

# 2021 CONSOLIDATED ANNUAL REPORT



**Suwannee River Water Management District**

## **Table of Contents**

Section One: 2021-2025 Strategic Plan and 2020 Annual Work Plan Report	4
Section Two: Minimum Flows and Minimum Water Levels Priority List	41
Section Three: Five-Year Capital Improvements Plan	48
Section Four: Alternative Water Supply Report	56
Section Five: Five-Year Water Resource Development Work Program	72
Section Six: Waterbody Grades	88
Section Seven: Florida Forever Work Plan	94
Section Eight: Mitigation Donation Annual Report	111

## Project Team

Overall Plan Coordination, Design and Distribution	Katelyn Potter and Lindsey Covington
Section One: 2021-2025 Strategic Plan and 2020 Annual Work Plan Report	Katelyn Potter
Section Two: Minimum Flows and Minimum Water Levels Priority List	Sean King/John Good
Section Three: Five-Year Capital Improvements Plan	Christina Green
Section Four: Alternative Water Supply Report	Kristine Eskelin
Section Five: Five-Year Water Resource Development Work Program	Amy Brown and Kristine Eskelin
Section Six: Waterbody Grades	Amy Brown
Section Seven: Florida Forever Work Plan	Katelyn Potter
Section Eight: Mitigation Donation Annual Report	Christina Carr

## For More Information

For further information regarding this report, contact the Office of Communications and Organizational Development at 386.362.1001 or [planning@srwmd.org](mailto:planning@srwmd.org). This report is also available on the District's website at: <http://www.MySuwanneeRiver.com/>.

## ADA Statement

**Americans with Disabilities Act:** The District does not discriminate upon the basis of any individual's disability status. This nondiscrimination policy involves every aspect of the District's functions including one's access to, participation, employment, or treatment in its programs or activities. Anyone requiring reasonable accommodation as provided for in the Americans with Disabilities Act should contact the District at 386.362.1001 or 800.226.1066 (Florida only). The District's fax number is 386.362.1056.



# 2021-2025 Strategic Plan

Suwannee River Water Management District



Virginia H. Johns,

Chair

---

## Governing Board Members

---

Virginia H. Johns,

Chair

Richard Schwab,

Vice Chair

Charles Keith,

Secretary/Treasurer

Virginia Sanchez

Larry Sessions

Harry Smith

Larry Thompson

## Message from the Chair

The Springs Heartland has long been renowned for its unique, breathtaking beauty and abundance of water. For generations, people have come to the area to enjoy the bountiful resources that seem infinite. In those days, major water resource challenges were concentrated in areas far away from the Suwannee River Valley. Today, however, environmental changes, land use changes, rising temperatures, societal interests, and an ever-growing population have brought these challenges to our doorstep, increasing the demand for our attention.

The Suwannee River Water Management District's (District) commitment to ensure an adequate water supply, improve water quality, protect natural systems, and provide flood protection has grown to meet our increasing challenges, with the help of greater scientific advancements and robust data monitoring.

Through the re-evaluation of the new Lower Santa Fe Ichetucknee River minimum flows and minimum water levels (MFL), as well as the anticipated Upper Suwannee River MFL, District staff are working through planning, permitting, and projects to ensure the health of our natural systems and protect our water supply.

Expansion of the water quality monitoring network, strategic project prioritization in critical areas, increased project monitoring, and maximizing nutrient load reductions in stormwater systems will help to reduce nitrate levels as we work to achieve numeric nutrient criteria for water quality.

The District will be better able to serve and protect its communities from flooding through hydrologic and wetlands restoration, enhanced flood elevation studies, educating communities on the importance of land use designations, and increasing the public awareness and use of flood information tools.

Supporting the mission of the District and accomplishing these goals will rely heavily on the ability of the District to continue to strengthen stakeholder partnerships, maintain institutional knowledge, and reduce risk through information and data management.

Despite the challenges before us, the opportunities to serve the residents of North Florida through protection and restoration of our water resources is ever present. I am proud to work alongside my fellow Governing Board members and District staff as we work to safeguard the health of our water resources for today and generations to come.



# Agency Overview

## Vision

Uniting the region in stewardship and awareness using innovative, science-based solutions to protect and restore our water resources.

## Mission

To protect and manage water resources using science-based solutions to support natural systems and the needs of the public.

The District is a regional governmental agency responsible for protecting and managing water resources in north-central Florida. The District is one of five water management districts created by the Florida Legislature with the passage of the Water Resources Act in 1972. A governing board consisting of up to nine members, each of whom live in the District, establishes District policies. Governing board members are unpaid volunteers appointed by the Governor and confirmed by the Florida Senate for four-year terms.

While the District is the fifth largest of the five water management districts in geographic area, population served, tax base, and agency staff, it holds many of the most unique and valuable natural resources in Florida. The District encompasses 7,640 square miles in north-central Florida. The District includes all of Columbia, Dixie, Gilchrist, Hamilton, Lafayette, Madison, Suwannee, Taylor and Union counties, and parts of Alachua, Baker, Bradford, Jefferson, Levy and Putnam counties. The District contains over 500 documented springs, including the highest concentration of freshwater springs in Florida, and the highest concentration of first-magnitude springs in the United States. Major rivers in the District include the Suwannee, Santa Fe, Withlacoochee, Aucilla, Alapaha, Ichetucknee, Fenholloway, Steinhatchee, Econfinia, Waccasassa, and the Wacissa.

The District is charged by the Legislature with the responsibilities of managing water supply, water quality, flood protection, and natural systems. To meet these responsibilities and its mission, the District has developed goals for the next five years and identified the strategies necessary to accomplish these goals.

## Funding

To carry out the mission and vision of this Strategic Plan, the District's budget is comprised of several funding sources. With the smallest tax base of the five water management districts, state legislative appropriations and state and federal grants are critical to accomplish our goals and mission. Grants from state and federal agencies, including the Florida Department of Environmental Protection (FDEP), Florida Department of Agriculture and Consumer Services (FDACS), Florida Fish and Wildlife Conservation Commission (FWCC), the Florida Department of Transportation (FDOT), Federal Emergency Management Agency (FEMA), the United State Geological Survey, and the United States Army Corps of Engineers (USACE), support District programs and projects. Strong partnerships with local governments and stakeholders are also key to identifying funding opportunities. The District continues to work with its local, state, and federal partners to leverage the funding necessary to achieve the goals set out in this Strategic Plan.

# Serving NORTH CENTRAL FLORIDA Since 1972



## Introduction

The Suwannee River Water Management District (District), in accordance with subsection 373.036(2)(e)(4), Florida Statutes (F.S.), submits an annual strategic plan in lieu of the District Water Management Plan. The strategic plan outlines strategic priorities, goals, strategies, success indicators, funding sources, deliverables, and milestones for District functions. The plan casts a five-year outlook.

## Strategic Priorities



# WATER QUALITY



# WATER SUPPLY



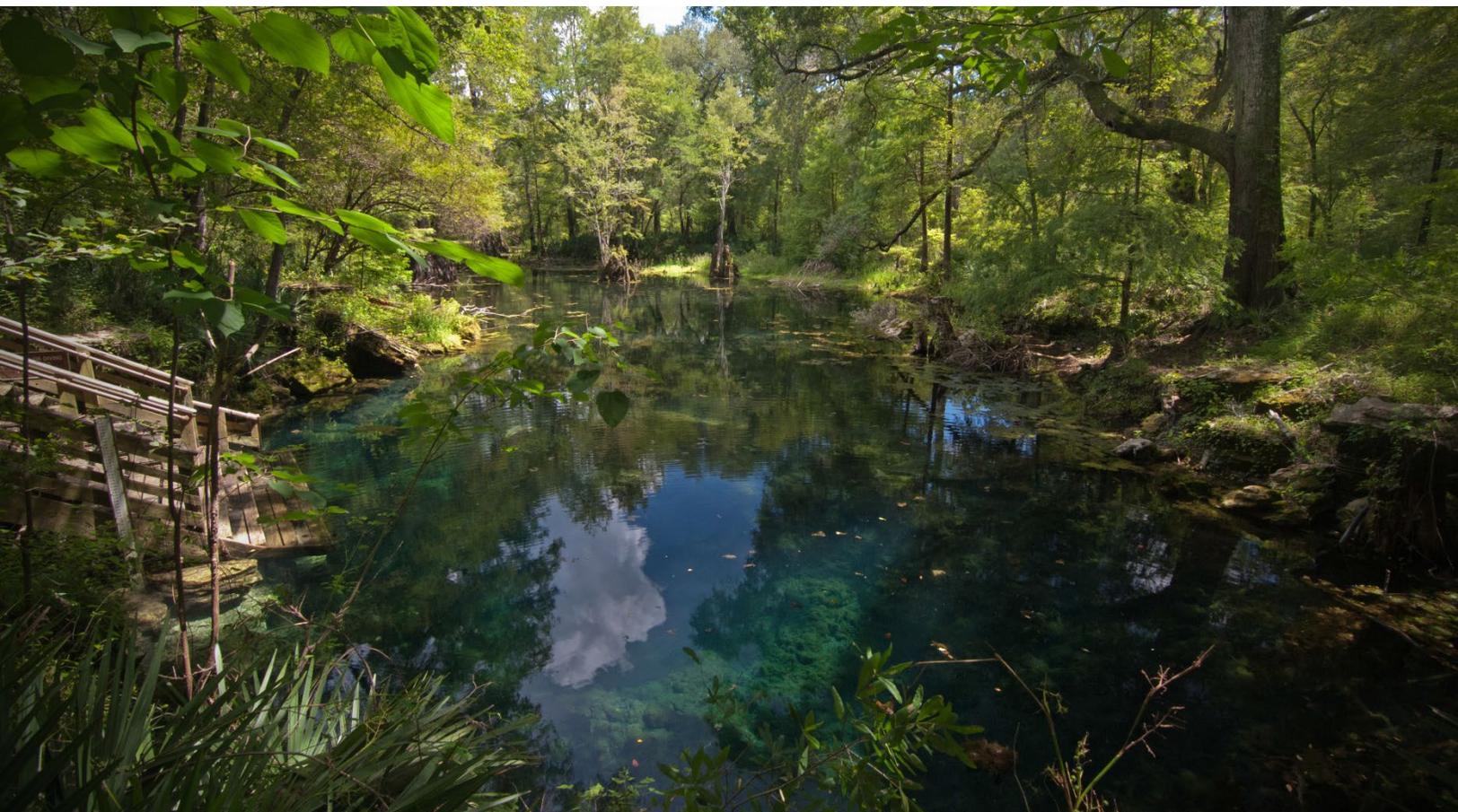
# FLOOD PROTECTION



# NATURAL SYSTEMS



# MISSION SUPPORT



## Water Quality

### Preserving and Restoring the Foundation of North Florida's Economy

Water quality refers to the chemical, physical, and biological characteristics of water. Data shows persistent elevated nutrient levels, primarily nitrate, in rivers and springs throughout the District. Nitrate, in some instances, is the limiting nutrient that can cause imbalances in the ecosystem and impact the health of springs, rivers, and estuaries. Increased nutrient loads not only adversely impact the ecological health of rivers and springs but also the health of Gulf estuaries downstream.

The FDEP has established a Total Maximum Daily Load (TMDL) for the Lower and Middle Suwannee and Santa Fe Rivers of 0.35 mg/L of nitrate as nitrogen (N) in basin management action plans (BMAP). FDEP has established numeric nutrient criteria standards for nitrogen, phosphorus, and chlorophyll-a. To meet these targets, nitrate loads from non-point pollution sources need to be reduced anywhere from 30-90 percent on the Suwannee River and associated springs, and 35 percent on the Santa Fe River. To assist the FDEP in achieving these targets, the District partners with state agencies, local governments, landowners, and other stakeholders to implement projects to reduce nutrient loading, including implementing agricultural best management practices (BMPs), stormwater treatment, and erosion control and bank restoration. The District actively monitors nitrate concentrations throughout the District in both groundwater and surface water.

## GOAL

### Reduce Nitrate Levels to Achieve Water Quality Criteria

#### Strategies

- Consolidate existing research for nutrient sourcing and identify gaps for additional research needs
- Expand the monitoring network to include strategic sampling and sampling of non-standard parameters
- Develop project monitoring strategies to measure benefits accurately
- Develop a collaborative strategy with stakeholders for project prioritization in BMAP Regions
- Implement projects to assist in meeting BMAP nitrate load reduction targets
- Ensure permit and project authorizations meet statewide water quality criteria for erosion and sediment control
- Develop rule language requiring nutrient load reductions in stormwater systems

#### Success Indicators and Milestones for Water Quality

The District will measure progress towards the completion of individual and programmatic tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks and strategies. In addition, success will be measured by the percentage of Outstanding Florida Springs that meet the state numeric nutrient criteria and the pounds of nitrate reduced by projects receiving District cost-share.





## Water Supply

### Ensuring a Sustainable Supply of Water for People and the Environment

The District is responsible for managing water resources to ensure there is an adequate supply to satisfy all existing and projected reasonable and beneficial uses while sustaining water resources and protecting natural systems. In the District, over 90 percent of the water supply demands are met with fresh groundwater, virtually all from the Upper Floridan aquifer system. This region's ability to continue to grow and develop is therefore dependent on sustainably managing a growing demand for groundwater. Coordinated water use permitting, water resource planning, and water resource development projects are key to protecting and managing fresh groundwater supply.

Resource planning efforts include water supply assessments and regional water supply planning. Every five years, the District evaluates current and future water supply needs and water supplies within the District. Water supply assessments help determine whether water supplies will be adequate to satisfy projected demands. Recognizing that water supplies are constrained by demands both within and outside of District boundaries, the District works with regional stakeholders to develop planning and permitting guidelines that help to safeguard water supply across shared regions.

The regulation and monitoring of water use within the District is a critical part of managing the resource. Water use permits protect water resources, ensuring proposed uses are reasonable and beneficial, within the public interest, and do not adversely impact existing legal uses. To ensure proposed uses are reasonable and beneficial, the permit application review includes, among other things, an analysis to prevent environmental harm and ensure consistency with established MFLs and prevention or recovery strategies if warranted.

## GOAL

### Sustainably Manage District Water Resources

#### Strategies

- Implement projects to reduce groundwater withdrawal impacts in all surface water bodies
- Implement water resource development and alternative water supply projects to ensure an adequate water supply for all reasonable-beneficial uses
- Identify and implement comprehensive feasibility and design studies necessary to evaluate projects
- Research and implement innovations and conservation for stakeholders
- Maximize alternative water supply and reuse benefits
- Achieve 10% or less losses for all public supply systems
- Implement a net resource benefit program
- Develop a collaborative strategy for assisting public utilities with long-range water supply planning prior to water use permit renewals
- Maintain and enhance existing data-driven processes to assess cumulative withdrawals for the potential of harm to water resources and ability to sustain natural systems

#### Success Indicators and Milestones for Water Supply

The District will measure progress towards the completion of individual and programmatic tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks and strategies. In addition, success will be measured by the amount of estimated water supply demand that can be met with projects identified in District water supply plans; and the year-to-year percentage of impact from District on the aquifer.





## **Flood Protection**

### **Harnessing Peak Flows of Water to Protect Our Communities and Augment Our Aquifer**

The District works with multiple cooperators including the Florida Department of Transportation (FDOT), Florida Division of Emergency Management (FDEM), local governments, and landowners to implement regional and local flood protection and flood control projects. Such projects assist local governments to manage, maintain, or expand stormwater infrastructure to better capture runoff, increase stormwater storage, and reduce peak discharge rates.

In addition to flood control projects, the District provides information to the public to reduce and mitigate flood risks. The District partners with Federal Emergency Management Agency (FEMA) to update floodplain maps to help the public make informed decisions that reduce risk to life and property. Further, the District is the primary source of current flooding information for other agencies and the public, including real-time river levels and rainfall amounts, so that people can make well-informed decisions about flood protection and property at risk.

Through the environmental resource permitting (ERP) Program, the District ensures that development does not result in increased flooding. Permit reviews are performed to prevent net loss of the 100-year floodplain or increases in flood levels. Permit evaluations also consider specific storm design conditions and potential impacts to upstream and downstream properties.

## Goal One

### Reduce and Mitigate Flooding Risks

#### Strategies

- Promote naturally occurring recharge by increasing water storage through hydrologic restoration
- Identify and study 100-year flood elevations of unstudied parcels/areas which are prone to flooding
- Identify unmet flood protection needs of local governments
- Conduct frequent river inspections for unpermitted activities and structures
- Communicate best available data on flood risk to stakeholders

## Goal Two

### Encourage Non-Structural Flood Plain Management Approaches

#### Strategies

- Maximize land acquisition and/or development restrictions of land within 100-year floodplain
- Seek opportunities and evaluate all land purchases for flood protection potential
- Coordinate with appropriate governmental entities on data sharing and consistency for flood forecasts
- Increase public awareness of flood protection tools, permit requirements, and flood risks
- Strategically partner with stakeholders to identify and implement flood projects
- Coordinate with FDEP to develop a consistent message to evaluate flood risk of single-family homes

## Goal Three

### Prepare Communities for Sea Level Rise Impacts

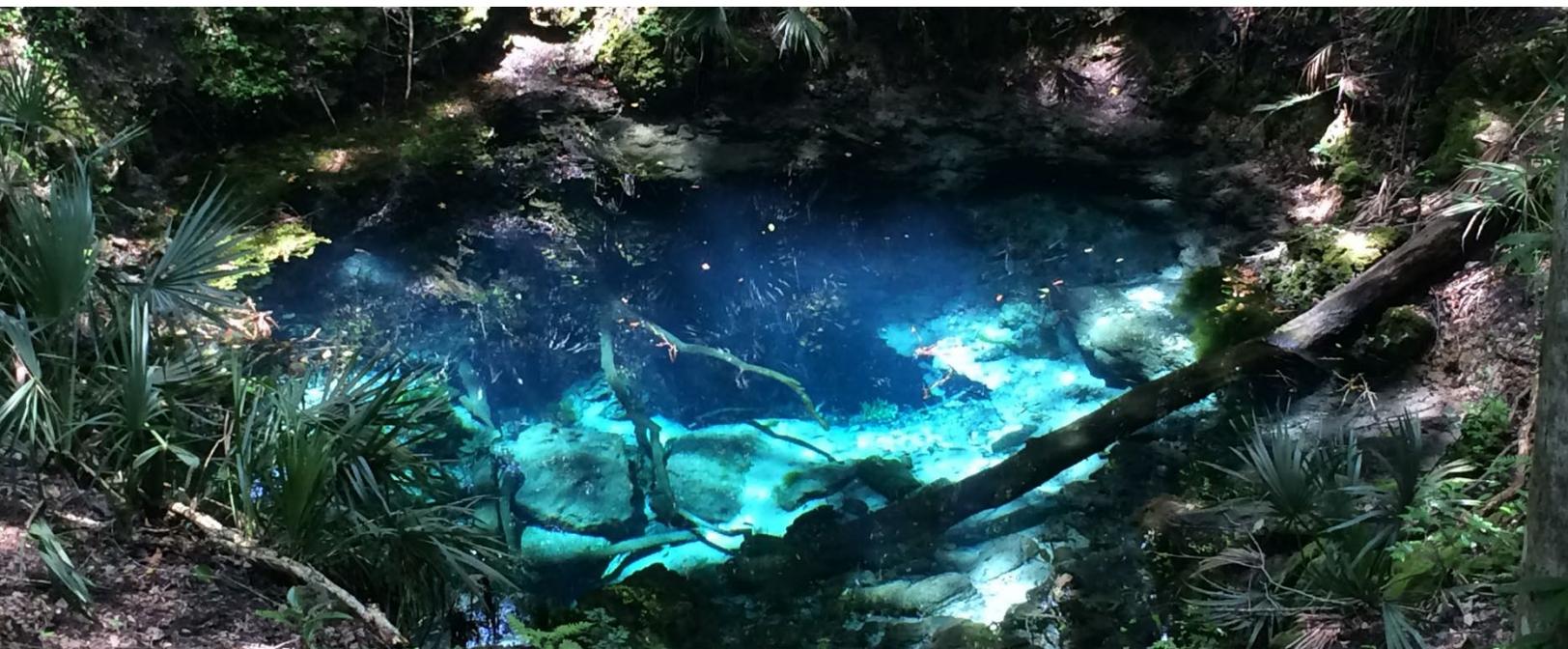
#### Strategies

- Conduct vulnerability and risk assessment studies in coastal communities to assess freshwater accessibility threatened by sea level rise (SLR)
- Identify strategic District land acquisition opportunities
- Incorporate SLR impacts in Water Supply Plans and coastal MFLs
- Initiate interdistrict coordination regarding rules and regulations to address SLR
- Conduct outreach with coastal communities regarding SLR data and implications

#### Success Indicators and Milestones for Flood Control

The District will measure progress towards the completion of individual and programmatic tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks and strategies. In addition, success will be measured by the percent of acreage of riverine floodplain under protection; whether the District's programs have funded at least one flood control project each year; funding opportunities identified for the Dixie County surface water management projects; the acres of hydrologic restoration implemented and maintained, as well as the associated recharge benefits; and the number of compliance cases addressed, and trainings provided.





## Natural Systems

### Maintaining the Ecosystem Services Provided by the Natural Resources of the District

District projects, regulations, and land acquisition and management activities protect and restore the overall health of the ecological system. As discussed above, hydrologic restoration projects in the District re-establish and improve natural systems such as wetlands, floodplains, native ecological communities, and aquifer recharge areas, which provide valuable water resource functions including water quality treatment, water supply, flood water conveyance and attenuation, fish and wildlife habitat, and recreation.

The District establishes minimum flows and minimum water levels (MFLs) for priority rivers, springs, and lakes to ensure there is an adequate supply of water to support natural systems. MFLs are established to prevent significant harm to the water resources and ecology of an area resulting from water withdrawals permitted by the District. MFLs define how much water body levels and/or flows may change and still prevent significant harm.

Through land acquisition and conservation easements, the District protects wetlands, floodplains, lakes, rivers, estuaries and related resources. Land management strategies include prescribed fire to restore and enhance habitat and natural communities and, where appropriate, the promotion of sustainable forestry activities. ERP evaluations consider avoidance and minimization of impacts to wetlands and other natural systems. Additionally, permit reviews address erosion and sedimentation control measures, thereby protecting wetlands, Outstanding Florida Waters, and improving water quality to receiving water bodies.

## Goal One

### Establish Minimum Flows and Minimum Water Levels for Priority Water Bodies

#### Strategies

- Implement the approved MFL priority list
- Conduct scheduled MFL water body status assessments
- Maintain the District monitoring network to establish and assess MFLs
- Evaluate existing and new water resource value criteria
- Update and refine MFL methodology

## Goal Two

### Steward District Lands to Balance the Needs of Natural Resources and People

#### Strategies

- Manage District lands to achieve the highest natural resource value possible, leading the region in quality of public lands, while still generating sustainable revenue streams from the properties
- Implement and support the District Land Management Plan





## Goal Three

### Preserve and Protect Water Resources

#### **Strategy**

- Document permit mitigation and conservation easements in a GIS format

## Goal Four

### Optimize Public Use of District Lands

#### **Strategies**

- Optimize maintenance and restoration of District lands and resources
- Focus communication and outreach efforts on land management opportunities to maximize exposure and encourage public use

### Success Indicators and Milestones for Natural Systems

The District will measure progress towards the completion of individual and programmatic tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks and strategies. In addition, success will be measured by the completion of MFLs for all remaining priority water bodies per the District schedule; and the quantity of water (mgd) achieved from conservation and water resource development projects under contract with the District. The success of the District's land acquisition and management goals and strategies will be determined by the number of acres acquired and disposed of; the number of acres acquired by the District that enhance aquifer recharge or flood protection; the number of acres of restored hydrology; and the number of acres of prescribed fire and invasive plant treatment.



## **Mission Support**

### **Creating a Culture of Excellence, Efficiency, and Passion for the Region's Resources**

Investing in and empowering District employees is critical to achieving the goals set out in this strategic plan. As the fifth-largest water management district, District employees often perform multiple tasks, performing the job functions of two or three employees. Engaging employees, providing development opportunities, and leadership support helps to ensure staff have the tools and guidance to achieve District goals. Operational efficiency is also an important focus so employees and District operations can be as effective as possible. Utilization of technology to assist employees to perform their tasks is critical to the quality of service the District is able to provide.

## Goal One

### Reduce Risks Through the Management of Information and Data

#### Strategies

- Implement a District-wide comprehensive data management system including, but not limited to, hydrologic conditions, water use, water quality, permitting data, flood zones, flood occurrence, land use changes, land acquisition, surplus properties, projects, and project benefits
- Collect and manage high-quality information to allow for data-driven, science-based decision making in water resource projects, flood hazard information, and water resource protection
- Reduce paper and place-bound information access by maximizing cloud-based file storage and automated authorization
- Optimize accessibility in facilities and information

## Goal Two

### Maintain Institutional Knowledge

#### Strategies

- Establish programmatic documentation that captures and identifies necessary steps to complete or implement essential work functions, priority project objectives, and other critical processes to maintain consistent program standards and provide efficient transfer of institutional knowledge
- Retain employees through succession planning, mentoring, and professional development initiatives

## Goal Three

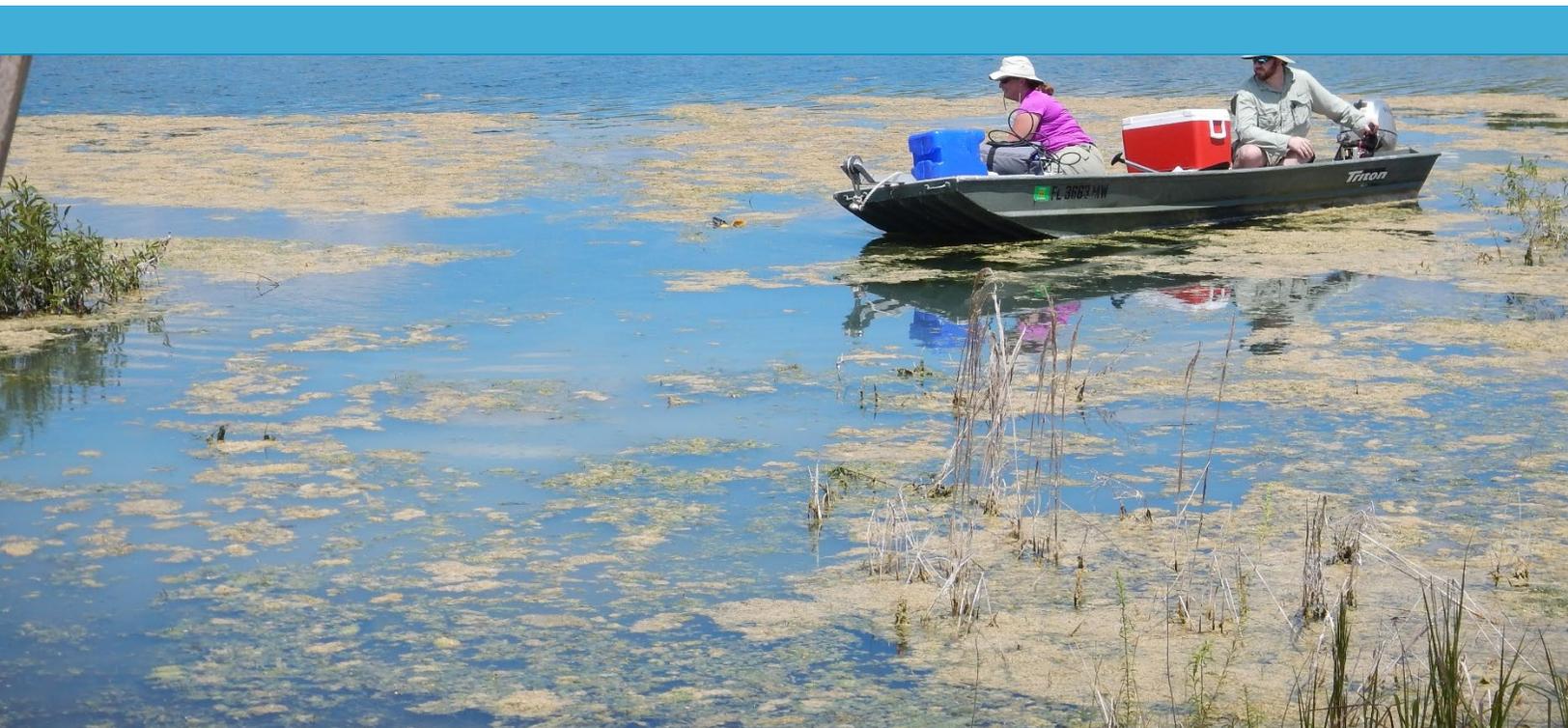
### Strengthen Stakeholder Relationships and Partnerships

#### Strategies

- Build accuracy and trust in District messages, staff, and science through factual, transparent, consistent, and standardized engagements with internal and external stakeholders
- Increase public awareness of District functions in planning, projects, and permitting
- Sustain water resources through education of challenges and maximization of project opportunities
- Engage and educate stakeholders who are critical to water resource sustainability

#### Success Indicators and Milestones for Mission Support

The District will measure progress towards the completion of individual and programmatic tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks and strategies. In addition, success will be measured by the number of professional certifications, graduate degrees, and leadership positions within professional organizations held by its staff; the District's administrative overhead; the percentage of the District's budget utilized for projects that benefit water quality and water quantity; the percentage of the District's budget that is recurring but not funded with recurring revenues; and the percentage of facility repairs identified in the last 10-year facility inspection report that have been addressed.





# 2020 Annual Work Plan

Suwannee River Water Management District

## Introduction

The Suwannee River Water Management District (District), in accordance with subsection 373.036(2)(e), Florida Statutes (F.S.), submits an annual strategic plan and annual work plan report in lieu of the District Water Management Plan. The annual work plan report describes the implementation of the strategic plan for the previous fiscal year.

The strategic priorities and goals set by the strategic plan evaluated in this report, covering Fiscal Year 2019-2020 (FY 2020), are provided below. This report will describe District efforts over the past fiscal year to achieve these goals.

