	**$28,661,900**	**$127,396,911**

[1]Funding sources include the Water Protection and Sustainability Program (WPSP), District General Fund (GF), the Water Supply Development (WSD) Grant Program, and DEPs Alternative Water Supply (AWS) Program
[2]Anticipated water flow (mgd) and/or storage capacity (MG) to be made available at project completion.
[3]Capacity of alternate raw water intake

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Chapter 5

FY 2021-2022 Five-Year Water Resource Development Work Program

FY 2021-2022 Five-Year Water Resource Development Work Program

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Chapter 5. FY 2021-2022 Five-Year Water Resource Development Work Program

Introduction

Florida's water management districts are required by sections 373.036 and 373.709, Florida Statutes (F.S.), to conduct water supply planning in regions where existing sources of water are determined to be inadequate to supply water for existing and future reasonable-beneficial uses and to sustain water resources and related natural systems for at least a 20-year planning period. This determination is based on a technical assessment of all sources of water, existing water uses, anticipated future needs, and water conservation efforts. District governing boards re-evaluate the determination at least once every five years.

The Northwest Florida Water Management District (NWFWMD or District) established seven water supply planning regions in 1996 (Figure 5.1). The most recent districtwide water supply assessment (WSA) was completed in 2018. Consistent with the findings of successive assessments beginning in 1998, the Region II (Santa Rosa, Okaloosa, and Walton counties) RWSP was first approved and has been in implementation since February 2001. The plan was most recently updated in 2019 with a 2020-2040 planning horizon. Additional information is available at: https://nwfwater.com/Water-Resources/Water-Supply-Planning.

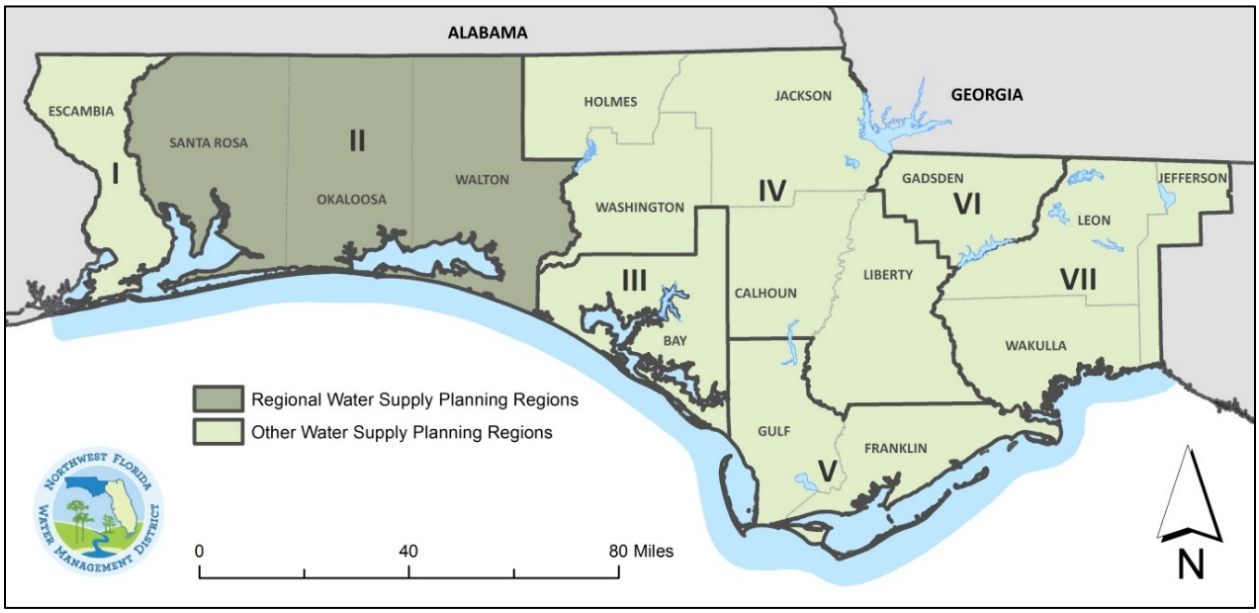

Figure 5.1 NWFWMD Water Supply Planning Regions

Districts are required by section 373.536(6)(a)4, F.S., to prepare a Five-Year Water Resource Development Work Program (WRDWP or Work Program) as a part of the annual budget reporting process. Work Programs describe implementation strategies and funding plans over a five-year period for water resource and water supply development, including alternative water supply development, for each approved regional water supply plan (RWSP) developed or revised under section 373.709, F.S.

This Work Program covers fiscal year (FY) 2021-22 through FY 2025-26 and is consistent with the strategies described in the Region II RWSP. Projects in this Work Program are reflected in Appendix C of the District's final adopted budget.

Purpose

Pursuant to section 373.536(6)(a)4, F.S., the Work Program must address all elements of the water resource development component in the approved RWSP and identify water supply projects proposed for District funding and assistance. The annual funding plan identifies anticipated District funding and additional funding needs. The Work Program must also:

- Identify projects that will provide water;
- Explain how each water resource development and water supply development project will produce additional water available for consumptive uses;
- Estimate the quantity of water to be produced by each project;
- Provide an assessment of the contribution of RWSPs in supporting the implementation of minimum flows and minimum water levels (MFLs) and water reservations; and
- Ensure sufficient water is available to meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event and to avoid the adverse effects of competition for water supplies.

A proposed Work Program is furnished within 30 days after adoption of the District's final budget and posted on the District website for public review. The final Five-Year WRDWP is incorporated into the District's March 1 Consolidated Annual Report.

Work Program Summary

The Work Program presented herein, including the District's implementation strategy and five-year funding plan, has been developed to ensure water is available to meet the water supply needs of existing and future reasonable-beneficial uses for a 1-in-10-year drought event, to maintain the function of natural systems, and to avoid the adverse effects of competition for water supplies. The Work Program is specifically focused on implementation of the Region II RWSP, with additional description of districtwide and supporting activities.

The fiscal year 2021-22 Work Program describes current progress toward implementing water resource development projects included within the Region II RWSP. The Work Program also describes funded alternative water supply development projects. The Work Program further includes five-year funding plans for water resource development and water supply development projects, to include the current year budgeted amounts and proposed funding levels for the following years.

For fiscal year 2021-22, $268,870 is budgeted for water resource development within Region II, and $8,385,615 is budgeted for alternative water supply development and water conservation. The Work Program identifies approximately 3.9 million gallons per day (mgd) of reclaimed water to be made available through currently funded alternative water supply development projects within the region.

Region II Work Program

The 2019 update to the Region II RWSP was developed following the recommendation of the 2018 Water Supply Assessment. The 2019 Region II RWSP was approved by the District's Governing Board on January 23, 2020. Water use was estimated to be about 70 mgd in 2015, and it is projected to climb 36 percent to approximately 95 mgd by 2040. Public supply and recreational landscape irrigation water uses are expected to remain approximately 85 percent of all Region II water demand through the planning horizon (Table 5.1).

Table 5.1. 2015 Estimated Water Use and 2020-2040 Demand Projections

Use Category	Estimates	Future Demand Projections - Average Conditions					2015-2040 Change	
	2015	2020	2025	2030	2035	2040	mgd	%
Public Supply	47.48	51.65	55.28	58.78	62.00	65.00	17.52	36.9%
DSS	3.96	4.33	4.67	4.63	4.58	4.44	0.49	12.3%
Agriculture	2.80	3.00	3.24	3.52	3.77	3.97	1.17	41.8%
Recreational	10.79	11.83	12.75	13.55	14.29	14.92	4.13	38.3%
ICI	4.71	6.07	6.32	6.55	6.55	6.55	1.84	39.0%
Power	-	-	-	-	-	-	n/a	n/a
TOTALS*	**69.73**	**76.88**	**82.25**	**87.03**	**91.19**	**94.88**	**25.14**	**36.1%**

*Figures expressed in million gallons per day (mgd). Numbers may not sum due to rounding

Public supply is estimated to represent about 67 to 69 percent of the future demand over the planning horizon. In drought conditions, public supply and recreational landscape irrigation together are projected to comprise about 86.5 percent of demand in 2040.

There are currently no adopted MFLs, no recovery or prevention strategies, and no water reservations in Region II.

Water Resource Development

Water resource development is "the formulation and implementation of regional water resource management strategies, including the collection and evaluation of surface water and groundwater data; structural and nonstructural programs to protect and manage water resources; the development of regional water resource implementation programs; the construction, operation, and maintenance of major public works facilities to provide for flood control, surface and underground water storage, and groundwater recharge augmentation; and related technical assistance to local governments, government-owned and privately owned water utilities, and self-suppliers to the extent assistance to self-suppliers promotes the policies as set forth in s. 373.016."[1] As indicated in section 373.705, F.S., water resource development is primarily a role of the water management districts, although utilities may provide assistance.

The Region II RWSP includes six water resource development projects encompassing strategies for managing water resources and supporting alternative water supply development (Table 5.2).

[1] Section 373.019(24), F.S.

Table 5.2. Summary of Region II Water Resource Development Projects

Activity	Description	Water (mgd)*
Surface Water	Resource evaluations to determine minimum flows needed to protect riverine habitats and associated resources.	**TBD**
Reuse	Coordination of reuse of reclaimed water projects and programs.	**10**
Conservation	Coordination of water conservation projects and programs.	**6**
Aquifer Storage and Recovery (ASR)	Technical support for aquifer storage and recovery (ASR) or aquifer recharge (AR) as a component of IWUPs.	**2**
Groundwater Evaluations	Sand-and-gravel aquifer resource evaluations to update alternative water supply assessments.	**TBD**
	Floridan aquifer resource evaluations and Coastal Floridan MFL Technical Assessment to develop and apply groundwater flow and saltwater intrusion models with recovery/prevention strategies as required.	**TBD**
Data Collection and Analysis	Hydrologic and water quality data collection, monitoring, and analyses.	**NA**
	Water use data, analyses, planning, and WSD support.	**NA**

*Estimates of water available or potential to be made available.

Surface Water Development

Surface water investigations and cooperative efforts have focused on the Shoal River as an alternative water supply source for Okaloosa County. This source has the potential to augment potable water supplies in mid-county and coastal areas of Okaloosa County, which will further support water resource sustainability and reduce reliance on Floridan aquifer withdrawals in coastal areas. Okaloosa County has acquired land along the Shoal River and has completed significant planning and analysis toward development of a future water supply source.

District staff developed an MFL Work Plan for the Shoal River and identified preliminary hydrologic data collection needs. In consideration of updated demand projections in Okaloosa County, the schedule for development of an MFL technical assessment for the Shoal River was moved to future years with the 2019 update to the MFL Priority List and Schedule. No additional surface water supply projects are currently under development within the region.

