MARCH 1, 2017

SUWANNEE RIVER
Water Management District

2017
CONSOLIDATED ANNUAL REPORT

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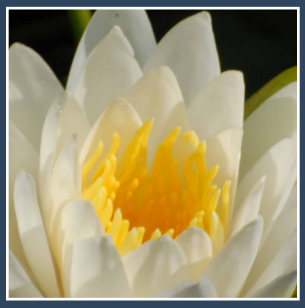
SUWANNEE RIVER WATER MANAGEMENT DISTRICT



Strategic Plan

2017 - 2022

SUWANNEE RIVER
WATER MANAGEMENT DISTRICT

SUWANNEE RIVER WATER MANAGEMENT DISTRICT

Donald Quincey, Jr.,
Chairman

Governing Board Members

Donald Quincey, Jr.,
Chairman

Alphonas Alexander,
Vice-Chairman

Virginia Johns
Secretary/Treasurer

Kevin Brown

Gary Jones

Virginia Sanchez

Richard Schwab

Bradley Williams

Charles Keith

Message from the **Chairman**

Water is the foundation for our economy, environment, and the North Florida way of life. This strategic planning effort helps to collaborate with the public and sharpen the vision of staff and the board to ensure the District works efficiently and effectively to protect our shared water resources. Three key areas of focus for me are increased regional water conservation efforts, robust data collection, and continued improvement of water use monitoring.

Key to improved regional water conservation efforts is effective joint planning between the St. Johns River Water Management District (SJRWMD) and are our own district. This year the two districts have completed the North Florida Regional Water Supply Plan (NFRWSP). This first-ever, joint-planning document outlines water supply demands over the next 20 years and after almost 100 stakeholder meetings, the plan was approved unanimously by a stakeholder advisory committee representing critical interests throughout the districts. The plan was built on a scientifically rigorous model, the North Florida Southeast Georgia groundwater flow model (NFSEG), which was also developed in partnership with both districts, as well as numerous stakeholder groups. The completion of the plan and draft of the model illustrate the importance and benefit of regional collaboration for managing our water resources.

As demonstrated in the NFRWSP, water conservation continues to be an important focus of the District. Through grant and cost-share programs, the Governing Board has directed more budgetary dollars than ever before into community project development and implementation. These projects allow local communities to prosper using innovative solutions to decrease water use. In fact, the District recently launched the Sustainable Suwannee program which aims to assist farmers to use less water, while also decreasing the leaching of nutrients into our water.

Effectively protecting our resources depends on developing sound science based on comprehensive data collection. To that end, the Governing Board and District have made great strides in water use monitoring and the development of a monitoring well network. The data collected from these efforts allows the District to better forecast water resource needs and intentionally focus regulatory operations.

I truly believe in the mission and work of the District. Without the knowledge and expertise of District staff, strong relationships with our stakeholders and a genuine concern for our area, the communities and resources we serve would suffer. I speak for all of the Governing Board when I say that we are proud of this District and the changes it has made in recent years. With new leadership, expert staff and a strategic road-map, I look forward to what we can accomplish together.

Noah Valenstein,
Executive Director

Message from the Executive Director

Since the establishment of Florida's water management districts in 1972, the Suwannee River Water Management District has been unique in its strong connection between our communities and our environmental resources. Made up primarily of rural communities, our District's economic growth relies heavily on the health of our natural resources, which both define a way of life for North Floridians, and provide a platform for economic growth. With eleven major rivers, lakes and the State's highest concentration of first-magnitude springs, water lovers flock to this area to create a life unique from anywhere else in the United States.

As we reflect on the mission of our agency and plan for the future, the District has selected six strategic priorities upon which to focus its planning and operational efforts over the course of this five-year plan. The following focus areas were developed in partnership with local communities and stakeholders as critical to preserving and enhancing their way of life:

PRESERVING OUR WORKING FORESTS TO PROTECT WATER SUPPLY AND WATER QUALITY

IMPROVING WATER QUALITY TO PROMOTE AQUACULTURE IN OUR COASTAL COMMUNITIES

PRESERVING OUR WILD AND SCENIC COASTAL RIVERS

INNOVATIVE AGRICULTURE PRACTICES FOR A SUSTAINABLE SUWANNEE

SPRINGS-BASED RECREATION AND TOURISM

HYDROLOGIC RESTORATION AND AQUIFER RECHARGE

The magnitude of responsibility to manage our water resources to protect livelihoods and ways of life for so many of our residents is not taken lightly. As we look to the future, I believe strongly that the District and our staff are equipped with the skills and expertise needed to safeguard some of Florida's most prized resources.

Agency Overview

Vision

To be the leader in community-focused, sustainable water resource management in Florida.

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 of nine members, each of who 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.

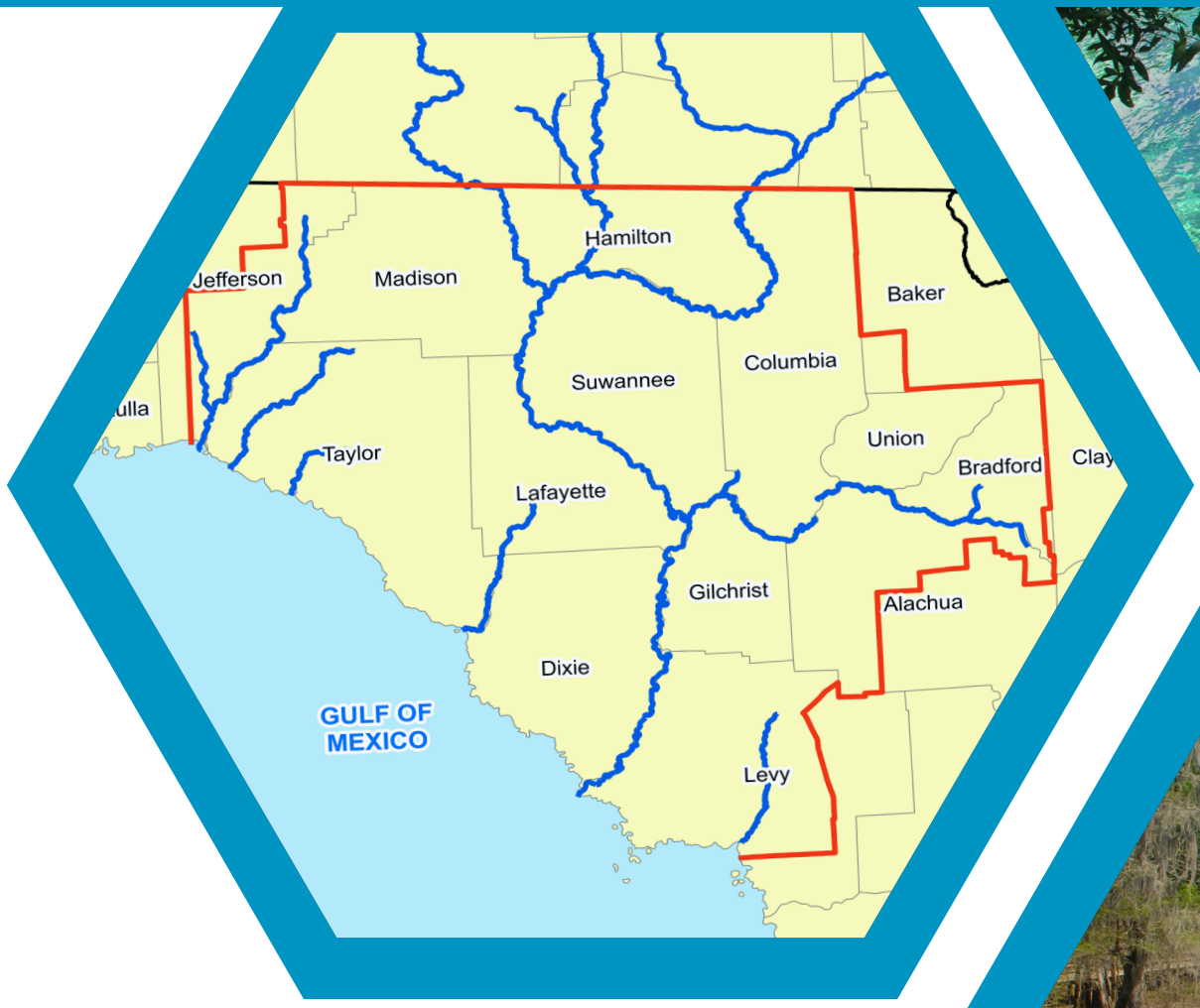
While the District is the smallest of the five water management districts in geographic area, population served, tax base, and agency staff, it holds many of the most unique and valuable natural resources in Florida. The District encompasses 7,640 square miles in north-central Florida. The District includes 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 300 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, Econfina, Waccasassa, and the Wacissa.

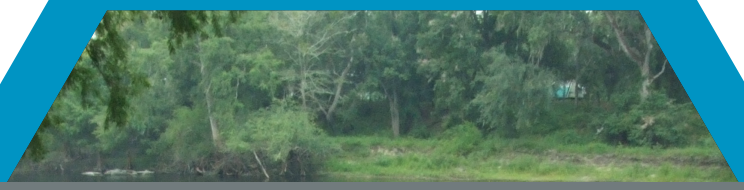
The District is charged by the Legislature with the responsibilities of managing water supply, water quality, flood protection, and natural systems. To meet these responsibilities and its mission, the District has developed goals for the next five years and identified the strategies necessary to accomplish these goals. The District encompasses a unique area comprised of working and natural forests, farms, rivers, springs, and estuaries. Agriculture, silviculture, aquaculture, and springs-based tourism are major economic drivers in the region. Protecting water resources not only supports natural systems but also is necessary for future economic growth. For this reason, our strategic plan focuses on four core responsibilities and also on key environmental and economic connections.

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 necessary 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), 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





ENVIRONMENTAL AND ECONOMIC CONNECTIONS

The major economic drivers in the District are dependent on healthy, productive natural systems. Communities throughout the District recognize that protecting water resources which support natural systems is necessary for economic growth. Public feedback makes it clear that preserving these natural resource-based economies is a priority. Therefore, these environmental and economic connections serve as strategic priorities that will guide the implementation of the District's core responsibilities over the next five years.