### Flood Protection

- Reduce and mitigate the risk of flooding
- Encourage non-structural flood plain management approaches

### Natural Systems

- Establish minimum flows and minimum water levels for priority water bodies
- Steward District lands to balance the needs of natural resources and people
- Preserve and protect water resources
- Optimize public use of District lands

### Water Quality

- Reduce nitrate levels to achieve water quality criteria

### Water Supply

- Sustainably manage District water resources

### Mission Support

- Reduce risks through the management of information and data
- Maintain institutional knowledge
- Strengthen stakeholder relationships and District partnerships

## Flood Protection

### Harnessing Peak Flows of Water to Protect Our Communities and Augment Our Aquifer

The District works with multiple cooperators including the United States Army Corps of Engineers (USACE), Federal Emergency Management Agency (FEMA), Florida Department of Transportation (FDOT), Florida Division of Emergency Management (FDEM), local governments, and landowners to implement regional and local flood protection and flood control projects. Such projects assist local governments to manage, maintain, or expand stormwater infrastructure to better capture runoff, increase stormwater storage, and reduce peak discharge rates.

In addition to flood control projects, the District provides information to the public to reduce and mitigate flood risks. The District partners with FEMA to update floodplain maps to help the public make informed decisions that reduce risk to life and property. Further, the District is the primary source of current flooding information for other agencies and the public, including real-time river levels and rainfall amounts.

Through the Environmental Resource Permitting (ERP) and Works of the District program, the District ensures that development does not result in flooding. Permit reviews are performed to prevent net loss of the 100-year floodplain and increases in flood levels. Permit evaluations also consider specific storm design conditions and any associated impacts to upstream and downstream properties.

### Goal One

#### Reduce and Mitigate Flooding Risk

##### STRATEGIES

- Promote naturally occurring recharge by increasing water storage through hydrologic restoration.
- Identify and study 100-year flood elevations of unstudied parcels/areas which are prone to flooding.
- Identify unmet flood protection needs of local governments.
- Conduct frequent river inspections for unpermitted activities and structures.
- Communicate best available data on flood risk to stakeholders.

### Goal Two

#### Encourage Non-Structural Flood Plain Management Approaches

##### STRATEGIES

- Maximize land acquisition and/or development restrictions of land within 100-year floodplain / Seek opportunities and evaluate all purchases.
- Coordinate with appropriate governmental entities on data sharing and consistency for flood forecasts.
- Increase public awareness of flood protection tools, permit requirements, and flood risk.
- Strategically partner with stakeholders to identify and implement flood projects.
- Coordinate with FDEP to develop a consistent message to evaluate flood risk of single-family homes.

## Success Indicators and Milestones for Flood Control

The District will measure progress towards the completion of individual tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks. In addition, success will be measured by the percentage of riverine floodplain under protection; whether the District's cost-share programs have funded at least one flood control project each year; funding opportunities identified for the Bradford County surface water management projects; the acres of hydrologic restoration implemented and maintained, as well as the associated recharge benefits; and the number of compliance cases addressed, and trainings provided.

- The District awarded two projects for flood protection, totaling \$550,000 across all funding programs. These projects will protect 135 acres in the floodplain.
  1. Alligator Creek Study - The District continues to work with Bradford County and City of Starke to identify projects throughout the county that would reduce natural resource and property loss due to flooding. Additionally, the District has partnered with the USACE on a feasibility study to address flooding along Alligator Creek in Bradford County. This project is in the Santa Fe BMAP and supports the Upper Santa Fe River MFL.
  2. Cross City Flood Management - The District initiated an agreement with Dixie County for a flood abatement project in Dixie County.
- The District completed one flood protection project in FY 2020.
  1. Alleviate Flooding in Mayo - Construct retention ponds to reduce flooding in Mayo. This project is in the Suwannee BMAP, Troy Peacock and Lafayette Blue Priority Focus Area (PFA) and supports the Middle Suwannee MFL.
- The District has three ongoing flood protection projects as of November 2020, including Edwards Bottomlands Wetlands Mitigation, Country Club Road Analysis and Ichetucknee Trace-Cannon Creek.
- There are 2,739,495 acres within the 100-year floodplain in the District. The District currently has 8.2% (226,774 acres) of the total acreage under ownership or conservation easement.
- The District continues use of its Current River and Lake Levels webpage to maintain flood warning awareness. This page was operated and updated throughout the ongoing 2019/2020 La Niña event and coastal groundwater flooding events. It is one of the most visited locations on the District webpage.
- The District has continued its utilization of social media to communicate water level and flood-related information on a routine basis, as well as in times of high-water incidences. This outreach includes ongoing Aquifer Alerts on our website that can be subscribed to for hydrologic news.
- In FY 2020, there were 265 ERPs issued of which 180 or approximately 68% were within the 100-year floodplain.
- New FEMA flood risk maps were completed for Hamilton and Madison counties.
- The District was awarded \$334,900 in grant funding from FEMA for flood risk awareness education and outreach. The grant will include website upgrades and a regional outreach

campaign that is expected to kick off in 2021.

## Natural Systems

### Maintaining the Ecosystem Services Provided by the Natural Resources of the District

District projects, regulations, and land acquisition and management activities protect and restore the overall health of the ecological system. As discussed above, hydrologic restoration projects in the District re-establish and improve natural systems such as wetlands, floodplains, native ecological communities, and aquifer recharge areas, which provide valuable water resource functions including water quality treatment, water supply, flood water conveyance and attenuation, fish and wildlife habitat, and recreation.

Through land acquisition, the District protects springs, wetlands, floodplains, lakes, rivers, estuaries and related resources. Land management strategies include prescribed fire to restore and enhance habitat and natural communities and, where appropriate, the promotion of sustainable forestry activities. ERP evaluations consider avoidance and minimization of impacts to wetlands and other natural systems. Additionally, permit review addresses erosion and sedimentation control measures and Best Management Practices (BMPs), thereby helping to protecting Outstanding Florida Springs, Outstanding Florida Waters, and other water bodies; and improving/protecting water quality to receiving water bodies.

The District establishes minimum flows and minimum water levels (MFLs) for priority rivers, springs, and lakes to ensure there is an adequate supply of water to support natural systems. MFLs are established to prevent significant harm to the water resources and ecology of an area resulting from consumptive water withdrawals permitted by the District. MFLs define how much water body levels and/or flows may change and still prevent significant harm.

### Goal One

#### Establish Minimum Flows and Minimum Water Levels for Priority Water Bodies

##### STRATEGIES

- Implement the approved MFL priority list
- Conduct scheduled MFL water body status assessments
- Maintain the District monitoring network to establish/assess MFLs
- Evaluate existing and develop new water resource value criteria; update and refine MFL methods

### Goal Two

#### Steward District Lands to Balance the Needs of Natural Resources and People

##### STRATEGIES

- Manage District lands to achieve the highest natural resource value possible, leading the region in quality of public lands, while still generating sustainable revenue streams from the properties.
- Implement and support the District Land Management Plan.

## Goal Three

### Preserve and Protect Water Resources

#### **STRATEGIES**

- Document permit mitigation and conservation easements in a GIS format.

## Goal Four

### Optimize Public Use of District Lands

#### **STRATEGIES**

- Optimize maintenance and restoration of District lands and resources.
- Focus communication and outreach efforts on land management opportunities to maximize exposure and encourage public use.

## Success Indicators and Milestones for Natural Systems

The District will measure progress towards the completion of individual tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks. In addition, success will be measured by the completion of MFLs for all remaining priority water bodies per the District schedule, and the quantity of water achieved from conservation and water resource development projects under contract with the District. The success of the District's land acquisition and management goals and strategies will be determined by the number of acres acquired and disposed of; the number of acres that protect Outstanding Florida Springs and Priority Focus Areas (PFAs), the number of acreages that protect or improve water quality; the number of acres acquired by the District that enhance aquifer recharge or flood protection; the number of acres of restored hydrology; and the number of acres of prescribed fire and invasive plant treatment.

- The District awarded two natural systems restoration projects, totaling \$143,970.00 across all funding programs. These projects are estimated to reduce sediment loading by 185,185 pounds per year.
  1. Lower Suwannee National Wildlife Refuge - Hydrologic Restoration using RESTORE funding to protect the Lower Suwannee National Refuge. This project supports the Lower Suwannee MFL.
  2. Gilchrist 2<sup>nd</sup> Way Park - Stormwater improvement project to reduce sediment entering the Santa Fe River and protect the shoreline. This project supports the Santa Fe BMAP.
- The District completed two natural systems restoration projects in FY 2020.
  1. Pot Springs Restoration Project which stabilized the bank to reduce erosion and sediment in the spring pool. This project supports the Suwannee BMAP and is in the Madison Blue PFA.
  2. Rum Island Springs Park Bank Restoration project which will reduce erosion and sediment in the spring pool. This project supports the Santa Fe BMAP and is in the Devil's Ear PFA.
- The District has five ongoing natural systems restoration projects as of November 2020, including Edwards Bottomlands, Ruth Springs Restoration, Starke Bypass Wetland

Mitigation, Mill Creek Suwannee and Santa Fe Land Acquisition, and Mill Creek Sink.

- As of December 2020, 326.7 riverine miles contain an MFL. Tributaries of major rivers not mentioned in a rule are not included in the total mileage. In addition, 43 springs are protected by MFLs.
- The District continues to work on developing MFLs for all remaining priority water bodies per the District schedule.
- The District continued coordination with FDEP and SJRWMD to finalize LFSI MFL re-evaluation.

#### **FOREST RESOURCES**

- In FY 2020, the District completed ten timber sales totaling 2,095 acres.
- One timber sale was a final harvest in preparation for a wellfield.
- Nine timber sales to thin pines for improving forest health and aiding in natural community restoration.
- In FY 2020, the District received its final forest inventory products from F4-Tech. This inventory will improve data collecting, reporting, and planning for silvicultural operations. The FY 2020 improvements were custom modifications specifically for the District which will improve data collection and interpretation. Inventory data was collected on 812 plots by Land Management staff in FY 2020. The data from these plots is used to quantify the acres that have achieved their natural community goals and provide data for areas that could be improved by silvicultural activities. As part of this planned project the District has contracted with a firm to complete 3,080 plots using the new inventory system in FY 2021, which will update data within operational timber stands that were last cruised in FY 2011 and identify volumes and other species data in areas where potential for a restoration project has been identified.

#### **PRESCRIBED FIRE**

- In FY 2020, prescribed burning was conducted on approximately 10,768 acres of District lands.

#### **MECHANICAL VEGETATION CONTROL**

- In FY 2020, approximately 1,043 acres were roller-chopped, and 1,888 acres were mowed to help facilitate the use of prescribed fire and to help meet natural community restoration/management objectives.
- Of the approximate 2,931 acres roller-chopped and mowed in FY 2020 the District received \$98,838 in grant funding from the Florida Forest Service to pay for 557 acres of that work on various tracts throughout the District.
- Approximately 152 miles of ditch edges were mechanically treated on the Steinhatchee Springs and Mallory Swamp tracts in FY 2020. This work was done to increase the width of areas along road edges to provide better fire break capabilities; facilitating use of prescribed fire and help protect forest resources from the damaging effects of wildfires.

#### **CHEMICAL VEGETATION CONTROL**

- In FY 2020, approximately 626 acres were treated with herbicide to prepare sites for reforestation, to help meet natural community restoration/management objectives and to help facilitate the use of prescribed fire.

#### **INVASIVE PLANT CONTROL**

- In FY 2020, District staff monitored 171 invasive plant infestations and treated 97 of those infestations with herbicides.

- In FY 2020, District contractors treated approximately 107 acres of invasive plant infestations throughout the District.

**RARE SPECIES SURVEY/MONITORING**

- In FY 2020, District staff monitored 92 documented rare plant occurrences throughout the District. Rare plant species were observed at 63 of these locations. These occurrences included species listed as state endangered, state threatened, or commercially exploited.

**PUBLIC USE**

- In FY 2010, the District completed a restoration and improvement project at an old and very large erosion scar on the bank of the Suwannee River in the Blue Sink Tract. The site was fully developed into a canoe/kayak launch and included paved parking, ADA improvements, and mending of the erosion scar. Shortly after construction was complete, the river flooded and the new construction within the erosion scar catastrophically failed. The site was closed and was unmaintained for approximately 10 years. The District contracted with a firm to make improvements to the launch area for public access and to further reduce erosion potential without removing any large portions of the reoccupied vegetation. In FY 2020, the contractor for the project had to start and stop work often because of high river levels. A small wildfire adjacent to the site further damaged existing facilities which required a contract amendment to be employed. On September 11, 2020, the District re-opened the Blue Sink Canoe and Kayak Launch.
- A new all-terrain vehicle (ATV) parking area was constructed along the McCall's Chapel Grade to provide better access for ATV users who access Mallory Swamp Tract from the southern entrance. The original ATV parking area on Sandy Grade will be abandoned and moved to the old hunter check station parking area near the north entrance when the trail re-opens.
- A road sign project was completed within the Mallory Swamp Tract to improve visitor service and to identify which roads can be legally traveled by the public. All the named roads in Mallory Swamp had new road signs installed; visitors should only travel on named roads. Additionally, closed roads were marked with signage. A road hierarchy sign was added at each entrance describing road types and explaining the user expectation.
- The District installed 6,725 feet of perimeter fencing around the J. H. Anderson, Jr. Memorial Park – Rock Bluff Tract.
- The District completed a Cultural Resource Assessment Survey on 33 acres of the J. H. Anderson, Jr. Memorial Park – Rock Bluff Tract and defined the high and low archaeological probability zones for the tract. This work was completed in anticipation of future improvement projects related to tract management and public use.
- Ninety-four percent of fee title lands owned by the District are open to the public for recreation. Lands which are not open to the public include wellfields, spray fields and water resource development project sites.
- The District cooperated with Florida Fish and Wildlife Conservation Commission and United States Fish and Wildlife Service to provide public hunting opportunities on approximately 106,146 acres.
- The District partnered with Lake City Longbeards, Jefferson County King of Springs, and Gator Gobblers Chapters of the National Wildlife Turkey Federation to sponsor women in the outdoors and youth special opportunity hunts. These special opportunity hunts allow additional hunting opportunities on 6,169 acres. The 2,030-acre Double Run Creek Tract managed by Camp Blanding is leased for hunting.
- In FY 2020, 356 Special Use Authorizations (SUAs) were issued for a wide variety of recreation opportunities or needs. Seventeen SUAs were completed for Mallory Swamp ATV

Trail, 168 SUAs were completed for camping at the Goose Pasture Campground, 37 SUAs were issued for temporary ingress and egress and 18 non-recreation SUAs were issued as well. A total of 596 SUAs were issued during FY 2020.

#### **FACILITIES PROJECTS**

- Land Management staff continues to work with GIS staff to improve GIS apps for use on smart devices that enable staff and contractors to use and collect real-time data. In FY 2020, Land Management staff inspected all major tracts and existing facilities (1,463 individual facility and culture resource inspection locations visited) and staff even visited many individual small lots.
- Approximately 85 miles of road maintenance was completed on the following tracts: Goose Pasture, Mt. Gilead, Cabbage Grove, Cuba Bay, Lamont, Wolf Creek, Roline, Cabbage Creek, Jones Mill Creek, and Mallory Swamp tracts. Of the 85 total miles of road work completed in FY 2020, approximately 7 miles were associated with timber harvest operations.
- Three hydrological improvement projects were completed within the Cabbage Grove Tract. These projects were conducted at various water access locations for the purpose of reducing erosion and sediment loading into the water bodies while maintaining or improving public access.
- Six hydrological facilities (two culverts and four low-water crossings) were replaced or repaired in the Jones Mill Creek Tract. One culvert was replaced in the Mt. Gilead Tract.
- Approximately 12 gate replacement projects were completed throughout the District to replace antiquated cable gates and to protect District land from illegal access.

## **Water Quality**

### **Preserving and Restoring the Foundation of North Florida's Economy**

Water quality refers to the chemical, physical, and biological characteristics of water. Data shows persistent elevated nutrient levels, primarily nitrate, in rivers and springs throughout the District. Nitrate, in some instances, is the limiting nutrient that can cause imbalances in the ecosystem and impact the health of springs, rivers, and estuaries. Increased nutrient loads not only adversely impact the ecological health of rivers and springs but also the health of Gulf estuaries downstream.

The FDEP has established a Total Maximum Daily Load (TMDL) for the Lower and Middle Suwannee and Santa Fe Rivers of 0.35 mg/L of nitrate as nitrogen (N). To meet this target, nitrate loads from non-point pollution sources need to be reduced anywhere from 30-90 percent on the Suwannee River and associated springs, and 35 percent on the Santa Fe River. To assist the FDEP in achieving these targets, the District partners with state agencies, local governments, landowners, and other stakeholders to implement projects to reduce nutrient loading, including implementing agricultural best management practices (BMPs), stormwater treatment, and erosion control and bank restoration. The District actively monitors nitrate concentrations throughout the District in both groundwater and surface water.

### **Goal One**

#### **Reduce Nitrate Levels to Achieve Water Quality Criteria**

##### **STRATEGIES**

- Consolidate existing research for nutrient sourcing and identify gaps for additional research
- Expand the monitoring network to include strategic sampling and sampling of non-standard

parameters

- Develop project monitoring strategies to measure benefits accurately
- Develop a collaborative strategy with stakeholders for project prioritization in BMAP Regions
- Implement projects to assist in meeting BMAP nitrate load reduction targets
- Ensure permit and project authorizations meet statewide water quality criteria for erosion and sediment control
- Develop rule language requiring nutrient load reductions in stormwater systems

## Success Indicators and Milestones for Water Quality

The District will measure progress towards the completion of individual tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks. In addition, success will be measured by the percentage of Outstanding Florida Springs that meet the state numeric nutrient criteria; the percentage of enrollment for the FDACS BMPs program; and the pounds of nitrate reduced by projects receiving District cost-share.

\* Project has both water quality and water supply benefits.

- The District awarded 11 water quality projects, plus 27 agricultural cost-share contracts, totaling \$24 million across all funding programs. These projects are estimated to reduce 1.2 million pounds of total nitrogen, reduce 84 pounds of phosphorus and reduce over 73,000 pounds of sediment annually.
  1. Gwen Lake Phase 2 - Extension of stormwater controls up gradient of Gwen Lake project. This project supports the Santa Fe BMAP and is in the Ichetucknee PFA.
  2. Otter Springs Onsite Sewage Treatment and Disposal Systems Improvement – project will convert existing septic systems to a Distributed Wastewater Treatment System to reduce nitrogen. This projects supports the Suwannee BMAP and is in the Fanning Manatee PFA.
  3. High Springs Gravity Sewer Extension Phase A2 project will extend wastewater collection system to remove 43 septic systems. This project supports the Santa Fe BMAP and is in the Columbia Hornsby Treehouse PFA.
  4. Lake Butler Advanced Wastewater Treatment (AWT) Upgrade Phases I and II - Feasibility study and design of a 1.0 mgd AWT facility with reclaimed water for offset and a constructed wetland for polishing. This project supports the Santa Fe BMAP and the Lower Santa Fe River MFL.
  5. Southern Street Lift Station Replacement - Relocation of a sanitary system out of the floodplain.
  6. Bronson Wastewater - Extension of wastewater collection system to remove septic systems. This project supports the Rainbow Springs BMAP.

7. Lake Frances Sediment Control - Pilot project to install a stormwater nutrient reduction system to improve water quality. This project supports the Suwannee BMAP.
  8. Greenville Sewer Phases I and II\*- Wastewater collection system extension to phase out approx. 67 septic systems. This project supports the Wacissa BMAP.
  9. Accelerating Suwannee\*- Incentivize silviculture and rural land conservation to reduce groundwater pumping and nitrogen loading. This project supports the Santa Fe and Suwannee BMAPS, is in the Troy Peacock and Lafayette Blue PFA, supports the Ichetucknee Springs MFL and is in the Western Water Supply Planning Area (WSPA).
  10. Fanning Springs Wastewater Expansion Phase VI\* - Construct a regional advanced wastewater treatment near Fanning Springs with a 0.4 mgd recharge constructed wetland. This project supports the Suwannee BMAP, is in the Fanning Manatee PFA, supports the Lower Suwannee MFL and is in the Eastern WSPA.
  11. Ichetucknee Springs Quality and Quantity Enhancement\*- Increase wetland polishing and recharge for Lake City's Wetland. This project supports the Santa Fe BMAP, is in the Ichetucknee PFA, supports the Ichetucknee Springs MFL and is in the Easter WSPA.
- The District completed five water quality projects in FY 2020.
    1. Cedar Key Water and Sewer District Pipe Relocation – Relocation sewer main to protect natural resources. This project supports the Suwannee BMAP.
    2. Otter and Hart Springs Water Quality Improvement – Develop engineering design needed to update septic for water quality improvements. This project supports the Suwannee BMAP.
    3. Fanning Springs Water Quality Improvement Phases II – Septic to sewer conversion to reduce 4,300 pounds of nitrogen per year. This project supports the Suwannee BMAP and is in the Fanning Manatee PFA.
    4. Fanning Springs Water Quality Improvement Phase III - Septic to sewer conversion to reduce 4,554 pounds of nitrogen per year. This project supports the Suwannee BMAP and is in the Fanning Manatee PFA.
    5. Jasper Wastewater Systems - Repair concrete pond and add lift station to reduce overflows during high water events
  - The District has 16 ongoing water quality projects including Poe Springs Domestic Sewage Infrastructure Upgrade, Gwen Lake, Mill Creek Sink Land Acquisition Phase II, Fertigation, Sustainable Suwannee Ag Pilot Program, Dairy Wastewater Improvements\*, Dairy Screen Separators\*, Madison Blue Springs Aquifer Recharge\*, Sustainable Suwannee Ag Pilot\*, Precision Agricultural Practices Hornsby Spring Habitat Restoration, I75/CR 136 Wastewater Improvement, I15/SR 47 Cannon Creek Sink Wastewater Improvement, Infiltrative Wetlands

for Wastewater Treatment and Ichetucknee Trace – Clayhole/Alligator Creek. (\* Project has both water quality and water supply benefits)

- Notably, the District continues to manage 235 agricultural contracts in FY 2020 with both water supply and water quality benefits.
- Four of the 14 Outstanding Florida Springs meet state numeric nutrient criteria based on current available data - Poe, Treehouse, Ichetucknee Springs Group and Wacissa Springs group.
- The District worked with communities to identify new technologies for water quality improvements.
- The District continues to engage and lead the Suwannee River Partnership (SRP), which works to overcome water quality challenges in the Suwannee River Valley by pooling resources with sister agencies and cooperating stakeholder groups who have similar goals for water quality throughout the District.
- The District removed over 18.63 tons of debris from locations along the Suwannee River to improve water quality and reduce flooding risk.
- The District relaunched the “Leave No Litter” campaign to raise public awareness of water quality concerns and the importance of keeping water resources free of litter and debris. The campaign reached 19,046 people and 783 people engaged with the content. The campaign runs three times per year during the summer when people are enjoying the springs and rivers.
- 2019 Water Quality Summary was presented to the Governing Board August 2020. A written water quality report is in draft phase.
- The District was awarded a \$300,000 grant from the United States Environmental Protection Agency and FDEP for non-point source pollution education and outreach. The outreach materials for the campaign include development of a micro-website, educational print materials for students, stakeholder engagement through events and a digital outreach initiative. The campaign launched in spring 2020.
- The District was awarded \$865,000 in grant funds from FDEP for the Enhancement and Expansion of Water Quality Monitoring. \$260,725 of these funds were spent on equipment and data collection services in FY 2020. The remaining amount is scheduled to be spent in FY 2021.
- The District performed a District-wide internal review of the water quality monitoring program to identify and prioritize the data collection needs of the District in anticipation of expanding the water quality network in FY 2021.

## **Water Supply**

### **Ensuring a Sustainable Supply of Water for People and the Environment**

The District is responsible for managing water resources to ensure there is an adequate supply to satisfy all existing and projected reasonable and beneficial uses while sustaining water resources and protecting natural systems. In the District, over 90 percent of the water supply demands are met with fresh groundwater, virtually all from the Upper Floridan aquifer system. This region’s ability to continue to grow and develop is therefore dependent on sustainably managing a growing demand for

groundwater. Coordinated water use permitting, water resource planning, and water resource development projects are key to protecting and managing fresh groundwater supply.

Resource planning efforts include water supply assessments and regional water supply planning. Every five years, the District evaluates current and future water supply needs and water supplies within the District. Water supply assessments help determine whether water supplies will be adequate to satisfy projected demands. Recognizing that water supplies are constrained by demands both within and outside of District boundaries, the District, along with the FDEP and SJRWMD, formed the North Florida Regional Water Supply Partnership (Partnership). The Partnership developed a joint regional water supply plan, the North Florida Regional Water Supply Plan, which established fresh groundwater alone cannot supply the projected increase in demand over the 20-year planning horizon.

The regulation and monitoring of water use within the District is a critical part of managing the resource. Water Use Permits protect water resources, ensuring proposed uses are reasonable and beneficial, within the public interest, and do not adversely impact existing legal uses. To ensure proposed uses are reasonable and beneficial, the permit application review includes, among other things, an analysis to prevent environmental harm and ensure consistency with established MFLs.

## Goal One

### Sustainably Manage District Water Resources

#### **STRATEGIES**

- Implement projects to reduce groundwater withdrawal impacts in all surface water bodies.
- Implement water resource development and alternative water supply projects to ensure an adequate water supply for all reasonable-beneficial uses.
- Identify and implement comprehensive feasibility and design studies necessary to evaluate projects.
- Research and implement innovations for sustainable agriculture.
- Maximize alternative water supply and reuse benefits.
- Achieve 10% or less losses for all public supply systems.
- Implement a net resource benefit program.
- Develop a collaborative strategy for assisting public utilities with long-range water supply planning prior to water use permit renewals.
- Maintain and enhance existing data-driven processes to assess cumulative withdrawals for the potential of harm to water resources and ability to sustain natural systems.

## Success Indicators and Milestones for Water Supply

The District will measure progress towards the completion of individual tasks contained within the aforementioned goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks. In addition, success will be measured by the amount of estimated water supply demand that can be met with projects identified in District water supply plans; the year-to-year percentage of impact of groundwater use within the District on the aquifer.

\* Project has both water quality and water supply benefits.

- The District awarded approximately \$26 million for 19 projects, plus 74 agriculture cost-share to increase water supply across all funding programs. These projects will conserve an estimated 20.8 mgd across all funding programs.
  1. Accelerating Suwannee River Restoration and Silviculture Management\* - Incentivize silviculture and rural land conservation to reduce groundwater pumping and nitrogen loading. This project supports the Santa Fe and Suwannee BMAPS, is in the Troy Peacock and Lafayette Blue PFA, supports the Ichetucknee Springs MFL and is in the Western Water Supply Planning Area (WSPA).
  2. Ft. White Water Main Loop - Construct loops in Ft. White's watermain in the Eastern Water Supply Planning area to conserve 200 gpd. This project is in the Devil's Ear PFA, supports the Lower Santa Fe MFL and is in the Eastern WSPA.
  3. Lake City Conservation and Alternative Water Supply (AWS) - Feasibility study to which will identify AWS and water conservation projects for implementation for a 20-year planning horizon.
  4. Bee Haven Bay Water Resource Development - Construct an alternative discharge line to increase re-use capacity by 0.7 mgd. This project supports the Lower Suwannee River MFL and is in the Eastern WSPA.
  5. Bradford County Silviculture Enhancement & Recharge Project - Direct excess water to recharge features or wells and provide an estimated three mgd. This project supports the Santa Fe BMAP, supports the Lower Santa Fe MFL and is in the Eastern WSPA.
  6. Hamilton County Aquifer Recharge Replacement Wells and Water Quality Improvement - Replacement of existing drainage wells to provide aquifer recharge and flood protection in the Alapaha Basin. This project supports the Suwannee BMAP, the Lower Suwannee River MFL and is in the Western WSPA.
  7. Drainage Well and Conveyance Replacement - Replacement of drainage wells in Live Oak, FL for recharge and flood protection. This project supports the Suwannee BMAP, is in the Troy Peacock Lafayette Blue PFA, supports the Lower Suwannee MFL and is in the Eastern WSPA.
  8. Hampton Water Main Loop - Construct loops and isolation valves in Hampton's watermain in the Eastern Water Supply Planning area to conserve 500 gpd. This project supports the Lower Santa Fe MFL and is in the Eastern WSPA.
  9. Mallory Swamp - Data collection of surface and groundwater flows to develop a management plan. This project supports the Lower Suwannee MFL.
  10. Alachua County Turf Swap - Reduce irrigated turf to conserve 0.074 mgd. This project supports the Santa Fe BMAP, supports the Lower Santa Fe MFL and is in the Eastern WSPA.
  11. University Oaks Phase III - Extend and replace water main to reduce water loss by 0.018 mgd. This project supports the Waccasassa MFL.

12. Dixie County Multiple Basin Aquifer Recharge - Design and construct a wetland restoration system, re-establish natural drainage, and recharge 1.1 mgd. This project supports the Lower Suwannee River MFL and is in the Western WSPA.
  13. Groundwater Recharge Wetland - Construct a wetland in western Gainesville to recharge 1.5 mgd of reclaimed water. This project supports the Santa Fe BMAP, supports the Lower Santa Fe Ichetucknee MFL and is in the Eastern WSPA.
  14. Pivot Retrofits - Retrofit pivot irrigation systems districtwide to reduce 1.1 mgd of groundwater withdrawals. This project is in the Santa Fe BMAP, is in the Ichetucknee PFA, supports the Lower Santa Fe Ichetucknee MFL and is in the Eastern WSPA.
  15. Public Supply Efficiency Improvements - District-wide infrastructure and conservation improvements to reduce water loss and use. This project supports the Lower Santa Fe MFL and is in the Eastern WSPA.
  16. Fanning Springs Wastewater Expansion Phase VI\* - Construct a regional advanced wastewater treatment near Fanning Springs with a 0.4 mgd recharge constructed wetland. This project supports the Suwannee BMAP, is in the Fanning Manatee PFA, supports the Lower Suwannee MFL and is in the Eastern WSPA.
  17. Ichetucknee Springs Quality and Quantity Enhancement\*- Increase wetland polishing and recharge for Lake City's Wetland. This project supports the Santa Fe BMAP, is in the Ichetucknee PFA, supports the Ichetucknee Springs MFL and is in the Easter WSPA.
  18. Oakmont Reclaimed Water Ph III and IV - Extend reclaimed water lines to provide 0.05 mgd of public access reuse to Oakmont Subdivision. This project supports the Santa Fe BMAP, supports the Lower Santa Fe Ichetucknee MFL and is in the Eastern WSPA.
  19. Agricultural Cost-Share\* - Dairy wastewater system upgrades, precision agriculture practices, and irrigation system upgrades.
- The District completed three water supply projects in FY 2020:
    1. Scriven Avenue Drainage Improvements - Replace a drainage well in Live Oak to provide recharge and flood protection. This project supports the Suwannee BMAP, is in the Troy Peacock Lafayette Blue PFA, supports the Lower Suwannee MFL and is in the Eastern WSPA.
    2. Lower Suwannee Drainage Basin Aquifer Recharge - Restore sand ponds and rehydrate 1,250 acres. This project supports the Suwannee BMAP, supports the Lower Suwannee MFL and is in the Western WSPA.