Reuse of Reclaimed Water

Developing reclaimed water sources is an important strategy for developing alternative sources of supply and meeting future demands in Region II. Reuse feasibility studies are required of water use permittees within the Region II Water Resource Caution Area (WRCA) and are encouraged in other areas. The District continues to work with local and regional partners to identify viable strategies to further develop and extend reclaimed water resources.

Reuse planning is focused on achieving potable offset by providing reclaimed water for such purposes as public access irrigation, toilet flushing, fire protection, and industrial uses. The RWSP identified a potential for up to 10 mgd of reclaimed water to be made available by 2040. Ongoing efforts are focused on project

development in cooperation with local governments and utilities and identification of future opportunities for water reuse and development of integrated water quality and quantity strategies. Among the conceptual strategies and projects under consideration within Region II are cooperative reclaimed water projects within Santa Rosa County. These may include efforts with the City of Milton and with Pace Water System to extend reclaimed water to additional industrial, commercial, and residential users.

Water Conservation

Like reuse, water conservation is an essential component of ensuring the long-term sustainability and sufficiency of water supplies within Region II. Enhanced water conservation measures are required of water use permittees within the coastal WRCA.

The RWSP identified a potential for up to six mgd in additional water conservation savings that may be achieved by 2040. Among potential implementation strategies are cost-share grants and incentive programs, funding for facility retrofits for improved efficiency and water loss prevention, conservation rate structures, improved utility data management, and public education and outreach. These complement continuing efforts on the part of utilities in response to regulatory requirements. Water use data and analysis have documented progress in reducing per capita water use rates.

During FY 2020-21, the District developed a water conservation cost-share grant program, which was submitted to the Florida Department of Environmental Protection (DEP) for funding consideration. In addition to providing conservation benefits, the program is designed to assist project partners in quantifying water saved. As funding becomes available, the District will work with utilities within Region II with additional emphasis on assisting financially disadvantaged small communities. District staff also continue to participate in inter-district coordination, advancing statewide efforts.

Aquifer Storage and Recovery

Depending on hydrogeologic characteristics, aquifer storage and recovery (ASR) has the potential to store large quantities of water for subsequent use. A few aquifer recharge projects have been permitted in the region for groundwater remediation and restoration. The RWSP estimated that approximately 2.0 mgd may be achieved over the 20-year planning horizon through ASR, including an existing ASR system permitted for 1.12 mgd. There are no current ASR projects included in the District's Budget or Five-Year Work Program.

Groundwater Evaluations

District groundwater evaluation programs include data collection, groundwater and saltwater intrusion modeling, MFL technical assessments, and associated resource assessments.

Sand-and-Gravel Aquifer

The District plans to incorporate sand-and-gravel aquifer resources into larger groundwater models and further evaluate the sustainability of the sand-and-gravel aquifer as an alternative water source. Groundwater levels within the sand-and-gravel aquifer are routinely monitored as part of District's Quarterly Water Level Trend and Continuous Monitoring networks. New monitoring wells completed in 2020 were instrumented with dataloggers to continuously monitor shallow groundwater levels in northern Walton County to monitor surface water/groundwater interactions. The District's 2020 MFL

Priority List includes the sand-and-gravel aquifer in Okaloosa and Santa Rosa counties as a waterbody to be evaluated and scheduled, if necessary, for future years.

Floridan Aquifer

The Floridan aquifer functions as a regional aquifer system across inland and coastal areas. Data collection and groundwater model development for the Coastal Region II Upper Floridan Aquifer MFL technical assessment began in 2015 and continued through FY 2020-21. Completed tasks include construction of deep Floridan aquifer wells to monitor the saltwater interface, expanded water quality data collection at existing wells, enhanced water quality and water level monitoring at new wells, and development of a regional groundwater flow model and a transport model.

Groundwater modeling and trend analysis of the Upper Floridan aquifer in support of the MFL technical assessment continued through FY 2020-21. The newly developed variable-density groundwater flow and saltwater transport (SEAWAT) model was used to assess effects of current and projected pumpage on saltwater movement in the Upper Floridan aquifer. Regional water quality data were evaluated for significant trends in saline indicators. Water level data were also evaluated for long-term trends. A draft MFL technical assessment was completed, incorporating the results of these groundwater evaluations. Planned groundwater modeling activities in Region II include a future update of the Region II MODFLOW model and expansion of the model domain to the north and east.

Data Collection and Analysis

Hydrologic Data

Hydrologic data collection, monitoring, and analyses are essential to multiple District functions and programs. In Region II, the District maintains a network of rainfall gauges, streamflow gauges, and monitoring wells. Hydrologic and water quality data collection are enhanced by continued cooperation with USGS and data provided by water use permittees. Data collected and the evaluation of long-term trends data inform water resource evaluation programs and activities.

The Coastal Floridan aquifer MFL technical assessment was supported by construction of saltwater interface monitor wells, discrete interval water quality sampling at new and existing wells to determine the position of the saltwater interface, and evaluation of water quality trends in saline indicators. Sand-and-gravel aquifer monitoring wells within Region II provide water level data used for numerical groundwater flow models and to better understand surface water and groundwater interactions. This enhanced data collection and monitoring are scheduled to continue through the five-year work plan period.

Water Use Data and Planning

Water use data collection and analysis support multiple District and state programs and reporting requirements. Data are analyzed to prepare water use estimates and report metrics annually, with future demand projections generated every five years in conjunction with WSA updates. Annually, water use permittees submit water use/pumpage reports detailing water use over the past year. District staff compile and evaluate these reports to assess water use trends and to calculate per capita use statistics.

During FY 2020-21, District staff began work toward developing the 2023 districtwide Water Supply Assessment. Over the past year, this included compiling 2020 data to provide base year water use estimates and conducting a geospatial population analysis of public water utility service areas to

incorporate with other population data sources. Associated ongoing efforts include collaboration with the Florida Department of Agriculture and Consumer Services (FDACS) on Florida Statewide Agricultural Irrigation Demand (FSAID) annual reports, which will also be incorporated into the 2023 WSA. Additionally, District staff continue statewide water supply planning coordination with DEP and other water management districts and provide requested reviews and assistance for the Florida Legislature's Office of Economic and Demographic Research.

Water Resource Development Annual Funding Plan

The proposed annual funding plan to support accomplishment of the District's water resource development priorities, as described above, is provided by Table 5.3.

Table 5.3. Region II RWSP Water Resource Development Annual Funding Plan

Water Resource Development Projects	Budget Activity	FY 20-21 Expenditures[1]	Anticipated Five Year Work Program					FY 21-22 to FY 25-26 Cost Estimate
			FY 21-22 Budget[2]	FY 22-23	FY 23-24	FY 24-25	FY 25-26	
Surface Water	1.1.1 1.1.2	$0	$0	$0	$0	$0	$0	$0
Reuse	1.1.1 2.2.1	$24,818	$26,780	$28,000	$28,000	$28,000	$28,000	$138,780
Conservation	1.1.1 2.2.1	$17,897	$24,100	$25,000	$25,000	$25,000	$25,000	$124,100
Aquifer Storage and Recovery	2.2.1	$0	$0	$0	$0	$0	$0	$0
Groundwater Evaluations	1.1.2 2.2.1	$148,476	$90,550	$90,000	$90,000	$90,000	$90,000	$450,550
Data Collection and Analysis	1.1.1 1.2.0	$128,768	$127,440	$150,000	$150,000	$150,000	$150,000	$727,440
TOTAL		**$319,960**	**$268,870**	**$293,000**	**$293,000**	**$293,000**	**$293,000**	**$1,440,870**

[1]Final unaudited costs. Includes funds that were encumbered in FY 20-21 but not yet reflected in YTD Expenditures in the Proposed WRDWP dated October 20, 2021.
[2]Based on adopted budget.

Substantial water supply development funding is additionally budgeted to advance the reuse of reclaimed water and water conservation within the region, as described further below and listed in Table 5.4.

Water Supply Development

Water supply development involves "the planning, design, construction, operation, and maintenance of public or private facilities for water collection, production, treatment, transmission, or distribution for sale, resale, or end use."[2] Water supply development encompasses both traditional and alternative water supply development. Alternative water supply sources may include salt water, brackish waters, surface water captured predominately during wet weather flows, sources made available through the addition of new storage capacity, reuse of reclaimed water, downstream augmentation of water bodies with reclaimed water, stormwater, and any other water supply source designated as nontraditional.[3] As indicated by section 373.705, F.S., water supply development is primarily the role of local governments, regional water supply authorities, and water utilities, although water management districts may provide assistance.

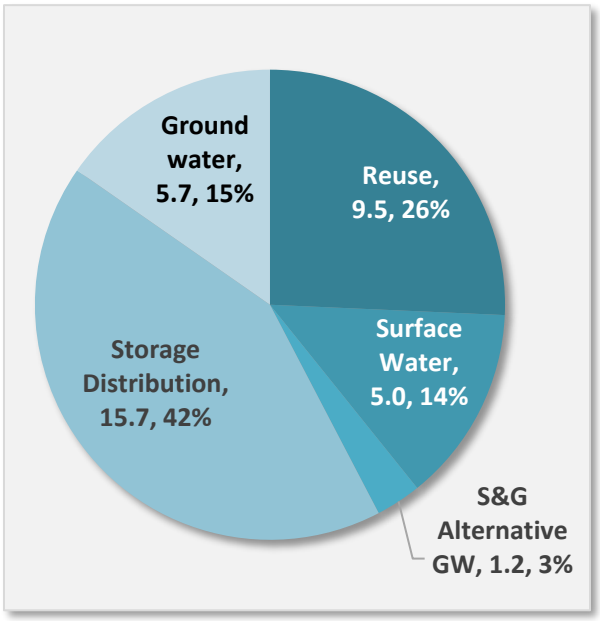

Figure 5.2. Potential WSD Water Production by Project Type (mgd)

The 2019 Region II RWSP identified WSD project options that may generate up to 37 mgd of water by 2040 for future needs (Figure 5.2). About 42 percent or 16 mgd are AWS, including reclaimed water, surface water, and the sand-and-gravel aquifer as an alternative to coastal Floridan aquifer withdrawals.

Storage and distribution project options include water storage tanks, distribution infrastructure improvements, and system interconnections. Water conservation project options include infrastructure replacements and upgrades, advanced metering systems, and public information conservation programs.

Water conservation and AWS projects meet the goals of the RWSP and are therefore preferred options. Traditional groundwater projects may also continue to be an option for inland areas.

The 2019 RWSP also includes, within the water supply development component, reuse project options submitted by utilities in all three Region II counties with a combined total potential reuse flow of 9.5 mgd. This is in addition to approximately 9.2 mgd of reclaimed water currently being provided by utilities in the region for public access irrigation. Most of the project options indicate some availability of local matching funds and proposed implementation within the next five to ten years.

State alternative water supply and Water Protection and Sustainability Program Trust Fund appropriations have been identified to leverage local and other resources for two major multijurisdictional reuse projects, summarized below. Additional proposed reuse projects are listed in the 2019 RWSP update.