PRESERVING OUR WORKING FORESTS TO PROTECT WATER SUPPLY AND WATER QUALITY

The District includes some of the most heavily forested areas in Florida. All four Big Bend counties - Jefferson, Taylor, Dixie, and Levy - have more than 60 percent forest cover; with Taylor County having nearly 90 percent forested. Silvicultural best management practices (BMPs) help protect water quality, supply, and natural systems. Forested lands serve as natural filters to surface water, benefiting receiving waters and downstream coastal estuaries. These lands provide important habitat, especially along the coast, allowing for adaptation to rising sea levels. Managed forested lands also help reduce evapotranspiration, increasing water yield to surface water bodies and the aquifer.

These forested lands are a critical part of the regional economy. In 2013, forestry and forest product manufacturing generated over $2 billion in economic output for the region and directly supported over 12,000 jobs. Over 6,500 of those jobs are in Taylor County alone. It is important to note that these forest-related industries require a stable and sufficiently large source of timber in order to flourish and grow. Therefore, the District is committed to preserving sufficient managed forest lands in the region as population growth brings changes in land uses and increased development.

IMPROVING WATER QUALITY TO PROMOTE AQUACULTURE IN OUR COASTAL COMMUNITIES

The Big Bend coastal region of Florida is characterized by long stretches of undeveloped shoreline and extensive salt marshes punctuated by a few small coastal residential communities, including Cedar Key, Suwannee, Steinhatchee, Jena, Horseshoe Beach, and Keaton Beach. While these uniquely isolated communities have largely retained their rural character and maritime culture, they offer great potential for emerging aquaculture industries. The clam industry in Cedar Key supports over 550 jobs and represents roughly 80 percent of Florida's clam industry, which overall has a statewide impact of over $50 million annually. Through projects ranging from wastewater infrastructure improvements and land acquisitions, to living shoreline and artificial reef projects, the District continues to improve water quality in the Big Bend coastal region benefiting the coastal industries.

PRESERVING OUR WILD AND SCENIC COASTAL RIVERS

The coastal rivers within the District are some of the most pristine natural and cultural resources in Florida. The Aucilla and Wacissa Rivers are both designated by the state as Outstanding Florida Waters, and with the majority of land along the rivers in public ownership, these rivers remain scenic and untouched. As true ecotourism destinations, coastal rivers are home to a vast array of wildlife and offer recreation opportunities for birding, canoeing, kayaking, and nature photography.

The coastal corridors are of historic and cultural importance as well. The Wacissa River, a tributary of the Aucilla, is where the historic slave canal is found. This canal was an attempt to join the two rivers to move cotton to the coast during antebellum times. Although the canal was not successful in transporting cotton, it now is a popular destination for experienced paddlers. The Aucilla River Basin contains archaeological treasures, including one of the only sites in the world for studying early human settlement in the Western Hemisphere. Located on the southern edge of Florida's Red Hills Region, the Page-Ladson archaeological dig has attracted exploration by scientists since the 1960s. Recent discoveries have confirmed this site to be the oldest known location of human life in the southeastern United States, with artifacts dating back over 14,500 years. Preserving these unique systems to protect their cultural significance continues to be a priority for the District.

INNOVATIVE AGRICULTURE PRACTICES FOR A SUSTAINABLE SUWANNEE

Agriculture is a major economic driver in the Suwannee River Basin and also an integral part of the heritage of the region. In 2013 alone, agriculture and related industries generated $4.5 billion in economic output and supported over 20,000 jobs in the Suwannee River Basin. In addition, the 1,366,714 acres of agriculture in the region have created some of Florida's most productive green belts, yielding defined communities set within a rural landscape that continues to provide ecosystem services such as wildlife habitat, pollination, water storage and aquifer recharge. Maintaining these large open spaces is of added importance as the District contributes more than 30 percent of the state's total recharge to the Floridan aquifer system. Through the Suwannee River Partnership, the District works with state, federal, and regional agencies, local governments, and agricultural operations to reduce nutrient loading and conserve water use through implementation of best management practices. The District also works with agricultural producers through its cost-share program to assist producers in implementing projects that increase irrigation efficiency, water conservation, and improve nutrient management technology. Continuing research, and implementation of technologies and innovative agricultural practices is key to meeting the challenge of protecting water resources and sustaining the region's agricultural economy.

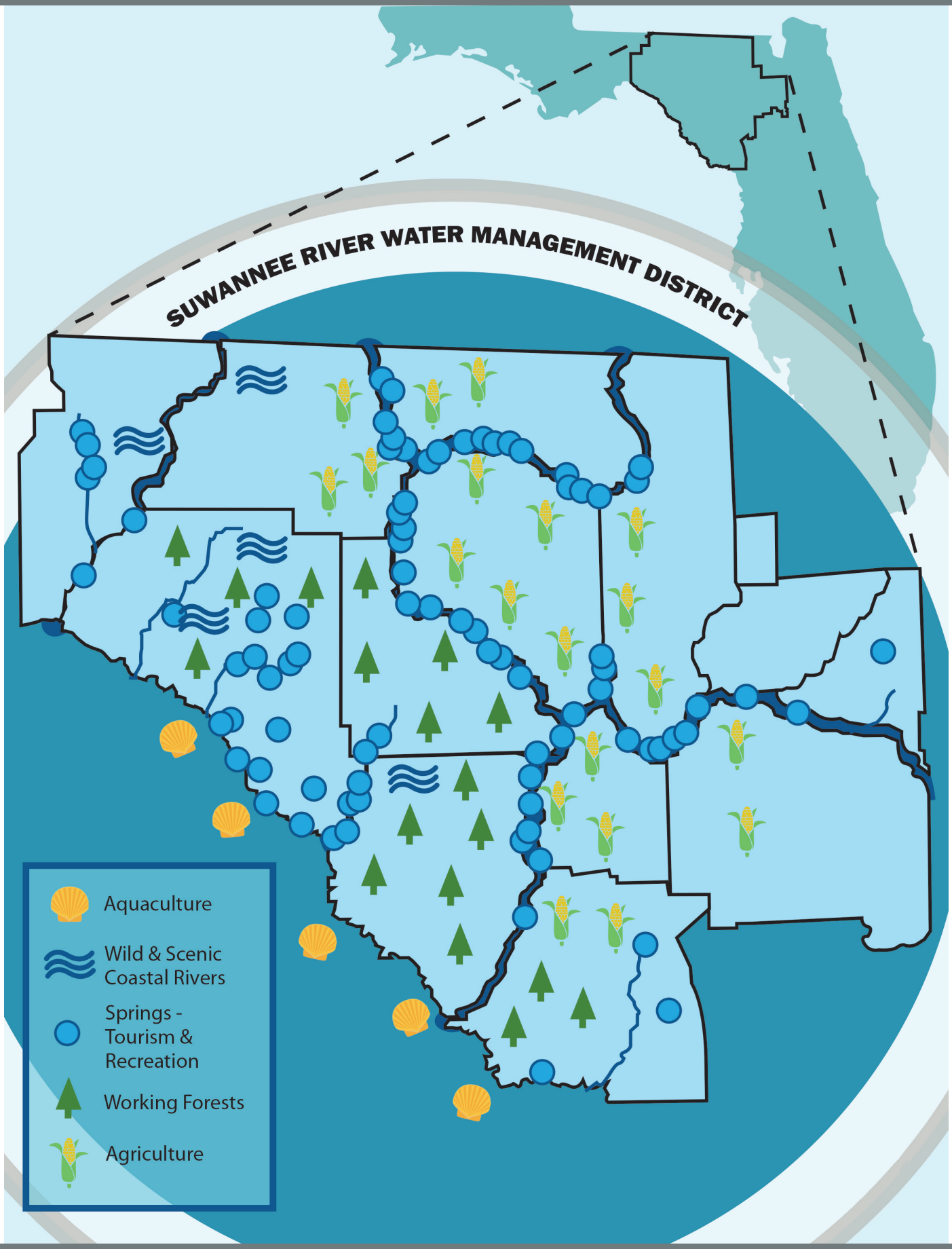
ENVIRONMENTAL AND ECONOMIC CONNECTIONS

SPRINGS-BASED RECREATION AND TOURISM

The District is defined by world-renowned springs, including the highest concentration of springs in Florida and the highest concentration of first-magnitude springs in the United States. Springs provide habitat for wildlife and plant species, as well as natural, recreational, and economic value. Recreational use of springs supports ecotourism in the region providing opportunities for swimming, fishing, diving, kayaking and canoeing, and wildlife viewing. The estimated total economic benefits associated with recreational use (due to direct spending, supply chain activity and income re-spending) supported over 1,000 full and part-time jobs and generated $94 million annually in economic output. Springs in the District are vulnerable to increased nutrient loading and declining flows. The long-term preservation of this international resource is a major priority for the District, and this objective has recently been underscored by the Legislature which designated 14 springs and springs groups within the District as Outstanding Florida Springs.

HYDROLOGIC RESTORATION AND AQUIFER RECHARGE

The Suwannee River Basin is unique in Florida with regard to the extent and degree of interaction between surface water and groundwater. In areas of the District where the Floridan aquifer system is unconfined, the aquifer is highly vulnerable to activities on the land surface. However, this also provides opportunity for more rapid recharge of groundwater from infiltration. Hydrologic restoration projects target historic floodplains, wetlands, and drainage patterns that had been altered to drain naturally wet areas prior to Florida's current environmental regulations. The District has a long-standing commitment to address issues through hydrologic restoration continues to look for opportunities to restore natural hydrology, enhance and restore wetlands, improve both water quality and water supply, and provide flood protection and prevention.