3. Cow Pond Drainage Basin Aquifer Recharge - Restore sand ponds and rehydrate 1,750 acres. This project supports the Suwannee BMAP, supports the Lower Suwannee MFL and is in the Western WSPA.

- The District has 15 ongoing water supply projects, including Dairy Wastewater Improvements\*, Dairy Screen Separators\*, Madison Blue Springs Aquifer Recharge\*, Sustainable Suwannee Ag Pilot\*, Precision Agricultural Practices\*, Upper Suwannee Aquifer Recharge, District Cost-Share, Dixie County Water Main, Soil Moisture Probes, Ag Cost-Share/AWS, Infiltrative Wetlands for Wastewater Treatment\*, Ichetucknee Trace - Clayhole/Alligator Lake\*.
- Notably, the District continues to manage 235 agricultural contracts in FY 2020 with both water supply and water quality benefits.
- The District continues to secure funding for water resource development projects listed in or supporting the North Florida Regional Water Supply Initiative and North Florida Regional Water Supply Plan. These projects have targeted the Suwannee and Santa Fe basins in this District and Region 1 of SJRWMD.
- Preparations are underway to update water supply planning documents.
- The District is coordinating with SJRWMD to update the North Florida Regional Water Supply Plan with a planning horizon through 2045.
- Updated regional water use estimates and projections are being prepared for stakeholder review.
- The District conducted water conservation education and public outreach to local communities and stakeholders through online education, presentations, civic engagement, tours, and demonstrations.
- The District continues to work through the North Florida Regional Water Supply Partnership and with FDEP and other water management districts on regional concerns through planning, project implementation, and model implementation.
- FDEP, at the request of the District's Governing Board, agreed to adopt the Upper and Middle Suwannee River and Priority Spring MFLs. The District is also conducting technical work pertaining to the Lower Santa Fe and Ichetucknee Rivers MFLs in support of FDEP. These MFLs are currently being reassessed as a result of the recent completion of the joint North Florida Southeast Georgia (NFSEG) model.
- As of November 2, 2020, the District monitored 97.4% of existing active wells with an agricultural water use permit monitoring conditions (an increase of 1.2% from 2019). These wells were monitored either by electric consumption or telemetry. Active wells with a monitoring condition make up 60% of total agricultural water use allocations in the District (217.0 mgd/~360 mgd). The remaining 40% of agricultural water use allocations will require the addition of a monitoring condition in the course of a permit modification or permit renewal.
- The District conducted its annual water conservation campaign for Water Conservation Month in April to enhance public awareness of the need to conserve water. The digital campaign included social media and streaming radio outreach strategies. Overall, the campaign reached 77,068 people with 338 people engaged with the content.

## Mission Support

### Creating a Culture of Excellence, Efficiency, and Passion for the Region's Resources

Investing in and empowering District employees is critical to achieving the goals set out in this strategic plan. As the smallest water management district, District employees often wear multiple hats, and each employee performs a diversity of job functions. Engaging employees, providing development opportunities, and leadership support will ensure staff has the tools and guidance to achieve District goals. Operational efficiency is also an important focus so employees and District operations can be as effective as possible.

#### Goal One

##### Reduce Risks Through the Management of Information and Data

###### STRATEGIES

- Implement a District-wide comprehensive data management system including but not limited to hydrologic conditions, water use, water quality, permitting data, flood zones, flood occurrence, land use changes, land acquisition, surplus properties, projects, and project benefits.
- Collect and manage high quality data to allow for data-driven, science-based decision making in water resource projects, flood hazard information, and water resource protection.
- Reduce paper and place-bound information access by maximizing cloud-based file storage and automated authorization.
- Optimize accessibility in facilities and information.

#### Goal Two

##### Maintain Institutional Knowledge

###### STRATEGY

- Establish programmatic documentation that captures and identifies necessary steps to complete or implement essential work functions, priority project tasks objectives, and other critical processes to maintain consistent program standards and provide efficient transfer of institutional knowledge
- Retain employees through succession planning, mentoring, and professional development initiatives

#### Goal Three

##### Strengthen Stakeholder Relationships and District Partnerships

###### STRATEGIES

- Build trust in District messages, staff, and science through factual, transparent, consistent, and standardized engagements with internal and external stakeholders.
- Increase public awareness of District functions in planning, projects, and permitting.
- Sustain water resources through education of challenges and maximization of project opportunities.
- Engage and educate stakeholders who are critical to water resource sustainability.

## Success Indicators and Milestones for Mission Support

The District will measure progress towards the completion of individual tasks contained within the above goals and strategies by tracking the completion of the planning, funding, construction, or implementation phases of the tasks. In addition, success will be measured by the number of professional certifications, graduate degrees, and leaderships positions within professional organizations held by its staff; the District's administrative overhead; the percentage of the District's budget utilized for projects that benefit water quality and water quantity; the percentage of the District's budget that is recurring but not funded with recurring revenues; the percentage of facility repairs identified in the last 10-year facility inspection report that have been addressed; and the number of educational activities and Suwannee River Partnership meetings held in the last year.

### Professional Development

- District houses 12 professionally licensed staff and 48 professional certifications.
- Staff have attained two associate degrees, 21 undergraduate degrees, 21 graduate degrees and five doctoral degrees.
- Four staff are working toward master's degree programs using the District's tuition reimbursement program. Twenty-three staff are members of professional development organizations.
- District leadership has adopted a culture of succession and knowledge transfer for retiring employees in mission-critical and leadership positions. New hires are being brought on early to overlap and shadow work processes for a seamless transition.
- District leadership provided four sessions of human resources and supervisory compliance training.

### Finance

- The District's administrative overhead for FY 2020 was 7.62%. The FY 2021 Adopted Budget administrative overhead is 3.26%.
- Based on the FY 2020 Adopted Budget, approximately 87% of the budget was allocated for water quality, water supply and natural systems projects.
- Assuming appropriations and District revenues remain at current levels, the District's recurring budget is projected to be funded by recurring dollars.

### Facilities

- Almost 37%, or six of the 16 items, identified on the 2016 Property Condition Report have been completed. For 2020, 62% or 10 of the 16 items listed on the 10-year facility inspection report have been completed.
- The District contracted for a complete survey of the HVAC systems and identified systems by age, service area and remaining life expectancy. In FY 2021 the District will establish and implement an HVAC upgrade plan with priority focus being on critical systems relating to IT and records storage. Additionally, the District anticipates contracting for the relocation/reconfiguration of a portion of the HVAC system to increase efficiency and replace aging units thus reducing maintenance costs.
- The District is continuing to update facilities to meet ADA compliance, improve interior structures, correct exterior roofing issues, and improving air quality with annual duct cleaning.
- In FY 2020, the District completed renovations, remodeling and expansion of the public lobby restrooms enhancing ADA compliance.

- In FY 2021, the District anticipates contracting with a consultant for the preliminary evaluation and planning of extensive exterior renovations of the entire District Headquarters facility.
- In FY 2020, the District completed energy conservation measures by the installation of motion sensor lighting controls in all offices.
- In FY 2020, the District consolidated the electrical service for the Headquarters facility putting the executive wing on the same service as the main building and providing emergency generator back-up power to both buildings.

### Communications, Outreach and Customer Service

- An accessibility audit of the District's three most popular websites and documents was conducted for ADA compliance. District websites were found to be highly compliant. Staff received accessibility training to configure documents and better serve customers.
- The District continued to support the SRP by including new environmental, utility, and agricultural stakeholders on the Steering Committee to represent a broad scope of interests. A total of three Steering Committee meetings and six partnership breakfast meetings were held in FY 2020.
- The SRP Steering Committee created a work plan for the next year and decided to pursue funding for the 4R Grant Project. This project will be an on-farm demonstration. They also developed a new logo to rebrand the SRP, launched several BMP educational videos, and published BMP success stories.
- District staff participated in 60 educational outreach activities including tours, speaking engagements, project showcases, demonstrations, school activities, and festivals. Educational outreach activities shifted to online in March and for the remainder of the year.
- Regulatory staff provided District stakeholders outstanding customer service in the timely issuance of WUPs and ERPs by meeting or exceeding stretch goals (33 days for WUPs and 25 days for ERPs) for 81% of FY 2020, while experiencing a 31% increase in permit ERP reviews.
- The District participated in the 2020 Statewide Springs Outreach Campaign with the other water management districts and FDEP to heighten awareness of springs and springs' issues. Over the course of the three-month campaign, the District posted content to three social media platforms. The campaign reached 76,895 people and 3,598 people were engaged by the content.
- The District relaunched the "Well Wellness" campaign in January 2020 to raise public awareness of the need for protection and upkeep of their domestic water wells. The campaign reached a total of 46,435 people and 1,577 people were engaged by the content.

### Emergency Response

- The District completed major revisions to its Continuity of Operations Plan (COOP) in 2020 to better respond to stakeholder needs and ensure employee safety. The COOP is updated and provided annually to FDEM by March 1.
- The District staff were able to effectively operate from remote workstations during the COVID-19 pandemic under Emergency Final Order 20-0002.

### Legislative and Community Affairs

- Provided Payment in Lieu of Taxes (PILT) of more than \$357,000 to 12 counties within the District in the form of where these counties were updated and informed on activities both District-wide and specific to the individual county.



# 2020 Minimum Flows and Minimum Water Levels Priority List and Schedule

Suwannee River Water Management District

## Minimum Flows and Minimum Water Levels Priority List and Schedule

### Past Year Accomplishments

- Model impacts output from the North Florida-Southeast Georgia (NFSEG) Regional Groundwater Flow Model for all MFL compliance points was completed.
- Technical work continues for the following water bodies. Technical work includes managing Consultant Contracts to establish MFLs, facilitating Peer Reviews of MFL evaluations, status assessments, and developing District responses to Peer Reviews):

*Current progress of MFLs in development:*

Waterbody Name or System Name	Current Status
Lower Santa Fe and Ichetucknee Rivers and Priority Springs	Peer Review complete; District response published; revised draft MFL approaches, sections, and appendices completed.
Waccasassa River	Data collection for hydrodynamic model in process
Upper Suwannee River and Priority Springs	Draft MFL Report completed, Baseline flow updates in progress
Alapaha River	Field work and modeling completed
Middle Suwannee River and Priority Springs	Peer review completed; Response completed; Baseline flow updates in progress
Lake Alto	Peer review completed; Response completed;
Lake Butler	Peer review completed; Response completed; Technical study of status completed
Lake Hampton	Peer review completed; Response in process
Lake Santa Fe	Peer Review Completed; Response in Process
Cherry Lake	Seepage technical memorandum completed
Withlacoochee River	Field work and modeling completed

<b>Madison Blue Spring (OFS)</b>	NFSEG Model impacts in process
<b>Pot Spring</b>	NFSEG Model impacts in process
<b>Hardee (Rosseter) Spring</b>	NFSEG Model impacts in process

## Changes to the Priority List and Schedule from 2019-2020

- The MFLs re-evaluation of the Lower Santa Fe and Ichetucknee Rivers and associated Priority Springs has been delayed due to the peer review and stakeholder comments. This task and the associated time needed to complete the voluntary peer review, District peer review response, status assessment, and recovery strategy was completed by the end of 2020.
- Four springs were added along the Suwannee River- Bell Springs (Columbia County), Blue Sink Spring (Suwannee County), Hamilton Unnamed Spring (Ham1023971, Hamilton County), and Seven Sisters Spring (Hamilton County) were added to the Priority List and Schedule. These additional springs are second magnitude spring systems which have been acquired for conservation and recreational purposes.
- Waterbodies with adopted MFLs that are not scheduled for re-evaluation in the current planning horizon are not shown in the 2020 Priority List and Schedule.
- Three waterbodies planned to have new MFLs established after 2023 were removed from the Priority List. These waterbodies are Lake Crosby, Lake Rowell, and Lake Sampson all located in Bradford County. Structural modifications are being investigated by the United States Army Corps of Engineers that may impact water levels and will not be completed in the next five years.

## 2020 Priority List and Schedule

### Suwannee River Water Management District Minimum Flows and Minimum Levels to be adopted in 2020

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
Re-Evaluation	Santa Fe River near Fort White	Lower Santa Fe	River	Gilchrist	Yes	Yes	29.8486	-82.7153	Rule Adopted
New	Santa Fe River at US HWY 441 near High Springs	Lower Santa Fe	River	Alachua	Yes	Yes	29.8525	-82.6086	
Re-Evaluation	Columbia (Col101974)	Lower Santa Fe	Spring (Mag. 2)	Columbia	Yes	Yes	29.8340	-82.6767	Rule Adopted
Re-Evaluation	Columbia Spring (OFS)	Lower Santa Fe	Spring (Mag. 1)	Columbia	Yes	Yes	29.8541	-82.6120	Rule Adopted
Re-Evaluation	Devils Ear Spring (OFS)	Lower Santa Fe	Spring (Mag. 1)	Gilchrist	Yes	Yes	29.8353	-82.6966	Rule Adopted
Re-Evaluation	Hornsby Spring (OFS)	Lower Santa Fe	Spring (Mag. 1)	Alachua	Yes	Yes	29.8504	-82.5932	Rule Adopted
Re-Evaluation	July Spring	Lower Santa Fe	Spring (Mag. 1)	Columbia	Yes	Yes	29.8362	-82.6964	Rule Adopted
Re-Evaluation	Poe Spring (OFS)	Lower Santa Fe	Spring (Mag. 2)	Alachua	Yes	Yes	29.8257	-82.6490	Rule Adopted
Re-Evaluation	Rum Island Spring	Lower Santa Fe	Spring (Mag. 2)	Columbia	Yes	Yes	29.8335	-82.6798	Rule Adopted
Re-Evaluation	Santa Fe River Rise	Lower Santa Fe	Spring (Mag. 1)	Alachua	Yes	Yes	29.8739	-82.5916	Rule Adopted
Re-Evaluation	Siphon Creek Rise	Lower Santa Fe	Spring (Mag. 1)	Gilchrist	Yes	Yes	29.8562	-82.7331	Rule Adopted
Re-Evaluation	Treehouse Spring (OFS)	Lower Santa Fe	Spring (Mag. 1)	Alachua	Yes	Yes	29.8549	-82.6029	Rule Adopted
New	Gilchrist Blue Spring	Lower Santa Fe	Spring (Mag. 2)	Gilchrist	Yes	Yes	29.8299	-82.6829	
Re-Evaluation	Ichetucknee River at Hwy27 near Hildreth	Ichetucknee	River	Columbia	Yes	Yes	29.9525	-82.7861	Rule Adopted
Re-Evaluation	Blue Hole Spring	Ichetucknee	Spring (Mag. 1)	Columbia	Yes	Yes	29.9805	-82.7584	Rule Adopted
Re-Evaluation	Devils Eye Spring	Ichetucknee	Spring (Mag. 2)	Gilchrist	Yes	Yes	29.8352	-82.6966	Rule Adopted
Re-Evaluation	Grassy Hole Spring	Ichetucknee	Spring (Mag. 3)	Columbia	Yes	Yes	29.9678	-82.7597	Rule Adopted
Re-Evaluation	Mill Pond Springs	Ichetucknee	Spring (Mag. 2)	Columbia	Yes	Yes	29.9667	-82.7600	Rule Adopted
Re-Evaluation	Mission Springs	Ichetucknee	Spring (Mag. 2)	Columbia	Yes	Yes	29.9762	-82.7579	Rule Adopted
Re-Evaluation	Ichetucknee Head Spring (OFS)	Ichetucknee	Spring (Mag. 2)	Suwannee	Yes	Yes	29.9842	-82.7619	Rule Adopted

**Suwannee River Water Management District Minimum Flows and Minimum Levels to be adopted in 2021**

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
New	Suwannee River at White Springs	Upper Suwannee	River	Columbia	Yes	Yes	30.3256	-82.7383	
New	Suwannee River at Suwannee Springs	Upper Suwannee	River	Suwannee	Yes	Yes	30.3928	-82.9333	
New	Bell Springs	Upper Suwannee	Spring (Mag. 2)	Columbia	Yes	Yes	30.3296	-82.6880	
New	White Sulphur Springs	Upper Suwannee	Spring (Mag. 2)	Hamilton	Yes	Yes	30.3300	-82.7608	
New	Blue Sink Spring (Suwannee)	Upper Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.3357	-82.8084	
New	Hamilton Unnamed Spring (Ham1023971)	Upper Suwannee	Spring (Mag. 2)	Hamilton	Yes	Yes	30.3861	-82.9064	
New	Suwannee Springs	Upper Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.3945	-82.9345	
New	Blue Spring at Boys Ranch	Upper Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.4223	-83.0138	
New	Holton Creek Rise	Upper Suwannee	Spring (Mag. 1)	Hamilton	Yes	Yes	30.4379	-83.0576	
New	Alapaha River Rise	Upper Suwannee	Spring (Mag. 1)	Hamilton	Yes	Yes	30.4394	-83.0893	
New	Stevenson Spring	Upper Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.4171	-83.1530	
New	Seven Sisters Spring	Upper Suwannee	Spring (Mag. 2)	Hamilton	Yes	Yes	30.4177	-83.1553	
New	Suwannee River at Ellaville	Middle Suwannee	River	Suwannee	Yes	Yes	30.3844	-82.8281	
New	Suwannee River at Branford	Middle Suwannee	River	Suwannee	Yes	Yes	29.9556	-82.9278	
New	Allen Mill Pond Springs	Middle Suwannee	Spring (Mag. 2)	Lafayette	Yes	Yes	30.1628	-83.2431	
New	Anderson Spring	Middle Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.3534	-83.1897	
New	Bell Spring	Middle Suwannee	Spring (Mag. 3)	Gilchrist	Yes	Yes	29.5974	-82.9412	
New	Bonnet Spring	Middle Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.1243	-83.1382	
New	Branford Spring	Middle Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	29.9549	-82.9284	
New	Charles Spring	Middle Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.1674	-83.2304	
New	Guaranto Spring	Middle Suwannee	Spring (Mag. 2)	Dixie	Yes	Yes	29.7798	-82.9400	
New	Hart Springs	Middle Suwannee	Spring (Mag. 2)	Gilchrist	Yes	Yes	29.6750	-82.9512	
New	Lime Sink Rise	Middle Suwannee	Spring (Mag. 1)	Suwannee	Yes	Yes	30.3878	-83.1611	
New	Little River Spring	Middle Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	29.9969	-82.9663	
New	Otter Spring	Middle Suwannee	Spring (Mag. 2)	Gilchrist	Yes	Yes	29.6448	-82.9428	

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
New	Pothole Spring	Middle Suwannee	Spring (Mag. 2)	Dixie	Yes	Yes	29.8107	-82.9359	
New	Rock Bluff Springs	Middle Suwannee	Spring (Mag. 2)	Gilchrist	Yes	Yes	29.7991	-82.9186	
New	Rock Sink Spring	Middle Suwannee	Spring (Mag. 2)	Dixie	Yes	Yes	29.7279	-82.9493	
New	Royal Spring	Middle Suwannee	Spring (Mag. 3)	Suwannee	Yes	Yes	30.0837	-83.0748	
New	Suwanacoochee Spring	Middle Suwannee	Spring (Mag. 2)	Madison	Yes	Yes	30.3867	-83.1718	
New	Turtle Spring	Middle Suwannee	Spring (Mag. 2)	Lafayette	Yes	Yes	29.8474	-82.8903	
New	Lime Spring	Middle Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.3912	-83.1687	
New*	Falmouth Spring (OFS)	Middle Suwannee	Spring (Mag. 1)	Suwannee	Yes	Yes	30.3612	-83.1350	Emergency rule*
New*	Lafayette Blue Spring (OFS)	Middle Suwannee	Spring (Mag. 1)	Lafayette	Yes	Yes	30.1258	-83.2261	Emergency rule*
New*	Peacock Springs Group (OFS)	Middle Suwannee	Spring (Mag. 2)	Suwannee	Yes	Yes	30.1232	-83.1332	Emergency rule*
New*	Troy Spring (OFS)	Middle Suwannee	Spring (Mag. 1)	Lafayette	Yes	Yes	30.0060	-82.9975	Emergency rule*
New	Lake Alto	Lake Alto	Lake	Alachua	Yes	Under evaluation	29.7886	-81.8386	
New	Lake Butler	Lake Butler	Lake	Union	Yes	Under evaluation	30.0272	-81.6617	
New	Lake Hampton	Lake Hampton	Lake	Bradford	Yes	Under evaluation	29.8644	-81.8386	
New	Lake Santa Fe	Lake Santa Fe	Lake	Alachua	Yes	Under evaluation	29.7450	-81.9014	

\* Emergency MFL rule 40BER 17-01 effective July 1, 2017.

**Suwannee River Water Management District Minimum Flows and Minimum Levels to be adopted in 2022**

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
New	Alapaha River near Jennings	Alapaha	River	Hamilton	Yes	Under evaluation	30.5981	-82.9267	
New	Cherry Lake	Cherry Lake	Lake	Madison	Yes	Under evaluation	30.6183	-82.5778	
New	Withlacoochee River near Pinetta	Withlacoochee	River	Madison	Yes	Under evaluation	30.5953	-82.7403	
Re-Evaluation	Madison Blue Spring (OFS)	Withlacoochee	Spring (Mag. 1)	Madison	Yes	Under evaluation	30.4804	-83.2444	Rule Adopted
New	Pot Spring	Withlacoochee	Spring (Mag. 2)	Hamilton	Yes	Under evaluation	30.4708	-83.2344	
New	Hardee (Rosseter) Spring	Withlacoochee	Spring (Mag. 2)	Hamilton	Yes	Under evaluation	30.5447	-83.2501	

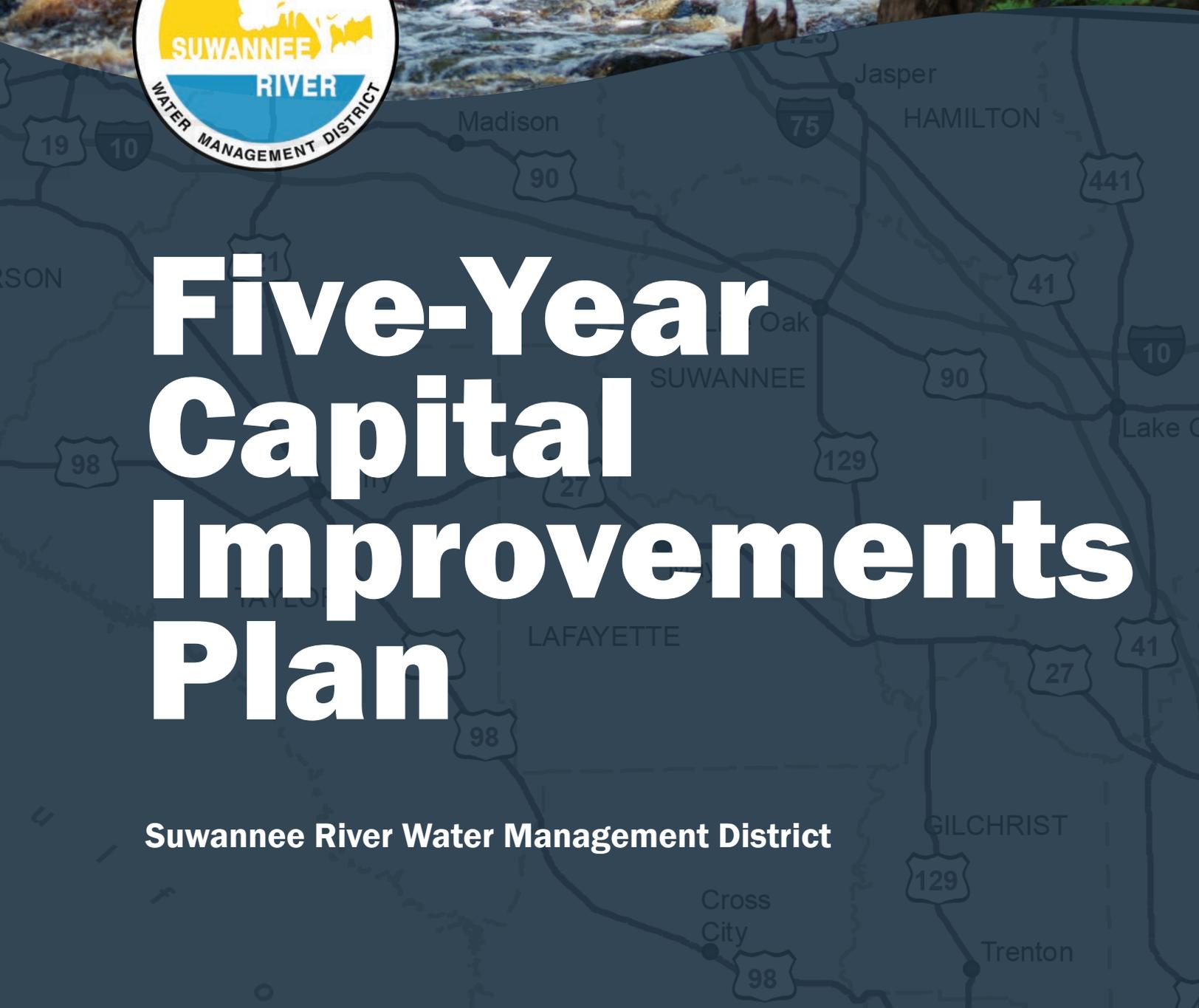
**Suwannee River Water Management District Minimum Flows and Minimum Levels to be adopted in 2023**

New or Re-Evaluation	Waterbody Name or Compliance Point	System Name	Waterbody Type	County(s)	Voluntary Peer Review to be Completed?	Cross-Boundary Impacts from Adjacent WMD?	Latitude	Longitude	Rulemaking Status
New	Lake Palestine	Lake Palestine	Lake	Union	Yes	Under evaluation	30.1294	-81.5906	
New	Ocean Pond	Ocean Pond	Lake	Baker	Yes	Under evaluation	30.2153	-81.5581	



# Five-Year Capital Improvements Plan

Suwannee River Water Management District



## I. Introduction

The Suwannee River Water Management District's (District's) Five-Year Capital Improvements Plan (CIP) is submitted in compliance with the reporting requirements of subsection 373.536(6)(a)3, Florida Statutes (F.S). The format for this report has been developed jointly by the Executive Office of the Governor, the Department of Environmental Protection (FDEP), and the water management districts (WMDs). The CIP includes projected revenues and expenditures for capital improvements from Fiscal Years 2020-2021 (FY 2021) through 2024-2025. As directed by subsection 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. Those two programs and their activities and sub-activities are:

### 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 and Major Renovations

### 3.0 Operation and Maintenance of Lands and Works

#### 3.1 Land Management

#### 3.2 Works

#### 3.3 Facilities

#### 3.4 Invasive Plant Control

#### 3.5 Other Operation and Maintenance Activities

The purpose of the CIP is to project future needs and anticipated future funding requirements to meet those needs. The District uses a pay-as-you-go approach and does not incur bonded debt. The CIP contains only those projects that will be owned and capitalized as fixed assets by the District.

The CIP includes expenditures for basic construction costs (permits, inspections, site development, etc.) and other related capital project costs (land, survey, existing facility acquisition, professional services, etc.). The CIP does not include expenditures for changes in program costs (including salaries and benefits), changes in maintenance costs, or changes in utility costs.

Standard definitions for these programs and activities used by the water management districts are:

### 2.0 Acquisition, Restoration and Public Works

This program includes the development and construction of all capital projects (except 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 / Springs Restoration Grants / Military Base Protection Funds); and the restoration of lands and water bodies.

### 2.1 Land Acquisition

This activity includes District acquisition of lands for flood protection; water storage; water management, conservation and protection of water resources; aquifer recharge; and preservation of wetlands, streams and lakes. Funds from the Florida Forever program, Springs Restoration Grants and Military Base Protection Funds are used for land acquisitions.

### 2.2 Water Source Development

This activity includes water resource development projects and regional or local water supply development assistance projects designed to increase the availability of water supplies for consumptive use; also, other water resource development activities not necessarily contained in regional water supply plans, but which provide water supply benefits.

#### 2.2.1 Water Resource Development Projects

This activity includes regional projects designed to create, from traditional or alternative sources, an identifiable, quantifiable supply of water for existing and/or future reasonable-beneficial uses. These projects do not include the construction of facilities for water supply development, as defined in subsection 373.019(21), F.S. Such projects may include the construction, operation, and maintenance of major public works facilities that provide for the augmentation of available surface and ground water supply or that create alternative sources of supply. Water resource development projects are to be identified in water management district regional water supply plans or district water management plans, as applicable, and the water resource development work program.

#### 2.2.2 Water Supply Development Assistance

This activity includes financial assistance for regional or local water-supply development projects. Such projects may include the construction of facilities included in the term “water supply development” as defined in subsection 373.019(21), F.S.

### 2.3 Surface Water Projects

This activity includes projects that restore or protect surface water quality, related resources, or provide flood protection through the acquisition and improvement of land, construction of public works, and other activities.

## 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

This activity includes maintenance, custodial, public-use improvements, and restoration efforts for lands acquired through Save Our Rivers, Preservation 2000, Florida Forever or other land acquisition programs.