- The Okaloosa County-Niceville-Eglin AFB Reclaimed Water Project will provide for construction of 11 miles of reclaimed water transmission main from Okaloosa County's Arbennie Pritchett Water Reclamation Facility to the City of Niceville, with service connections

[2] Section 373.019(26), F.S.
[3] Section 373.019(1), F.S.

to Eglin AFB. Upon completion, this project will increase the available capacity of reclaimed water by approximately 2.5 mgd.

- The South Santa Rosa Reuse Initiative, a cooperative effort between Santa Rosa County, the Holley-Navarre Water System, the City of Gulf Breeze, and Eglin AFB, will interconnect multiple utilities, improve water reclamation facilities, and expand reclaimed water systems. It will also increase the reclaimed water resource for the region and eliminate a wastewater discharge into Santa Rosa Sound. Upon completion, this project is expected to make 1.4 mgd of reclaimed water available.

Where resources and opportunities are available, expanding the reuse of reclaimed water will help achieve integrated water resource management goals, particularly water quality improvement when reuse helps facilitate improved wastewater treatment and elimination of wastewater discharges.

Table 5.4 Region II Water Supply Development Annual Funding Plan

Unique ID	Project Name	Cooperating Entity	Project Type	Project Status	Total Water[(1)] (mgd)	Prior District Funding	FY 2021-22 Budgeted	FY 2022-23	FY 2023-24	FY 2024-25	FY 2025-26	Cooperating Entity Match	Project Total
NF-00043A	Floridan Aquifer	Varies	Inland Groundwater	Complete	17.19	$8,745,149	$0	$0	$0	$0	$0	$15,578,371	$24,323,520
NF-00044A	Sand-and-Gravel Aquifer	Varies	Inland Groundwater	Complete	6.08	$3,302,647	$0	$0	$0	$0	$0	$451,947	$3,754,594
NF-00045A	Shoal River Surface Water	Okaloosa County	Surface Water Storage	Planning	TBD	$0	$0	$0	$0	$0	$0	$0	$0
NF-00046A	Reuse	Varies	Reclaimed Water for Potable Offset	Planning	TBD	$6,061,125	$500,000[(2)]	$0	$0	$0	$0	$7,011,666	$13,572,791
NWWS-00052A	Okaloosa, Eglin AFB, Niceville Reclaimed Water	Okaloosa County	Reclaimed Water for Potable Offset	Underway	2.50	$1,377,901	$2,500,000[(3)]	$0	$0	$0	$0	$8,000,000	$10,500,000
NWWS-00053 (A-D)	South Santa Rosa Reuse Initiative	Holley-Navarre Water System; Santa Rosa County; City of Gulf Breeze,	Reclaimed Water for Potable Offset	Underway	1.40	$0	$5,100,000[(4)]	$2,500,000	$2,500,000	$0	$0	$22,775,000	$32,875,000
	Conservation	Varies	PS and CII Conservation	Planning	TBD	$0	$285,615[(5)]	$150,000	$150,000	$150,000	$150,000	$135,615	$1,021,230
NF-00047A	Storage and Distribution	Varies	Distribution/ Transmission Capacity	Planning	0	$5,681,222	$0	$0	$0	$0	$0	$20,423,434	$26,104,656

Notes
(1) Total water made available or to be made available upon completion.
(2) Reflects $500,000 pending State allocation of alternative water supply funding from 2021 request. This corresponds with a portion of the Alternative Water Supply Funding (Pending Allocation) entry in Appendix C of the Tentative Budget report, with the remainder of that funding distributed between the South Santa Rosa Reuse and Conservation projects listed here.
(3) $1,377,901 expended late in FY 2020-21. The $2,500,000 budgeted in FY 2021-22 is inclusive of this amount and represents the total NWFWMD grant for the Okaloosa-Eglin-Niceville reclaimed water project.
(4) Includes $2,600,000 funding carried forward and $2,500,000 of additional state Alternative Water Supply Funding.
(5) Includes $135,615 in Water Protection and Sustainability Program Trust Fund budget carried forward, as well as $150,000 in District funds

Districtwide and Supporting Initiatives

Implementation of water resource, water supply development, and water quality projects in Region II are complemented by broader regional and Districtwide programs and initiatives. Programs such as these, including in areas where RWSP development is not required, reflect proactive efforts that are protective of resources and advance resource sustainability Districtwide.

Water Supply Development

The District continues support for water supply development by assisting local governments and utilities with project development and in identifying funding sources and options. Limited additional grant funding may be provided as resources allow. Assisting utilities and local governments in developing reclaimed water projects with potable offset projects will remain a Districtwide priority, with implementation assistance depending on future funding availability.

Water Reuse

Helping local governments and utilities across northwest Florida identify opportunities to develop and expand the reuse of reclaimed water remains a District priority. Projects that both offset the use of potable water sources and reduce wastewater discharges have been identified in several regions. The District will continue to work with local cooperators and DEP to identify the funding resources needed for implementation.

Water Conservation

As funding becomes available, the District will extend water conservation cost-share assistance to utilities Districtwide, with emphasis on assisting financially-disadvantaged small communities. Among projects considered may be installation of modern water meters to enable rural communities to improve potable water conservation and management. Additional efforts include agricultural water use efficiency measures, as described below.

Water Resource Evaluations

The District conducts monitoring and assessment activities to assess the status and sustainability of water resources across northwest Florida. The 2023 districtwide WSA, described above, will include evaluations of the sustainability of water resources through 2045 for all seven regions of the District. Additionally, during FY 2021-22, the District will be conducting a hydrogeologic evaluation in Gulf County to assess the suitability of the intermediate aquifer as a water supply source.

Precision Agriculture Strategies and Systems (PASS) Cost Share Program

Significant efforts continue to enhance agricultural water use efficiency and support implementation of associated precision agriculture practices, targeted primarily for the Jackson Blue Spring basin of the Apalachicola River watershed. Together with the Northwest Florida Mobile Irrigation Laboratory, these efforts are increasing water use efficiency and reducing nutrient applications within the spring basin. Through FY 2021-22, the District has received $9.8 million of state spring restoration funding and other grant funds for these activities. The District provides a 75 percent cost-share to help producers retrofit irrigation systems and to implement more efficient nutrient and water application systems. Through September 2021, approximately 122 projects with 91 producers have been implemented.

Well Abandonment

The District continues its program to properly plug abandoned and contaminated wells through well permitting and a cost-share assistance program. Well abandonments considered for financial assistance typically include financially constrained public water systems, wells located within a WRCA, and wells within areas delineated under Chapter 62-524, 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 cost-share program is coordinated with DEP and currently pays up to 50 percent of costs to properly plug and abandon eligible wells.

During FY 2020-21, approximately 821 permits were issued to plug abandoned or contaminated wells Districtwide. Approximately 53 percent of those were in Region II. As there were no requests for financial assistance, permits were issued at no cost to the District other than staff time.

Water Quality

The District's interrelated programs support achievement of statewide goals articulated in the Governor's Executive Order 19-12 to improve water quality, as well as to further development of alternative water supplies and to enhance coastal resilience. The District's Surface Water Improvement and Management (SWIM) program provides a watershed-based planning framework to support water quality protection and improvement throughout northwest Florida (https://www.nwfwater.com/Water-Resources/Surface-Water-Improvement-and-Management). The program engages stakeholder-driven initiatives, and it complements and supports State water quality restoration efforts, including Total Maximum Daily Loads (TMDLs), Basin Management Action Plans (BMAPs), the Blue-Green Algae Task Force, nonpoint source management grants, and other cooperative funding programs (https://protectingfloridatogether.gov/). Current project priorities, funding resources, and progress for watershed management and water quality protection and restoration are outlined in Chapter 9 of the District's March 1 Consolidated Annual Report.

Land Acquisition, Restoration, and Management

Since 1984, the District has protected 225,468 acres across northwest Florida for water resource purposes, either in fee simple or through conservation easements. The District acquires lands for water quality protection, flood protection and floodplain management, water recharge, and natural resource conservation. District lands within the Econfina Creek Recharge Area, purchased for water resource development purposes, serve to protect the quality and quantity of recharge for Deer Point Lake Reservoir, the primary source of water for Bay County.

Funding Sources and Needs

The state constitution and statutory millage rate cap for NWFWMD is 0.05, significantly less than the ad valorem taxing authority afforded to the other four water management districts. The District's FY 2021-22 ad valorem tax millage rate, as set by the Governing Board, is 0.0294. To meet its areas of responsibility, the District must rely on other sources of funding, as available. Funding sources used to support water resource and supply development include:

- State Legislative appropriations – Alternative Water Supply;
- Water Protection and Sustainability Program Trust Fund (WPSTF);
- Land Acquisition Trust Fund;
- District Fund Balance;
- State Legislative appropriations – General Operations;
- Local government match funding; and
- Ad valorem.

Since 2019, the Florida Legislature has made significant resources available for alternative water supply development. The funding is available to help communities develop alternative water supplies and to implement water conservation programs, with priority funding given to regional projects in the areas of the greatest need. The District conducts an annual grant cycle and submits recommended projects to the Governing Board for consideration. Board-approved projects are then forwarded to DEP, which evaluates projects from all five of the water management districts in making final funding awards.

The WPSTF, established by the 2005 Legislature, has enabled the District to provide cost-share assistance for construction of alternative water supply development projects and implementation of priority water resource development projects. In FY 2019-20, limited funding was appropriated to the water management districts for the first time since FY 2009-10. The District received $100,000, which will help support the South Santa Rosa Reuse Initiative. An additional $180,000 was appropriated in FY 2020-21, to provide additional support for alternative water supply development and water conservation.

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, as well as for construction of water supply development projects. All projects require substantial local investment once they reach the water supply development stage.

Appendix: Basin Management Action Plan Projects in Region II

Basin Management Action Plans provide blueprints for achieving pollutant load reductions specified in TMDLs to meet State water quality standards. In 2016, the Florida Legislature amended section 373.036, F.S., to require identification of specific projects related to water quality or water quantity within a work program. To support this requirement, information related to BMAP projects or recovery or prevention strategies within regional water supply planning regions are included within the District's Water Resource Development Work Program. Additional information related to water quality projects and MFLs Districtwide will be reported in the District's March 1 Consolidated Annual Report.

Within northwest Florida, BMAPs have been adopted for three waterbodies: Bayou Chico (Escambia County), Jackson Blue Spring and Merritt's Mill Pond (Jackson County), the Upper Wakulla River and Wakulla Springs (with a contribution area in Wakulla, Leon, and Gadsden counties). Additionally, a small portion of Jefferson County within the NWFWMD is within the contribution area for the Wacissa River and Wacissa Spring Group BMAP.