SUWANNEE RIVER WATER MANAGEMENT DISTRICT
Aquaculture
Wild & Scenic Coastal Rivers
Springs - Tourism & Recreation
Working Forests
Agriculture

FLOOD **CONTROL &** FLOOD **PROTECTION**

HARNESSING PEAK FLOWS OF WATER TO PROTECT OUR COMMUNITIES AND AUGMENT OUR AQUIFER

The District works with multiple cooperators including the FDOT, 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) 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 THE RISK OF FLOODING FOR DISTRICT COMMUNITIES

STRATEGIES

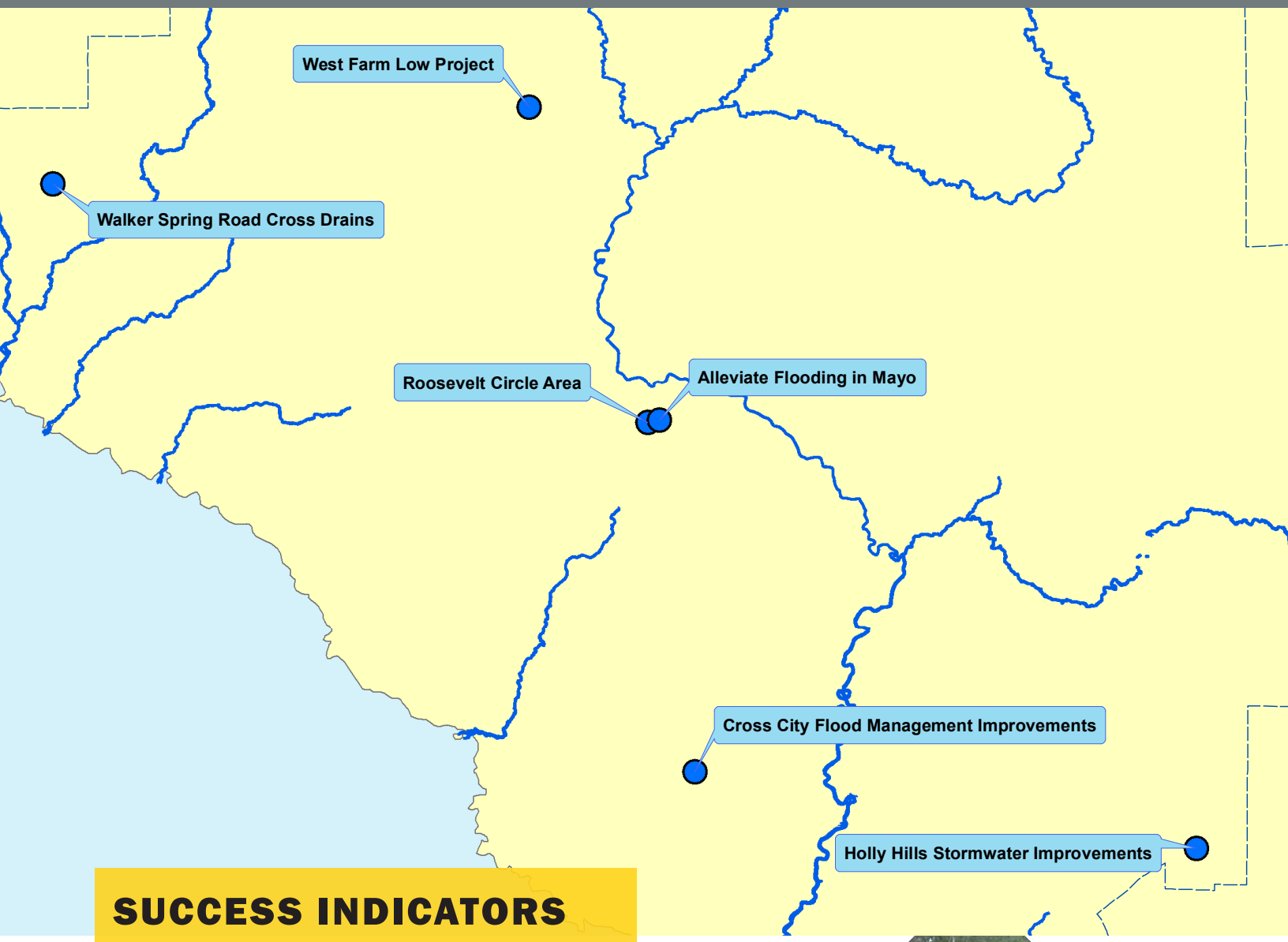
- In conjunction with local entities, identify areas through the FEMA discovery process as under significant risk of flooding and offer cost-share on flood abatement projects through the District's Regional Initiative Valuing Environmental Resources (RIVER) program, as funding is available.
- Partner with local governments and the state to design multipurpose projects that reduce flooding, while increasing natural or augmented recharge to the aquifer, including identifying existing drainage wells within the Northern Highlands physiographic region for rehabilitation or replacement.
- Continue to assist in mitigating flood impacts by purchasing floodplain properties, when fiscally appropriate, and with a focus on simultaneously achieving additional core missions.
- To better maximize and quantify the benefits of restoration projects, establish a unified, comprehensive plan for monitoring, operating, and maintaining hydrologic restoration projects throughout Lafayette and Dixie counties, as well as request an updated FEMA model of flooding in the that area.
- Address persistent and large-scale flooding issues in Bradford County by partnering with FEMA to revise flood plain maps for Bradford County and assist the USACE in developing a comprehensive flood management project list for the Santa Fe Basin area of Bradford County. In addition, partner with SJRWMD, Chemours Company, Bradford County and others to complete the design of, identify funding opportunities for, and begin construction of a regional surface water management system in eastern Bradford County.

GOAL TWO

PROTECT LIFE AND PROPERTY FROM FLOODING THROUGH PUBLIC EDUCATION AND RESEARCH

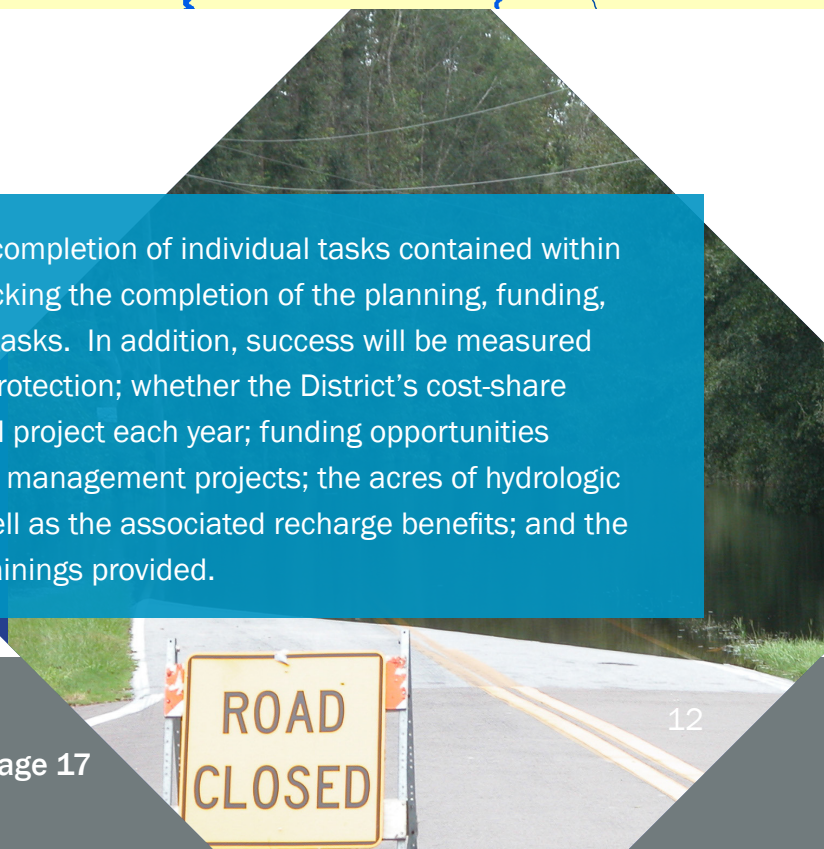
STRATEGIES

- Improve permittees' knowledge of and compliance with District regulations protecting natural surface water functions by designating a specific employee to serve as the Compliance Assistance and Enforcement Officer.
- Improve regional knowledge of the purpose of surface water and flood control regulations by providing training to consultants on an annual basis and hosting a regional seminar on a bi-annual basis.
- Continue education efforts to inform the public of the District's adoption of the North American Vertical Datum of 1988 to ensure the public can properly utilize the District's river level and flooding information.
- Assist local governments in better predicting changes in storm surge, due to changes in land use and sea level, by partnering with FEMA and research institutes to gather updated information about the District's coastal surface hydrology.
- Strengthen existing relationships with the Southeast River Forecast Center, National Weather Service, and United States Geological Survey to improve existing flood forecast and warning monitoring network and develop interactive riverine indundation mapping.



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.



NATURAL SYSTEMS

MAINTAINING THE ECOSYSTEM SERVICES PROVIDED BY THE NATURAL RESOURCES OF THE DISTRICT

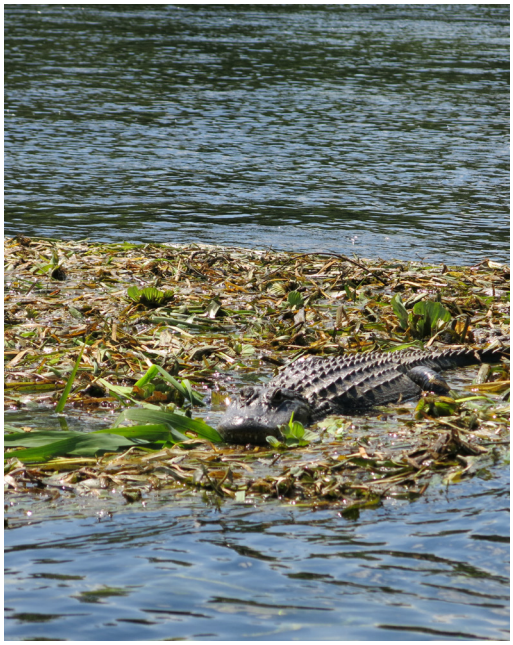
District projects, regulations, and land acquisition and management activities protect and restore the overall health of the ecological system. As discussed above, hydrologic restoration projects in the district re-establish and improve natural systems such as wetlands, floodplains, native ecological 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 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. Environmental Resource Permit evaluations consider avoidance and minimization of impacts to wetlands and other natural systems. Additionally, the permit review addresses erosion and sedimentation control measures and BMPs, thereby protecting wetlands, Outstanding Florida Waters, and improving water quality to receiving water bodies.