### 3.3 Facilities

This activity includes the operation and maintenance of district support and administrative facilities.

## II. Five-Year Capital Improvements Plan

Capital improvements involve the District’s headquarters facility and lands acquired for water management purposes. District Governing Board policy has historically been to take a nonstructural

water management approach where possible. This policy recognizes both the environmental benefits of a nonstructural approach and the fiscal reality of the District's limited funding ability.

This report describes anticipated revenues and expenditures for capital improvements needed to implement District programs to fulfill the requirements of Chapter 373, F.S. Related documents provide additional detail and information as follows:

- The District's Florida Forever Work Plan describes the District's land acquisition and management, water resource development, and restoration efforts.
- The annual Preliminary Budget and Tentative Budget Submission Report provide proposed revenues and expenditures for each fiscal year.
- The Annual Budget, adopted by the Governing Board in September of each year, provides the strategies and budgets of each District program.
- The District's Strategic Plan provides the long-range water resource management issues and strategies for water quality, water supply, flood protection, and natural systems management.
- The District's Five-Year Water Resource Development Work Program provides implementation strategies relating to water resource development and water supply development efforts.

## FISCAL YEAR 2021 THROUGH FISCAL YEAR 2025

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS					
2.1 LAND ACQUISITION					
REVENUES	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Fund Balance	2,802,000	2,500,000	1,000,000	1,000,000	1,000,000
State Revenue	1,800,000	2,000,000	-	-	-
Total	4,602,000	4,500,000	1,000,000	1,000,000	1,000,000
EXPENDITURES	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Total	4,602,000	4,500,000	1,000,000	1,000,000	1,000,000

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS					
3.1 LAND MANAGEMENT					
REVENUES	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
District Revenue	250,000	300,000	100,000	100,000	100,000
Total	250,000	300,000	100,000	100,000	100,000
EXPENDITURES	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Total	250,000	300,000	100,000	100,000	100,000

3.3 FACILITIES					
REVENUES	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Fund Balance	225,000	386,000	300,000	300,000	300,000
Total	225,000	386,000	300,000	300,000	300,000
EXPENDITURES	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Total	225,000	386,000	300,000	300,000	300,000

### III. Project Descriptions

#### Program: 2.0 Acquisition, Restoration and Public Works

**Activity:** 2.1 Land Acquisition

**Project Title:** Water Management Lands Acquisition

**Type:** Fee title purchase of lands within the Land Acquisition and Management Plan and/or the 2020 Florida Forever Work Plan.

**Physical Location:** Activities are conducted at District headquarters near Live Oak, FL. Acquisitions are located within the District boundaries as identified in the 2020 Florida Forever Work Plan.

**Square Footage/Physical Description:** N/A

**Expected Completion Date:** Ongoing

**Historical Background/Need for Project:** Land acquisition is a key mechanism for the District to achieve its statutory responsibilities. The District's land acquisition program implements provisions of section 373.139, F.S.

The implementation of this program, along with the cumulative efforts under the Save Our Rivers, Preservation 2000, Florida Forever programs, Springs Restoration Grants and Military Base Protection Funds have resulted in the protection of over 287,042 acres of fee title and conservation easement water resource lands. Approximately 159,897 acres of river floodplains, freshwater springs, headwater wetlands, bottomland hardwood and buffering upland forests are protected in full-fee ownership. Conservation easements, access easements and deed restricted from less-than fee purchases have protected nearly 127,145 acres of water resource lands. These lands are managed primarily for nonstructural flood protection including floodwater conveyance, storage, and attenuating floodwaters. Ancillary benefits include water quality and habitat protection, and passive public recreation areas.

The District continues to explore potential acquisitions with public and private partners to maximize available funding for conservation acquisitions.

**Plan Linkages:** Florida Forever Work Plan 2021, Five-Year Strategic Plan 2021-2025, FY 2021 Budget, FY 2022 Preliminary Budget, 5-Year Water Resource Development Work Program

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

**Alternative(s):** Planned acquisitions could be deferred to future year(s), but acquisition opportunities may be lost.

**Other Project Costs (includes land, survey, existing facility acquisition, professional services, other):** FY 2021 - \$4,602,000; FY 2022 - \$4,500,000

#### Program: 3.0 Operation and Maintenance of Lands and Works

**Activity:** 3.1 Land Management

**Project Title:** Land Management

**Type:** Construction, reconstruction, or development of capital improvements and/or facilities necessary for managing water resource lands.

**Physical Location:** Various locations on District-owned lands.

**Square Footage/Physical Description:** 159,897 acres

**Expected Completion Date:** Ongoing

**Historical Background/Need for Project:** Lands acquired for water resource management purposes often require capital improvements associated with hydrologic or other restoration to eliminate or reduce adverse water resource impacts, allow for public use, and for ongoing District land-management activities.

**Plan Linkages:** 2021 Florida Forever Work Plan, Five-Year Strategic Plan 2021-2025, FY 2021 Budget, FY 2022 Preliminary Budget

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

**Alternative(s):** Land management capital improvements could be deferred to future year(s) or foregone but would result in increased future costs and/or adverse water resource impacts resulting from decreased land management capabilities.

**Other Project Costs (includes land, survey, existing facility acquisition, professional services, other):** FY 2021 - \$250,000; FY 2022 - \$300,000

**Activity:** 3.3 Facilities

**Project Title:** Facility Management

**Type:** Operation and maintenance of administrative facilities.

**Physical Location:** District headquarters

**Square Footage/Physical Description:** 29,600 square feet

**Expected Completion Date:** Ongoing

**Historical Background/Need for Project:** The District facilities consist of a 23,000 square foot headquarter building, a laboratory/storage building, a garage/storage facility, and a parking lot on 12 acres.

**Plan Linkages:** FY 2021 Budget, FY 2022 Preliminary Budget.

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

**Alternative(s):** Facility management improvements could be deferred to future year(s) or foregone but would result in increased future costs and potentially have adverse effects on District operations.

**Basic Construction Costs (includes permits, inspections, communications requirements, utilities, outside building, site development, other):** FY2021 - \$225,000; FY2022 - \$386,000



# Alternative Water Supply Report

Suwannee River Water Management District

## Introduction

In 2005, the Florida Legislature created the Water Protection and Sustainability Program, section 373.707, Florida Statutes (F.S.). As part of this program, the Legislature made state funds available through the Water Protection and Sustainability Trust Fund to water management districts for the development of the alternative water supply and conservation projects. Funds could also be used for water resource development projects if a regional water supply plan had not been completed including, but not limited to, springs protection. Each water management district is required by subsection 373.707(8)(n), F.S. to submit an alternative water supply report that provides details on all funded alternative water supply, conservation, and water resource development projects. This Alternative Water Supply Report includes information on funding under the Water Protection and Sustainability Program and the District’s continued efforts to protect and enhance water resources. In 2017, the Board adopted the North Florida Regional Water Supply Plan (NFRWSP). The plan includes fourteen counties, of which all or portions of the following are within the SRWMD District – Alachua, Baker, Bradford, Columbia, Gilchrist, Hamilton, Putnam, Suwannee, and Union.

## Water Protection and Sustainability Program

During the four years of the Water Protection and Sustainability program (WPSP), the District received over \$21 million dollars from the Water Protection and Sustainability Trust Fund (WPSTF). With this funding, the District formed collaborative partnerships with the cities of Lake City, Live Oak, Monticello, and Alachua to provide funding assistance for establishing reclaimed water programs. These projects are listed in Table 1 and described in the following narrative. Consistent with subsection 373.707(8)(c), F.S., the District has also used funding from the WPSTF for water resource development projects, consisting of implementing its Minimum Flows and Minimum Water Levels program.

## Water Protection and Sustainability Trust Fund - Funding Distribution

Fiscal Year	Distribution Amount
2005-2006	\$10,000,000
2006-2007	\$6,000,000
2007-2008	\$5,200,000
2008-2009	\$270,000
2019-2020	\$100,000

Table 1

District Project Number	Project Name	Project Type	Status	Water Produced (mgd)	WSPSP Fiscal Year	WSPSP Funding	DEP Funds	Cooperator Match	Total Project Cost
153	City of Alachua Reclaimed Water Program	Reclaimed Water (for potable offset)	Complete	3	2006-2007	\$1,000,000	\$0	\$250,000	\$1,250,000
151	City of Lake City Reclaimed Water Program Ph 1	Reclaimed Water (for potable offset)	Complete	1	2005-2006	\$3,000,000	\$0	\$1,735,526	\$4,735,526
154	City of Live Oak Reclaimed Water Program Ph 1	Reclaimed Water (for potable offset)	Complete	1.5	2006-2007	\$2,000,000	\$0	\$500,000	\$2,500,000
152	City of Monticello Reclaimed Water Program	Reclaimed Water (for potable offset)	Complete	0.5	2005-2006	\$1,500,000	\$500,000	\$50,000	\$2,050,000
331	Ft. White Water Main Loop	PS and CII Conservation	Active	0.0002	2019-2020	\$100,000	\$29,000	\$0	\$129,000

### City of Alachua Reclaimed Water Program #153

This project was for the implementation of a 0.4 mgd reuse project to offset groundwater withdrawals. Initial construction was for filtration, disinfection, transmission lines, pumping, controls and storage, with a potential offset for 1 to 3 mgd for commercial and residential offset.

### City of Lake City Reclaimed Water Program Ph 1 #151

This project was for the implementation of a 1 mgd reuse project with expansion capabilities. Initial construction was for water treatment and transmission.

### City of Live Oak Reclaimed Water Program Ph 1 #154

Ph 1 expansion is to implement a 1.5 mgd treatment facility. The goal is the offset of 0.8 mgd of groundwater withdrawals.

### City of Monticello Reclaimed Water Program # 152

This project was for the implementation of a 0.5 mgd reuse project to offset groundwater withdrawals at the Simpson Nursery. Initial construction was to upgrade the water treatment facility, transmission mains, pumping, storage, supervisory control and data acquisition.

### Fort White Water Main Loop #331

A portion of this project has been funded through the WPSP to construct water main loops.

## Summary of Continuing Efforts

The District works with its local and state partners to identify, develop and fund alternative water supply, conservation, and water resource development projects. The District's Regional Initiative Valuing Environmental Resources (RIVER) cost-share program provides local governments with funding for projects including alternative water supply and water conservation projects. Since the inception of the RIVER program in 2013, the District has partnered with local governments to implement twenty-six alternative water supply projects and water conservation projects with a total estimated benefit of 0.68 mgd.

Through agricultural cost-share programs, the District, FDACS and FDEP partner with agricultural producers to increase water savings by implementing irrigation retrofits, new water saving technologies, and other water conservation projects. The FDEP has awarded state springs grants for cost share programs for irrigation and nutrient management retrofits for agricultural and dairy operations. The Suwannee River Partnership (SRP) has been instrumental in implementing conservation partnerships with the agricultural community in the Suwannee River Basin. From 2014 through 2020, the estimated benefit at completion will be 27.3 mgd.

The District also invests funds into water resource development projects. These projects include aquifer recharge and hydrologic restoration projects. The continuing support for springs protection and restoration from Governor DeSantis, the Florida Legislature, and the FDEP has enabled the District to increase efforts, through partnerships, to protect and enhance water supply and resources throughout the District. From 2014 to 2020, the District with the FDEP and local partners implemented 37 water resource development projects with an estimated benefit of 54.9 mgd at completion.

Details on alternative water supply, water conservation, and water resource development projects funded through these various programs is provided in Table 2 and described in the following narratives.

Table 2

District Project Number	Project Name	WRD or WSD project type	Status	Water Produced (mgd)	Initial FY funded	DEP funds	Other State Amount	District Amount	Cooperator match	Total Project cost	Program
5	2014 Springs Projects: Task 2 WC Through Pivots (S0796)	Agricultural Conservation	Complete	5.26	2015	\$885,000	\$0	\$1,235,000	\$308,975	\$2,428,975	Springs
6	2014 Springs Projects: Task 3 Dairy Lagoon Expansion (S0796)	Other Non-Traditional Source	Complete	0.3	2015	\$920,000	\$0	\$0	\$300,000	\$1,220,000	Springs
7	2015 Springs Projects: Dairy Screen Separators	Agricultural Conservation	Active	0.32	2016	\$2,120,000	\$0	\$20,000	\$530,000	\$2,670,000	Springs
8	2016 Springs Projects: Dairy Wastewater System Improvements	Other Non-Traditional Source	Active	0.14	2017	\$1,500,000	\$0	\$0	\$300,000	\$1,800,000	Springs
228	Accelerating Suwannee River Restoration and Silviculture Management	Agricultural Conservation	Active	3.03	2020	\$1,878,736	\$0	\$0	\$500,000	\$2,378,736	Springs
130	Ag Cost Share - SRWMD soil moisture probes	Agricultural Conservation	Active	4.54	2016	\$0	\$0	\$2,000,000	\$0	\$2,000,000	Other
157	Agriculture Water Conservation (2013 Ag Cost Share Funds)	Agricultural Conservation	Complete	5.2	2013	\$0	\$0	\$1,200,550	\$308,975	\$1,509,525	District
277	Alachua County Turf Swap	PS and CII Conservation	Active	Note 1	2020	\$100,000	\$0	\$0	\$0	\$100,000	AWS
230	Bee Haven Bay WRD	Surface Water Storage (e.g., reservoirs)	Active	0.7	2020	\$370,000	\$0	\$0	\$0	\$370,000	Springs
240	Bradford County Silviculture Enhancement & Recharge Project	Groundwater Recharge	Active	3	2020	\$2,000,000	\$0	\$0	\$0	\$2,000,000	Springs
15	Brooks Sink Phase 1	Groundwater Recharge	Complete	0.22	2014	\$0	\$0	\$35,000	\$0	\$35,000	Florida Forever
136	Cedar Key WSD Reuse project	Distribution/Transmission Capacity	Complete	0.18	2008	\$0	\$0	\$25,000	\$8,333	\$33,333	Florida Forever
17	City of Alachua Water Conservation Project	PS and CII Conservation	Complete	0.05	2013	\$0	\$0	\$31,220	\$31,220	\$62,440	River
19	City of Hampton Water Supply Improvement and Conservation	PS and CII Conservation	Complete	0.00006	2016	\$0	\$0	\$105,530	\$8,000	\$113,530	River
20	City of High Springs Water Conservation Project	PS and CII Conservation	Complete	0.02	2013	\$0	\$0	\$28,628	\$28,628	\$57,256	River
1724	City of Jasper Reclamation Water Project - RIBs	Wastewater Collection and Treatment	Active	0.7	2021	\$1,374,997	\$0	\$0	\$150,000	\$1,524,997	Springs

District Project Number	Project Name	WRD or WSD project type	Status	Water Produced (mgd)	Initial FY funded	DEP funds	Other State Amount	District Amount	Cooperator match	Total Project cost	Program
21	City of Jasper Water Conservation Project	PS and CII Conservation	Complete	0.04	2013	\$0	\$0	\$97,200	\$10,000	\$107,200	River
23	City of Madison Water Conservation Project	PS and CII Conservation	Complete	0.04	2014	\$0	\$0	\$7,675	\$444	\$8,119	River
24	City of Newberry Water Conservation Project	PS and CII Conservation	Complete	0.04	2013	\$0	\$0	\$28,550	\$28,550	\$57,100	River
27	Columbia County Water Main & Conservation Project (October Rd)	PS and CII Conservation	Complete	0.03	2014	\$0	\$0	\$201,256	\$249,552	\$450,808	River
28	Cow Pond Drainage Basin Aquifer Recharge - see Dixie Co MBAR No 291	Groundwater Recharge	Complete	1.69	2016	\$313,382	\$0	\$50,000	\$50,000	\$413,382	Springs
32	Cross City Hydrant and Water Main Replacement	PS and CII Conservation	Complete	0.0014	2017	\$0	\$0	\$36,310	\$0	\$36,310	River
291	Dixie County Multiple Basin Aquifer Recharge (MBAR)	Groundwater Recharge	Active	1.1	2020	\$2,993,000	\$0	\$0	\$150,000	\$3,143,000	Springs
208	Dixie County Water Main	PS and CII Conservation	Active	0.0015	2018	\$0	\$0	\$176,500	\$240,000	\$416,500	River
34	Drainage Well and Conveyance Replacement (TAP funding)	Groundwater Recharge	Active	6.8	2020	\$0	\$0	\$0	\$0	\$2,300,000	FDOT tap
124	Eagle Lake (Phase 1)	Reclaimed Water (for potable offset)	Complete	10	2014	\$3,070,000	\$0	\$300,000	\$230,000	\$3,600,000	Springs
290	Fanning Springs WW system Expansion, Ph VI, WWTF	Reclaimed Water (for groundwater recharge or natural system)	Active	0.4	2020	\$9,350,000	\$0	\$0	\$4,000	\$9,354,000	Springs
331	Ft. White Water Main Loop	PS and CII Conservation	Active	Note 1	2020	\$29,000	\$0	\$0	\$0	\$129,000	AWS
293	Groundwater Recharge Wetland	Reclaimed Water (for groundwater recharge or natural system)	Active	1.5	2020	\$1,500,000	\$0	\$0	\$1,500,000	\$3,000,000	AWS
255	Hamilton County Aquifer Recharge Replacement Wells and Water Quality Improvement	Groundwater Recharge	Active	2	2020	\$0	\$0	\$700,000	\$0	\$700,000	District
276	Hampton Water Main Loop	PS and CII Conservation	Active	Note 1	2020	\$164,000	\$0	\$0	\$18,250	\$182,250	AWS
47	Hampton Water Tank Revitalization Project	PS and CII Conservation	Complete	0.01	2014	\$0	\$0	\$25,000	\$5,000	\$30,000	River

District Project Number	Project Name	WRD or WSD project type	Status	Water Produced (mgd)	Initial FY funded	DEP funds	Other State Amount	District Amount	Cooperator match	Total Project cost	Program
51	High Springs Water Main Replacements	PS and CII Conservation	Complete	0.01	2014	\$0	\$0	\$50,000	\$833,033	\$883,033	River
53	Hilltop to Alliance Wastewater Project	Other Non-Traditional Source	Complete	0.34	2015	\$0	\$0	\$181,000	\$210,991	\$391,991	District
56	I-75/CR-136 Wastewater Improvement, Septic Elimination (Phase I)	Other Project Type	Active	0.1	2018	\$2,780,000	\$0	\$0	\$550,000	\$3,330,000	Springs
1738	I-75/SR 247 Regional Pond	Stormwater	Active	0.033	2021	\$2,510,000	\$0	\$651,105	\$2,000,000	\$5,161,105	River and Springs Coast
231	Ichetucknee Springs Quality & Quantity Enhancement	Reclaimed Water (for groundwater recharge or natural system)	Active	0.625	2020	\$1,800,000	\$0	\$0	\$50,000	\$1,850,000	Springs
58	Ichetucknee Springshed Water Quality Improvement (ISQWIP)	Reclaimed Water (for groundwater recharge or natural system)	Complete	1.19	2013	\$3,900,000	\$0	\$283,815	\$100,000	\$4,283,815	Springs
134	Ichetucknee Trace - Clayhole Creek/Alligator Lake Recharge and stormwater Mitigation	Stormwater	Active	4	2017	\$2,260,000	\$0	\$0	\$300,000	\$2,560,000	Springs
133	Ichetucknee Trace-Cannon Creek	Flood Control Works	Active	2.24	2016	\$2,250,000	\$250,000	\$0	\$750,000	\$3,250,000	Springs
59	Infiltrative Wetlands for WWTF Effluent Treatment Disposal Phase I	Reclaimed Water (for groundwater recharge or natural system)	Active	0.24	2018	\$1,708,500	\$0	\$0	\$0	\$1,708,500	Springs
140	Lake City Municipal Airport	Stormwater	Complete	1.9		\$0	\$0	\$5,950			Other
63	Lake City Public and Staff Restroom Retrofit (task 1 LP61032)	PS and CII Conservation	Complete	0.02	2016	\$98,850	\$0	\$0	\$0	\$98,850	Springs
137	Lake Harris	Groundwater Recharge	Complete	1.12	2015	\$0	\$0	\$0	\$120,000	\$120,000	Other
66	Lawtey Water System Improvements	PS and CII Conservation	Complete	0.049	2014	\$0	\$693,257	\$25,000	\$0	\$718,257	River
67	Leaky Fire Hydrants and Water Main Replacements	PS and CII Conservation	Complete	0.011	2017	\$0	\$0	\$85,251	\$15,000	\$100,251	River
1729	Live Oak Reuse	Wastewater Collection and Treatment	Active	0.01	2021	\$3,240,000	\$0	\$0	\$0	\$3,240,000	AWS

District Project Number	Project Name	WRD or WSD project type	Status	Water Produced (mgd)	Initial FY funded	DEP funds	Other State Amount	District Amount	Cooperator match	Total Project cost	Program
74	Lower Suwannee Drainage Basin Aquifer Recharge - see Dixie Co MBAR No 291	Groundwater Recharge	Complete	3.26	2017	\$587,404	\$0	\$0	\$63,359	\$650,763	Springs
75	Madison Blue Springs Aquifer Recharge	Groundwater Recharge	Active	3.4	2018	\$2,150,000	\$0	\$50,000	\$75,000	\$2,275,000	Springs
78	Middle Suwannee River and Springs Restoration and Aquifer Recharge	Groundwater Recharge	Complete	2	2013	\$1,548,000	\$0	\$277,000	\$30,000	\$1,855,000	Springs
82	Oakmont GRU Phase II (Recharge Wetland)	Reclaimed Water (for groundwater recharge or natural system)	Active	1	2015	\$0	\$0	\$150,000	\$80,000	\$230,000	LMTF
83	Oakmont Reclaimed Water Main Extension (Ph 2)	Reclaimed Water (for potable offset)	Complete	0.05	2016	\$0	\$0	\$113,143	\$113,143	\$226,286	River
229	Oakmont Reclaimed Water Ph 3 and 4	Reclaimed Water (for potable offset)	Active	0.05	2020	\$352,500	\$0	\$0	\$352,500	\$705,000	Springs
300	Pivot Retrofits	Agricultural Conservation	Active	1.1	2020	\$500,400	\$0	\$0	\$55,600	\$556,000	AWS
88	Potable Water and Central Wastewater System Improvements (Newberry)	PS and CII Conservation	Complete	0.0003	2016	\$0	\$0	\$38,435	\$88,698	\$127,133	River
89	Precision Agricultural Practices	Agricultural Conservation	Active	2	2017	\$5,000,000	\$0	\$0	\$1,250,000	\$6,250,000	Springs
303	Public Supply Efficiency Improvements	PS and CII Conservation	Active	1.4	2020	\$1,000,000	\$0	\$0	\$0	\$1,000,000	AWS
199	Repair/replace leaking infrastructure (Madison, City of)	PS and CII Conservation	Complete	0.01	2014	\$0	\$0	\$2,500	\$0	\$2,500	River
1732	Sawdust Spring Land Acquisition Project	Land Acquisition	Active	0.001	2021	\$634,395	\$0	\$0	\$300,000	\$934,395	Springs
94	Scriven Avenue Drainage Improvements	Flood Control Works	Complete	0.03	2017	\$0	\$0	\$88,027	\$18,030	\$106,057	River
96	SR-6 I-75 Hamilton County Water System Improvements	PS and CII Conservation	Complete	0.04	2013	\$0	\$0	\$31,523	\$0	\$31,523	River
98	Starke Fire Hydrant Replacement Project	PS and CII Conservation	Complete	0.0056	2016	\$0	\$0	\$119,040	\$24,733	\$143,773	River

District Project Number	Project Name	WRD or WSD project type	Status	Water Produced (mgd)	Initial FY funded	DEP funds	Other State Amount	District Amount	Cooperator match	Total Project cost	Program
1883	Starke Public Supply Efficiencies	PS and CII Conservation	Active	Note 1	2021	\$40,000	\$0	\$0	\$0	\$40,000	AWS
103	Sustainable Suwannee Ag Pilot Program - Low Input	Agricultural Conservation	Active	5.1	2016	\$5,000,000	\$0	\$0	\$0	\$5,000,000	Springs
105	Suwannee Country Club Reuse Connection	Reclaimed Water (for potable offset)	Complete	0.2	2015	\$0	\$0	\$119,520	\$4,893	\$124,413	River
123	Suwannee Valley Ag Extension Center Surface Water	Surface Water	Complete	0.05	2014	\$0	\$0	\$40,200	\$80,400	\$120,600	Other
1811	TCWSD Public Supply Efficiencies	PS and CII Conservation	Active	0.002	2021	\$0	\$0	\$100,000	\$0	\$100,000	River
284	University Oaks Phase III a	PS and CII Conservation	Active	Note 1	2020	\$95,124	\$0	\$0	\$7,610	\$102,734	AWS
109	University Oaks Water System Improvement	PS and CII Conservation	Complete	0.003	2015	\$0	\$0	\$151,390	\$53,258	\$204,648	River
110	University Oaks Water System Improvement - Phase 3	PS and CII Conservation	Complete	0.019	2017	\$0	\$0	\$122,250	\$8,292	\$130,542	River
111	Upper Suwannee River Regional Aquifer Recharge	Groundwater Recharge	Active	4	2018	\$2,500,000	\$0	\$0	\$0	\$2,500,000	Springs
114	Waldo Water Conservation Project	PS and CII Conservation	Complete	0.01	2013	\$0	\$0	\$76,836	\$76,836	\$153,672	River
115	Waldo Well & Water System Improvements	PS and CII Conservation	Complete	0.01	2014	\$0	\$0	\$87,000	\$627,137	\$714,137	River
117	Water Supply Booster Pump Station Replacement	PS and CII Conservation	Complete	0.0006	2017	\$0	\$0	\$65,964	\$5,000	\$70,964	River

#### 2014 Springs Projects: Task 2 WC Through Pivots (S0796) #5

14 active contracts; 115 pivots, retrofit center pivots to increase spray efficiency.

#### 2014 Springs Projects: Task 3 Dairy Lagoon Expansion (S0796) #6

5 active projects increase pond storage to better manage wastewater & irrigation.

#### 2015 Springs Projects: Dairy Screen Separators #7

9 active projects; 18 screens and 37 irrigation retrofits (Improved Nutrient Application in Dairy operations).

#### 2016 Springs Projects: Dairy Wastewater System Improvements #8

Ranking on-going - 4 contracts, use of new technology to improve wastewater systems to reduce nutrient impacts and reduce ground water usage. This cost share program is for the use of new technology to improve wastewater systems to reduce nutrient impacts.

#### Accelerating Suwannee River Restoration and Silviculture Management #228

Incentivize silviculture and rural land conservation to reduce groundwater pumping and nitrogen loading in the Ichetucknee and Middle Suwannee springshed.

#### Ag Cost Share - SRWMD soil moisture probes #130

Cost share to provide producers with soil moisture probes to improve irrigation efficiency. Water savings of 40-60% depending on crop type.

#### Agriculture Water Conservation (2013 Ag Cost Share Funds) #157

Assess and implement water conservation BMPs as part of agricultural cost-share program. The cost and savings are the total for the following counties: Alachua, Columbia, Gilchrist, Hamilton, and Suwannee.

#### Alachua County Turf Swap #277

The Turf SWAP (Save water, add plants) rebate program will transition from irrigated turf to Florida Friendly Landscapes and hire Florida Water Star Accredited Professionals to improve irrigation systems by fixing leaks and other improvements. This is a subproject to the Public Supply Efficiencies.

#### Bee Haven Bay WRD #230

Construction of an alternative discharge line from Eagle Lake Phase I to provide additional reuse capacity to the mining operations. This alternative water supply reduces the reliance on fresh groundwater from the UFA.

#### Bradford County Silviculture Enhancement & Recharge Project #240

The Project will take place in Bradford County and enhance opportunities for aquifer recharge for the silvicultural lands and areas with surplus surface waters.

#### Brooks Sink Phase 1 #15

Restore natural hydrologic connection to Brooks sink.

#### Cedar Key WSD Reuse project #136

WWTP improvements and extension of reclaimed water lines.

#### City of Alachua Water Conservation Project #17

Reduce leakage in water resource caution area.

### City of Hampton Water Supply Improvement and Conservation #19

Improve fire protection, increase water conservation, and improve water service quality and reliability. Includes water meter replacements, installation of isolation valves, water storage tank repair, and potentially water main relocation.

### City of High Springs Water Conservation Project #20

Reduce leakage in water resource caution area.

### City of Jasper Reclamation Water Project – RIBS #1724

Relocate the Wastewater Treatment Plant discharge from the Baisden Swamp to a Rapid Infiltration Basin (RIB)

### City of Jasper Water Conservation Project #21

Replace 26 leaking hydrants and install isolation valves in a WRCA.

### City of Madison Water Conservation Project #23

Reduce water losses by improvements at the Barrsfield Well and Chason Well.

### City of Newberry Water Conservation Project #24

Replacement of aging pipes and equipment to reduce water loss.

### Columbia County Water Main & Conservation Project (October Rd) #27

Water main extension to reduce flushing at the Ellisville water treatment plant.

### Cow Pond Drainage Basin Aquifer Recharge #28

The project will restore approximately 300 acres of sand ponds and rehydrate approximately 1,750 acres of wetlands while recharging approximately 1.69 million gallons per day of water.

### Cross City Hydrant and Water Main Replacement #32

Replacement of 7 hydrants and 10 isolation valves within Town's distribution network; installation of a 450 ft 6" water main and 1000 ft segment of 6" water main - replacing lines that have had breaks in recent history.

### Dixie County Multiple Basin Aquifer Recharge #291

Design and construct a wetland restoration system to re-establish natural drainage patterns using culverts and flashboards. Project will funnel excess surface water to new and existing recharge features.

### Dixie County Water Main #208

Transition an unincorporated residential area from well water usage to Community Potable Water service.

### Drainage Well and Conveyance Replacement (TAP funding) #34

The project will construct a replacement drainage well similar to the original well at the site with stormwater treatment. Estimated treatment is 210.51 impervious acres.

### Eagle Lake #124

Public Private partnership to reduce groundwater withdrawals.