As none of these BMAPs are within Regional Water Supply Planning Region II, there are no BMAP projects to include in this five-year work plan update. Moreover, there are no adopted MFLs in Region II and henceforth no recovery or prevention strategies to report on in this Work Program.

Consolidated Annual Report
Chapter 6

Florida Forever Water Management District
Work Plan Annual Report

Florida Forever Water Management District Work Plan
Annual Report

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Chapter 6. Florida Forever Water Management District Work Plan Annual Report

Introduction

Section 373.199(7), F.S. requires the Northwest Florida Water Management District (NWFWMD or District) to annually update the Florida Forever Five-Year Work Plan. The 21st annual update of the 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, surplus or exchanged lands, 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. 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
TOTAL	21,589	$43,254,337

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, 225,545 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 groundwater contribution areas and 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. Existing water management areas (WMAs) include the Perdido River, Escambia River, Blackwater River, Yellow River, Garcon Point, Choctawhatchee River/Holmes Creek, Econfina Creek, Chipola River, Apalachicola River, and St. Marks/Wakulla Rivers.

Subject to receiving funding, the District's acquisition efforts this year will focus on the purchase of fee simple or less than fee simple (Conservation Easements) projects that protect the quality and quantity of water that flows into and out of springs. The District's acquisition efforts will focus on acquiring fee or less than fee simple interest in properties located within the Jackson Blue, Chipola, Econfina, and Wakulla Springs Groundwater Contribution Areas.

In developing the annual update, District staff 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 Chipola River 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	Econfina 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 may 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 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.

Surplus

Chapter 373.089, F.S., allows the Governing Board of the District to sell (surplus) lands or interests 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 in 2013.

Table 6.3 District Surplus Lands

WMA	Acres	County	Acquired Date	Status
Econfina Creek	8.39	Washington	December 19, 1997	For Sale
Escambia River	115	Escambia	April 26, 1994	For Sale

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 Asset Management 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:
https://floridadep.gov/lands/environmental-services/content/florida-forever

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 the Northwest Florida Water Management District.

Florida Forever Goals and Numeric Performance Measures

Reported as of October 1, 2021

Rule No. 18-24.0022

(2)(d)1. For proposed acquisitions, see the (Florida Forever) Water Management District Work Plan Annual Report in the Consolidated Annual Report.

(2)(d)2. For proposed acquisitions for water resource development projects, see the (Florida Forever) Water Management District Work Plan Annual Report in the Consolidated Annual Report

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

(3)(a)3. NWFWMD lands to be treated for upland invasive, exotic plants = <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 State alternative water supply funding, the Water Protection and Sustainability Program Trust Fund, NWFWMD General Fund, and local funding. See the NWFWMD Five-Year Water Resource Development Work Program report and Consolidated Annual Report.

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

In need of restoration, enhancement, and management	= 3,308 acres
Undergoing restoration or enhancement	= 2,613 acres
Restoration completed	= 26,332 acres
Restoration maintenance	= 26,332 acres

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

(4)(a)6. NWFWMD lands under upland invasive, exotic plant maintenance control = <10,000 acres

(4)(b) Refer to Water Projects in the Five-Year Water Resource Development Work Program of the Consolidated Annual Report for quantity of new water made available through regional water supply plans.

(4)(c) See (Florida Forever) Land Acquisition Work Plan (Table 6.6) 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.

Hurricane Michael substantially impacted northwest Florida in October 2018. According to a report by the Florida Forest Service (https://www.fdacs.gov/Divisions-Offices/Florida-Forest-Service/Our-Forests/Forest-Health/Forest-Recovery-After-a-Hurricane), more than 2.8 million acres of forest land were damaged. Restoring and preserving flood protection and nutrient reduction capabilities inherent in these systems is vital not only to protecting the natural resources but to restoring the economy. To help in this effort, this plan identifies the hurricane impact area (as provided by National Weather Service and National Oceanic and Atmospheric Administration) as the Forest Restoration Acquisition Area (FRAA). The goal of FRAA is to work with willing sellers to restore and protect, through conservation easement acquisition, the water quantity and quality benefits afforded by silviculture and agricultural best management practices.

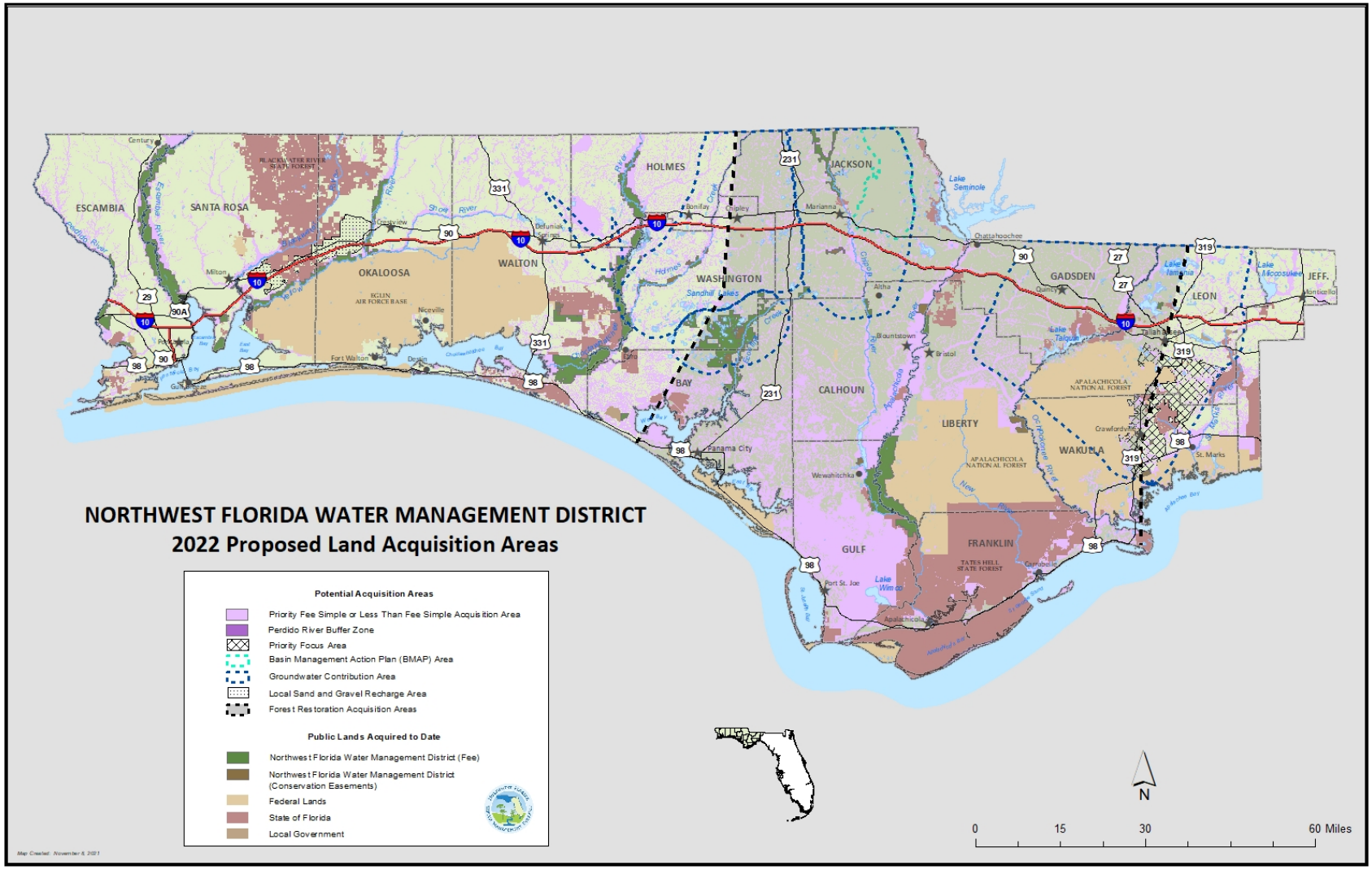

Figure 6.1 Proposed Land Acquisition Areas 2022

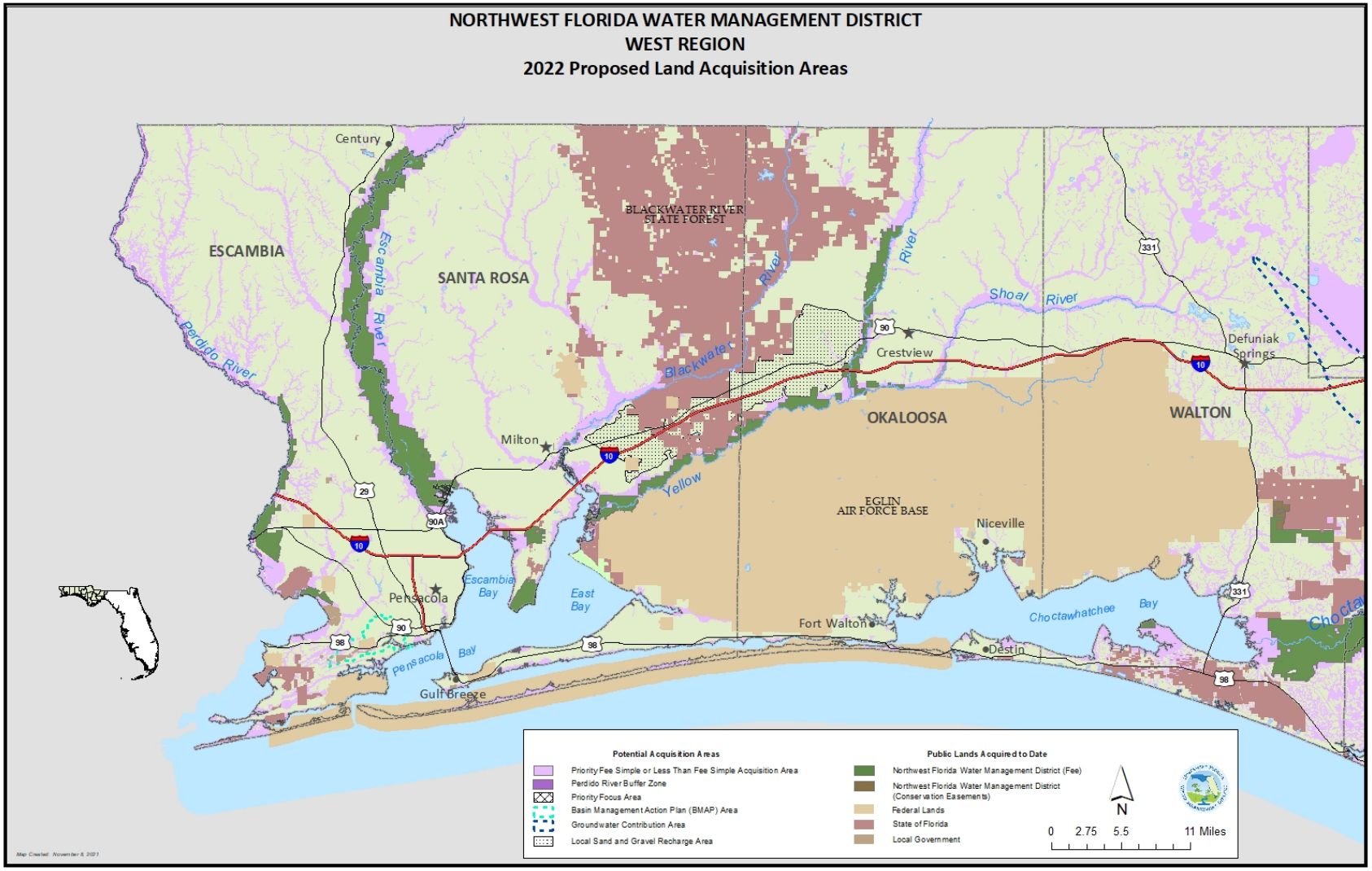

Figure 6.2 Proposed Land Acquisition Areas, 2022, West Region

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 simple 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 enhance water quality protection efforts for the Perdido Bay system.