The District establishes Minimum Flows and Minimum 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 levels and/or flows may change and still prevent significant harm.

GOAL ONE

ESTABLISH MINIMUM FLOWS AND MINIMUM LEVELS AND IMPROVE WATER QUALITY OF PRIORITY SPRINGS AND WATER BODIES



STRATEGIES

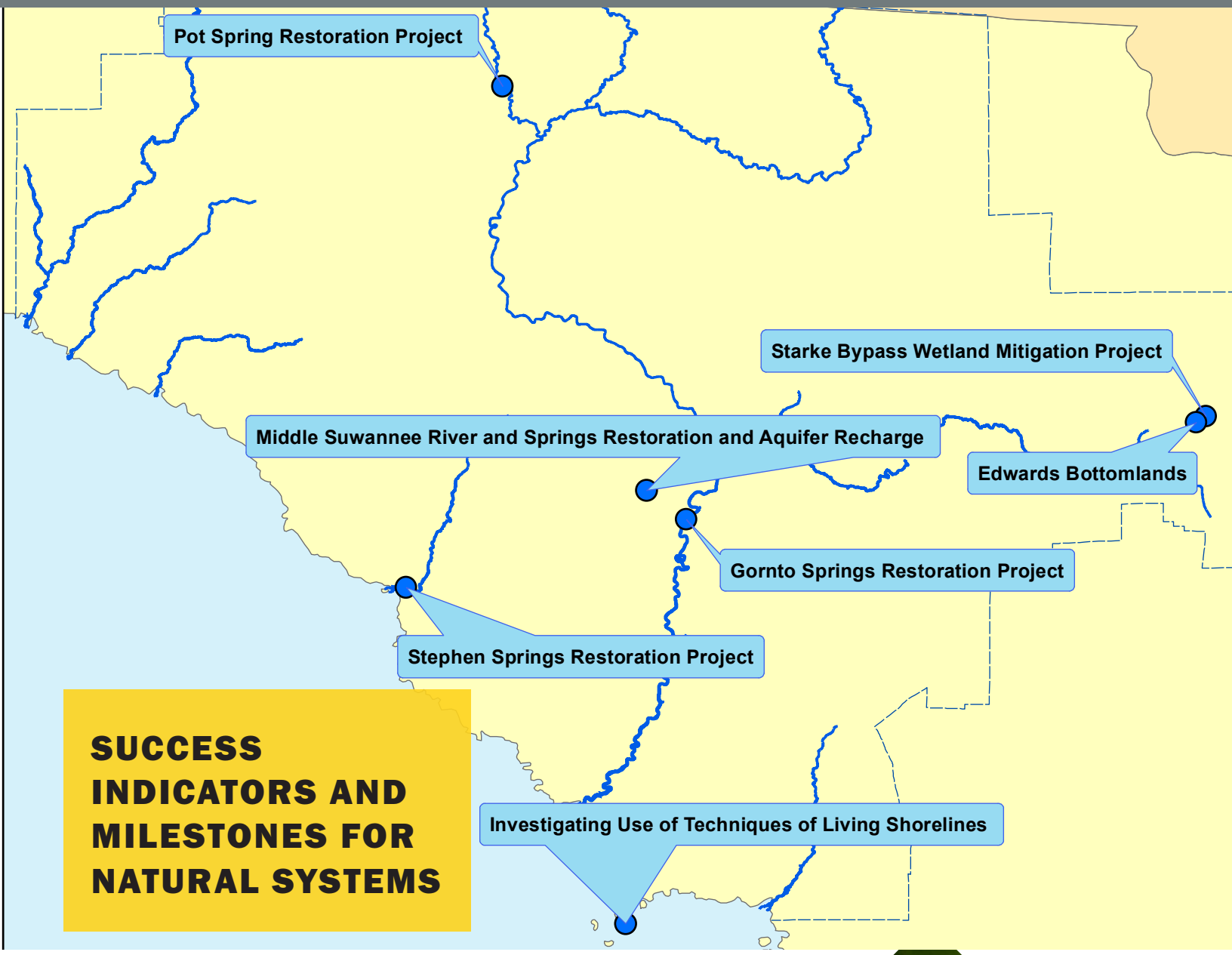
- Establish MFLs for all Outstanding Florida Springs and priority water bodies and reassess adopted MFLs on a timely basis to protect the District's unique and irreplaceable resources.
- Expeditiously implement conservation and water resource development projects to recover and support spring flows and water quality standards for Outstanding Florida Springs and additional springs designated as priority water bodies. Specifically, develop and implement 20 million gallons per day (mgd) of conservation and water resource development projects, within the existing water resource caution area, to benefit the Ichetucknee and Lower Santa Fe Rivers over the next five years, as funding is available.
- Partner with the FDEP and the FDACS, as well as other local, state, and federal partners to implement water quality projects for the restoration of priority water bodies.
- Leverage District cost-share funding to assist with meeting water quality goals.
- Identify short and long-term monitoring needs, and implement data collection, to ensure MFL rules, Water Supply Plans, and Water Use Permit decisions and re-evaluations meet sustainable water quantity goals for people and nature.

GOAL TWO

ACQUIRE AND MANAGE DISTRICT LANDS TO PRESERVE AND PROTECT EXCEPTIONAL WATER RESOURCE VALUES AND RELATED NATURAL SYSTEMS

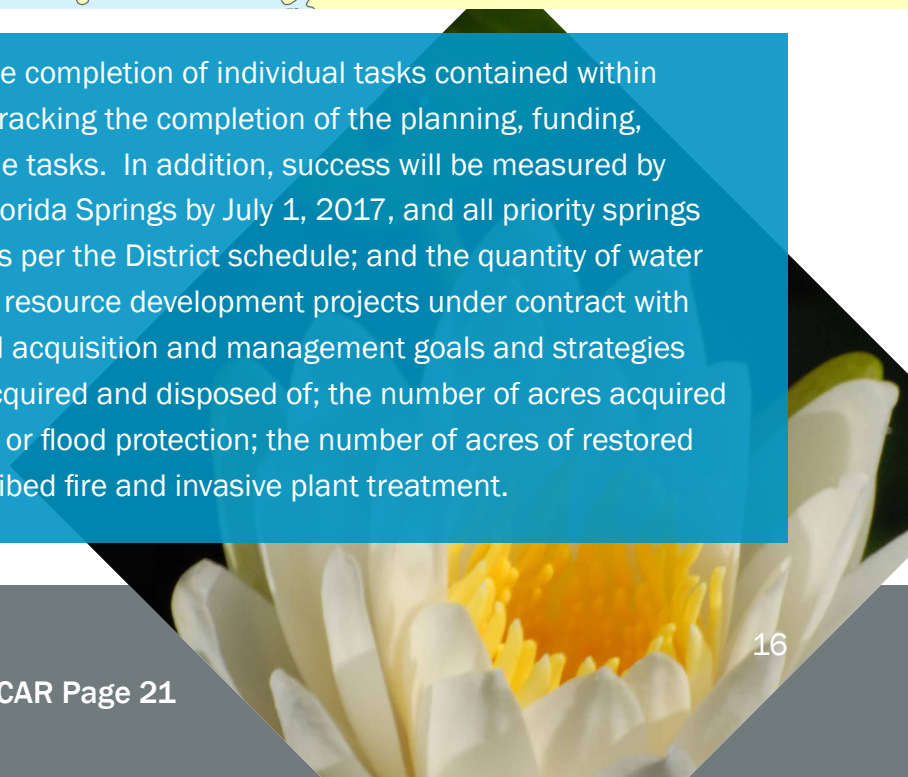
STRATEGIES

- 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.
- Maximize the water resource values of District-owned property by identifying opportunities to restore hydrologic function on current properties; and by analyzing the ability of all future acquisitions to contribute to the District's missions to protect and enhance the area's water quantity and quality, aquifer recharge, and flood protection.
- Surplus District lands that are not needed for conservation or water resource development projects, investing revenue back into the District's natural systems programs.
- Identify and foster partnerships to assist in acquiring and managing lands that preserve and restore Outstanding Florida Springs, priority water bodies, natural systems, and provide flood protection.
- Develop land conservation programs that assist in preserving the unique connections between the area's economy and natural resources, while achieving the District's core missions.



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 Outstanding Florida Springs by July 1, 2017, and all priority springs by 2017; the time it takes to re-evaluate MFLs 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.



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 0.35mg/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, land owners, and other stakeholders to implement projects to reduce nutrient loading, including implementing agricultural 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 IN OUTSTANDING FLORIDA SPRINGS TO ASSIST IN COMPLIANCE WITH THE STATE'S NUMERIC NUTRIENT CRITERIA STANDARD

STRATEGIES

- Implement pilot projects in key springsheds that reduce nitrate levels beyond those achieved by full implementation of BMPs for non-point sources of pollution.
- Encourage the development of new technologies that can achieve significant reduction in nutrients on any scale.
- Establish programs to coordinate all areas of the District's work, and its partners' efforts, to leverage water quality improvements that protect key natural resources, such as Outstanding Florida Springs.

GOAL TWO

IMPROVE AND PROTECT WATER QUALITY OF THE DISTRICT'S PRIORITY WATER BODIES, ASSISTING IN IMPROVING THE REGION'S ECONOMY

STRATEGIES

- Assist the FDEP in implementing existing and new Basin Management Action Plans by coordinating cost-share programs to provide for the timely adoption of BMPs, including precision agriculture.
- Identify and address areas where water quality is limiting economic growth and develop plans to address those impacts.