### Fanning Springs WW system Expansion, Ph VI, WWTF #290

Design phase for the construction of a new 0.4 mgd Regional AWT WWTF with a constructed wetland aquifer recharge system having an overall budget Est of \$15 Million. It is planned to be funded with three consecutive funding cycles.

### Ft. White Water Main Loop #331

Water conservation and reduction of groundwater pumping by looping of water main lines to reduce flushing. This is a subproject to the Public Supply Efficiencies.

### Groundwater Recharge Wetland #293

GRU proposes to construct a groundwater recharge wetland using reclaimed water from the Kanapaha Water Reclamation facility. Estimated 3-5 mgd water recharge at final completion.

### Hamilton County Aquifer Recharge Replacement Wells and Water Quality Improvement #255

This project concept is to replace two 12-inch drainage wells to provide aquifer recharge and flood protection in the Alapaha Basin.

### Hampton Water Main Loop #276

Loop water mains to improve water conservation, remove dead ends to improve water quality and reduce flushing. Install isolation valves to aid in line break repairs. Develop water infrastructure map in ESRI to document water system location and record of repairs. Conserve estimated 200,000 gallons per year in reduced flushing. This is a subproject to the Public Supply Efficiencies.

### Hampton Water Tank Revitalization Project #47

Repair water storage tank and reduce flushing losses.

### High Springs Water Main Replacements #51

Water line replacements of old leaking main lines.

### Hilltop to Alliance Wastewater Project #53

Wastewater pipeline connecting Hilltop Dairy to Alliance Dairy for wastewater reuse.

### I-75/CR-136 Wastewater Improvement, Septic Elimination (Phase I) #56

Construct a new WWTP plant with wetland treatment/aquifer recharge for effluent disposal, eliminating 32 existing commercial septic tanks.

### I-75 / SR 247 Regional Pond #1738

Construction of regional stormwater ponds to treat and attenuate runoff from Cannon Creek.

### Ichetucknee Springs Quality & Quantity Enhancement #231

Increase the wetland polishing from 1 mgd to 3 mgd with estimated recharge of 2 mgd and additional nutrient reduction.

### Ichetucknee Springshed Water Quality Improvement (ISQWIP) #58

Convert existing sprayfield to treatment wetland.

### [Ichetucknee Trace - Clayhole Creek/Alligator Lake Recharge and stormwater Mitigation #134](#)

This project will better manage up to 14.8 million gallons per day of stormwater and surface water. Swales, canals, and stormwater control structures will be constructed to direct water to Alligator Lake.

### [Ichetucknee Trace-Cannon Creek #133](#)

Funding direct between Columbia Co and DEP. Project to mitigate flooding, water quality and pretreatment for aquifer recharge.

### [Infiltrative Wetlands for WWTF Effluent Treatment Disposal Phase I \(cost is for Phases 1\) #59](#)

Project will convert the City's existing effluent sprayfield into infiltration wetlands. Only 10 acres would be constructed in Phase 1 which would provide sufficient capacity for the City's current wastewater treatment capacity of 0.24 mgd.

### [Lake City Municipal Airport #140](#)

Stormwater Improvements increase soil percolation.

### [Lake City Public and Staff Restroom Retrofit \(task 1 LP61032\) #63](#)

The Lake City Public and Staff Restrooms Retrofit Project will upgrade 51 toilets from 1.6 gallons per flush (GPF) systems to 0.8 GPF systems and upgrade 103 - 2.2 gallons per minute (GPM) manual faucets to 1.0 GPM motion detection faucets.

### [Lake Harris #137](#)

Replacement of existing 6-inch or 8-inch drainage wells that became plugged and were nonfunctional leading to flooding during high storm events.

### [Lawtey Water System Improvements #66](#)

Project will construct new public water supply well to serve the City of Lawtey's existing water treatment plant and distribution system. Also includes other plant upgrades.

### [Leaky Fire Hydrants and Water Main Replacements #67](#)

The City of Jasper currently has old and non-operational fire hydrants. Each fire hydrant leaks approx. 1,440 g/day 525,600 g/annually We have identified 10 hydrants with this condition. That calculates over 5.2 million gallons of water per year.

### [Live Oak Reuse #1729](#)

Construct extensions to the Live Oak wastewater collection infrastructure which will provide additional reuse.

### [Lower Suwannee Drainage Basin Aquifer Recharge #74](#)

The project will restore approximately 500 acres of sand ponds and rehydrate approximately 1,250 acres of wetlands by re-establishing natural flow through natural recharge features and an aquifer recharge well.

### [Madison Blue Springs Aquifer Recharge #75](#)

Rehabilitation or replacement of up to six existing drainage wells to improve recharge rates. This may include the installation of biosorptive activated media (BAM) or the construction of treatment wetlands.

### [Middle Suwannee River and Springs Restoration and Aquifer Recharge #78](#)

Hydrologic restoration activities on the property to rehydrate roughly 1,500 acres of ponds, 4,000 acres of wetlands and recharge the aquifer up to an estimated 10 million gallons per day.

### [Oakmont GRU Phase II \(Recharge Wetland\) #82](#)

District is partnering with Gainesville Regional Utilities (GRU) to construct a recharge wetland in western Alachua County at the Oakmont subdivision, treating both reclaimed water and stormwater.

### [Oakmont Reclaimed Water Main Extension \(Ph 2\) #83](#)

Installing of additional reclaimed water mains.

### [Oakmont Reclaimed Water Ph 3 #229](#)

Expansion of reclaimed water distribution system pipelines in Oakmont subdivision to offset use of potable water for irrigation.

### [Pivot Retrofits #300](#)

Retrofit pivot systems with a need determined by a mobile irrigation lab evaluation in existing and proposed water resource planning areas.

### [Potable Water and Central Wastewater System Improvements \(Newberry\) #88](#)

Replace existing water and wastewater lines to a community within close proximity to the City of Newberry's historic district.

### [Precision Agricultural Practices #89](#)

The project will provide cost share funds to agricultural producers in the BMAP areas to implement precision management technology. Priority will be given to producers within both the BMAP and Florida Outstanding Springs areas.

### [Public Supply Efficiency Improvements #303](#)

Infrastructure and conservation improvements to reduce water loss based on water audit information or conservation measures.

### [Repair/replace leaking infrastructure \(Madison, City of\) #199](#)

The City of Madison (Solenoid) water conservation project is to install two solenoid valves which will reduce Madison's water loss by 0.01 mgd.

### [Sawdust Spring Land Acquisition #1732](#)

Fee simple acquisition of approximately 163 acres within the Devil's Ear Spring (Outstanding Florida Spring) Priority Focus Area with third magnitude Sawdust Spring.

### [Scriven Avenue Drainage Improvements #94](#)

Replacement in kind of a Class V injection well in the City of Live Oak in the adjacent stormwater management facility. A new well of the same diameter, casing depth, and total depth will be drilled in the southwest corner of the facility.

### [SR-6 I-75 Hamilton County Water System Improvements #96](#)

Reduce water usage by installing variable frequency drives to control water flow and reduce flushing requirements. Improve water quality by improved disinfection processes.

### [Starke Fire Hydrant Replacement Project #98](#)

Reduce unaccounted for water loss throughout the City of Starke. Includes installation of at least 60 fire hydrants, including associated water mains and connections.

### [Starke Public Supply Efficiencies #1883](#)

The project includes replacing the altitude valve and other critical water valves and equipment on the water tower that are currently inoperable. This is a subproject to the Public Supply Efficiencies.

### [Sustainable Suwannee Ag Pilot Program - Low Input #103](#)

Pilot program for agricultural operations, landowners, counties and cities, private companies, and other entities within specific geographical areas to submit proposals to reduce water use and improve water quality by reducing and removing nutrients.

### [Suwannee Country Club Reuse Connection #105](#)

Connect the Suwannee County Club golf course to the City of Live Oak reuse line; install pump station.

### [Suwannee Valley Ag Extension Center Surface Water #123](#)

Partnership with UF IFAS for variable rate irrigation using surface water.

### [TCWSD Public Supply Efficiencies #1811](#)

Install 4 neighborhood master meters to monitor for system losses and identify leaks within the TCWSD water system.

### [University Oaks Phase III-A #284](#)

University Oaks Phase III-A is for the construction of the remaining 2,200 LF of 6" watermain serving 14 customers. This is a subproject to the Public Supply Efficiencies.

### [University Oaks Water System Improvement #109](#)

Replacement of 5,230 LF of 6-inch water main and 35 service connections to reduce water loss (estimated 105,800 gallons per month) Phase I and II combined.

### [University Oaks Water System Improvement - Phase 3 #110](#)

The project includes the replacement of approximately 2,350 LF of 6" watermain that will provide service to 15 customers.

### [Upper Suwannee River Regional Aquifer Recharge #111](#)

Installation of up to four recharge wells in the Upper Suwannee River basin in locations where wetlands were historically ditched and drained into the river. This project intends to capture water during high flow conditions that occur after large rainfall events.

### [Waldo Water Conservation Project #114](#)

Replacement of 543 lead free water meters to improve accuracy and water quality. Meters have a 30-day rolling data log for enhanced customer information.

### [Waldo Well & Water System Improvements #115](#)

Construct a new 12 inch well to provide 500 gpm capacity for adequate supply and fire protection.

### [Water Supply Booster Pump Station Replacement #117](#)

The City of Hampton, Florida requires upgrades to its potable water booster pumping station that delivers water through their potable water distribution system to its customers.



# Five-Year Water Resource Development Work Program

Suwannee River Water Management District

## Introduction

Water Management Districts are required by section 373.709, Florida Statutes (F.S.), to evaluate their water resources to ensure that existing sources of water are adequate to supply water for all existing and future reasonable-beneficial uses and to sustain the water resources and related natural systems for a 20-year planning period. A Regional Water Supply Plan (RWSP) is developed when a District determines that there are not enough traditional water supplies to provide water for all existing and future reasonable/beneficial uses and to sustain water resources and related natural systems for the planning period. RWSPs include a technical analysis of the current and future demands, evaluation of available water sources, and identification of water resource development and water supply development project options that could be used to meet future water demands.

The District is also required to prepare a Five-Year Water Resource Development Work Program (Work Program) as a part of its annual budget reporting process, pursuant to subsection 373.536(6)(a)4., F.S. The Work Program must describe the District's implementation strategy relating to its water resource development and water supply development (including alternative water supply development) components over the next five years. Further, the Work Program must:

- Address all the elements of the water resource development component in the District's approved RWSPs, as well as the water supply projects proposed for District funding and assistance;
- Identify both anticipated available District funding and additional funding needs for the second through fifth years of the funding plan;
- Identify projects in the Work Program which will provide water;
- Explain how each water resource and water supply 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 the District's RWSPs in supporting the implementation of minimum flows and minimum water levels and water reservations; and
- Ensure sufficient water is available to timely 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.

This Work Program covers the period from Fiscal Year (FY) 2020-2021 through FY 2024-2025 and is consistent with the planning strategies of the District's North Florida Regional Water Supply Plan, (NFRWSP), a regional water supply plan produced and implemented jointly between this District and the SJRWMD (see Figure 1). The NFRWSP was approved by both Districts in 2017 and covers the 2015-2035 planning horizon. The next plan update is scheduled for 2022. The planning region includes all of Hamilton, Columbia, Baker, Suwannee, Union, Bradford, Gilchrist, Putnam, and Alachua Counties, as well as the remaining counties in Region 1 of the SJRWMD. For additional information about the NFRWSP, please see the Water Supply Plan located on the [North Florida Regional Water Supply Partnership](#) website.

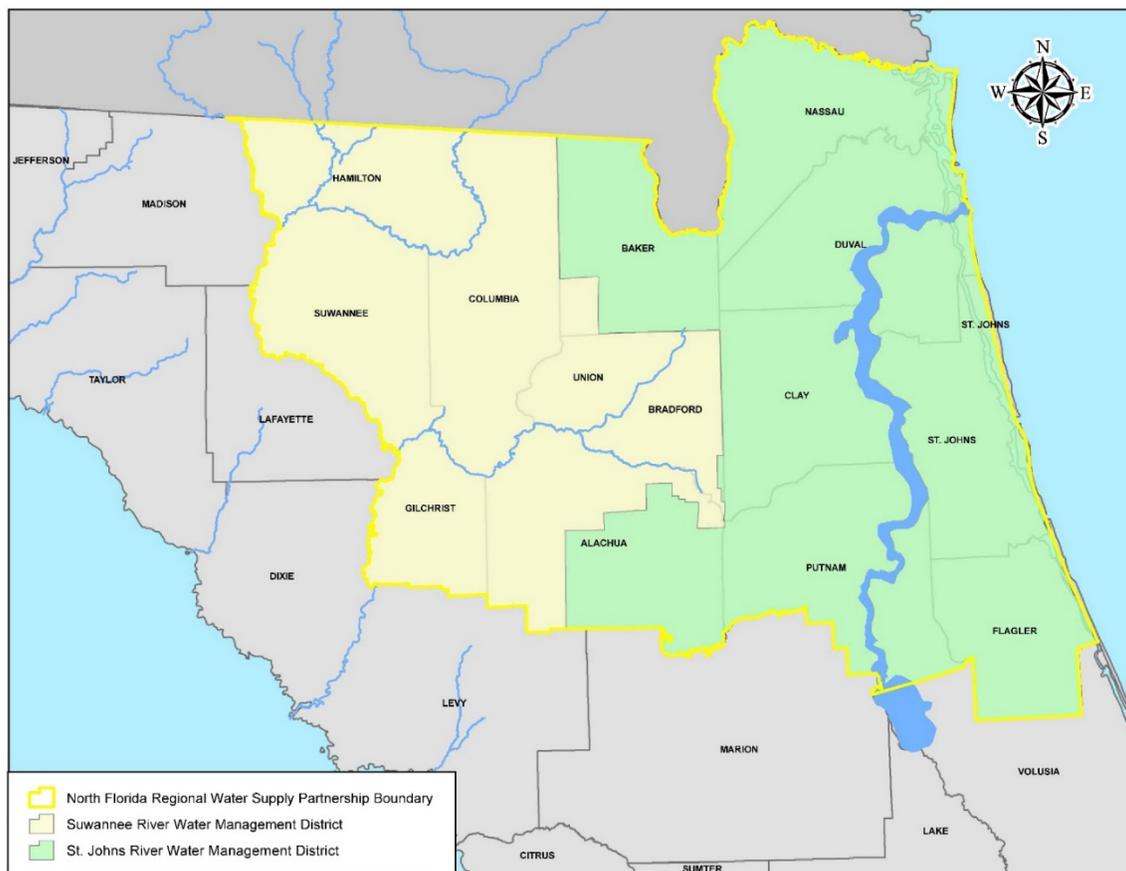


Figure 1: North Florida Regional Water Supply Plan Partnership Area

## Work Program Summary

The projects listed in the Five-Year Water Resource Development Work Program demonstrate progress in implementing projects which are listed in the NFRWSP and projects which support the NFRWSP’s objectives. Implementation of projects listed in the NFRWSP supports the recovery strategy for the Lower Santa Fe and Ichetucknee Rivers and Associated Priority Springs (LSFI). The District believes that this work program is adequate to further the recovery of LSFI, to ensure water is available to timely 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 based on the District’s established minimum flows and minimum water levels (MFLs).

Over the next five years, the District will continue to implement projects and support regional water management programs, including water supply planning, water resource data collection and monitoring, and establishment of MFLs to ensure the availability of adequate water supplies for all reasonable-beneficial uses and to maintain the function of natural systems. This work program illustrates the contributions of the District in support of MFLs. Establishment of MFLs will proceed according to the District’s MFL Priority List. The most current version of the District’s MFL priority list,

and an overview of the District’s MFL program is available on the District’s [Minimum Flows and Minimum Water Levels](#) page of the website.

In total, this Work Program outlines projects that, upon completion, would make available 28.79 million gallons per day (mgd) of water, including reuse and non-reuse water across the District. These projects are detailed in Appendix A. These benefits are associated with approximately \$11,175,000 budgeted for FY 2020–2021. The proposed funding for projects identified in the 5-year Work Program is approximately \$23,355,000 through FY 2024–25. The District also funds Water Resource Development Activities that are regional in nature and are therefore primarily the responsibility of the District. These activities are described in Table 1 and 2. They are also associated with approximately \$6,145,539 budgeted in FY 2020-2021.

In addition, these projects set forth a commitment to develop projects associated with implementation of MFLs. The projects benefitting MFLs are anticipated to make available 28.79 mgd of reuse and non-reuse water upon completion. Of that, up to 18.45 mgd of reuse and non-reuse water will benefit MFLs in recovery.

## **Water Resource and Water Supply Development Project Funding**

The District funds projects that support water resource development and water supply development. Water resource development components are those that involve 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 section 373.016, F.S.”<sup>1</sup> Water supply development components are those that involve “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. A list of all projects meeting these statutory definitions is provided in Appendix A. The District provides funding assistance to public supply, agriculture, and other water use permittees, including industrial and commercial users, for projects that are consistent with the District’s RWSP and meet the District’s directive and procedures pertaining to cost-share funding.

---

<sup>1</sup> Section 373.019(24), F.S.

## Water Resource Development Activity Funding

The District also funds Water Resource Development Activities that are regional in nature and are therefore primarily the responsibility of the District. These Water Resource Development Activities are listed in Table 1 below; and the projected expenditures for these ongoing programs are listed in Table 2. The District has identified the need for additional Regional Water Supply Planning. These planning efforts will be ongoing for FY 2020-2021 through 2024-2025 and are reflected in the projected expenditures in Table 2.

*Table 1: District water resource development activities and descriptions*

Water Resource Development Activity	Activity Description
Water Supply Planning (1.1.1)	Long-term planning to assess and quantify existing and reasonably anticipated water supply needs and sources, and to maximize the beneficial use of those sources, for humans and natural systems. This includes water supply assessments developed pursuant to section 373.036, F.S., and regional water supply plans developed pursuant to section 373.709 F.S.
Minimum Flows and Minimum Water Levels (MFL, 1.1.2)	The establishment of minimum surface and ground water levels and surface water flow conditions required to protect water resources from significant harm, as determined by the district governing board.
Research, Data Collection, Analysis and Monitoring (1.2)	Activities that support district water management planning, restoration, and preservation efforts, including water quality monitoring, data collection and evaluation, and research. Data collection and analysis activities are a critical part of the water resource development component implemented by the District. This activity supports the District’s MFL program.
Water Resource Development Projects (2.2.1)	Regional projects designed to create, from traditional or alternative sources, an identifiable, quantifiable supply of water for existing and/or future reasonable-beneficial uses. These projects do not include the construction of facilities for water supply development, as defined in section 373.019(21), F.S. Such projects may include the construction, operation, and maintenance of major public works facilities that provide for the augmentation of available surface and ground water supply or that create alternative sources of supply. Water resource development projects are to be identified in water management district regional water supply plans or district water management plans, as applicable.
Water Supply Development Assistance (2.2.2)	Financial assistance for regional or local water supply development projects. Such projects may include the construction of facilities included in the term “water supply development” as defined in section 373.019(26), F.S.
Other Cooperative Projects (2.4)	Any non-water source development cooperative effort under this program area between a water management district and another organization. This activity includes the District’s Agricultural Conservation Cost-Share Program.

*Table 2: Fiscal year 2020-2021 through Fiscal Year 2024-2025 projected expenditures (including salaries, benefits, and operating expenses) for ongoing water resource development activities. This table does not include items listed in Appendix A or B of this work program. Except as noted below, the table estimates future year expenditures based on recurring expenses.*

Regional Water Activity	Fiscal Year 2020-2021	Fiscal Year 2021-2022	Fiscal Year 2022-2023	Fiscal Year 2023-2024	Fiscal Year 2024-2025	Total
Water Supply Planning (1.1.1)	\$611,374	\$611,374	\$611,374	\$611,374	\$611,374	\$3,056,870
Minimum Flows and Minimum Water Levels (MFL, 1.1.2)	\$2,163,384	\$2,163,384	\$2,163,384	\$2,163,384	\$2,163,384	\$10,816,920
Research, Data Collection, Analysis and Monitoring (1.2)	\$2,670,703	\$2,670,703	\$2,670,703	\$2,670,703	\$2,670,703	\$13,353,515
Water Resource Development Projects (2.2.1)	\$368,487	\$368,487	\$368,487	\$368,487	\$368,487	\$1,842,435
Water Supply Development Assistance (2.2.2)	\$83,315	\$83,315	\$83,315	\$83,315	\$83,315	\$416,575
Other Cooperative Projects (2.4)	\$248,276	\$248,276	\$248,276	\$248,276	\$248,276	\$1,241,380
<b>Total</b>	<b>\$6,145,539</b>	<b>\$6,145,539</b>	<b>\$6,145,539</b>	<b>\$6,145,539</b>	<b>\$6,145,539</b>	<b>\$30,727,695</b>

## Basin Management Action Plan Appendix

Basin management action plans (BMAPs) are the “blueprint” for restoring impaired waters by reducing pollutant loadings to meet the allowable loadings established in a Total Maximum Daily Load (TMDL). In 2016, the Florida Legislature amended section 373.036, F.S., to require the identification of all specific projects that implement a BMAP or a recovery or prevention strategy in the Work Program.

The District’s Work Program has historically identified water resource development projects that support MFL recovery and prevention but has not included specific descriptions of projects primarily intended to implement BMAPs. Consistent with section 373.036, F.S., and in a manner that has been coordinated with DEP and all five water management Districts, the District makes available as part of this Work Program a five-year funding outlook for projects specifically identified in an adopted BMAP in Appendix B.

Appendix A

DEP ID	Type	District Project Number	Project Name	Description	DEP status	Project End Date	RWSP Region Supported	Primary MFL Supported	Water available on completion	Reuse at completion	Total Project cost	FY 20/21
	Groundwater Recharge	240	Bradford County Silviculture Enhancement & Recharge Project	The Project may use historic silvicultural drainage systems to direct water to control structures or recharge wells. Replacement of two drainage wells near Lake Sampson will also be pursued for additional recharge.	Design	1/30/26	SR NFRWSP	Lower Santa Fe Ichetucknee Rivers	3.00		\$2,000,000.00	\$1,800,000.00
	Other Project Type	259	Special Projects WRD	Water Resource Development - Anticipated funding TBD on a yearly basis.	On Hold		SR District-wide				\$100,000.00	\$200,000.00
	Groundwater Recharge	291	Dixie County Multiple Basin Aquifer Recharge	Design and construct a wetland restoration system to re-establish natural drainage patterns using culverts and flashboards. Project will funnel excess surface water to new and existing recharge features. Consolidation of LP61039 and LP6103B.	Design	2/1/24	SR District outside NFRWSP	Lower Suwannee River	1.10		\$3,143,000.00	\$1,000,000.00
	Data Collection and Evaluation	311	Mallory Swamp	Data collection of groundwater and surface water flows in the District's Mallory Swamp tract. Modeling of data relative to the existing structures to develop a management plan. Construction or modification of structures as recommended based on the analysis.	Design	12/31/24	SR District outside NFRWSP	Lower Suwannee River			\$295,947.12	\$200,000.00
	Other Project Type	313	Water Sustainability Trust Fund - TBD	Projects will be developed each year to support alternative water supply and conservation measures.	On Hold		SR NFRWSP				\$180,000.00	\$180,000.00

DEP ID	Type	District Project Number	Project Name	Description	DEP status	Project End Date	RWSP Region Supported	Primary MFL Supported	Water available on completion	Reuse at completion	Total Project cost	FY 20/21
	Reclaimed Water (for potable offset)	314	AWS Grants - 2201 TBD	Projects will be developed each year to support water resource development, alternative water supply and conservation with Alternative Water Supply funds.	On Hold		SR NFRWSP				\$1,000,000.00	\$1,000,000.00
	Surface Water	315	Special Projects 2300	Budget line to support surface water projects development.	On Hold		SR District-wide				\$400,000.00	\$400,000.00
	Surface Water	317	Suwannee River Basin Project	Hydrologic study of the Suwannee River Basin.	On Hold		SR District-wide	Middle Suwannee River			\$500,000.00	\$500,000.00
	Reclaimed Water (for groundwater recharge or natural system)	318	AWS Grants - 2300 TBD	Projects will be developed each year to support water resource development, alternative water supply, and conservation with Alternative Water Supply funds.	On Hold		SR District-wide				\$1,500,000.00	\$1,500,000.00
SROT00162A	Surface Water	211	RIVER Cost Share 2300 Budget	Regional Initiative Valuing Environmental Resources - Projects will be developed each year to support surface water, water resource development, water quality, and conservation.	On Hold		SR District-wide				\$500,000.00	\$500,000.00
SROT00163A	Other Project Type	214	RIVER Cost Share 2400 Budget	Regional Initiative Valuing Environmental Resources - Budget line item for "Other" project types in RIVER, may include flood protection or water quality.	On Hold		SR District-wide				\$300,000.00	\$300,000.00
SROT00164A	Data Collection and Evaluation	257	Alligator Creek Study - Bradford County Flood Protection	Agreement for a surface water feasibility study with USACE for flood protection and storage to attenuate peak flows in the Creek.	Design	4/24/21	SR NFRWSP	Upper Santa Fe River			\$350,000.00	\$100,000.00
SROT00165A	Other Project Type	258	Lower Suwannee National Wildlife Refuge	Hydrologic Restoration using RESTORE funding to protect the Lower Suwannee National Refuge.	Design	6/30/22	SR District outside NFRWSP	Lower Suwannee River			\$100,000.00	\$300,000.00

DEP ID	Type	District Project Number	Project Name	Description	DEP status	Project End Date	RWSP Region Supported	Primary MFL Supported	Water available on completion	Reuse at completion	Total Project cost	FY 20/21
SRWS00018B	Other Non-Traditional Source	8	2016 Springs Projects: Dairy Wastewater System Improvements	The use of new technology to improve wastewater systems to reduce nutrient impacts and reduce ground water usage. May include increased storage capacity and efficient drop nozzles to reduce potable water use.	Construction/Underway	10/31/20	SR NFRWSP	Lower Suwannee River	0.14		\$1,800,000.00	\$500,000.00
SRWS00031C	Agricultural Conservation	7	2015 Springs Projects: Dairy Screen Separators	Improved Nutrient Application in Dairy operations that includes conversion from high pressure to low pressure drop nozzles that reduce groundwater use.	Underway	6/30/21	SR NFRWSP	Lower Suwannee River	0.32		\$2,670,000.00	\$300,000.00
SRWS00032A	Reclaimed Water (for groundwater recharge or natural system)	82	Oakmont GRU Phase II (Recharge Wetland)	District is partnering with Gainesville Regional Utilities (GRU) to construct a recharge wetland in western Alachua County at the Oakmont subdivision, treating both reclaimed water and stormwater for water quality improvements.	Cancelled	9/30/20	SR NFRWSP	Lower Santa Fe Ichetucknee Rivers	1.00		\$230,000.00	\$180,000.00
SRWS00058A	Agricultural Conservation	89	Precision Agricultural Practices	The project will provide cost share funds to agricultural producers in the BMAP areas to implement precision management technology. Priority will be given to producers within both the BMAP and Florida Outstanding Springs areas to reduce nutrients and groundwater pumping.	Construction/Underway	6/30/21	SR NFRWSP	Lower Santa Fe Ichetucknee Rivers	2.00		\$6,250,000.00	\$1,000,000.00
SRWS00063A	Groundwater Recharge	75	Madison Blue Springs Aquifer Recharge	Rehabilitation or replacement of up to six existing drainage wells to improve recharge rates. This may include the installation of biosorptive activated media (BAM) or the construction of treatment wetlands. This project is in the District's 2017 Florida Forever Plan	Design	6/30/22	SR NFRWSP	Madison Blue Springs	3.40		\$2,275,000.00	\$525,000.00

DEP ID	Type	District Project Number	Project Name	Description	DEP status	Project End Date	RWSP Region Supported	Primary MFL Supported	Water available on completion	Reuse at completion	Total Project cost	FY 20/21
SRWS00082A	Agricultural Conservation	103	Sustainable Suwannee Ag Pilot Program - Low Input	Pilot program for agricultural operations, landowners, counties and cities, private companies, and other entities within specific geographical areas to submit proposals to reduce water use and improve water quality by reducing and removing nutrients.	Construction/Underway	1/31/23	SR District-wide	Lower Suwannee River	5.10		\$5,000,000.00	\$300,000.00
SRWS00084A	Groundwater Recharge	111	Upper Suwannee River Regional Aquifer Recharge	Installation of up to four recharge wells in the Upper Suwannee River basin in locations where wetlands were historically ditched and drained into the river. This project intends to capture water during higher flow conditions that occur after large rainfall events	Design	6/30/21	SR NFRWSP	Lower Suwannee River	4.00		\$2,500,000.00	\$1,000,000.00
SRWS00107B	Surface Water Storage (e.g., reservoirs)	230	Bee Haven Bay WRD	Construction of an alternative discharge line from Eagle Lake Phase I to provide additional reuse capacity to the mining operations. This alternative water supply reduces the reliance on fresh groundwater from the UFA.	Design	6/30/22	SR NFRWSP	Lower Suwannee River		0.70	\$370,000.00	\$370,000.00
SRWS00108B	Agricultural Conservation	228	Accelerating Suwannee River Restoration and Silviculture Management	Incentivize silvicultural and rural land conservation to reduce groundwater pumping and nitrogen loading in the Middle Suwannee springshed.	Construction/Underway	9/30/25	SR NFRWSP	Ichetucknee Springs	3.03		\$2,378,736.00	\$500,000.00
SRWS00124A	Stormwater	206	Gwen Lake	The project addresses stormwater, flooding, erosion, and sedimentation concerns that impair the water quality and water storage capacity of Gwen Lake and adjacent waterways.	Construction/Underway	2/28/21	SR Portion of NFRWSP	Ichetucknee Springs			\$450,000.00	\$150,000.00