Purchases within the Priority Fee Simple or Less than Fee Simple Acquisition Area will be concentrated on floodplain parcels 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 Bay, Tarkiln Bay, Arnica Bay, 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.

Purchases within the Priority Fee Simple or Less than Fee Simple Acquisition Area will be concentrated on floodplain parcels adjacent to the bay which can enhance water quality protection.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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 Priority Fee Simple or Less than Fee Simple Areas border a major urban area containing residential and commercial development.

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 non-point source 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.

Local Sand and Gravel Recharge Area

Designated area has groundwater 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 activities. Access issues are addressed on a parcel-by-parcel basis.

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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.

Purchases within the Priority Fee Simple or Less than Fee Simple Acquisition Area will be concentrated on floodplain parcels 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 activities. Access issues are addressed on a parcel-by-parcel basis.

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Garcon Point Ecosystem

The Priority Fee Simple or Less Than Fee Simple acquisition area contains a portion 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 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.

Purchases within the Priority Fee Simple or Less than Fee Simple Acquisition Area will be concentrated on floodplain parcels adjacent to Escambia and East Bays. 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 activities. Access issues are addressed on a parcel-by-parcel basis.

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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 Blackwater River immediately north and south of Milton in Santa Rosa County.

The Priority Fee Simple or Less than Fee Simple Acquisition Area includes considerable floodplain. Purchases within the Priority Fee Simple or Less than Fee Simple Acquisition Area will be concentrated on these parcels. In addition, purchase of lands north and northwest of Eglin Air Force Base (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 constrained potable water sources in southern Santa Rosa and Okaloosa counties. Acquisitions in this area are consistent with the District's Regional Water Supply Plan for Okaloosa, Santa Rosa, and Walton counties to protect future supply sources.

Local Sand and Gravel Recharge Area

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 surface 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.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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 AFB across much of eastern Santa Rosa and western Okaloosa counties (see Figure 6.2). The proposed acquisitions would bring floodplain of the Yellow River in Florida under public ownership. Included in the project is a segment of the lower Shoal River, the largest tributary to the Yellow River. The Priority Fee Simple or Less than Fee Simple Acquisition Area will be given to tracts containing considerable floodplain. 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 Priority Fee Simple or Less than Fee Simple Acquisition Area would provide water quality protection beginning at the Alabama border. Purchase of lands north and 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 consistent with the District's Regional Water Supply Plan for Okaloosa, Santa Rosa, and Walton counties to protect future supply sources.

Local Sand and Gravel Recharge Area

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 Okaloosa County would protect recharge areas that are important for future water supply sources. This area encompasses approximately 52,000 acres.

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

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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

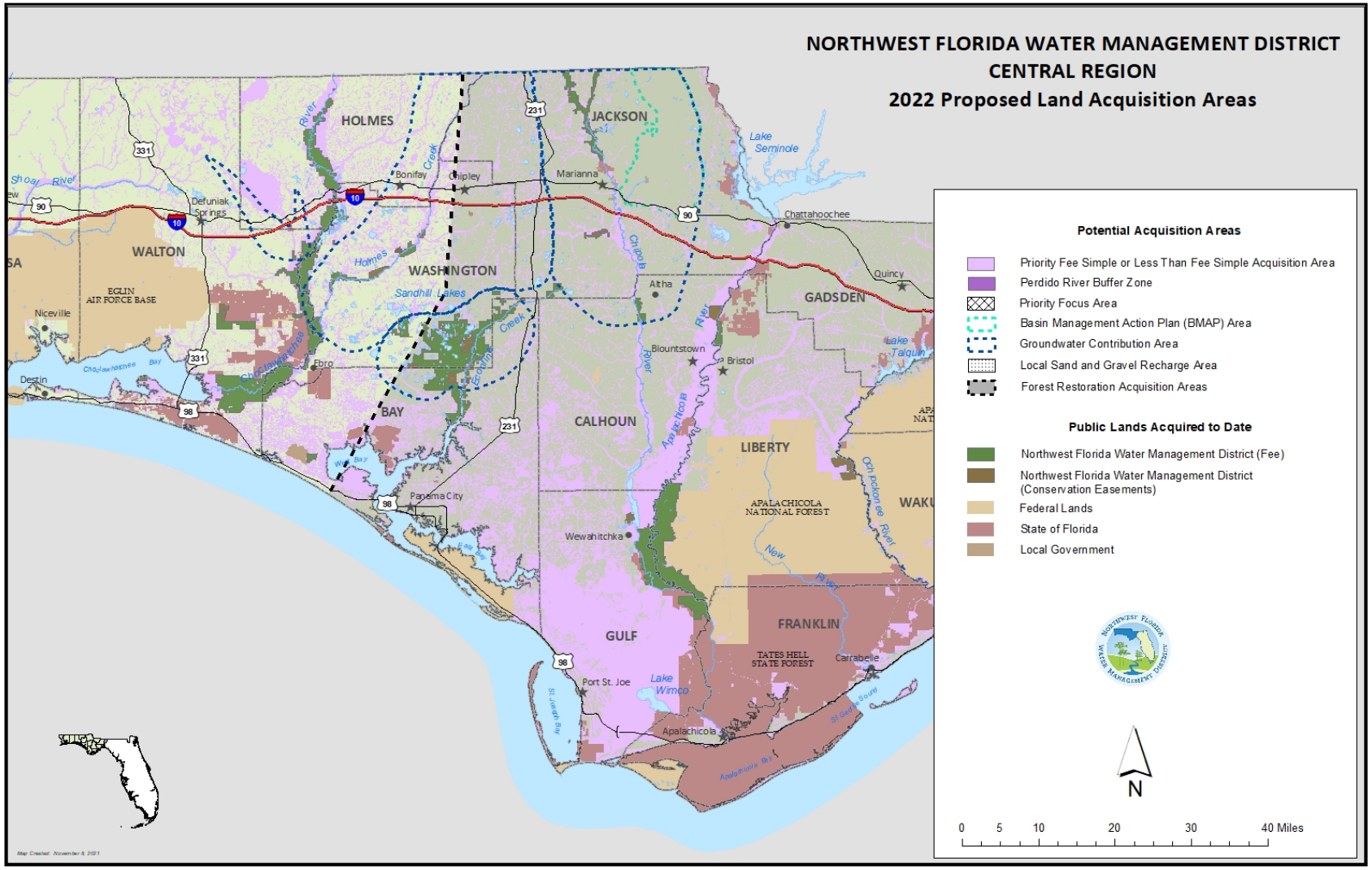

Figure 6.3 Proposed Land Acquisition Areas, 2022, Central Region

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. Purchases with the Priority Fee Simple or Less than Fee Simple Acquisition Area will protect a portion of Magnolia and Wolf creeks, both of which are significant tributaries to Lafayette Creek, as well as 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.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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 63,673 acres along the river, creek, and bay in fee and less than fee. Purchases within the Priority Fee Simple or Less than Fee Simple Acquisition Area will be concentrated on parcels containing floodplain along the river and designated tributaries such as Holmes Creek.

Groundwater Contribution Area

In addition, a portion of the Choctawhatchee River and all of Holmes Creek is captured within the Groundwater Contribution Area. Properties within this contribution area may be considered as a potential acquisition, especially those properties improving the quality or quantity of water for springs.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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 non-point source pollution, as well as habitat loss and fragmentation. Acquisitions within the Priority Fee Simple or Less than Fee Simple Acquisition 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 protects 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 public use and water resource protection, 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.

Due to impacts of Hurricane Michael on October 10, 2018, this basin has been identified as part of the Forest Restoration Acquisition Area (FRAA) for potential conservation easement acquisition.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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). Properties 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 44,145 acres in fee and less than fee, including the 2,155-acre Sand Hill Lakes Mitigation Bank. Purchases will be concentrated on parcels within the Groundwater Contribution Area as well as purchases that improve the quality or quantity of water for springs.

Groundwater Contribution Area

The upper portion of the acquisition project is a significant groundwater contribution area of the Floridan Aquifer and properties within this contribution area may be considered as a potential acquisition, especially those properties improving the quality and quantity of water for springs. The majority of the acreage purchased by the District and targeted for future purchase is one of the most important groundwater contribution 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.

Due to impacts of Hurricane Michael on October 10, 2018, this basin has been identified as part of the Forest Restoration Acquisition Area (FRAA) for potential conservation easement acquisition.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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 doing so, it would preserve water quality and a mosaic of interconnected upland, wetland, stream, and estuarine habitats. Purchases within the Priority Fee Simple and Less than Fee Simple Acquisition Area would protect water quality by providing a substantial riparian buffer and maintaining natural hydrology.