GOAL THREE

ASSIST IN IDENTIFYING AND ANALYZING TRENDS IN WATER QUALITY FOR SURFACE WATER BODIES THROUGHOUT THE DISTRICT

STRATEGIES

- Complete revised Surface Water Improvement and Management (SWIM) plans to assess and guide project development for all water bodies within the District and update the SWIM plans five years after they are complete.
- Manage the continuous and periodic collection of environmental data in a targeted fashion to assist partners with identifying emerging challenges and water quality trends for key resources.
- Publish an annual water quality report for the District water quality monitoring program.

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.

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

IMPLEMENT MULTI-DISTRICT WATER SUPPLY PLANNING AND COMPLIMENTARY REGULATORY PRACTICES

STRATEGIES

- Update the Joint Regional Water Supply Plan with the SJRWMD no later than 2022.
- Coordinate with FDEP to ensure that regulatory efforts between water management districts adequately reflect cross-boundary challenges identified within water supply planning efforts.
- Ensure the District's five-year Water Supply Assessments are collaboratively driven and clearly communicate resource constraints as well as opportunities for water resource development.

GOAL TWO

WORK WITH ALL PARTNERS TO INCREASE WATER CONSERVATION EFFORTS ACROSS THE DISTRICT

STRATEGIES

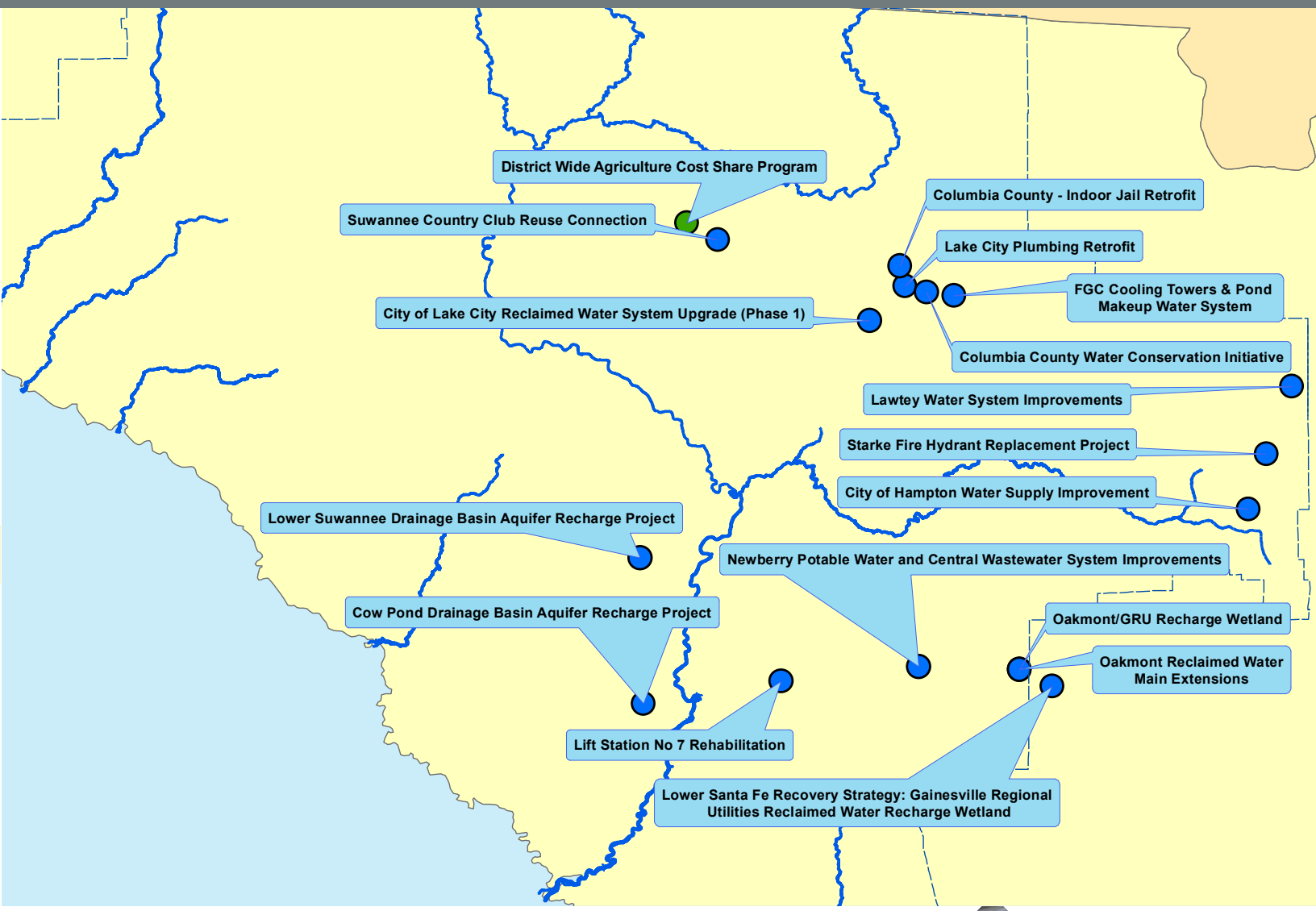
- Lead the state in the implementation of agricultural water conservation through targeted cost-share and education efforts.
- Assist communities in increasing the beneficial reuse of water, achieving the beneficial reuse of 50 percent of wastewater within the District in five years, tripling reuse within the District.
- Educate the public about the importance of water conservation by assisting in developing a conservation ethic that instills in the public a sense of their stake in the sustainability of the region's water resources.

GOAL THREE

ENVIRONMENTAL DATA COLLECTION AND DISSEMINATION

STRATEGIES

- Monitor 100 percent of eligible agricultural Water Use Permits within six months, and monitor all agricultural use of water from eight-inch or greater diameter wells within five years.
- Complete the establishment of a comprehensive groundwater monitoring network to support the water supply planning efforts of the District within two years.
- Publish water flow information, including annual trends, on all Outstanding Florida Springs in an easy-to-digest online format.



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 groundwater use within the District is having on the Floridan aquifer system; and the percentage of agricultural groundwater use that is being monitored through automated or manual reporting.

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 one employee performs the job functions of two or three employees. 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 – MAINTAIN AND INCREASE THE LEVEL OF SKILL AND EXPERTISE AMONG DISTRICT STAFF AND LEADERSHIP

Strategy:

- Ensure District staff remain subject-matter experts in their fields and have the ability to become nationally recognized for their area of work by creating a leadership development program and professional development opportunities. In addition, leverage and reinforce the current expertise of staff by creating opportunities for cross training of employees between program areas and identify and celebrate employee inter-personal and professional achievements.

GOAL TWO – MAINTAIN A BALANCED DISTRICT BUDGET FOR EXISTING AND FUTURE NEEDS

Strategy:

- Continue to develop budgets that focus on the protection of groundwater supply through water conservation and water resource development projects, while containing less than a five percent administrative overhead. In addition, identify priority recurring needs that are not currently being funded with recurring revenue and develop a plan to sustain those needs.

GOAL THREE - ENSURE THE SAFETY OF DISTRICT EMPLOYEES, PROPERTIES AND FACILITIES THROUGH REPAIRS AND PREVENTATIVE MAINTENANCE

Strategy:

- Improve the safety of employees by developing a preventative maintenance program for District facilities and properties as well as conduct workplace safety assessments of occupied facilities.

GOAL FOUR – REDUCE RISKS IN MANAGEMENT OF DATA AND MAINTAIN INSTITUTIONAL KNOWLEDGE

Strategies:

- Improve the utilization and management of data by implementing a District-wide electronic document and project management system, as well as implement corresponding policies and procedures to institutionalize and augment the use of the system.
- Improve the retention of institutional staff knowledge by developing a new employee orientation training and mentoring program that disseminates the knowledgebase of senior employees.

GOAL FIVE – STRENGTHEN STAKEHOLDER RELATIONSHIPS AND DISTRICT PARTNERSHIPS

Strategies:

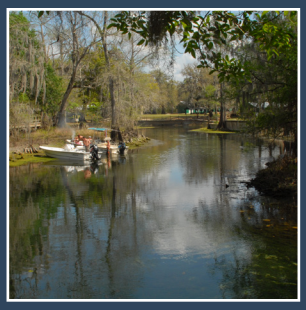
- Reinvigorate the Suwannee River Partnership and establish new advisory committees within the partnership to allow a forum for productive dialogue among all District partners, including environmental non-profits, agricultural producers, local governments, and research organizations.
- Create a unified grant application and cost-share assistance program within the District to simplify the project development and funding application process for local governments.
- Develop an organized and recurring set of tours and educational events to share technical information developed by the District and its partners.

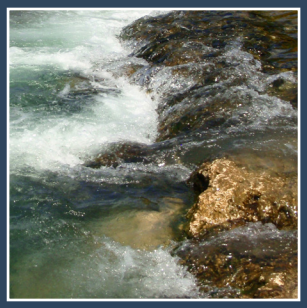
SUCCESS INDICATORS AND MILESTONES FOR MISSION SUPPORT:

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 tours and Suwannee River Partnership meetings held in the last year.

2016 ANNUAL WORK PLAN

SUWANNEE RIVER WATER MANAGEMENT DISTRICT





INTRODUCTION

The Suwannee River Water Management District (District), in accordance with section 373.036(2)(e)(4), 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 describes 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 2015-2016 (FY 2016), are provided below. This report will describe District efforts over the past fiscal year to achieve these goals.

WATER SUPPLY

- Sustainable Water Supply: Ensure an adequate and sustainable water supply for all reasonable and beneficial uses while protecting springs and natural systems.
- Water Conservation: Maximize water conservation and use efficiency for all water uses.

WATER QUALITY

- Heartland Springs Initiative: Ensure springs have adequate flow, maintain good water quality, and sustain healthy biological communities.

NATURAL SYSTEMS

- Minimum Flows and Minimum Levels: Ensure District priority water bodies are protected for current and future generations.
- Water Management Lands : Manage land and real estate to provide non-structural flood control, to protect surface and ground water quality, and to enhance water resources related to natural systems.