DEP ID	Type	District Project Number	Project Name	Description	DEP status	Project End Date	RWSP Region Supported	Primary MFL Supported	Water available on completion	Reuse at completion	Total Project cost	FY 20/21
SRWS00126A	Other Project Type	210	Springs Projects 2400 (See actual projects)	Budget line item for 2400 Springs projects	Planned		SR District-wide				\$4,580,000.00	\$1,000,000.00
SRWS00127A	Surface Water	212	Springs Projects 2300 (see actual projects)	Budget line item for 2300 Springs projects	On Hold		SR District-wide				\$1,000,000.00	\$1,000,000.00
SRWS00128A	Other Project Type	213	Springs Projects 2201 (see actual projects)	Budget line item for 2201 Springs Water Resource Development projects	On Hold		SR NFRWSP				\$1,000,000.00	\$1,000,000.00
SRWQ00160A	Other Project Type	256	Acquisition FY20 DEP Grants Springs	Land Acquisition of approximately 964 acres in the Manatee Springshed.	On Hold		SR District-wide				\$2,200,000.00	\$1,800,000.00
SRWS00031E	Agricultural Conservation	300	Pivot Retrofits	Retrofit pivot systems with a need determined by a mobile irrigation lab evaluation in existing and proposed water resource planning areas.	Underway	6/30/21	SR District-wide	Lower Santa Fe Ichetucknee Rivers	1.10		\$556,000.00	\$400,000.00
SRWS00129B	Reclaimed Water (for groundwater recharge or natural system)	293	Groundwater Recharge Wetland	GRU proposes to construct a groundwater recharge wetland using reclaimed water from the Kanapaha Water Reclamation facility. Estimated 3-5 mgd water aquifer recharge at completion.	Design	6/30/24	SR NFRWSP	Lower Santa Fe Ichetucknee Rivers		1.50	\$2,000,000.00	\$2,500,000.00
SRWS00140A	PS and CII Conservation	303	Public Supply Efficiency Improvements	Infrastructure and conservation improvements to reduce water loss based on water audit information or conservation measures.	Construction/Underway	6/30/21	SR District-wide	Lower Santa Fe Ichetucknee Rivers	1.40		\$500,000.00	\$300,000.00

DEP ID	Type	District Project Number	Project Name	Description	DEP status	Project End Date	RWSP Region Supported	Primary MFL Supported	Water available on completion	Reuse at completion	Total Project cost	FY 20/21
SRWS00141A	Reclaimed Water (for potable offset)	296	Lake Butler AWT Upgrade Ph 1	The existing WWTF operates above the 0.7 mgd capacity and without nitrogen removal AWT capabilities. The City proposes to construct a new 1 mgd AWTF. Estimated 2,988 lbs./yr. of Total Nitrogen to be removed. Reclaimed water will be used for recharge and offset.	Design	6/30/25	SR NFRWSP	Lower Santa Fe River		0.80	\$3,000,000.00	\$2,000,000.00
SRWS00154A	Other Project Type	167	Other Cooperative projects - Ag Cost share and AWS	Multi-year cost share program to assist agricultural producers for projects that increase irrigation efficiency and water conservation and assist with nutrient management technology. Used as match funds for various initiatives. Benefits reflected in other projects.	Construction/Underway	9/30/24	SR District-wide				\$1,500,000.00	\$1,500,000.00
SRWS00159A	Groundwater Recharge	255	Hamilton County Aquifer Recharge Replacement Wells and Water Quality Improvement	This project concept is to replace two 12-inch drainage wells to provide aquifer recharge and flood protection in the Alapaha Basin. The wells would allow up to 2 mgd of natural aquifer recharge to the Upper Floridan aquifer and provide a benefit to springs.	Design		SR District outside NFRWSP	Lower Suwannee River	2.00		\$700,000.00	\$500,000.00
SRWS00161A	PS and CII Conservation	253	RIVER Cost Share 2202 Budget	Regional Initiative Valuing Environmental Resources - Projects will be developed each year to support water supply development, water quality, and conservation.	On Hold		SR District-wide				\$200,000.00	\$200,000.00

Appendix B

DEP Project ID	BMAP	Lead Entity	Partners	Project Name	Project Description	District Project Number	Project Status	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Total State Funding	Total District Funding	Lead Entity Match	Project Total
SRWQ00152A	SAFE	SRWMD	DEP/ Agricultural Producers/ Local Governments/ La	Sustainable Suwannee Springs Agriculture Pilot Pro	Agriculture operators, landowners, local governments, private companies, other entities may submit proposals for advanced technologies that can cost-effectively reduce nitrogen in groundwater that contributes to spring flow. Canceled because project located outside of basin.	102	Underway	66,000		\$999,998.25	\$0.00	\$234,626.75	\$1,234,625.00
SRWS00032A	SAFE	GRU	SRWMD	Oakmont Recharge Wetland	Construct a recharge wetland in an existing stormwater retention basin that will reduce nutrients while recharging aquifer.	82	Cancelled	0	0.00	\$0.00	\$150,000.00	\$80,000.00	\$230,000.00
SRWS00031C	SAFE	SRWMD	DEP and Dairy Producers	Improved Nutrient Application Practices in Dairy O	To date, 9 agreements with dairies to install screen separators to reduce wastewater solids. 1 agreement with a dairy in the Santa Fe Basin. DEP has allocated \$2,120,000 for districtwide program. Load reduction to land estimate of 1,485 lb-N/yr.	7	Underway	95,183		\$2,120,000.00	\$20,000.00	\$530,000.00	\$2,670,000.00
SRWS00082A	SAFE	SRWMD	DEP/ Agricultural Producers/ Local Governments/ La	Sustainable Suwannee Springs Agriculture Pilot Program	Agriculture operators are invited to submit proposals to transition to less intensive cropping systems, change the type of cropping system, or change the land use to fallow or native landscape for a certain amount of time or a permanent conservation easement.	103	Underway	375,000		\$5,000,000.00	\$0.00	\$0.00	\$5,000,000.00

DEP Project ID	BMAP	Lead Entity	Partners	Project Name	Project Description	District Project Number	Project Status	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Total State Funding	Total District Funding	Lead Entity Match	Project Total
SRWS00058A	SAFE	SRWMD	Agricultural Producers	Precision Agricultural Practices	Provide cost-share funds to agricultural producers within the BMAP area to implement precision nutrient and irrigation management technology. Districtwide program benefits and dollars split between Santa Fe and Suwannee BMAPs.	89	Underway	1,426,250		\$5,000,000.00	\$0.00	\$1,250,000.00	\$6,250,000.00
SRWQ00146C	SAFE	Alachua County	DEP	Mill Creek Sink Water Quality Improvement Project	See AL-01 for the Phase I project info. Phase II is the acquisition of 240 additional acres surrounding and upstream of Mill Creek Swallet.	173	Underway	152	0.00	\$1,300,000.00	\$0.00	\$1,300,000.00	\$2,600,000.00
SRWQ00146A	SAFE	City of Alachua	DEP/SRWMD	Mill Creek Sink Water Quality Improvement Project	Purchase property to install water quality BMPs to reduce pollutant loads discharging directly into the sink. Nutrient loading should be reduced by 66 % and benefit Hornsby Spring.	80	Underway	0	0.00	\$1,000,000.00	\$400,000.00	\$0.00	\$1,400,000.00
SRWS00108B	SAFE	SRWMD	DEP/Agricultural Producers	Accelerating Suwannee River Restoration and Silviculture Management	Incentivize silviculture and rural land conservation to reduce groundwater pumping and nitrogen loading in the Middle Suwannee springshed and Ichetucknee River.	228	Underway	177,450	0.00	\$1,878,736.00	\$0.00	\$500,000.00	\$2,378,736.00
SRWQ00143B	SAFE	City of High Springs	TBD	Wastewater Collection System Extension - Phase A2	Provide central sewer to remaining areas served by septic systems. Elimination of 168 septic systems. Reduction estimate to land surface of 5,880 lb-N/yr.	298	Underway	433		\$1,000,000.00	\$0.00	\$0.00	\$1,000,000.00

DEP Project ID	BMAP	Lead Entity	Partners	Project Name	Project Description	District Project Number	Project Status	TN Reduction (lbs/yr)	TP Reduction (lbs/yr)	Total State Funding	Total District Funding	Lead Entity Match	Project Total
SRWQ00150A	SAFE	Columbia County	SRWMD	Rum Island Park	Install new public restrooms with lift station and septic system in place of portable toilets. Install BAM to reduce nutrients around septic system. Project also involves bank restoration and dredging.	91	Completed	0	0.00	\$150,000.00	\$150,000.00	\$0.00	\$300,000.00



# Waterbody Grades

Suwannee River Water Management District

## Introduction

Section 373.036(7)(b)9., F.S., provides that the Consolidated Annual Report shall contain a “grade for each watershed, water body, or water segment in which a project listed under subparagraph 8. 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.”

Table 1 lists the projects contained within the Five-year Water Resource Development Work Plan, the watershed, water body, or water segment the project impacts, and a grade for two items: 1) the water quality level of impairment and 2) the level of violation of a minimum flow or minimum water level.

## Level of Impairment Grade

The Level of Impairment grade is represented as follows:

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

The FDEP provided the impairment grades based upon Total Maximum Daily Loads (TMDL) based Water Body IDs (WBIDs). Projects that impact a specific WBID were identified in Table 1 for that WBID. As an example, a project that replaced disposal of treated wastewater in a spray field or Rapid Infiltration Basin (RIB) with beneficial use of reclaimed water utilized the impairment grade associated with the WBID where the spray field or RIB were originally located. It is important to note that projects contained within a Water Resource Development Work Program are focused on water use/conservation with the exception of the projects contained in Appendix B – District Projects for Implementing basin management action plans.

## The Level of Violation of Adopted MFL is represented as follows:

The waterbody was evaluated based on the relative magnitude of the MFL violation and rated as close, moderately close, or not close to meeting the MFL. In evaluating this element, the Districts considered the magnitude of the variance from the MFL, the magnitude of the ecological impact, the timeframe for recovery, and the timeframe for completion of the projects.

The waterbody was also evaluated based on the regional significance of the water body and rated as Tier 1, Tier 2 or Tier 3 with Tier 1 being the highest rating for regional significance and Tier 3 being the lowest rating. In evaluating this element, the Districts considered the waterbody's size and geographical extent, ecological importance, recreational uses, navigation, threatened/endangered species, wildlife utilization, aesthetics, and historical and archeological significance.

- **Meeting:** *This grade is assigned for any MFL that was determined to be meeting its MFL at the time of its adoption or during its last status evaluation.*
- **Level 0:** *This grade is assigned if the waterbody is meeting the MFL but is projected to not meet the MFL within 20 years (that is, the waterbody is in prevention).*
- **Level I:** *This grade is assigned if the waterbody is close to meeting the MFL and the waterbody is rated as a Tier 3 or Tier 2 for regional significance; or the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 3 for regional significance*
- **Level II:** *This grade is assigned if the waterbody is close to meeting the MFL and the waterbody is rated a Tier 1 for regional significance; or the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 2 for regional significance; or the waterbody is not close to meeting the MFL and the waterbody is rated a Tier 3 for regional significance.*
- **Level III:** *This grade is assigned if the waterbody is moderately close to meeting the MFL and the waterbody is rated a Tier 1 for regional significance; or the waterbody is not close to meeting the MFL and the waterbody is rated a Tier 2 or Tier 1 for regional significance.*

District Project Number	Project Name	Primary MFL Supported	Quantity Grade	Waterbody Benefited	WBID	Quality Grade
255	Hamilton County Aquifer Recharge Replacement Wells and Water Quality Improvement	Lower Suwannee River	Meeting	UFA, Tiger Creek	3358	Not impaired
75	Madison Blue Springs Aquifer Recharge	Madison Blue Springs	Meeting	Madison Blue Spring	3315Z	Impaired
230	Bee Haven Bay WRD	Lower Suwannee River	Meeting	Swift Creek	3375	Impaired - High
111	Upper Suwannee River Regional Aquifer Recharge	Lower Suwannee River	Meeting	Bay Creek, Hunter Creek, Deep Creek, Robinson Creek	3353, 3364, 3388, 3448	Impaired - High
7	2015 Springs Projects: Dairy Screen Separators	Lower Suwannee River	Meeting	Suwannee River (Lower Segment), Santa Fe River	3422B	Impaired - High
7	2015 Springs Projects: Dairy Screen Separators	Lower Santa Fe Ichetucknee Rivers	Level III	Suwannee River (Lower Segment), Santa Fe River	3605C	Impaired - High
8	2016 Springs Projects: Dairy Wastewater System Improvements	Lower Suwannee River	Meeting	Suwannee River (Lower Segment)	3422A	Impaired - High
8	2016 Springs Projects: Dairy Wastewater System Improvements	Lower Suwannee River	Meeting	Suwannee River (Lower Segment)	3422B	Impaired - High
89	Precision Agricultural Practices	Lower Santa Fe Ichetucknee Rivers	Level III	Suwannee River (Lower Segment)	3519	Not impaired
102	Sustainable Suwannee Ag Pilot Program - Advanced Technology	Lower Suwannee River	Meeting	Suwannee River (Lower Segment)	3422A, 3422B	Impaired - High
102	Sustainable Suwannee Ag Pilot Program - Advanced Technology	Lower Santa Fe Ichetucknee River	Level III	Santa Fe River	3605C	Impaired - High
103	Sustainable Suwannee Ag Pilot Program - Low Input	Lower Suwannee River	Meeting	Suwannee River (Lower Segment)	3422A	Impaired - High
103	Sustainable Suwannee Ag Pilot Program - Low Input	Lower Santa Fe Ichetucknee River	Level III	Ichetucknee River	3519	Not impaired
300	Pivot Retrofits	Lower Santa Fe Ichetucknee Rivers	Level III	UFA	3519, 3570, 3522,	Not impaired
206	Gwen Lake	Ichetucknee Springs	Level III	Lake Lona Drain	3486	Not impaired
272	Gwen Lake Phase 2	Ichetucknee Springs	Level III	Lake Lona Drain	3486	Not impaired
228	Accelerating Suwannee River Restoration and Silviculture Management	Ichetucknee Springs	Level III	Ichetucknee River	3519	Not impaired

District Project Number	Project Name	Primary MFL Supported	Quantity Grade	Waterbody Benefited	WBID	Quality Grade
1883	Starke Public Supply Efficiency Improvements	Lower Santa Fe	Level III	UFA, Alligator Creek	3598C	Impaired - High
240	Bradford County Silviculture Enhancement & Recharge Project	Lower Santa Fe	Level III	Sampson Lake	3593, 3598D, 3598	Not impaired
331	Ft. White Water Main Loop	Lower Santa Fe Ichetucknee Rivers	Level III	Santa Fe River	3605C	Impaired - High
276	Hampton Water Main Loop	Lower Santa Fe Ichetucknee Rivers	Level III	UFA	3633	Not impaired
91	Rum Island Park	Lower Santa Fe Ichetucknee River	Level III	Rum Island Spring, Santa Fe River	3605X, 3605C	Impaired - High
298	High Springs Gravity Sewer Extension Phase A2	Lower Santa Fe Ichetucknee Rivers	Level III	Santa Fe River, UFA	3605C	Impaired - High
173	Mill Creek Sink Land Acquisition Ph II (Alachua Co Contract)	Lower Santa Fe Ichetucknee	Level III	Mill Creek Sink	3644	Impaired - High
80	Mill Creek Sink (RIVER Agreement with City of Alachua)	Lower Santa Fe Ichetucknee Rivers	Level III	Mill Creek Sink	3644	Impaired - High
291	Dixie County Multiple Basin Aquifer Recharge (MBAR)	Lower Suwannee River	Meeting	UFA	3684, 3422, 3668	Impaired - High
277	Alachua County Turf Swap	Lower Santa Fe Ichetucknee Rivers	Level III	UFA	2711,2698,2717B,2710, 2694,3671A,3675,2692, 3644	Impaired - High
82	Oakmont GRU Phase II (Recharge Wetland)	Lower Santa Fe Ichetucknee Rivers	Level III	UFA, Santa Fe River	2692	Not impaired
293	Groundwater Recharge Wetland	Lower Santa Fe Ichetucknee Rivers	Level III	UFA	2692	Not impaired
1874	Archer Public Supply Efficiency Improvements	Lower Santa Fe	Level III	UFA, Orange Creek Non-Contributing area	2692	Not impaired
284	University Oaks Phase III a	Waccasassa Rivers	Meeting	Unnamed Slough	3712	Not impaired
278	Bronson Wastewater	Waccasassa Rivers	Meeting	Rainbow River	3712	Not impaired
89	Precision Agricultural Practices	Lower Santa Fe Ichetucknee River	Meeting	Santa Fe River	3605C	Impaired - High
89	Precision Agricultural Practices	Lower Suwannee River	Meeting	Suwannee River (lower Segment)	3422A	Impaired - High

District Project Number	Project Name	Primary MFL Supported	Quantity Grade	Waterbody Benefited	WBID	Quality Grade
89	Precision Agricultural Practices	Lower Suwannee River	Meeting	Withlacoochee	3315	Not impaired
89	Precision Agricultural Practices	Waccasassa River	Meeting	Waccasassa River	3699	Impaired
89	Precision Agricultural Practices	Lower Suwannee River	Meeting	Suwannee River (lower Segment)	3422	Impaired - High
89	Precision Agricultural Practices	Lower Suwannee River	Meeting	Suwannee River (lower Segment)	3422B	Impaired - High
89	Precision Agricultural Practices	Econfina River, Aucilla & Wacissa Rivers	Meeting	Aucilla River, Econfina River, Fenholloway River, Steinhatchee River	3310, 3402, 3473, 3573	Impaired
89	Precision Agricultural Practices	Lower Suwannee River	Meeting	Tiger Creek	3358	Not impaired
103	Sustainable Suwannee Ag Pilot Program - Low Input	Middle Suwannee	NA	Convict Springs	3422V	Impaired



# 2021 Florida Forever Work Plan

Suwannee River Water Management District

## Introduction

The Suwannee River Water Management District (District) is required by section 373.199(7), Florida Statutes (F.S.), to update the Florida Forever Work Plan annually. This annual update is presented as a separate chapter in the Consolidated Annual Report pursuant to section 373.036(7), F.S.

The Florida Forever Act also provides funding opportunities for land acquisition projects and water resource development and restoration projects. Florida Forever funding must be used to achieve the following goals, as set out in section 259.105, F.S.:

- Enhance the coordination and completion of land acquisition projects.
- Increase the protection of Florida’s biodiversity at the species, natural community and landscape levels.
- Protect, restore, and maintain the quality and natural functions of land, water and wetland systems of the state.
- Ensure that sufficient quantities of water are available to meet the current and future needs of natural systems and the citizens of the state.
- Increase natural resource-based public recreational and educational opportunities.
- Preserve significant archaeological or historic sites.
- Increase the amount of forestland available for sustainable management of natural resources.
- Increase the amount of open space available in urban areas.

The Florida Forever Work Plan annual update presents projects the District has identified as eligible for funding under the Florida Forever Act and reports on District land acquisition and management activities. Table 1 lists Florida Forever expenditures for each fiscal year (FY). Table 2 outlines projected expenditures for the next five years.

Table 1. Actual Florida Forever Expenditures

Fiscal Year	Fee Acquisition Expenditures <sup>1</sup>	Fee Acres Acquired	Conservation Easement Expenditures	Conservation Easement Acres Acquired	Water Resource Development	Restoration
2000-2001	-	-	-	-	-	-
2001-2002	\$4,117,869	30,477	\$5,643,127	12,960	-	-
2002-2003	\$1,158,661	564	\$3,382,632	5,026	-	-
2003-2004	\$3,565,225	1,761	\$1,517,048	2,023	-	-
2004-2005	\$3,792,645	2,661	-	-	-	-
2005-2006	\$648,440	123	-	-	-	-
2006-2007	\$13,082,288	4246	-	-	-	-
2007-2008	\$4,041,930	493	\$6,379,514	3,294	-	\$210,510
2008-2009	\$10,965,200	2,171	-	-	-	-
2009-2010	\$494,000	84	\$1,789,725	786	\$23,500	\$309,080
2010-2011	\$5,426,437	1,201	\$1,557,593	682	\$400,000	-
2011-2012	-	-	\$250,710	167	-	-
2012-2013	-	-	-	-	\$20,825	-
2013-2014	-	-	-	-	-	-
2014-2015	\$628,145	85	\$707,850 <sup>1</sup>	35	\$97,918	-
2015-2016	\$7,160	-	-	-	\$26,398	-
2016-2017	\$20,073					
2017-2018	\$1,760,918	329	\$8,045	199		
2018-2019	\$12,828	5.41	\$1,795 <sup>1,2</sup>			
2019-2020		9.8 <sup>3</sup>	\$25,000 <sup>2</sup>			
Total	\$49,721,819	44,200	\$21,263,039	25,172	\$568,641	\$519,590

<sup>1</sup> Includes land exchanges    <sup>2</sup> Includes pre-acquisition costs    <sup>3</sup> Partially funded by Florida Forever funds

Table 2. Projected Florida Forever Expenditures

	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025
Conservation Land Acquisition	\$18,500	-	-	-	
Water Resource Development and Restoration Projects	-	-	-	-	
Total Projected	\$18,500	-	-	-	

## Water Resource Development

The District is responsible for managing water resources to ensure there is an adequate supply to satisfy all existing and projected reasonable and beneficial uses while sustaining water resources and protecting natural systems. Potential water resource development projects eligible for Florida Forever funding are detailed below. As the District continues to work with its various partners to further develop these projects, the District will look to leverage multiple funding sources including Florida Forever funding.

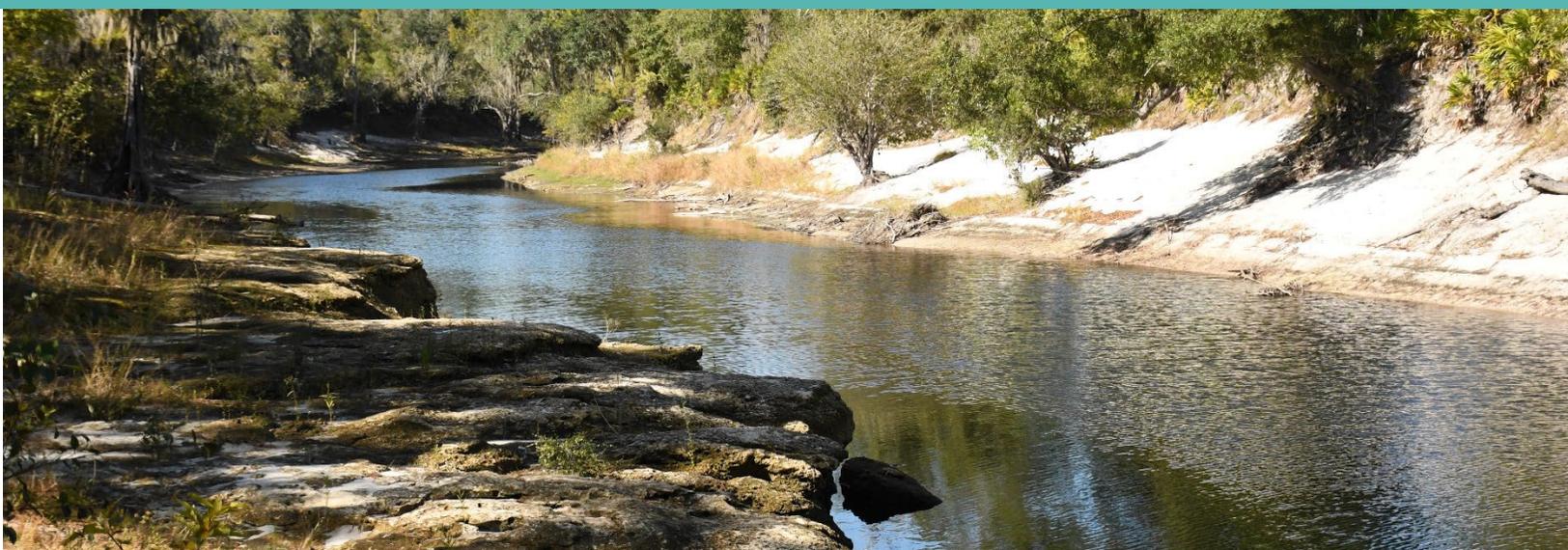
### Upper Suwannee River Basin Water Storage and Aquifer Recharge Projects

#### Columbia and Hamilton Counties

These projects propose the identification of areas within the Upper Suwannee River Basin where surface water storage and aquifer recharge can be implemented to attenuate flooding, maintain baseflows in surface streams, and restore the Floridan aquifer system. In some areas, it may be feasible to use surface water as an alternative water supply to reduce reliance on groundwater. The District is looking for suitable public and private lands to site water storage and recharge wells within these counties. The project cost is being determined.

#### **UPPER SUWANNEE RIVER REGIONAL AQUIFER RECHARGE**

This project is currently being implemented. It includes the installation of up to four recharge wells in the Upper Suwannee River Basin in locations where wetlands were historically ditched and drained into the river. This project intends to capture water during high flow conditions that occur after large rainfall events. The estimated capital cost is \$2,500,000.



### **HAMILTON COUNTY AQUIFER RECHARGE**

This project will evaluate and enhance the quantity and quality of aquifer recharge in Hamilton County. This project includes the replacement of two, 12-inch drainage wells to provide aquifer recharge and flood protection in the Alapaha Basin. The wells would allow up to 2 million gallons per day (mgd) of aquifer recharge to the upper Floridan aquifer (UFA) and the potential for increased recharge contribution in the form of alternative water supplies from the City of Jasper and surrounding communities. Positive flows into the wells will provide a benefit to springs along the Upper Suwannee River. The project cost is estimated at \$700,000.

#### [Suwannee County](#)

### **PILGRIM'S PRIDE WASTEWATER REUSE FEASIBILITY ASSESSMENT**

This project is located in western Suwannee County and is to investigate, and potentially implement, the reuse of the wastewater stream from the Pilgrim's Pride poultry processing facility along U.S. Highway 90 near Falmouth Spring. Reuse of the wastewater eliminates a permitted discharge into the Suwannee River and provides an alternate source of up to 1.5 mgd of groundwater to a potential user(s) currently using Floridan aquifer water, thereby helping maintain base flows to nearby springs as well as to the Suwannee River. The project is to assess reuse potential within at least a five-mile radius from the facility, and includes local agricultural irrigation, dairy pasture irrigation, and a sawmill as possible end-users. The project cost has not been determined.

## **Upper Santa Fe Basin Flood Mitigation and Aquifer Recharge Projects**

#### [Alachua and Bradford Counties](#)

These projects propose the identification of areas within the Upper Santa Fe Basin where surface water storage and aquifer recharge can be implemented to attenuate flooding, maintain baseflows in surface streams, and restore the Floridan aquifer system. The District is looking for suitable public and private lands to site water storage and recharge wells.

#### [Bradford County](#)

### **WEST RIDGE WATER RESOURCE DEVELOPMENT AREA**

The West Ridge Water Resource Development Area project includes nearly 667 acres of District-owned land adjacent to the Florida National Guard's (Guard) Camp Blanding. The purchase was funded by a grant from the Guard through the Department of Defense (DOD) as part of a program designed to secure buffers around military installations. This project provides an opportunity for natural resource enhancement and restoration (particularly wetlands), flood protection, potential aquifer recharge to the UFA, and to augment flows to the Upper Santa Fe River. The project cost and benefits have not been determined.

### **DOUBLE RUN CREEK WATER RESOURCE DEVELOPMENT AREA**

The Double Run Creek Water Resource Development Area project is in eastern Bradford County and includes 1,910 acres of District-owned land adjacent to the Guard's Camp Blanding. The purchase was funded by a grant from the Guard through the DOD as part of a program designed to secure buffers around military installations. This project presents an opportunity for flood protection, natural resource enhancement and restoration (particularly wetlands), potential aquifer recharge to the UFA, and to augment flows to the Upper Santa Fe River. The project cost and benefits have not been determined.

### **INTER-DISTRICT WATER RESOURCE DEVELOPMENT PROJECT**

This Inter-District Water Resource Development Project is in southeastern Bradford County and will utilize lands adjacent to the Guard's Camp Blanding. This project presents an excellent opportunity

for natural resource enhancement and restoration (particularly wetlands), aquifer recharge to the UFA, and to augment flows to the upper Santa Fe River. Aquifer recharge associated with this project will have regional cross-boundary benefits for stressed water resources in both the District and St. Johns River Water Management District (SJRWMD) due to its proximity to the Keystone Heights potentiometric high, which is a regional recharge area for the UFA. The project cost and benefits have not been determined.

#### **BROOKS SINK PHASE 2**

Brooks Sink, located in Bradford County, is known as one of the largest cover collapse sink holes in Florida and directly connects to the UFA. In the 1960s, previous landowners excavated a series of ditches to drain the wetlands and divert the natural flow of water away from Brooks Sink. In 2015, the District, partnering with Rayonier Operating Company, LLC, completed the first phase of the Brooks Sink Project, which involved installing a flashboard riser in the main ditch to divert the water back to the sinkhole. The first phase has resulted in 229.3 million gallons, or 0.12 mgd, of recharge from March 1, 2015 through June 30, 2020. Phase 2 proposes to include an additional 1,020 acres, for a total project area of 2,020 acres, on which flows would be redirected to the natural sink for additional recharge. Phase 2 is in the conceptual design phase and the project cost is being determined. Estimated additional recharge benefits of 0.2 mgd are anticipated. The project cost has not been determined. This project was selected for Springs funding.

#### **LAKE SAMPSON DRAINAGE WELLS**

This project proposes to replace an abandoned drainage well to provide aquifer recharge and flood protection in the Lake Sampson Basin. Flow into the well(s) will be monitored with telemetry using a flume and water level instrumentation. Positive flows into the well will provide a benefit to springs in the Lower Santa Fe River Basin as well as to related minimum flows and minimum water levels (MFLs) set for the river, which are currently in recovery. Recharge benefits are estimated up to 1.0 mgd. The District is actively seeking additional funding sources for this project. The project cost is estimated to be \$1,200,000.

#### **LAKE SAMPSON, LAKE ROWELL AND CROSBY LAKE**

This project is being reviewed for the potential to store and treat floodwaters. It is also a potential site for aquifer recharge using treated wastewater. The project is currently in a feasibility status and discussion with a local landowner is underway for potential project siting. The project cost and benefits have not been determined.