Due to impacts of Hurricane Michael on October 10, 2018, this basin has been identified as part of the Forest Restoration Acquisition Area (FRAA) for potential conservation easement acquisition.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

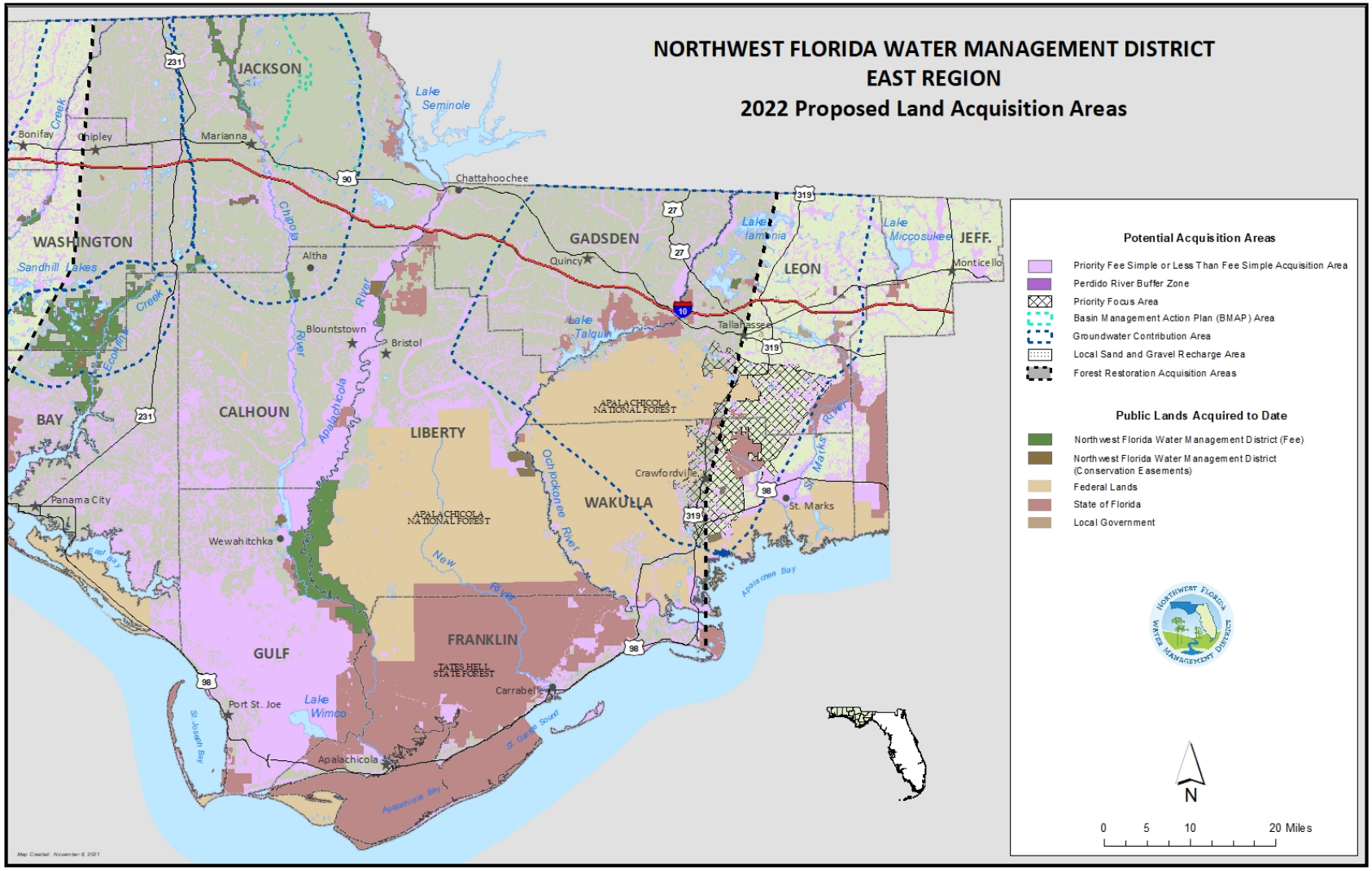

Figure 6.4 Proposed Land Acquisition Areas, 2022, East Region

FLORIDA FOREVER LAND ACQUISITION PROJECT

Chipola River Basin

Areas along the Chipola River have been identified as a Priority Fee Simple or Less than Fee Simple Acquisition Area. The area lies in Calhoun and Jackson counties (see Figure 6.4). Acquisitions along the Chipola River will help protect miles of the riverbank. 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 1,011 acres in the Chipola River Basin.

An additional area is identified for Priority Fee Simple or Less than Fee Simple Acquisition along the Chipola River. Spring Lake Spring Group is 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.

Due to impacts of Hurricane Michael on October 10, 2018, this basin has been identified as part of the Forest Restoration Acquisition Area (FRAA) for potential conservation easement acquisition.

Jackson Blue Spring BMAP and Chipola Springs Groundwater Contribution Area (GWCA)

The Jackson Blue Spring BMAP Area, east of the Chipola River, and the Chipola Springs GWCA, have 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. Properties within this BMAP or contribution area may be considered as a potential acquisition, especially those properties improving the quality or quantity of water for springs.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

FLORIDA FOREVER LAND ACQUISITION PROJECT

Apalachicola Bay and River

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 NWFWMD, have made extensive investments in acquiring and protecting lands throughout the basin.

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 Apalachicola River begins below Lake Seminole at the confluence of the 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. 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. Purchases will be concentrated on parcels within the Priority Fee Simple or Less than fee Simple Acquisition Area.

Due to impacts of Hurricane Michael on October 10, 2018, this basin has been identified as part of the Forest Restoration Acquisition Area (FRAA) for potential conservation easement acquisition.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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 water quality degradation. The District presently has 3,675 acres in less than fee holdings in the area.

Due to impacts of Hurricane Michael on October 10, 2018, this basin has been identified as part of the Forest Restoration Acquisition Area (FRAA) for potential conservation easement acquisition.

Public Access

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

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

FLORIDA FOREVER LAND ACQUISITION PROJECT

St. Marks and Wakulla Rivers

The Wakulla River originates at Wakulla Spring and flows south approximately 10 miles to join the St. Marks River at the town of St. Marks in Wakulla County (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. The St. Marks River 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 1,500 acres under less than fee acquisition and 131.49 acres in fee simple in the area.

Wakulla Springs BMAP and Priority Focus Area

Within the Upper Wakulla River and Wakulla Springs BMAP, the Priority Focus 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. Properties within this contribution area may be considered as a potential acquisition, especially those properties improving the quality or quantity of water for springs.

Land 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: availability of funds, Governing Board policy, threats to the resource, availability of willing sellers, tract size, general market conditions, and available staff resources.

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 for capital improvements have been made since FY 2008-2009. Table 6.4 identifies projects conceptual projects considered eligible for future 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 non-point 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 riparian and aquatic habitats and shorelines associated with northwest Florida springs and to improve compatible public access	Planning	TBD
Stormwater retrofit facilities	Construction of cooperative stormwater retrofit projects, improving water quality and flood protection in accordance with approved SWIM plans	Planning	TBD
Reclaimed water storage facilities	Construction of reclaimed water storage facilities that contribute to water quality improvement and conservation and protection of water resources	Planning	TBD
Hydrologic, wetland, and shoreline restoration	Restoration of shoreline, wetland, and riparian habitats and hydrologic functions to improve water and habitat quality and to enhance public access, consistent with SWIM plans	Planning	TBD

Project specifics, as noted in section 373.199(2), (3), (4) and (5), F.S., will 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 2020-2021 Work Plan

Land Acquisition

In 2021, the District purchased one conservation easement and one fee simple tract for springs protection in Jackson and Bay Counties to further protect the Chipola River Groundwater Contribution Area and Econfina Springs Groundwater Contribution Area.

Land Management

In October 2018, Hurricane Michael severely impacted District lands and the District's Econfina Field Office. Recovery from Hurricane Michael became the highest priority for the District's land managers in the central and eastern land management regions. Recovery activities included initial damage assessments, securing of facilities and clearing debris for essential access, planning and implementing salvage timber harvests, clearing roads and firelines, clearing and repairing recreation sites, contracting for various hurricane recovery activities, and coordinating with FEMA. In addition to hurricane recovery, the District completed numerous land management activities during Fiscal Year 2020-2021. Management and restoration efforts included prescribed burns, native species planting, and timber harvesting across the District's 211,336 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 Fiscal Year 2021-2022 staffing and management budget by WMA can be found in Table 6.7.

To date, the District has conserved and protected 225,545 acres primarily through fee simple acquisition. These lands help promote wetland and floodplain functions, groundwater recharge, surface and groundwater quality, and fish and wildlife habitat, as well as protect natural systems. All District-owned lands are accessible to the public and are managed to provide 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, Apalachicola, and St. Marks/Wakulla rivers; Lafayette, Holmes, and Econfina creeks; and on Perdido Bay, Garcon Point, and Live Oak Point. In addition, the District manages and conducts habitat restoration and maintenance on Yellow River Ranch, Live Oak Point, Ward Creek West, and Sand Hill Lakes Mitigation Bank. The District has acquired the majority of the groundwater recharge area for springs that discharge into Econfina Creek and form a crucial component of the groundwater contribution to Deer Point Lake Reservoir.

Land Management Accomplishments (FY 2020-2021)

- The District conducted prescribed burns on approximately 14,352 acres of District lands, as well as vegetation management (herbicide) and habitat enhancements on 1,009 acres.
- 3,763 camping permits were issued at 92 reservation-only sites on District lands.
- Twelve special resource area permits were issued on District property.
- Seven timber harvests totaling 1,234 acres were active, removing offsite sand pine and thinning loblolly and slash pine.

- More than 6,100 acres of District-owned land were surveyed for invasive exotic plants and control measures were implemented for identified problem areas.
- Hurricane debris removal was completed on 1,625.90 acres and contracted on an additional 1,186.57 acres to be completed in FY 2021-2022.

Restoration

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

Approved NWFWMD plans with substantial restoration components include the following:

- *Apalachicola River and Bay SWIM Plan* (2017)
- *Capital Improvements Plan (Annual)*
- *Choctawhatchee River and Bay SWIM Plan* (2017)
- *Ochlockonee River and Bay SWIM Plan* (2017)
- *Pensacola Bay System SWIM Plan* (2017)
- *Perdido River and Bay SWIM Plan* (2017)
- *St. Andrew Bay Watershed SWIM Plan* (2017)
- *St. Marks River and Apalachee Bay Watershed SWIM Plan* (2017)
- *Tate's Hell State Forest Hydrologic Restoration Plan* (2010)
- *NWFWMD In-Lieu Fee Mitigation Program Final Instrument* (2014)
- *Sand Hill Lakes Mitigation Bank Mitigation Banking Instrument* (2006)
- *East Region Land Management Plan (2019)*
- *West Region Land Management Plan (2020)*
- *Central Region Land Management Plan (2021)*

Restoration Accomplishments (FY 2020-2021)

- The District completed hand planting of 951 acres of longleaf pine reforestation and 68 acres of slash pine reforestation. These restoration activities improve upland habitat and serve important water resource functions by enhancing water recharge and providing water quality benefits. This work included site preparation and planting of 699,864 longleaf and slash pine tubelings within the Econfina Creek and Chipola River WMA's.
- The District completed stabilization and restoration of approximately 150 linear feet of streambank at Econfina Blue Spring using planted coir log retaining walls. To prevent further degradation of the shoreline from recreational use, existing concrete steps were replaced and an access boardwalk was installed. The project will improve water quality, restore historical shoreline impacted by erosion, and prevent destruction of habitat resulting from erosion and recreational use on Econfina Creek.
- The District completed stabilization and restoration of approximately 140 linear feet of streambank at Seven Runs Creek using planted coir log retaining walls. To prevent further degradation of the shoreline from recreational use, existing wooden steps into the creek were replaced, and an additional set of steps installed. The project will improve water quality, restore historical shoreline impacted by erosion, and prevent destruction of habitat resulting from erosion and recreational use on Seven Runs Creek.