FLOOD PROTECTION

- Non-Structural Flood Protection: Enhance flood risk information to protect life and property against flood hazards.

WATER SUPPLY

Sustainable Water Supply: Ensure an adequate and sustainable water supply for all reasonable and beneficial uses while protecting springs and natural systems.

Water Conservation: Maximize water conservation and use efficiency for all water uses.

Water Resource Planning and Monitoring

Over the past year, as part of the North Florida Regional Water Supply Partnership (Partnership), the District along with the St. John's River Water Management District and the Florida Department of Environmental Protection (FDEP), worked to develop the North Florida Regional Water Supply Plan. As part of this joint planning effort, the North Florida Southeast Georgia Regional Groundwater Flow Model (NFSEG), version 1.0, was released in 2016. This model is one of the recommended outcomes of the 2010 Water Supply Assessment, and is the result of a collaborative effort involving this District, St. John's River Water Management District, and Southwest Florida Water Management District, with input from community/ business stakeholders and technical experts.

Groundwater monitoring is an important tool for long-term groundwater trend analysis and for calibration of groundwater models, including those used in water use permit review and regional water supply planning. Currently, 207 wells are being monitored. The District has installed wells at 13 of the 26 well locations identified in the monitoring network analysis as part of the expansion. Presently, another seven potential locations have been identified and access arrangements are being secured. Additionally, all new, renewed and modified for extension agricultural water use permits with wells eight inches or greater in diameter contain a monitoring provision. The District is currently monitoring over 90% of active wells associated with agricultural water use permits with a monitoring condition in place. The District is working through its cost-share program to en-courage holders of old permits to install monitoring on wells.

Conservation Efforts

To maximize water conservation for all uses, the District works with public and private partners to encourage conservation practices, and to implement water conservation projects. During FY 2016, the gross per capita public supply water use in the District was 146 gallons per capita per day (gpcd) and residential per capita water use was 85 gpcd. District-wide, 100 percent of the 2010-2030 public supply increase in demand has been met.

Alternative Water Supply, Conservation, and Water Resource Development Projects

Through agricultural cost-share programs, the District 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. During the FY 2016, 24 irrigation system retrofits and upgrades were implemented resulting in water savings of approximately 2.27 mgd.

Through the Regional Initiative Valuing Environmental Resources (RIVER) governmental grant funding and state springs grants, administered by FDEP, the District was able to complete, continue, or initiate 22 water conservation, alternative water supply, and water resource development projects. The table below provides details on these project.

FY 2016 Water Supply, Conservation, and Resource Development Projects

Project	Total Cost	Estimated Benefit (mgd)	Status
Ichetucknee Springshed Water Quality Improvement Project	$4,600,000	1.19	Complete
Eagle Lake/Upper Suwannee River Springs Enhancement Project	$3,600,000	20.0	Complete
Columbia County Water Main and Conservation Project	$450,808	0.03	Complete
Middle Suwannee River and Springs Restoration & Aquifer Recharge	$1,852,000	10.0	Active
Columbia County Water Conservation Initiative	$350,000	0.05	Active
Ichetucknee Trace-Cannon Creek	$3,030,000	2.0	Active
High Springs Water Main Replacement	$124,800	0.10	Active
University Oaks Water System Improvements	$156,390	0.003	Active
Suwannee County Club Reuse Connection	$129,344.44	0.10	Active
University Oaks Water System Improvement	$156,390	0.003	Active
Oakmont/GRU Recharge Wetland	$1,156,740	1.0	Active
Cow Pond Drainage Basin Aquifer Recharge	$1,600,000	1.69	Initiated
Lower Suwannee Drainage Basin Aquifer Recharge	$2,406,359	3.26	Initiated
Sustainable Suwannee Pilot Program – Low Input Ag and Land Conservation	$5,000,000	5.1	Initiated
Dairy Wastewater System Improvements	$1,800,000	0.05-0.014	Initiated
City of Hampton Water Supply Improvements	$113,530	0.00006	Initiated
Starke Fire Hydrant Replacement	$142,080	0.0056	Initiated
City of Newberry Potable Water and Central Wastewater System Improvement	$65,000	0.0003	Initiated
Columbia County Jail Retrofit	$557,654	0.019	Initiated
Florida Gateway College Cooling Towers Replacement and Pond Make Up Replacement	$1,077,166	0.01	Initiated
Oakmont GRU Reclaimed Water Main Extension	$452, 571	0.05	Initiated
Lake City Reclaimed Water System Upgrade (Phase I)	$545,470	0.54	Initiated

WATER QUALITY

Heartland Springs Initiative: Ensure springs have adequate flow, maintain good water quality, and sustain healthy biological communities.

Spring Minimum Flows and Minimum Levels

Minimum Flows and Minimum Levels (MFLs) have been adopted for springs throughout the District. During FY 2016, the District adopted MFLs for the Wacissa Springs Group and the Nutall Rise. An evaluation was completed in 2016 to determine if water levels or flows in MFL water bodies are above the adopted MFL criteria, trending toward the criteria, or are below or projected to fall below the adopted criteria. Madison Blue Spring, Manatee Spring, Levy Blue Spring, Nutall Rise, and Wacissa Springs Group are all meeting their respective MFL. Fanning Springs did not meet all criteria during this initial evaluation. A more detailed analysis will be done to determine impacts of withdrawals, rainfall and watershed changes on the spring to determine the contributing factors causing flows/levels to fall below applicable MFLs.

Monitoring

The District monitors springs at 42 locations for flow and 43 locations for quality. The District has maintained continuous water quality monitoring, including for nitrate, at 13 springs or spring groups. For finalized nitrate water quality samples at the 43 springs, eight of 39, or 21 percent, of springs are meeting the nitrate numeric nutrient criteria.

Projects

The District continues to work with utilities, businesses, and commercial operations, and agricultural producers to reduce nutrient loading. During FY 2016, through the agricultural cost-share programs, the District assisted with 24 irrigation system retrofits and upgrades with estimated nitrogen reductions of 95,183 pounds.

With RIVER local government cost-share funding and state springs grants, the District completed, continued, or initiated 24 springs protection and restoration projects. The table below provide details on these projects including cost and benefits.

FY 2016 Springs Protection and Restoration Projects

Project	Total Cost	Water Quality Benefit	Status
Ichetucknee Springshed Water Quality Improvement	$4,600,000	Reduce TN loading by 85% and nitrate by 94%	Complete
Eagle Lake/Upper Suwannee River Springs Enhancement Project	$3,600,000	Reduce TN by 140,00 lbs/yr and TP by 110,000 lbs/yr	Complete
Little River Springs Restoration	$104,590	Springs restoration; reduce sediment loading	Complete
Hart Springs Restoration	$76,000	Sediment, sand, and debris removal from spring vent to improve flow	Complete
Fanning Springs Water Quality Improvement Phase I	$1,276,400	Eliminated 65 septic tanks and reduce TVN by 1,300 lbs/yr.	Complete
Otter Springs Restoration	$140,000	Remove sediments and debris from spring run; bank stabilization	Active
Fanning Springs Water Quality Improvement Phase II	$3,316,400	Reduce TN 4,300 lbs/yr	Active
Ravine and Convict Spring Nutrient Capture and Treatment	$630,000	Reduce TN by 4,300	Active
Hornsby Spring Water Quality Improvement	$500,000	Reduce TN by 100 lbs/yr	Active
Gornto Springs Restoration	$111,000	Spring restoration; removal of sediment in spring run	Active
Chiefland Nutrient Reduction- Biosolids Treatment Unit Replacement	$418,400	Reduce TN by 400 lbs/yr and TP by 200 lbs/yr	Initiated
Sustainable Suwannee Pilot Program – Low Input Ag and Land Conservation	$5,000,000	Reduce TN by 375,000 lbs/yr	Initiated
Sustainable Suwannee Pilot Program – Advanced Water Quality Technologies	$1,000,000	Reduce TN by 66,000 lbs/yr	Initiated
Dairy System Wastewater Improvements	$1,800,000	Reduce TN by 7,000 lbs/yr	Initiated
High Springs Wastewater Collection System Extensions Phase A1	$3,432,700	Reduce TN by 2,640 lbs/yr	Initiated
Fanning Springs Wastewater Collection System Phase III	$3,395,100	Reduce TN by 4,554 lbs/yr	Initiated
Hart and Otter Springs Water Quality Improvement	$5,979,740	Reduce TN by 1,724 lbs/yr	Initiated
Wacissa Springs Water Quality Improvement	$521,500	Reduce TN by 42,303 lbs/yr and TP by 17,128 lbs/yr	Initiated
Pot Spring Restoration	$183,600	Reduce TN by 69 lbs/yr; bank stabilization; erosion prevention	Initiated
Columbia County Dream Inn WWTP Closure and Connection	$3,448,437	Reduce TN by 1,000 lbs/yr	Initiated
High Springs Septic Tank Removal	$175,000	Reduce TN by 330 lbs/yr	Initiated
Levy County Blue Springs Restoration	$300,000	Spring restoration	Initiated
Stephens Spring Restoration	$129,680	Spring restoration	Initiated

NATURAL SYSTEMS

Minimum Flows and Minimum Levels: Ensure District priority water bodies are protected for current and future generations.

Water Management Lands: Manage land and real estate interests to provide non-structural flood control, to protect surface and ground water quality, and to enhance water resources related to natural systems.

Minimum Flows and Minimum Levels

The District establishes MFLs for priority rivers, springs, and lakes to ensure there is an adequate supply of water to support natural systems. The District has 27 adopted MFLs. During FY 2016, MFLs were adopted for the Aucilla River, Wacissa River, Econfina River, Nutall Rise, and the Wacissa Springs Group.

In FY 2016, draft MFL reports were received for the Upper Suwannee River and associated priority springs, and the Middle Suwannee River and associated priority springs. Both draft MFL reports will be peer reviewed in 2017.

For the Steinhatchee River MFL, data collection necessary for development of a hydrodynamic model in the tidal portion of the Steinhatchee River was completed, offshore water chemistry data collection was completed, and instream and river floodplain cross sections were surveyed to fine-tune an existing hydraulic model (USACOE, HEC-RAS) and to gather the necessary contours to develop a biological model (SEFA – System for Environmental Flow Analysis).