### **Alachua County**

#### **INTER-DISTRICT WATER RESOURCE DEVELOPMENT PROJECT**

This Inter-District Water Resource Development Project is located in central Alachua County and will target flood storage and aquifer recharge potential in the Prairie Creek and Paynes Prairie sub basins. This project presents an excellent opportunity for aquifer recharge to the UFA in a critical area providing groundwater flow to Santa Fe River Springs and thereby augment flows to the Lower Santa Fe River. Aquifer recharge associated with this project will have regional cross-boundary benefits for stressed water resources in both the District and SJRWMD due to its relative potentiometric high and large recharge feature in the Prairie. The project is in the initial phases of feasibility and is dependent upon a significant degree of interagency cooperation. The project cost and benefits are being determined.

## Outstanding Springs and Priority Focus Area Projects

### Sustainable Suwannee – Forestry Cost-Share Pilot Project

This cost-share project that would benefit springs by encouraging land uses such as silviculture that use less water and reduce potential nutrient inputs into surface or groundwaters. Three Outstanding Florida Springs - Ichetucknee, Madison Blue, and Troy Springs, Primary or Priority Focus Areas (PFAs) of their respective springsheds will be addressed for potential opportunities. Approximately 3,000 acres may be enrolled.

### Accelerating Suwannee River Restoration and Silviculture Management

This cost-share project will incentivize silviculture and land conservation to reduce groundwater pumping and nitrogen loading with preference given to the PFAs throughout the Suwannee and Santa Fe River Basins.

## Dispersed Water Storage Initiative

Several decades ago, industrial landowners excavated ditches to drain land for commercial purposes, including pine tree production. This draining had detrimental impacts to the environment including: Increased risk of downstream flooding due to an increase in peak stormwater discharge; loss of natural wetland systems and reduced aquifer discharge due to lowering the water table and shortening the wetland hydro-period; and adverse impacts to the fishery resources due to an increase in freshwater discharge to estuaries.

This project will enhance water resources and restore natural systems by dispersing water over wetland areas. To expand this concept, the District plans to partner with private landowners to gain additional water resource benefits. The District will establish project budgets as individual projects are identified and developed.

## Drainage Well Replacement/Rehabilitation and Enhancement of Natural Recharge Features

The District's karst landscape is characterized by frequent interaction between groundwater and surface water through sinkholes and other natural recharge features that promote rapid recharge to the Floridan aquifer. In the past, local governments used this phenomena to their advantage by accelerating rainfall drainage and reducing flooding impacts using drainage wells. Over time most of the wells have fallen into disrepair or have been plugged entirely. Drainage well replacement and rehabilitation projects would accelerate aquifer recharge and provide increased flood protection, while incorporating modern flow conveyances to provide a greater level of control and implement water quality improvements. The District has identified existing and/or abandoned drainage wells within the Northern Highland geographic region for replacement/rehabilitation. In addition, the District will identify natural recharge features that may provide recharge projects on an opportunistic basis.

## Engineering for Regional Water Resource Development

Preliminary engineering feasibility and scope-identification analyses are typically required to leverage regional water resource development projects to derive enhanced benefits related to water supply or water quality improvement goals. Within the District, the vast majority of municipalities and counties are economically distressed and are not fiscally able to implement this type of effort. This project would serve to identify and define 'shovel-ready' projects that can be initiated upon securing of other funding avenues.

## Alternative Water Supply Projects

Develop and implement alternative water supplies throughout the Suwannee River Basin to offset groundwater demands and enhance water supply. Projects include pivot retrofits for reducing groundwater pumping, upgrades of wastewater treatment facilities to Advanced Treatment (AWT) for reuse, public supply efficiency improvements, feasibility studies targeting Wastewater Treatment Facilities in PFA and basin management action plan (BMAP) areas, construction of AWT facilities as determined by the feasibility studies, and groundwater recharge wetlands.

## Aquifer Recharge Projects

Develop and implement aquifer recharge projects throughout the Suwannee River Basin to offset groundwater demands and enhance water supply. The source could be surface, stormwater or reclaimed water from an AWT facility.

## Restoration Projects

The District, together with state and local partners, has devoted significant funding to projects that focus on restoring water quality and quantity to protect natural systems, especially springs, rivers, and wetlands. Descriptions of water resource restoration projects identified as eligible for Florida Forever funding are provided below. The District continues to work with its state and local partners to identify additional project needs. As projects are developed, the District will look to leverage various funding sources including Florida Forever.



## San Pedro Bay, Mallory Swamp, and Waccasassa Flats

### **HYDROLOGIC RESTORATION**

The District contains extensive ‘pocosin swamps’ that were historically ditched and drained to reduce groundwater saturation of the pocosin soils to allow more intensive plantings of pine species. The largest of these swamps are known as San Pedro Bay in Madison, Taylor, and Lafayette counties, Mallory Swamp in Lafayette and Dixie counties, and the Waccasassa Flats in central Gilchrist County. While successful in increasing plantation densities, derivative impacts included declines in the UFA underlying the swamps, periodic drying of sand-bottom lakes at the perimeter of the swamps and increased suspended solids in the canals and riverine systems leading to the Gulf of Mexico.

The goal of future projects in these critical areas is to restore natural hydrology and thereby improve wetland conditions and enhance aquifer recharge at the swamp perimeters to aid in perimeter lake level recovery, as well as, to provide increased springflows to major river systems. These hydrologic restoration projects will also reduce the discharge of suspended solids through the extensive remaining canal networks to natural receiving water bodies and eventually the Gulf of Mexico.

Hydrologic restoration projects in these areas can be accomplished through the acquisition of large conservation easements within the swamp boundaries and along man-made drainage features to permit construction of and perpetual maintenance access for control structures (culverts, ditch blocks, controlled gates), recharge wells and related conveyances, and other restoration activities. An estimated minimum practicable project size would be 4,000 acres, with an estimate cost of \$4.0 million. Total acreage within the three swamps is more than 600,000 acres.

## Lafayette County

### **MIDDLE SUWANNEE RIVER AND SPRINGS RESTORATION PROJECT: PHASE II**

The proposed Phase II of the Middle Suwannee River and Springs Restoration and Aquifer Recharge Project is anticipated to be a private-public partnership between a timber company and the District. The Phase II property is adjacent to Mallory Swamp and adjacent to the existing boundary of the Middle Suwannee Project. The Phase II property is in excess of 6,000 acres, and the District is investigating conservation easement acquisition opportunities to optimize the water resources development potential of the Middle Suwannee Project. Phase II will rehydrate natural systems along and adjacent to the southeastern margin of Mallory Swamp; thereby, increasing available surface water for wetland hydration and groundwater recharge, which will enhance springs restoration. The District’s approach includes re-establishment of natural drainage patterns by modifying and constructing hydraulic structures (such as culverts and flashboard risers) adjacent to Mallory Swamp, and using natural recharge features and potentially one or more aquifer recharge wells at strategic locations. Phase II is in the initial stages of investigation with potential benefits being determined. The project cost and benefits are being determined.

## District-wide

### **SPRING WATER QUALITY AND QUANTITY RESTORATION**

Since 2012, the District’s Regional Initiative Valuing Environmental Resources (RIVER) program has contributed over \$8.8 million along with state contributions over \$12.1 million for projects generating water quantity and quality improvements, which focus on springs protection and restoration activities. These projects increase springflow, improve erosion and sediment control, reduce nutrient (Total Nitrogen, Total Phosphorous, Suspended Solids) loading, improved recreational opportunities, support economic growth and development within our communities, and provide natural systems restoration and protection. Projects focused on springs restoration may include construction of stormwater management systems, parking lot paving, bank repair and

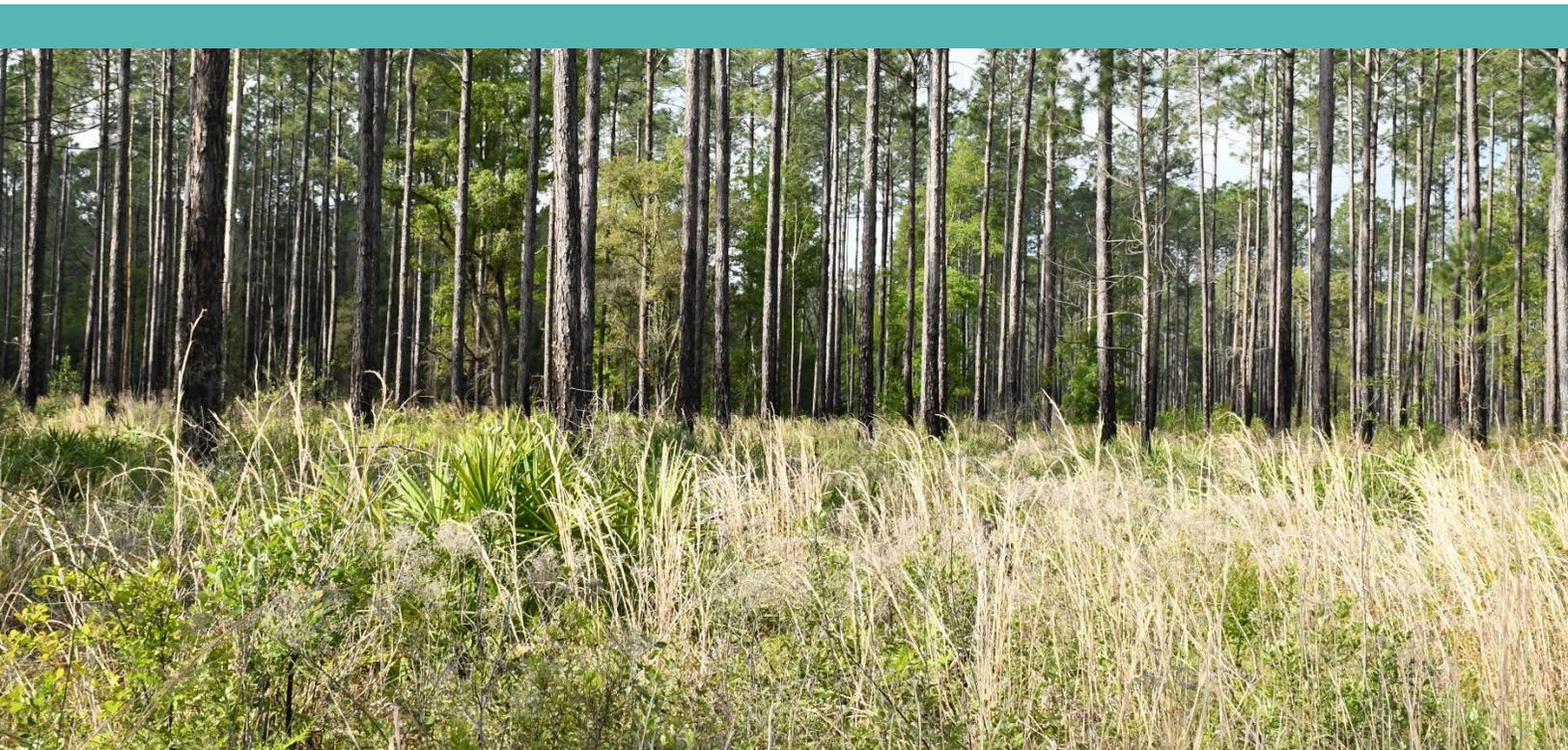
stabilization, sediment and debris removal from spring boils/pool/run, construction of distinct access entrance points to protect bank (i.e., steps, ramp, diving platform, canoe launch, etc.), invasive vegetation removal, and/or native aquatic plant installation. These types of springs restoration projects cost approximately \$100,000 – \$300,000 depending on scope.

#### **WASTEWATER SEPTIC TO SEWER UPGRADES**

Efforts to reduce wastewater pollution may include the elimination of small wastewater package plants and septic tanks that have low levels of treatment and redirect the wastewater to larger regional plants with higher treatment levels. Eliminating septic tanks and package plants can be accomplished by installing service connections to existing sanitary sewer collection systems which directly connect to regional wastewater treatment plants (WWTP). Costs vary greatly depending on the existence of a collection system and the capacity of the WWTP. If the plant can handle the additional wastewater and the collection system is close by, the scope simply involves pumping out the wastewater, crushing the septic tank, and adding a sanitary sewer service connection line. If grinder pumps are needed project costs will increase. The District will continue to work with local governments to develop wastewater infrastructure upgrades and septic to sewer conversion projects. Additionally, the District is working with SJRWMD and the University of Florida Institute for Food and Agricultural Sciences (UF/IFAS) to evaluate the effectiveness of enhances to septic systems at an UF/IFAS facility. Project costs will be determined as individual projects are identified.

#### **STORMWATER TREATMENT**

Agricultural and urban runoff has been identified as significant sources of nutrient, bacterial, and potential toxic contaminant pollution. The goal of stormwater treatment projects is to collect and treat stormwater runoff before it is discharged to surface waters and groundwater. This can be accomplished using hydrodynamic separators or screening devices as a pretreatment method and then using best management practices such as retention and detention systems to filter and/or dilute storm waters. Benefits include preventing trash, debris, suspended solids, oils, and other pollutants from entering surface waters and groundwater, reducing flow rates to match predevelopment rates, reducing erosion, reducing nutrient loading, and maximizing storage capacity and property usage. Stormwater treatment projects cost vary depending on type of treatment and if land is needed. Project costs average approximately \$50,000 per acre of impervious area for treatment.



## Land Acquisition and Land Management

Land acquisition and management activities protect water resources and the overall ecological health of communities within the District. The Save Our Rivers, Preservation 2000, federal, District and Florida Forever programs have preserved approximately 287,938 acres to protect the region’s river systems and groundwater resources. The following table summarizes fee and less than fee acres owned by the District as of December 2020.

*Table 3. Protected Lands by River Basins\**

Basin	Fee Acres	Less Than Fee Acres	Potential Acquisition Project Acres
Alapaha	2,875	1,544	2,942
Aucilla/Wacissa	15,750	12,033	4,880
Coastal River/Econfina/Steinhatchee	48,281	52,666	5,538
Santa Fe/Ichetucknee	15,535	8,176	39,092
Suwannee	65,773	28,551	28,640
Waccasassa	5,266	24,159	5,810
Withlacoochee	6,417	16	6,257
Total	159,897	127,145	93,162

\*Acreage updated to reflect best data available via GIS and land management database

### Land Acquisition Planning

The District’s land acquisition efforts focus on areas for springs protection and to support potential water resource development projects. Water resource development project areas are basically located in two broad zones:

- Areas of high recharge adjacent to the Cody Escarpment: These areas provide the highest potential for identifying and/or locating natural recharge features in the vicinity of possible upgradient recharge water sources, with the intent of minimizing eventual water resource development project transmission and treatment costs.
- Areas of potentiometric high groundwater: These areas constitute the greatest relative benefit with respect to the duration of time that recharged or otherwise retained waters remain in the UFA, as well as maximizing groundwater gradients in springsheds.

The land acquisition program is strictly voluntary — all land acquisition projects are negotiated with willing sellers within the constraints of appraised market value. Lands offered for sale are evaluated by District staff and contractors, who then make recommendations to the Governing Board Lands Committee for review and approval to send the proposed acquisition to the full Governing Board for consideration. The following objectives guide the District’s evaluation of potential acquisition areas:

- Preserving floodplain to maintain storage capacity, attenuate floodwaters, and mitigate flood risk;
- Protecting groundwater quality by maintaining low intensity land uses;

- Preserving natural buffers along water bodies where adjacent uses have a high potential to degrade surface water quality;
- Preserving and protecting springs and surrounding areas to protect and improve surface and groundwater; and
- Increasing recharge to the UFA via water resource development projects restoring natural hydrology in headwater swamps and increasing water retention for recharge enhancement.

## Approved Land Acquisition Projects

The Governing Board has directed staff to use a watershed approach to conduct detailed assessments of potential acquisitions and water resource development projects within the Aucilla, Coastal Rivers, Lower Suwannee, and Waccasassa River basins. This allows staff to take advantage of unanticipated opportunities and leverage District resources on potential projects with RESTORE funds and other funding sources. The Governing Board also approved District staff to work with local partners to identify potential acquisition and water resource development projects in the Santa Fe and Ichetucknee basins that benefit the Santa Fe and Ichetucknee Rivers and Associated Springs MFLs and the Santa Fe BMAP. If benefits for acquisition are identified, staff will make a recommendation to the Lands Committee for review and then forward to the Governing Board for consideration.

*Table 4. Acquisition Projects Approved for Detailed Assessment*

Seller	Project	Acres	County
Jean T. Drufner	Withlacoochee Hills	10	Hamilton
Michael and Freda Shaw	Shaw Conservation Easement Exchange	1,099	Lafayette
Hickman	Alapaha Point	39.8	Hamilton
Bearden	Alapaha Point CE (Donation)	430	Hamilton
Pflieger	Riverbend Estates (exchange for District Surplus property)	1.1	Dixie
Crosby Lake	Crosby Lake	1,380	Bradford
Camp and Abel	Camp and Abel	366	Hamilton
Rio Lindo	Rio Lindo Conservation Easement	313	Gilchrist

*Table 5. Acquisitions Closed in FY 2020*

Seller	Acres	County	Date	Transaction	Funding Source
James Moses	9.8	Hamilton Suwannee	10.31.2019	Fee Exchange	Florida Forever and Save Our Rivers Surplus Fund Balance*

\*Exchange of 9.8 acres of fee in Hamilton County for 20 acres of fee in Suwannee County with a conservation easement. \$1,795 of Florida Forever Funds were expended in FY19.

### Surplus Lands

The District reviews its land holdings to identify any areas that may not be critical for floodplain management, aquifer recharge, and the protection of surface waters, wetlands, and springs. Such lands are declared surplus and either sold or exchanged on the private market or conveyed to other units of government. The proceeds of any sales and exchanges are dedicated to the acquisition of lands with higher water resource and conservation values. Table 6 lists lands declared no longer needed for conservation and to be surplus during FY 2021. Table 7 lists lands surplus in FY 2020.

*Table 6. Lands Approved for Surplus FY 2021*

Tract	Acres	County	Acquired Date	Funding
Branford Bend	50	Suwannee	06.30.2004	Florida Forever
Country Club Road	80	Columbia	07.01.2015	Enforcement Action
Forest Woodlands	11	Gilchrist	10.11.1996	Save Our Rivers
Santa Fe Oasis	1	Gilchrist	04.28.1998	Save Our Rivers
Suwannee Run Shores	1.175	Dixie	12.30.1997	Save Our Rivers
Three Rivers Estates	1	Columbia	12.30.1997	Save Our Rivers
Turtle Spring Surplus Tract	32	Lafayette	05.13.2015	Florida Forever

*Table 7. Surplus Lands Activity FY 2020*

Surplus Parcels	Acres	County	Disposition Date	Transaction	Proceeds
Blue Sink Tract	20	Suwannee	10.24.2019	Conservation Easement Exchange - Moses	N/A
Fort White Wellfield	101	Columbia	07.14.2020	Conveyed to Town of Fort White	N/A

### Land Management

Land management activities ensure District lands continue to provide important water resource functions needed to maintain natural systems and benefit the public. Annually, the District's Land Management Review Team performs a review of management objectives and activities conducted on fee simple title lands held by the District. The COVID-19 pandemic negatively impacted that process

last year and no review or ELM report was completed. Although the District staff had planned, invited participants, and advertised for an April 1, 2020 review of District lands in the Aucilla and Econfina River basins the review had to be canceled due to the COVID-19 pandemic. The District intends to reinstate the review of lands in those basins in 2021. District staff did complete their internal FY 2019 Annual Land Management Report, which is used by the review team each year, and is posted on the District's website.

The Annual Land Management Report addresses social and economic management goals and management activities which are key components of the land management program and include resource protection, public use, communications and fiscal responsibility.

The following summarizes significant natural community resource projects during FY 2020. Once completed, a complete listing of activities and accomplishments will be found in the FY 2020 Annual Land Management Report and will be made available on the District's website.

## Natural Resource Management

### **FOREST RESOURCES**

- In FY 2020, the District completed ten timber sales totaling 2,095 acres.
- One timber sale was a final harvest in preparation for a wellfield.
- Nine timber sales were pine thinnings for improving forest health and aiding in natural community restoration.
- In FY 2020, the District received its final forest inventory products from F4-Tech. This inventory will improve data collecting, reporting, and planning for silvicultural operations. The FY 2020 improvements were custom modifications specifically for the District which will improve data collection and interpretation. Inventory data was collected on 812 plots by Land Management staff in FY 2020. The data from these plots is used to quantify the acres that have achieved their natural community goals and provide data for areas that could be improved by silvicultural activities. As part of this planned project the District has contracted with a firm to complete 3,080 plots using the new inventory system in FY 2021, which will update data within operational timber stands that were last cruised in FY 2011 and identify volumes and other species data in areas where potential for a restoration project has been identified.

### **PRESCRIBED FIRE**

- In FY 2020, prescribed burning was conducted on approximately 10,768 acres of District lands.



**MECHANICAL VEGETATION CONTROL**

- In FY 2020, approximately 1,043 acres were roller-chopped, and 1,888 acres were mowed to help facilitate the use of prescribed fire and to help meet natural community restoration/management objectives.
- Of the approximate 2,931 acres roller-chopped and mowed in FY 2020 the District received \$98,838 in grant funding from the Florida Forest Service to pay for 557 acres of that work on various tracts throughout the District.
- Approximately 152 miles of ditch edges were mechanically treated on the Steinhatchee Springs and Mallory Swamp tracts in FY 2020. This work was done to increase the width of areas along road edges to provide better fire break capabilities; facilitating use of prescribed fire and help protect forest resources from the damaging effects of wildfires.

**CHEMICAL VEGETATION CONTROL**

- In FY 2020, approximately 626 acres were treated with herbicide to prepare sites for reforestation, to help meet natural community restoration/management objectives and to help facilitate the use of prescribed fire.

**INVASIVE PLANT CONTROL**

- In FY 2020, District staff monitored 171 invasive plant infestations and treated 97 of those infestations with herbicides.
- In FY 2020, District contractors treated approximately 107 acres of invasive plant infestations throughout the District.

**RARE SPECIES SURVEY/MONITORING**

- In FY 2020, District staff monitored 92 documented rare plant occurrences throughout the District. Rare plant species were observed at 63 of these locations. These occurrences included species listed as state endangered, state threatened, or commercially exploited.

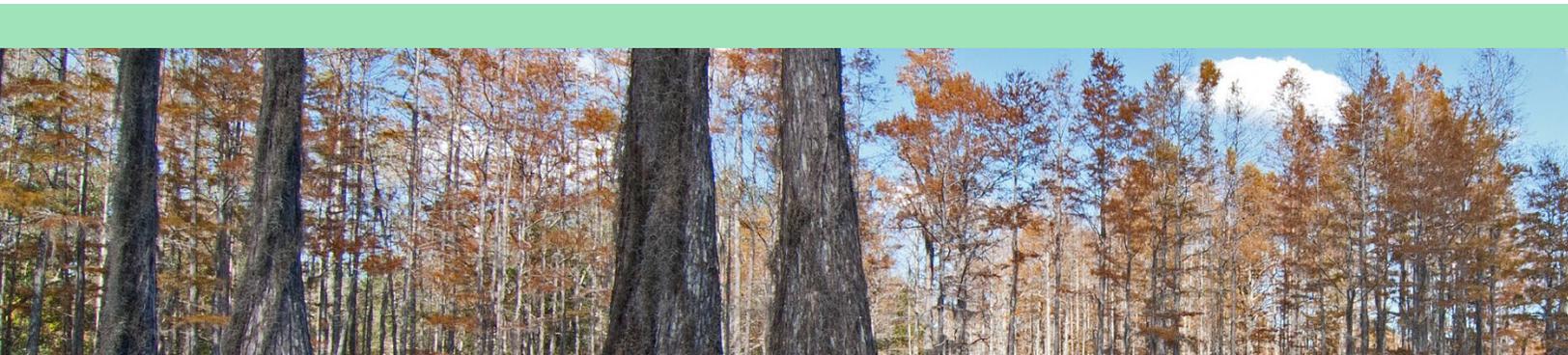
**PUBLIC USE**

- In FY 2010, the District completed a restoration and improvement project at an old and very large erosion scar on the bank of the Suwannee River in the Blue Sink Tract. The site was fully developed into a canoe/kayak launch and included paved parking, ADA improvements, and mending of the erosion scar. Shortly after construction was complete the river flooded and the new construction within the erosion scar catastrophically failed. The site was closed and was unmaintained for approximately 10 years. The District contracted with a firm to make improvements to the launch area for public access and to further reduce erosion potential without removing any large portions of the reoccupied vegetation. In FY 2020, the contractor for the project had to start and stop work often because of high river levels. A small wildfire adjacent to the site further damaged existing facilities which required a contract amendment to be employed. On September 11, 2020, the District re-opened the Blue Sink Canoe and Kayak Launch.
- A new all-terrain vehicle (ATV) parking area was constructed along the McCall's Chapel Grade to provide better access for ATV users who access Mallory Swamp Tract from the southern entrance. The original ATV parking area on Sandy Grade will be abandoned and moved to the old hunter check station parking area near the north entrance when the trail re-opens.
- A road sign project was completed within the Mallory Swamp Tract to improve visitor service and to identify which roads can be legally traveled by the public. All the named roads in Mallory Swamp had new road signs installed; visitors should only travel on named roads. Additionally, closed roads were marked with signage. A road hierarchy sign was added at each entrance describing road types and explaining the user expectation.

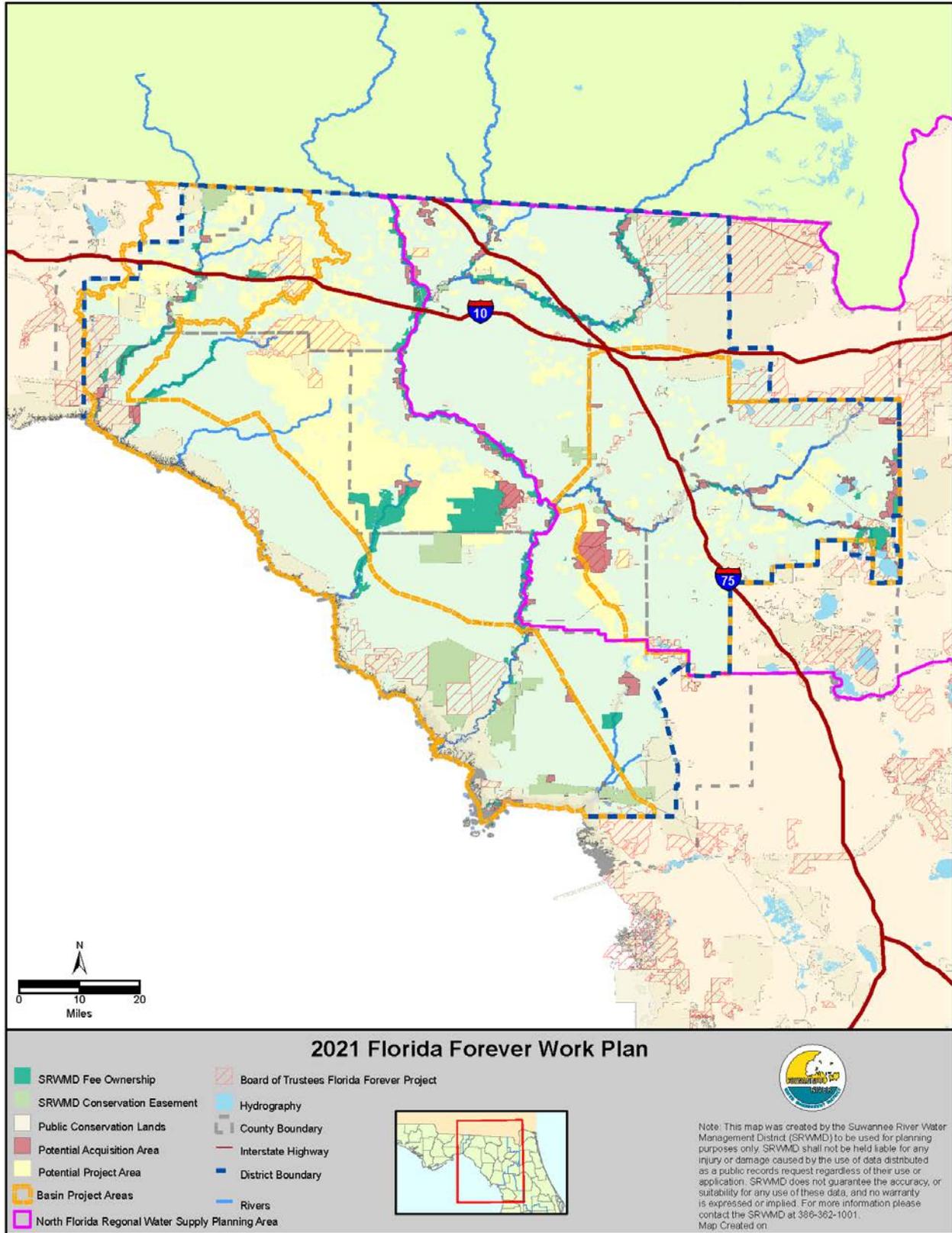
- The District installed 6,725 feet of perimeter fencing around the J. H. Anderson, Jr. Memorial Park – Rock Bluff Tract.
- The District completed a Cultural Resource Assessment Survey on 33 acres of the J. H. Anderson, Jr. Memorial Park – Rock Bluff Tract and defined the high and low archaeological probability zones for the tract. This work was completed in anticipation of future improvement projects related to tract management and public use.
- Ninety-four percent of fee title lands owned by the District are open to the public for recreation. Lands not open to the public include wellfields, spray fields, and water resource development project sites.
- The District cooperated with Florida Fish and Wildlife Conservation Commission and United States Fish and Wildlife Service to provide public hunting opportunities on approximately 106,146 acres.
- The District partnered with Lake City Longbeards, Jefferson County King of Springs, and Gator Gobblers Chapters of the National Wildlife Turkey Federation to sponsor women in the outdoors and youth special opportunity hunts. These special opportunity hunts allow additional hunting opportunities on 6,169 acres. The 2,030-acre Double Run Creek Tract managed by Camp Blanding is leased for hunting.
- In FY 2020, 356 Special Use Authorizations (SUAs) were issued for a wide variety of recreation opportunities or needs. Seventeen SUAs were completed for Mallory Swamp ATV Trail, 168 SUAs were completed for camping at the Goose Pasture Campground, 37 SUAs were issued for temporary ingress and egress and 18 non-recreation SUAs were issued as well. A total of 596 SUAs were issued during FY 2020.