- The District initiated shoreline habitat and salt marsh restoration at Live Oak Point in Walton County. When complete, the project will include establishment of breakwaters and salt marsh vegetation on over 4,600 feet of shoreline on the south shore of Choctawhatchee Bay. Live Oak Point contains the largest salt marsh system (approximately 1,000 acres) in Choctawhatchee Bay. The marsh has been subject to rapid erosion, with recent shoreline retreat averaging 3-4 feet per year.

Table 6.5 Restoration, Enhancement, and Maintenance (2021)

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	Hardwood	**Total**	Restoration	Thinning	Habitat Restoration	For Invasive, Non-native or Off-site Species
Escambia River	**108**	108													
Garcon Point															200
Blackwater River															
Yellow River	**145**	145													
Perdido River	**1,357**	1,357													519
Choctawhatchee River	**3,036**	3,036									**160**		160		880
Econfina Creek	**9,240**	8,327	883		30	**951**		951			**1,074**	1,074			
St. Andrews															1,260
Carter Restoration	**757**	278		479		**5**	5								
Ward Creek West						**21**	21								
Devils Swamp Restoration	**138**			138											
Chipola River	**116**	48	68			**68**			68						1,361
Apalachicola River															1,313
Lake Jackson	**350**	350													575
St. Marks/Wakulla Rivers															
Totals	**15,247**	**13,649**	**951**	**617**	**30**	**1,045**	**26**	**951**	**68**	**0**	**1,234**	**1,074**	**160**	**0**	**6,108**

Table 6.6 Access and Recreation Management (2021)

Water Management Area	Picnic Areas	Day Use Sites	Parking Areas	Reserved Camp Sites	Boat, Canoe/Kayak Landings	Portolet Stations	Horse Trail	Canoe Trail	Hiking Trail	Nature Trail	Bike Trail	Access Road	Camp Site Reservations	General Purpose (boundary signs)	Information Signs on District Lands	Weather Pavilions and Wildlife Viewing Towers
	Number Maintained						Miles Maintained						Issued	Signs		Maintained
Escambia River		6	11	12	28	11	10			1	2		27	1,166	35	9	15
Garcon Point			2	2						3			1		5	2	
Blackwater River		1	3	3		2					1						1
Yellow River			3	3		3			50				36		10	1	
Perdido River		3	3	4	1	4	10	6	15	6	1		32	59	25	14	1
Choctawhatchee River		12	15	15	24	14	10		15	11			55	919		4	11
Econfina Creek (incl. Carter Tract)		14	21	21	25	14	15	56	22	18	2		269	1,270		20	29
Chipola River		1	4	4	3	2	2		6				11	131			1
Apalachicola River		1	1	2	10	2	1						8	218			2
Lake Jackson		1	2	2			1	7		10		7	9				2
St. Marks/Wakulla Rivers			1	2			1			3	3	3	3		30	4	1
Totals		**39**	**66**	**70**	**91**	**52**	**50**	**69**	**108**	**52**	**9**	**10**	**451**	**3,763**	**105**	**54**	**63**

Table 6.7 Projected Funding, Staffing, and Resource Management for FY 2021-2022

Region	Water Management Area	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Western	Escambia	35,413		$139,297	$80,750
	Escambia Conservation Easements	19		$250	$250
	Garcon Point	3,245		$62,151	$5,900
	Yellow	16,553		$84,029	$30,552
	Blackwater	381		$14,054	$6,750
	Perdido	6,261		$178,620	$123,700
	Perdido Conservation Easements	4		$250	$250
	Western Region Total	**61,876**	**3**	**$478,651**	**$248,152**
Central	Choctawhatchee	60,831		$529,806	$363,580
	Choctawhatchee/Holmes Conservation Easements	2,841		$2,334	$250
	Econfina	39,268		$1,001,142	$730,487
	St. Andrew/Econfina Conservation Easements	2,722		$2,584	$500
	Ward Creek West	719		$0	$0
	Carter Restoration	2,155		$65,000	$65,000
	Central Region Total	**108,536**	**5**	**$1,600,866**	**$1,159,817**
Eastern	Chipola	9,094		$97,953	$67,493
	Apalachicola	36,823		$69,287	$51,700
	Apalachicola/Chipola Conservation Easements	3,370		$250	$250
	Lake Jackson	539		$44,670	$15,950
	St. Marks/Wakulla Rivers	131		$46,849	$40,000
	St. Marks/Wakulla Rivers Conservation Easements	1,500		$2,693	$250
	Ochlockonee Conservation Easements	3,675		$1,974	$250
	Eastern Region Total	**55,132**	**1**	**$256,600**	**$168,817**
	Regional Totals	**225,544**	**9**	**$2,336,117**	**$1,576,786**

Projected Funding, Staffing, and Resource Management for FY 2021-2022 (cont.)

Other Projects	Acres	Assigned Staff	Total Funding	Funding for Resource Management
Land Management Administration		4	$1,165,909	$494,708
IT Initiative			$490,941	$286,427
Land Management Database			$49,314	$44,500
Brunson Landing Tract (owned by FDEP)	348		$10,364	$8,460
Washington County School Board Donation			$278	$278
Hurricane Michael District Restoration			$2,587,275	$2,500,000
Cypress Spring Recreation Area			$39,773	$39,773
Grand Total	**225,181**	**13**	**$6,679,971**	**$4,950,932**

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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 October 1, 2007. The adoption of the Statewide Environmental Resource Permitting (SWERP) rules in Chapter 62-330, F.A.C., on October 1, 2013, included consolidation of the Management and Storage of Surface Water (MSSW) program under ERP.

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 2020-2021.

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Consolidated Annual Report
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.), requires the Consolidated Annual Report to 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, including any projects to connect onsite sewage treatment and disposal systems to central sewerage systems and convert onsite sewage treatment and disposal systems to enhanced nutrient-reducing onsite sewage treatment and disposal systems, 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 only water supply planning region in northwest Florida that has a regional water supply plan: Okaloosa, Santa Rosa, and Walton counties (Region II). The other 13 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) projects within the WRDWP which are funded wholly or in part by the District. Note that the projects from the WRDWP are also linked to the District's budget. Based on the budget structure and guidelines, similarly named projects between the two documents may not have the same funding totals.

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 region II, no BMAP projects are included in the WRDWP. Specific projects identified to implement a BMAP are listed in Chapter 9 (Table 9.3).

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 currently has no adopted MFLs for Regional Water Supply Planning region II, 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: if the WBID is impaired for one or more parameters other than mercury, and either:
  1. The WBID has a state-adopted total maximum daily load (TMDL), or
  2. The WBID has been prioritized for TMDL development through being included on the 303(d)-long-term vision list (i.e., the water is on the 2022 TMDL workplan list).
- Impaired: if the WBID is impaired for one or more parameters other than mercury.
- Not impaired: if the WBID has no impaired parameters.

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 NWFWMD

Project Name	Project Type[1]	Priority Ranking	Water body, or water segment	Level of Impairment
Region II (Okaloosa, Santa Rosa and Walton counties)				
Surface Water Sources	WRD	High	Shoal River	Impaired
Reuse	WRD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Conservation	WRD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Aquifer Storage and Recovery	WRD	Low	Floridan aquifer; sand-and-gravel aquifer	N/A
Groundwater Evaluations	WRD	High	Floridan aquifer; sand-and-gravel aquifer	N/A
Data Collection and Analysis	WRD	High	Floridan aquifer; sand-and-gravel aquifer	N/A

[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 Statutes require 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 2021-2022 Five-Year WRDWP Update was proposed on October 20, 2021. 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 District's 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 2021 and March 2022.

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Consolidated Annual Report
Chapter 9

Surface Water Improvement and Management (SWIM) Program Annual Report

Surface Water Improvement and Management (SWIM) Program Annual Report

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Chapter 9. Surface Water Improvement and Management (SWIM) Program Annual 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 NWFWMD has a long-term program to restore and protect 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.

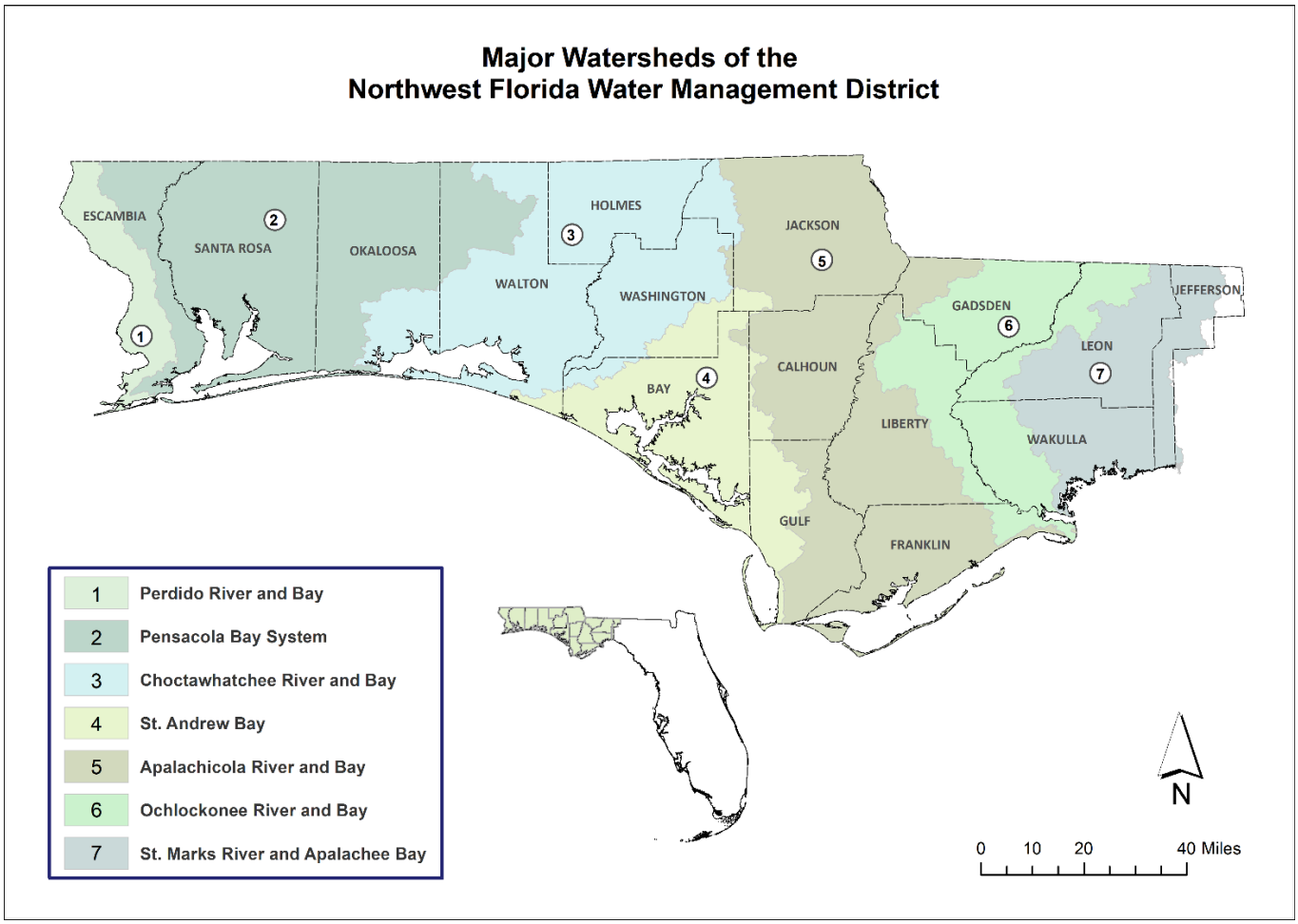

Figure 9.1 NWFWMD SWIM Priority Watersheds

SWIM Priority List

The Northwest Florida Water Management District's SWIM Priority list is provided in Table 9.1. All waterbodies, tributaries, sub-embayments, springs, and contributing basins are considered as being within the listed watersheds as priority waterbodies.