Initial draft MFL documents were completed with lake water budget models for the Lake Butler and Hampton Lake MFLs.

Land Acquisition

District land acquisition and management activities protect water resources and the overall health of communities within the District. The District has preserved over 287,820 acres to protect the region's river systems and public water supply. During FY 2016, the District completed two land acquisitions and surplused two parcels. Details of these activities are provided in the tables below.

Acquisitions Completed in FY 2016

Seller	Acres	County	Date	Transaction	Funding Source
Mark S Mooneyhan Trust	251.41	Bradford	12/11/2015	Purchase	FDOT Mitigation Escrow
Gilchrist County	2	Gilchrist	9/29/2016	Exchange	P-2000 Bonds

Surplus Lands Activity FY 2016

Surplus Parcels	Acres	County	Disposition Date	Transaction	Proceeds
Steffen Parcel	14	Bradford	11/24/2015	City of Starke – Steffen Parcel	$0.00
Shingle Landing and 47 Bridge	4.68	Gilchrist	09/29/2016	Gilchrist County Exchange	$0.00

Over the past year, the District's Governing Board approved a watershed-based approach to conducting detailed assessments of potential land acquisitions and water resource development projects. The Governing Board approved the Executive Director and staff to spend up to $50,000 for detailed assessments of potential acquisitions and water resource development projects within the Aucilla, Coastal Rivers, Lower Suwannee, and Waccasassa River Basins over the 2016 and 2017 fiscal years. This approval 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 that benefit the Santa Fe and Ichetucknee Rivers and Associated Springs MFLs and the Santa Fe Basin Management Action Plan (BMAP). If highly beneficial properties become available for acquisition, staff will make a recommendation to the Lands Committee for review and approval to forward to the Governing Board.

The Governing Board also approved four specific land acquisition projects for detailed assessment during FY 2016, which are provided in the table below.

Acquisition Projects Approved for Detailed Assessment

Seller	Project	Acres	County	Date Approved
Jerry and Virginia Coker	Lumbercamp Springs	37.32	Gilchrist	11/12/2015
Ware Forest, LLC	Ware Forest	160	Jefferson	12/08/2015
Hutchison Family LP	Levy County – Waccasassa Flats	192	Levy	08/09/2016
Waccasassa Fish Club	Levy County – Waccasassa Flats	22.7	Levy	08/09/2016

Land Management

The District's land management activities ensure District-owned lands continue to provide important water resource functions to maintain natural systems and benefit the public. Details are provided below on the District's land management activities and accomplishment during FY 2016.

Silviculture Water Yield Research Project

- This project is part of a statewide effort to advance the understanding of the impact of forest management practices on water yield, and whether this water is held in surficial systems or makes it way to the aquifer. This project will run through 2019.

Natural Resource Management

- The Little River Tract Restoration Project is a joint project with FWC and National Wild Turkey Federation on 473 acres of upland pine communities. In 2016, 225 acres were treated with herbicides to control hardwood resprouting and 83 acres were prescribed burned. Mallory Swamp Tract Aerial Burn Project is a joint project with FWC and National Wild Turkey Federation to help fund aerial burning operations.
- Project metrics in FY 2016 include prescribed burning on 12,528 acres;
- Sold 1,214 acres of timber and 27 acres were treated with herbicide to facilitate prescribed burning.

Non-native, Invasive Plant Control

- During FY 2016, 53 infestations of invasive plants were monitored;
- 65 infestations were treated with herbicides; and
- 6 infestations were reclassified as inactive.

Public Use

- 97% of fee title lands owned by the District are open to the public for recreation. Lands not open to the public include wellfields, sprayfields, and water resource development project sites.
- District partnered with Suwannee River Stutters Chapter of the Nation Wildlife Turkey Federation to sponsor a youth turkey hunt on the Peacock Slough Tract.
- The District cooperates with FWC and US Fish and Wildlife Service to provide public hunting opportunities on almost 105,000 acres.
- During FY 2016, 642 Special Use Authorizations were issued for use of District lands.

Facilities Maintenance Project

- During the FY 2016, 46 miles of roads and 128 miles of property boundaries were maintained.

Hydrologic Restoration

The District continued its long-standing commitment to restore natural hydrology to enhance and restore wetlands, improve both water quality and water supply, and provide flood protection throughout FY 2016. Hydrologic restoration projects target historic floodplains, wetlands, and drainage patterns that had been altered to drain naturally wet areas prior to Florida's current environmental regulations. On-going and newly funded hydrologic restoration projects are provided in the table below.

Hydrologic Restoration Projects Active and Funded During FY 2016

Project	Total Cost	Benefit	Status
Middle Suwannee River and Springs Restoration and Aquifer Recharge	$1,852,000	Rehydrate roughly 1,500 acres of ponds, 4,000 acres of wetlands, aquifer recharge, and enhance surface water storage.	Active
Starke Bypass Wetland Mitigation	$3,000,000	Wetland mitigation for approximately 67 acres of impacted wetlands associated with Starke Bypass.	Active
Edwards Bottomlands	$1,200,000	Wetland mitigation associated with Alligator Creek Floodplain Restoration project.	Active
Cow Pond Drainage Basin Aquifer Recharge	$1,600,000	Re-establish natural drainage patterns to restore approximately 300 acres of sand ponds and 1,750 acres of wetlands.	Initiated
Lower Suwannee Drainage Basin Aquifer Recharge	$2,406,359	RE-establish natural flow patterns to rehydrate approximately 500 acres of sand ponds and 1,250 acres of wetlands.	Initiated

FLOOD PROTECTION

Non-structural Flood Protection: Enhance flood risk information to protect left and property against flood hazards.

RiskMAPs

The District is the primary source of current, flooding information for other agencies and the public, including real-time river levels and rainfall amounts. The District continues to partner the Federal Emergency Management Agency (FEMA) on the Risk Mapping, Assessment and Planning (RiskMAP) Program. This program is intended to deliver quality data that increases public awareness to reduce risk to life and property. During FY 2016, work continued to complete RiskMaps for communities within the District. Eight RiskMaps in Levy, Madison, Suwannee, Lafayette, Gilchrist, Dixie, and Hamilton Counties are scheduled to become effective by the end of 2017.

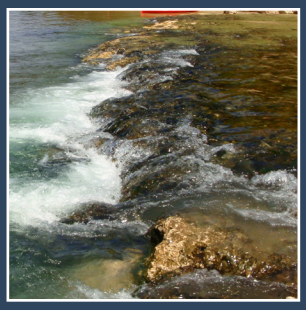
Projects

The District works with multiple cooperators to implement regional and local flood protection and flood control projects to reduce flood risks. Such projects help manage, maintain, or expand stormwater infrastructure to better capture runoff, increase storage, and reduce peak discharge rates. The table below provides information on flood protection and flood control projects.

FY 2016 Flood Protection and Control Projects

Project	Total Cost	Benefit	Status
Spring Creek/Rosehead Lake Flood Mitigation	$350,000	Improvements to existing channelized creek system to allow for additional storage, improvements to water quality, and removal of invasive species.	Complete
Theressa Flood Mitigation	$46,000	Reducing flooding by installing/improving ditches and culverts, and improvements to improve flow to Santa Fe Swamp.	Complete
Lafayette CR 416/354 Flood Abatement	$105,000	Remove sediment which eroded after heavy flooding and use material to address side slopes and create retention pond with overflow structure.	Complete
1st Avenue Stormwater Retrofit	$112,681	Stormwater management improvements through concrete ditch and pipe construction.	Complete
1st Avenue Stormwater Retrofit – Phase II	$10,000	Additional storage volume and flood protection through clearing of debris from stormwater drainage ditches.	Active
Alleviate Flooding in Mayo	$260,000	Alleviate persistent flooding by installing a series of culverts and swales.	Active
Merrillwood Stormwater Improvement	$85,591	Increase available storage volume of stormwater retention pond.	Active
West Farm Low	$239,000	Additional stormwater retention and a berm to provide additional storage and prevent flooding during excessive storms.	Active
Cross City Flood Management Improvements	$131,548	Increased flood protection through installation of culverts and ditch regrading to improve stormwater flows.	Initiated
Lower Hammock Canal Restoration	$230,859	Provide flood protection by restoring drainage canal, and removing seven miles of excess sediment and vegetation.	Initiated
Roosevelt Circle Area	$135,000	Prevent flooding by increasing stormwater storage.	Initiated