#### **FACILITIES PROJECTS**

- Land Management staff continues to work with GIS staff to improve GIS apps for use on smart devices that enable staff and contractors to use and collect real-time data. In FY 2020, Land Management staff inspected all major tracts and existing facilities (1,463 individual facility and culture resource inspection locations visited) and staff even visited many individual small lots. Of the 803 observations found in FY 2020, staff completed 195 before October 1.
- Approximately 85 miles of road maintenance was completed on the following tracts: Goose Pasture, Mt. Gilead, Cabbage Grove, Cuba Bay, Lamont, Wolf Creek, Roline, Cabbage Creek, Jones Mill Creek, and Mallory Swamp tracts. Of the 85 total miles of road work completed in FY 2020, approximately 7 miles were associated with timber harvest operations.
- Three hydrological improvement projects were completed within the Cabbage Grove Tract. These projects were conducted at various water access locations for the purpose of reducing erosion and sediment loading into the water bodies while maintaining or improving public access.
- Six hydrological facilities (two culverts and four low-water crossings) were replaced or repaired in the Jones Mill Creek Tract. One culvert was replaced in the Mt. Gilead Tract.
- Approximately 12 gate replacement projects were completed throughout the District to replace antiquated cable gates and to protect District land from illegal access.



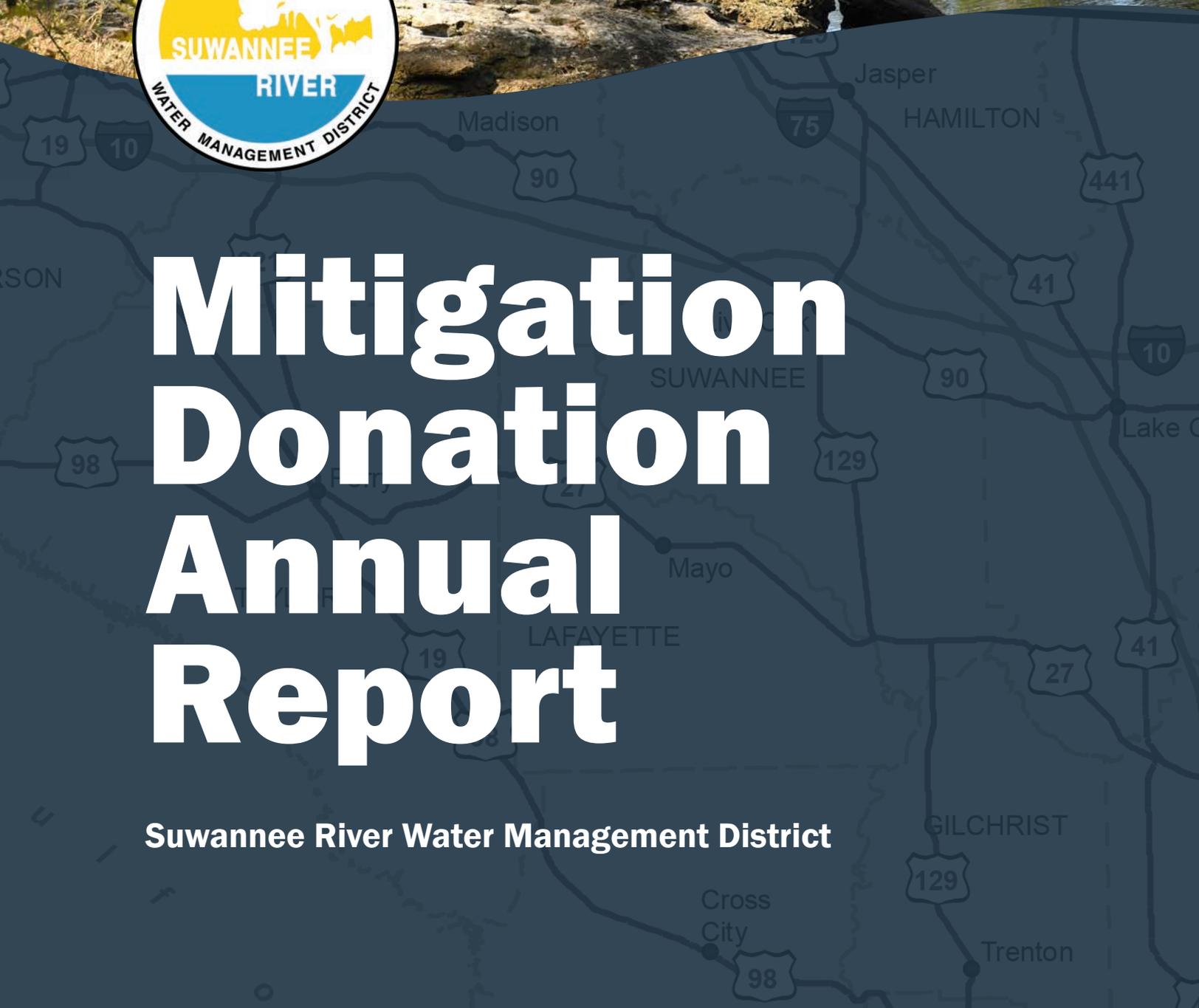
# Florida Forever Plan Map





# Mitigation Donation Annual Report

Suwannee River Water Management District



## Executive Summary

In accordance with section 373.4137, Florida Statutes (F.S.), the Suwannee River Water Management District (District) must develop and implement regional, long-range mitigation planning for wetland impacts associated with Florida Department of Transportation (FDOT) projects.

A total of 15 wetland mitigation projects have been initiated since 1996. Eight projects were completed successfully, five are being monitored by District staff, and two were for the purchase of mitigation bank credits. The District has received a sum total of \$6,060,856 from FDOT to manage these wetland mitigation activities. The FDOT has proposed one new project for the 2021 through 2025 planning period.

## Background Information

Section 373.4137, F.S., states that environmental mitigation for the impact of transportation projects proposed by the FDOT can be more effectively achieved by regional, long-range mitigation planning rather than on a project-by-project basis. The statute sets forth specific language designed to provide funding to the Florida Department of Environmental Protection (FDEP) and the Water Management Districts (WMDs) to develop a mitigation plan to offset environmental impacts from FDOT road projects that require an Environmental Resource Permit (ERP). By July 1st of each year, the FDOT must submit to the WMDs an environmental impact inventory containing a list of projects with proposed wetland impacts. The list is published at least three years prior to planned construction. Based on the yearly inventory, WMD staff develop a mitigation plan capable of securing all local, regional, state, and federal permits for the proposed impacts.

The statute requires each WMD, in consultation with the FDEP, the United States Army Corps of Engineers (USACE), and other appropriate federal, state, and local governments, to develop a mitigation plan for presentation to the WMD Governing Board prior to March 1st of each year. Once the mitigation plan is approved by the Governing Board it shall be submitted to FDEP for approval. Upon approval by FDEP, the WMDs can implement mitigation projects as outlined in the mitigation plan.

FDOT wetland impacts in the District have occurred or are anticipated to occur in the following eight river basins: Alapaha, Aucilla, Coastal Rivers, Santa Fe, Suwannee River, Upper Suwannee River, Waccasassa, and Withlacoochee (Figure 1). This mitigation plan is designed to provide in-kind mitigation for impacted wetlands within the same basin the impacts occur. The plan consists of one or more mitigation alternatives for each FDOT project (Figure 2). In some cases, alternatives include more than one mitigation project that, when combined, yield an alternative that will offset the FDOT impacts and secure the appropriate permits.

Mitigation planning projects undertaken since February of 2004 have used the Uniform Mitigation Assessment Method (UMAM), in accordance with Chapter 62-345, Florida Administrative Code (F.A.C.), to calculate the functional gain for each mitigation proposal. For these projects, the relative functional gain of the proposed mitigation is used in place of wetland mitigation ratios.

## New Projects

### Santa Fe River Basin

**FDOT Project:** Northwest Bascom Norris Drive

### Mitigation Project 1: Edwards Bottomland (EBL)

The District received an application from FDOT for ERP-023-204915-12, on November 5, 2020, for the construction of a roundabout at the intersection of Bascom Norris Road and Main Street (441) in Columbia County. The anticipated construction commencement date is August 21, 2021. FDOT has estimated 0.37 acres of wetlands (FLUCCS 630) will be impacted as a result of the project. The project will occur in the Santa Fe River basin and the mitigation will occur at the EBL Mitigation Site project. Upon completion of the EBL project, which consists of 10.33 acres of wetland/hydrologic restoration, enhancement, and creation plus invasive species removal and control, a total UMAM functional gain of 7.49 will have been created. EBL project earthwork, Phase I wetland plantings, and the baseline monitoring were completed in 2019. Phase II wetlands plantings were completed in 2020. Phase III will be completed in 2021. The estimated total projected mitigation costs for the EBL project are \$181,890.00. With the completion of Phase I and Phase II, 5.49 functional gain units were made available for FDOT projects. The Northwest Bascom Norris Drive UMAM functional loss of 0.19 will be deducted from the EBL Mitigation Site functional gain units upon permit issuance.

## Ongoing Projects

### Santa Fe River Basin

**FDOT Project:** County Road 231 New River Bridge Replacement

#### Mitigation Project 1: EBL

The District received an application from FDOT for ERP-007-228291-2, on September 10, 2018, for the construction of a new bridge over the New River on County Road (CR) 231 in Bradford and Union counties. The construction began around March 3, 2020 and is ongoing. FDOT proposes 1.26 acres of wetlands will be impacted by the project resulting in a total UMAM functional loss of 0.62. The project will occur in the Santa Fe River basin and the mitigation for the project will be completed at the EBL mitigation site. This project's UMAM functional loss of 0.62 was deducted from the EBL functional gain units.

## Completed Projects

### Aucilla River Basin

**FDOT Project:** US 98 Aucilla River Bridge Replacement

#### Mitigation Credits 3: San Pedro Bay Mitigation Bank Credit Purchase

The District issued ERP-123-212754-1 on October 24, 2011, for the replacement of US Highway 98 Bridge across Aucilla River. The bridge replacement impacted 5.7 acres of wetlands. Mitigation included purchase of mitigation credits from San Pedro Bay Mitigation Bank, and water quality improvements for District owned Cabbage Grove and Mt. Gilead tracts. Mitigation credits (0.87 units) were purchased in November 2010 by the District using a total of \$43,500 in funding received from the FDOT for this project. District staff met with USACE and FDOT representatives in 2016 to evaluate the success of the mitigation project. It was determined that an additional 0.42 mitigation credits would be required to complete the project. FDOT purchased these mitigation credits from the San Pedro Bay Mitigation Bank on October 27, 2017.

## Withlacoochee River Basin

**FDOT Project:** State Road 53 Widening and Resurfacing (US 90 to State Line)

**Mitigation Project 4:** West Farm Lake Stormwater Pond Project

The District issued ERP-079-204218-1 on June 9, 1998, for the widening of SR 53 from US Highway 90 in the City of Madison to the Georgia State Line, impacting 1.6 acres of wetlands. Mitigation created wetland and lake habitat at the West Farm Lake Storm Water Facility in Madison County. Mitigation activities were completed in March 2001. The District received \$260,325 from FDOT for this project.

**FDOT Project:** State Road 14 Widening (I-10 to CSX Transportation Railroad)

**Mitigation Project 5:** Cabbage Grove Wetland Enhancement

The District issued ERP-079-209145-1 on March 11, 2003, for the widening of SR 14 from Interstate 10 to the CSX Transportation Railroad in the City of Madison. The widening of SR 14 impacted 0.89 acres of wetlands. Mitigation restored natural water flow in wetlands within District-owned property, Cabbage Grove Tract, in Taylor County. The District received \$75,594 from FDOT. The mitigation project was completed in 2006. The District conducted operation and maintenance improvements at this site in December 2011.

## Upper Suwannee River Basin

**FDOT Project:** County Road 143 Widening (CR 146 to I-75)

**Mitigation Project 6:** Woods Ferry Hydrologic Enhancements

The District issued ERP-047-209544-1 on December 13, 2005 for the widening of CR 143 in Hamilton County from CR 146 to Interstate 75, impacting 1.23 acres of wetlands. The District contracted with consultants to identify, evaluate, and construct mitigation activities within District-owned Woods Ferry Tract in Suwannee County. Mitigation involved hydrologic enhancement of seven wetland sites by improving drainage features to restore natural water flow. Mitigation activities were completed in November 2006. The District received \$110,970 from FDOT for the mitigation. Evaluation of mitigation success was conducted by Jones, Edmunds and Associates in 2010 and shown to have met mitigation requirements.

## Coastal Rivers Basin

**FDOT Project:** State Road 51 Widening Lafayette County

**Mitigation Project 7:** Steinhatchee River Basin Hydrological Improvements

The District issued ERP-067-223712-1 on March 13, 2001, for the widening of SR 51 from the City of Mayo to the Taylor County line impacting 3.5 acres of wetlands in 2002. The mitigation project restored natural water flow for wetlands located on District-owned Steinhatchee Springs tract. The District received \$279,174 from FDOT for this project.

**FDOT Project:** State Road 51 Widening Taylor and Dixie Counties

**Mitigation Credits 3:** San Pedro Bay Mitigation Bank Credit Purchase

The District issued ERP-123-210590-1 on October 10, 2006 for the widening of SR 51 from the Town of Steinatchee to the Lafayette County line, impacting 1.27 acres of wetlands. Mitigation was achieved by purchase of mitigation credits from San Pedro Bay Mitigation Bank. The District received \$10,200 from FDOT for mitigation and purchased 0.6 mitigation credits from San Pedro Mitigation Bank in 2006.

## Santa Fe Basin

**FDOT Project:** US Hwy 441 Santa Fe River Bridge Replacement

**FDOT Project:** State Road 121 Santa Fe River Bridge Replacement

**Mitigation Project 8:** Alligator Lake Surface Water Improvement and Management (SWIM) Program

The District issued ERP-001-206684-1 and ERP-125-205839-1 on June 13, 2000 and May 13, 1999, respectively, for the replacement of bridges crossing the Santa Fe River in Alachua and Union Counties. These projects impacted 2.3 acres of wetlands. The mitigation project restored natural water flow between wetlands adjacent to Alligator Lake and Price Creek (both in Columbia County). Mitigation activities were completed in March 2001. The District received \$60,000 from FDOT for this project. District staff inspected the Alligator Lake and Price Creek surface water improvements project in January 2017.

**FDOT Project:** County Road 231 Widening (SR 100 to Baker County Line)

**Mitigation Project 9:** Cellon Creek Floodplain Restoration at San Felasco Hammock State Preserve

The District issued ERP-125-209144-1 on March 11, 2003, for the widening of CR 231 in Union County from SR 100 to the Baker County line, impacting 1.96 acres of wetlands. The mitigation project restored natural water flow and exotic plant species were removed within wetlands in San Felasco Hammock State Preserve (Alachua County). Construction activities were completed in August 2004, and exotic plant removal was completed in June 2011. The District received a total of \$166,476 from FDOT for wetland mitigation and a final report from FDEP in January 2011.

**FDOT Project:** County Road 229 New River Bridge Replacement

**Mitigation Project 10:** Lake Rowell Tract Restoration and Enhancement

The District issued ERP-125-210531-1 on April 12, 2005, for the replacement of the CR 229 bridge over New River at the Union/Bradford County's line, impacting 2.44 acres of wetlands. The mitigation project, located at the District-owned Lake Rowell tract, restored natural water connections between Alligator Creek and Lake Rowell (both in Bradford County). The District received \$180,214 from FDOT for this project. Mitigation activities were completed in 2006, evaluated in 2013, and deemed to be a success.

**FDOT Project:** Starke Bypass Project (State Road 223)

**Mitigation Project 2:** Starke Bypass Mitigation Area (SBMA)

The District issued ERP-007-213985-1 on October 22, 2017, for the construction of a new roadway corridor, State Road (SR) 223, that routes traffic around the City of Starke in Bradford County. The project impacted 58.06 acres of wetlands with a total UMAM functional loss of 46.47. Construction of SR223 was completed on September 12, 2019. A wetland mitigation project to offset these impacts was advertised under a low bid design-build procedure. The District awarded the contract to

one of two shortlisted design-build firms. The winning bid was \$2,980,000 submitted by Alligator Creek Mitigation Bank, LLC. The District issued ERP-007-223088-1 on November 6, 2015 for the Starke Bypass Mitigation Area. Alligator Creek Mitigation Bank, LLC initiated construction activities in December 2015. Construction of the mitigation site is complete and monitoring of wetland plantings for success has been ongoing.

## Waccasassa River Basin

**FDOT Project:** State Road 500 Widening (from Chiefland to Bronson)

**Mitigation Project 11:** Cedar Key Storm Water Quality Restoration Project

**Mitigation Project 12:** Cow Creek Road Restoration in Goethe State Forest

**Mitigation Project 13:** Wetland Preservation in Levy County

The District issued ERP-075-206226-1 on May 9, 2002, for the widening of SR 500 from Chiefland to Bronson. The project impacted 23.0 acres of wetlands. Mitigation involved improvements to the Cedar Key stormwater system to prevent discharge of sediments, nutrients, bacteria, and heavy metals into the Gulf of Mexico. In addition, natural water flow into wetlands was restored within the Goethe State Park, and approximately 1,000 acres of wetlands in Levy County were preserved by conservation easements to the District. Mitigation activities were completed in May 2007. The District received \$1,713,490 from FDOT for this project. The Cedar Key Water Quality Restoration Project was evaluated by District staff in 2019 and determined to be successful. The Cow Creek Road Restoration project was evaluated November 2017 and determined to be successful. In 2003 the District acquired and recorded conservation easements for the Meeks and Mann parcels (1,000 acres) in Levy County.

**FDOT Project:** State Road 24 Widening from Otter Creek to Rosewood

**Mitigation Project 14:** Devil's Hammock Hydrological Enhancement and Preservation

The District issued ERP-075-210019-1 on March 8, 2005, for the widening of SR 24 in Levy County, impacting 9.95 acres of wetlands. The District contracted with consultants to identify, evaluate, and construct the mitigation project that restored natural water flow for wetlands located on the District-owned Devil's Hammock property. Mitigation activities were completed in January 2007. The District received \$180,913 from FDOT for this project. Evaluation of mitigation success was conducted by Jones, Edmunds and Associates in 2010 and shown to have met mitigation requirements. This is an example of body copy.

Figure 1: FDOT Construction Projects

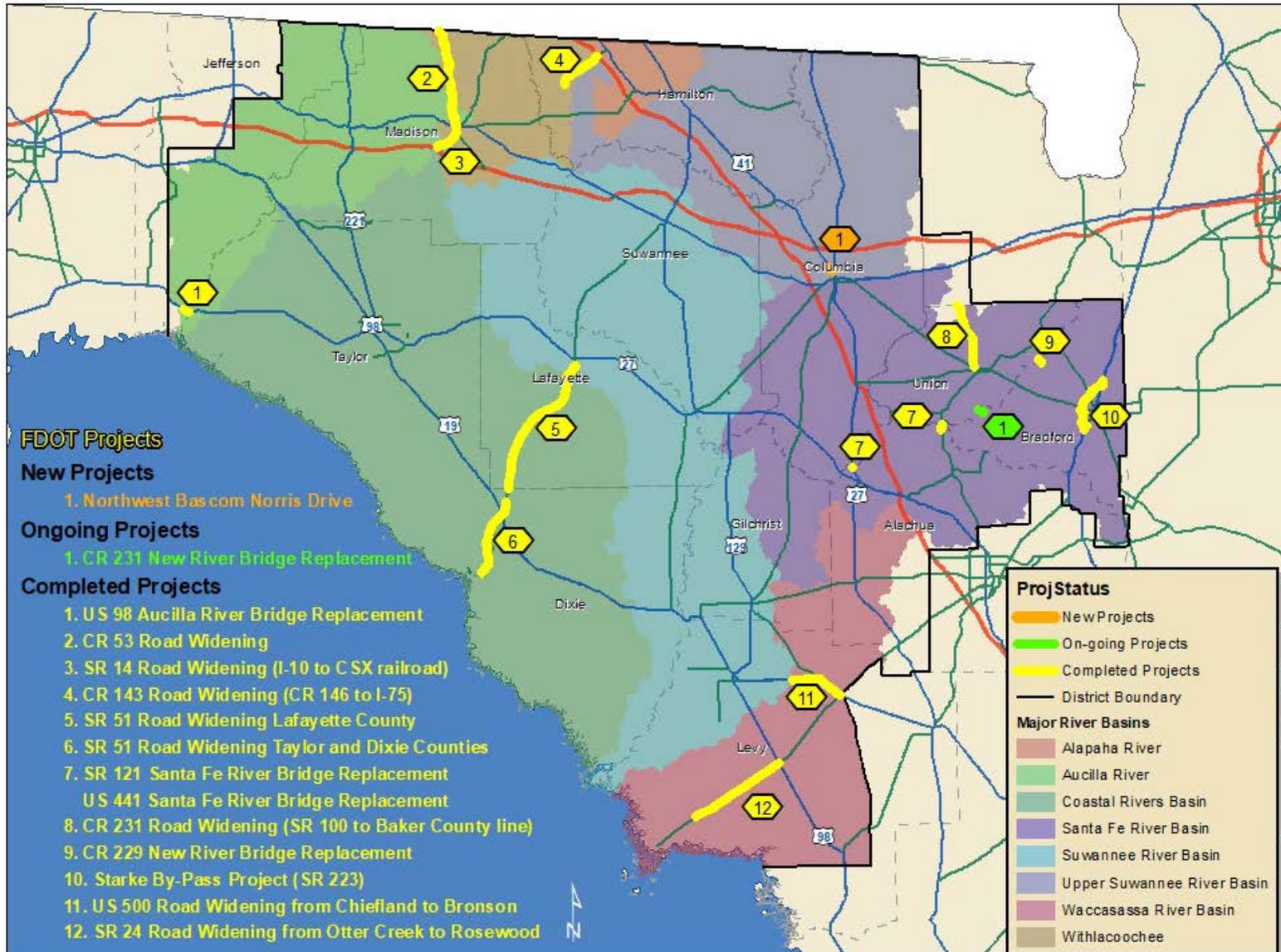


Figure 2: Wetland Mitigation Sites

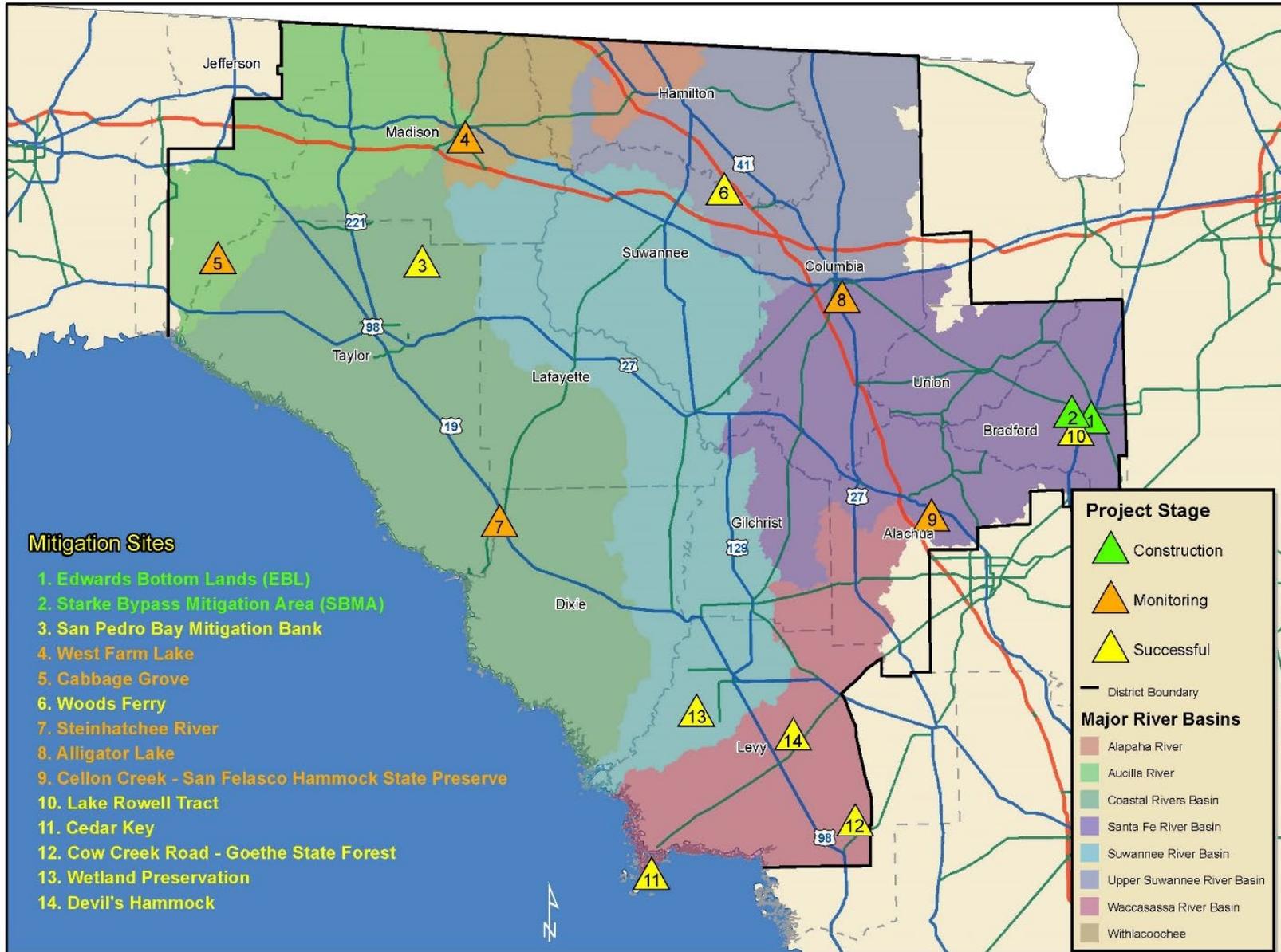


Table 1: FDOT construction projects and associated mitigation projects.

FDOT Project Status	River Basin		FDOT Project	FDOT Work Number	ERP Number	Impact Acres	Mitigation Stage*	Mitigation Project	Revenue from FDOT	Total Fund Expended
NEW	Santa Fe	1.	Northwest Bascom Norris Drive	446295	204915-12	0.37	C	1. Edwards Bottomland (EBL)	\$ 181,890.00	\$ 181,890.00
		1.	CR 231 New River Bridge Replacement	433957	209144-1	1.50	C	1. Edwards Bottomland (EBL)		
ONGOING	Santa Fe	1.	CR 231 New River Bridge Replacement	433957	209144-1	1.50	C	1. Edwards Bottomland (EBL)		
Currently there are no projects for the Alapaha or Suwannee River basins.										
COMPLETED	Aucilla	1.	US 98 Aucilla River Bridge Replacement	2108732	212754-1	5.70	S	2. San Pedro Bay Mitigation Bank Credit Purchase**	\$ 43,500.00	\$ 43,500.00
	Withlacoochee	2.	State Road 53 Widening and Resurfacing (US 90 to State Line)	2117565	204218-1	1.60	M	3. West Farm Lake Stormwater Pond Project	\$ 260,325.00	\$ 260,325.00
		3.	State Road 14 Widening (I-10 to CSX railroad)	2105281	209145-1	0.90	M	4. Cabbage Grove Wetland Enhancement	\$ 75,594.00	\$ 46,459.00
	Upper Suwannee River	4.	County Road 143 Widening (CR 146 to I-75)	2122181	209544-1	1.23	S	5. Woods Ferry Hydrologic Enhancements	\$ 110,970.00	\$ 53,848.00
	Coastal Rivers (Steinhatchee)	5.	State Road 51 Widening Lafayette County	2100751 2100851	223712-1	3.50	M	6. Steinhatchee River Hydrological Improvements	\$ 279,174.00	\$ 279,174.00
		6.	State Road 51 Widening Taylor and Dixie Counties	2108502 2084662	210590-1	1.27	S	2. San Pedro Bay Mitigation Bank Credit Purchase**	\$ 10,200.00	\$ 10,200.00
	Santa Fe	7.	US Hwy 441 Santa Fe River Bridge Replacement and State Road 121 Santa Fe River Bridge Replacement	2110486	206684-1 205839-1	1.00 1.30	M	7. Alligator Lake Surface Water Improvement and Management (SWIM) Program	\$ 60,000.00	\$ 60,000.00
		8.	County Road 231 Widening (SR 100 to Baker County line)	2128801	209144-1	1.96	M	8. Cellon Creek Floodplain Restoration at San Felasco Hammock State Preserve	\$ 166,476.00	\$ 72,180.00
		9.	County Road 229 New River Bridge Replacement	2128761	210531-1	2.44	S	9. Lake Rowell Tract Restoration and Enhancement	\$ 180,214.00	\$ 180,214.00
		10.	Starke By-pass Project (SR223)	2080014 2080015 2080016	213985-1	58.06	C	10. Starke Bypass Mitigation Area (SBMA)	\$ 2,980,000.00	\$ 2,931,843.00

FDOT Project Status	River Basin		FDOT Project	FDOT Work Number	ERP Number	Impact Acres	Mitigation Stage*	Mitigation Project	Revenue from FDOT	Total Fund Expended
	Waccasassa	11.	State Road 500 Widening from Chiefland to Bronson	2117089	206226-1 204584-1 224156-1	23.00	S	11. Cedar Key Storm Water Quality Restoration Project	\$ 1,713,490.00	\$ 1,713,490.00
							S	12. Cow Creek Rd Restoration in Goethe State Forest		
							S	13. Wetland Preservation in Levy County		
		12.	State Road 24 Widening from Otter Creek to Rosewood	210384	210019-1	9.95	S	14. Devil's Hammock Hydrological Enhancement and Preservation	\$ 180,913.00	\$ 190,694.00

\*Mitigation Stage: P-Proposed, M-Monitoring, C-Construction, S-Successful

\*\*Multiple credit purchases from same mitigation bank