Table 9.1 NWFWMD 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 must be periodically reviewed and updated as needed. Any updates will be reflected in this section.

SWIM Plans and Updates

Surface Water Improvement and Management plans are developed to address cumulative anthropogenic 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 education. 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. 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. Seven watershed plans were completed over the course of two years, finishing in November 2017 (Table 9.2). More information on the final plans can be found at: https://www.nwfwater.com/Water-Resources/SWIM.

Table 9.2 NWFWMD SWIM Plans

Watershed	Plan Approval Dates
Deer Point Lake	1988 (Superseded)
Apalachicola River and Bay	1996, 2017
Lake Jackson	1994, 1997 (Superseded)
Pensacola Bay System	1988, 1990, 1997, 2017
St. Andrew Bay Watershed	2000, 2017
Choctawhatchee River and Bay	1996, 2002, 2017
St. Marks River/Apalachee Bay	1997, 2009, 2017
Perdido River and Bay	2017
Ochlockonee River and Bay	2017

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 restoration and protection projects that further SWIM plan objectives. Additionally, Gulf of Mexico restoration funding made available through Deepwater Horizon-related sources in many cases helps to restore and protect watershed resources in a manner consistent with the District's SWIM program. Cumulatively, the overall effort has resulted in significant improvement and protection of water resources Districtwide.

Current Priorities

The District is continuing a multiyear effort to identify and coordinate projects to protect and restore the major Floridan aquifer spring systems of northwest Florida, with emphasis on implementing Basin Management Action Plans (BMAPs) for Wakulla and Jackson Blue springs. Spring restoration and protection is carried out through annual grant cycles conducted in cooperation with the Florida Department of Environmental Protection (DEP), as well as the District's SWIM, MFL, Land Management and Acquisition, Agricultural Cost-Share, Consumptive Use Permitting, and Environmental Resource Permitting programs. Projects include a number of septic-to-sewer projects, continued implementation of agricultural best management practices, land acquisition to protect water quality, and spring bank restoration. In addition to Wakulla Spring and Jackson Blue Spring, ongoing activities are focused on springs associated with Holmes Creek and Econfina Creek.

The District is evaluating freshwater flows and water quality within the Intracoastal Waterway, Gulf County Canal, and Lake Wimico and evaluating potential effects of freshwater inflow on St. Joseph Bay and East Bay (St. Andrew Bay). This work will help improve the understanding of environmental and anthropogenic effects on water quality within the interconnected systems. Additionally, the District is providing grant funding, awarded through the Natural Resource Damage Assessment (NRDA) process and the Florida Trustee Implementation Group (TIG), to the City of Port St. Joe to implement a stormwater retrofit project to reduce nonpoint source pollution and improve flood protection within the affected basin. The project also provided funding for a new stormwater master plan for the city.

The District is funding Carrabelle's Lighthouse Estates Septic to Sewer project, Phases I and II. The project will provide connection of up to 163 residences to central sewer. It is funded jointly by a grant from NRDA and by a legislative appropriation focused on Apalachicola Bay. The legislative appropriation also funded stormwater treatment improvements for the City of Apalachicola.

The District and DEP are continuing efforts to identify stormwater treatment priorities to improve water quality within the southern portion of Lake Jackson. The District is in the process of evaluating the condition and operation of the Megginnis Arm stormwater treatment facility. The Department and the City of Tallahassee are collecting water quality data to evaluate stormwater quality from basins discharging into the southern portion of the lake, with the objective of identifying new opportunities to address nonpoint source pollution.

With funding provided by an innovative technology grant from Florida's Blue Green Algae Task Force, the District has contracted the deployment of a mobile algal harvesting unit to remove intact cellular algae and associated nutrients and toxins from the Apalachee Regional Park pond through dissolved air flotation (DAF). Extraction of intact algae facilitates removal of associated nutrients and toxins retained within algae cells. The unit will be deployed for approximately 10 months, demonstrating a new approach for addressing harmful algae blooms and reducing nutrient enrichment within the Wakulla Spring groundwater contribution area.

For a list of priority SWIM projects currently underway or in the planning stages, please refer to Chapter 1 (Table 1.1) 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.

Section 373.037(7), F.S., requires the Consolidated Annual Report to list projects identified to implement a BMAP. Basin Management Action Plans have been adopted for three areas within the District: Bayou Chico in Escambia County; Jackson Blue Spring and the Merritts Mill Pond basin in Jackson County; and the Upper Wakulla River and Wakulla Springs basin in portions of Wakulla, Leon, and Gadsden counties. Additionally, a small portion of Jefferson County within the NWFWMD is within the contribution area for the Wacissa River and Wacissa Spring Group BMAP, although the majority of this BMAP is within the SRWMD. Table 9.3 lists projects identified to implement the referenced BMAPs.

Table 9.3 Current BMAP Projects in the NWFWMD

Cooperator	Project Name	County	Project Type	Five-Year Total Costs	Benefit Description	Water Resource or TMDL Waterbody	Watershed/ Waterbody Grade	Project Status
Bayou Chico (Pensacola Basin) BMAP								
Bayou Chico Association	Bayou Chico Channel Dredging	Escambia	Stormwater	$10,000,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	In Progress
ECUA	Beach Haven	Escambia	Wastewater	$1,200,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	In Progress
Escambia County	Bayou Chico Dredging Phase I	Escambia	Stormwater	$356,850	Reduced fecal coliform loading	Bayou Chico	Impaired-High	In Progress
Escambia County	Beach Haven Stormwater Phases I & II	Escambia	Stormwater	$11,000,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	In Progress
Escambia County	Jackson Lakes Stormwater Improvements	Escambia	Stormwater	$1,000,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	In Progress
Escambia County	Jones Creek Floodplain Restoration/ Expansion Project	Escambia	Stormwater	$1,500,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	In Progress
Escambia County	Jones Swamp Wetland Preserve Management Plan Development & Implementation	Escambia	Stormwater	$400,000	Reduced fecal coliform loading	Bayou Chico	Impaired-High	In Progress

Current BMAP Projects in the NWFWMD (cont.)

Cooperator	Project Name	County	Project Type	Five-Year Total Costs	Benefit Description	Water Resource or TMDL Waterbody	Watershed/ Waterbody Grade	Project Status
Jackson Blue Spring and Merritts Mill Pond BMAP								
NWFWMD; Jackson County	Jackson Blue Spring Recreation Area Stormwater Improvement Project	Jackson	Water Quality	$751,200	Reduced nutrient loading	Jackson Blue Spring	Impaired-High	Completed
NWFWMD; Jackson County	Indian Springs Sewer Extension Phases 1, 2A, 2B, and 2C	Jackson	Wastewater	$9,557,303	Reduced nutrient loading	Jackson Blue Spring	Impaired-High	In progress
NWFWMD; Jackson County	Blue Springs Road Sewer Project & Expansion	Jackson	Wastewater	$3,566,749	Reduced nutrient loading	Jackson Blue Spring	Impaired-High	In progress
NWFWMD; DEP	Sod-Based Crop Rotation Pilot Project	Jackson	Water Quality	$736,000	Reduced nutrient loading and water conservation	Jackson Blue Spring	Impaired-High	Completed
NWFWMD	Jackson Blue Spring Agricultural BMP Producer Cost-Share Grant Program	Jackson	Water Quality	$8,698,595	Reduced nutrient loading and water conservation	Jackson Blue Spring	Impaired-High	In progress
NWFWMD; Florida Department of Agriculture and Consumer Services	Mobile Irrigation Laboratory	Jackson	Water Quantity	$887,313	Water conservation	Jackson Blue Spring	Impaired-High	Ongoing
NWFWMD; UF-IFAS	Sod-Based Crop Rotation	Jackson	Water Quality; Education & Outreach	$1,475,333	Reduced nutrient loading and water conservation	Jackson Blue Spring	Impaired-High	In progress

Current BMAP Projects in the NWFWMD (cont.)

Cooperator	Project Name	County	Project Type	Five-Year Total Costs	Benefit Description	Water Resource or TMDL Waterbody	Watershed/ Waterbody Grade	Project Status
Upper Wakulla River and Wakulla Springs BMAP								
City of Tallahassee	Development and Implementation of Education Plan	Leon	Education & Outreach	$50,000	Reduced nutrient loading	Wakulla Spring	Impaired	Ongoing
City of Tallahassee	Septic Connection to Existing Sewer in the Wakulla BMAP	Leon	Wastewater	$4,018,000	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress
Leon County	Belair/Annawood Septic to Sewer Project	Leon	Wastewater	$3,500,000	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress
Leon County	Northeast Lake Munson Septic to Sewer Project	Leon	Wastewater	$5,500,000	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress
Leon County	Sewering in PSPZ	Leon	Wastewater	$24,500,000	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress
Leon County	Woodville Sewer System Project Phase I Construction	Leon	Wastewater	$10,500,000	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress
Leon County	Woodside Heights Wastewater Retrofit Project	Leon	Wastewater	$4,900,000	Reduced nutrient loading	Wakulla Spring	Impaired	Completed
Leon County/ DOH/NWFWMD	Advanced Septic Systems Pilot Project	Leon	Wastewater	$2,500,000	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress
Wakulla County	Magnolia Gardens Sewer Phase III	Wakulla	Wastewater	$3,191,811	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress
Wakulla County	Otter Creek WWTP Upgrade and Capacity Expansion	Wakulla	Wastewater	$7,644,346	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress
Wakulla County	Wakulla Gardens Sewer Phase III-IVA	Wakulla	Wastewater	$8,726,604	Reduced nutrient loading	Wakulla Spring	Impaired	In Progress