MINIMUM FLOWS & LEVELS PRIORITY LIST & SCHEDULE



SRWMD 2017-2019 MFL PRIORITY LIST

Location	Water Body Name	Initial Priority Schedule	Water Body Type	Spring Magn-itude	Proposed Re-evaluation Date	Potential Cross-boundary MFLs
Upper Suwannee	Upper Suwannee River	2016	River	n/a		Yes
Upper Suwannee	White	2016	Spring	2		Yes
Upper Suwannee	Suwannee	2016	Spring	2		Yes
Upper Suwannee	SUW1017972 - Unnamed	2016	Spring	2		Under Evaluation
Upper Suwannee	Holton Creek Rise	2016	Spring	1		Under Evaluation
Upper Suwannee	Alapaha Rise	2016	Spring	1		Under Evaluation
Upper Suwannee	SUW923973 (Stevenson)	2016	Spring	2		Under Evaluation
Middle Suwannee	Lime	2016	Spring	2		Under Evaluation
Middle Suwannee	Lime Run Sink	2016	Spring	--		Under Evaluation
Middle Suwannee	Falmouth	2016	Spring	1		Under Evaluation
Middle Suwannee	Middle Suwannee River	2016	River	n/a		Under Evaluation
Middle Suwannee	Anderson	2016	Spring	2		Under Evaluation
Middle Suwannee	Charles	2016	Spring	2		Under Evaluation
Middle Suwannee	Allen Mill Pond	2016	Spring	2		Under Evaluation
Middle Suwannee	Lafayette Blue	2016	Spring	1		Under Evaluation
Middle Suwannee	Peacock	2016	Spring	2		Under Evaluation
Middle Suwannee	Bonnet	2016	Spring	2		Under Evaluation
Middle Suwannee	Royal	2016	Spring	3		Under Evaluation
Middle Suwannee	Troy	2016	Spring	1		Under Evaluation
Middle Suwannee	Ruth/Little Sulfur	2016	Spring	2		Under Evaluation
Middle Suwannee	Little River	2016	Spring	2		Under Evaluation
Middle Suwannee	Branford	2016	Spring	2		Under Evaluation
Middle Suwannee	Turtle	2016	Spring	2		Under Evaluation
Middle Suwannee	Pothole	2016	Spring	2		Under Evaluation
Middle Suwannee	Guaranto	2016	Spring	2		Under Evaluation
Middle Suwannee	Rock Sink	2016	Spring	2		Under Evaluation
Middle Suwannee	Hart	2016	Spring	2		Under Evaluation
Middle Suwannee	Otter	2016	Spring	2		Under Evaluation
Middle Suwannee	Bell	2016	Spring	3		Under Evaluation
Middle Suwannee	Suwanacoochee	2016	Spring	2		Under Evaluation
Steinhatchee	Steinhatchee River	2016	River	n/a		Under Evaluation
Steinhatchee	Steinhatchee Rise	2016	Spring	1		Under Evaluation
Steinhatchee	TAY76992 - Unnamed	2016	Spring	2		Under Evaluation
Santa Fe	Lake Hampton	2016	Lake	n/a		Under Evaluation
Santa Fe	Lake Butler	2016	Lake	n/a		Under Evaluation
Alapaha	Alapaha River	2017	River	n/a		Under Evaluation
Withlacoochee	Withlacoochee River	2017	River	n/a		Under Evaluation
Withlacoochee	Pot	2017	Spring	2		Under Evaluation
Withlacoochee	Cherry Lake	2017	Lake	n/a		Under Evaluation

SRWMD 2017-2019 MFL PRIORITY LIST (CONTINUED)

Location	Water Body Name	Initial Priority Schedule	Water Body Type	Spring Magn-itude	Proposed Re-evaluation Date	Potential Cross-boundary MFLs
Santa Fe	Lake Santa Fe	2017	Lake	n/a		Under Evaluation
Santa Fe	Lake Altho	2017	Lake	n/a		Under Evaluation
Santa Fe	Ocean Pond	2018	Lake	n/a		Under Evaluation
Santa Fe	Lake Palestine	2018	Lake	n/a		Under Evaluation
Santa Fe	Lake Rowell	2018	Lake	n/a		Under Evaluation
Santa Fe	Lake Crosby	2018	Lake	n/a		Under Evaluation
Santa Fe	Lake Sampson	2018	Lake	n/a		Under Evaluation
Waccasassa	Waccasassa River	Adopted	River	n/a		Under Evaluation
Waccasassa	Levy (Bronson) Blue	Adopted	Spring	3		Under Evaluation
Withlacoochee	Madison Blue	Adopted	Spring	1	2017	Under Evaluation
Santa Fe	Upper Santa Fe River	Adopted	River	n/a	2019	Under Evaluation
Santa Fe	Lower Santa Fe River	Adopted	River	n/a	2019	Yes
Santa Fe	GIL1012973 (Siphon Creek Rise)	Adopted	Spring	1	2019	Yes
Santa Fe	July	Adopted	Spring	1	2019	Yes
Santa Fe	Devil's Ear (Ginnie group)	Adopted	Spring	1	2019	Yes
Santa Fe	Rum Island	Adopted	Spring	2	2019	Yes
Santa Fe	COL101974 - Unnamed	Adopted	Spring	2	2019	Yes
Santa Fe	Poe	Adopted	Spring	2	2019	Yes
Santa Fe	Columbia	Adopted	Spring	1	2019	Yes
Santa Fe	ALA112971 (Treehouse)	Adopted	Spring	1	2019	Yes
Santa Fe	Hornsby	Adopted	Spring	1	2019	Yes
Santa Fe	Santa Fe Rise	Adopted	Spring	1	2019	Yes
Santa Fe	Ichetucknee River	Adopted	River	n/a	2019	Yes
Santa Fe	Blue Hole	Adopted	Spring	1	2019	Yes
Santa Fe	Ichetucknee group	Adopted	Spring	1	2019	Yes
Lower Suwannee	Lower Suwannee River	Adopted	River	n/a		Under Evaluation
Lower Suwannee	Fanning	Adopted	Spring	1		Under Evaluation
Lower Suwannee	Little Fanning	Adopted	Spring	2		Under Evaluation
Lower Suwannee	Manatee	Adopted	Spring	1		Under Evaluation
Econfina	Econfina River	Adopted	River	n/a		Under Evaluation
Aucilla	Aucilla River	Adopted	River	n/a		Under Evaluation
Aucilla	Wacissa River	Adopted	River	n/a		Under Evaluation
Aucilla	Wacissa group	Adopted	Spring	1		Under Evaluation
Aucilla	Nutall Rise	Adopted	Spring	1		Under Evaluation

FIVE-YEAR CAPITAL IMPROVEMENT PLAN

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 Section 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 2016-2017 through 2020-2021. As directed by Section 373.536(6)(a)3, F.S., the CIP has been prepared in a manner comparable to the fixed capital outlay format set forth in Section 216.043, F.S. 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 activities and sub-activities under program 2.0 Acquisition, Restoration and Public Works that may include capital improvement projects are:

- 2.1 Land Acquisition,
- 2.2.1 Water Resource Development Projects, and
- 2.3 Surface Water Projects.

The activities under program 3.0 Operation and Maintenance of Lands and Works that may include capital improvement projects are:

- 3.1 Land Management, and
- 3.3 Facilities.

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); 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 are used for land acquisitions.

2.2 Water Source Development

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

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

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

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.

FIVE-YEAR CAPITAL IMPROVEMENTS PLAN

The Suwannee River Water Management District's capital improvements involve the District headquarters facility and lands acquired for water management purposes. District Governing Board policy has historically been to use nonstructural water management means. 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 efforts.
- The annual Preliminary Budget and Tentative Budget Report provide the 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 Water Management Plan included in Section 1 provides the long-range water resource management issues and strategies for water quality, water supply, flood protection, and natural systems management.

SUWANNEE RIVER WATER MANAGEMENT DISTRICT
FIVE-YEAR CAPITAL IMPROVEMENTS PLAN
Fiscal year 2016-2017 through fiscal year 2020-2021

2.0 ACQUISITION, RESTORATION AND PUBLIC WORKS

2.1 LAND ACQUISITION

REVENUES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Fund Balance	5,000,000	427,836	-	-	-
District Revenues	-	-	-	-	-
Total	5,000,000	427,836	-	-	-

EXPENDITURES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Land Acquisition	5,000,000	427,836	-	-	-
Total	5,000,000	427,836	-	-	-

2.2.1 WATER RESOURCE DEVELOPMENT PROJECTS

REVENUES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Fund Balance	5,000,000	427,836	-	-	-
District Revenues	-	-	-	-	-
Total	5,000,000	427,836	-	-	-

EXPENDITURES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Land Acquisition	5,000,000	427,836	-	-	-
Total	5,000,000	427,836	-	-	-

2.3 SURFACE WATER PROJECTS

REVENUES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
State Appropriations	10,886,317	27,394,919	-	-	-
District Revenues	58,873	130,873	-	-	-
Fund Balance	4,869,474	3,029,816	1,000,000	1,000,000	400,000
Total	15,814,664	30,555,608	1,000,000	1,000,000	400,000

3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

3.1 LAND MANAGEMENT

REVENUES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
State Appropriations	2,502,719	2,061,269	2,130,119	2,130,119	2,130,119
Fund Balance	-	-	-	-	-
District Revenues	790,010	1,001,801	1,001,801	1,001,801	1,001,801
Total	3,292,729	3,063,070	3,131,920	3,131,920	3,131,920

EXPENDITURES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Total	3,292,729	3,063,070	3,131,920	3,131,920	3,131,920

3.3 FACILITIES

REVENUES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Fund Balance	400,000	-	-	-	-
District Revenues	286,155	415,155	415,155	415,155	415,155
Total	686,155	415,155	415,155	415,155	415,155

EXPENDITURES	FY16-17	FY17-18	FY18-19	FY19-20	FY20-21
Total	686,155	415,155	415,155	415,155	415,155

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 SRWMD Florida Forever Work Plan.

Physical Location: Activities are conducted at District headquarters near Live Oak. Acquisitions are located within the District boundaries as identified in the Florida Forever Work Plan 2015.

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 Chapter 373.139, F.S.

The implementation of this program, along with the cumulative efforts under the Save Our Rivers, Preservation 2000, and Florida Forever programs, have resulted in the protection of over 284,000 acres of water resource lands and more than 325 miles of river frontage along the Suwannee and other rivers of the District. Approximately 158,000 acres of river floodplains, freshwater springs, headwater wetlands, pristine bottomland hardwood and buffering upland forests are protected in full-fee ownership. Conservation easements and less-than fee purchases have protected nearly 126,000 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.

During the past several of years, the District has been successful in partnering with the National Guard Bureau to acquire base-buffering lands near Camp Blanding that will benefit natural systems and provide opportunities for aquifer replenishment and natural systems restoration. 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 2017, Five-Year Strategic Plan 2017-2022, FY 2017 Budget, FY 2018 Preliminary Budget

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.

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

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY17 - $5,087,500; FY18 - $515,336

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY17 - $57,629; FY18 - $57,629

Anticipated Additional Operating Costs/Continuing: None

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.2.1 Water Resource Development Projects

Project Title: Springs Protection and Restoration

Type: Aquifer recharge, dispersed water storage, and springs protection and restoration.

Physical Location: Activities are conducted within the District boundaries.

Square Footage/Physical Description: N/A

Expected Completion Date: Ongoing

Historical Background/Need for Project: Implements District water resource project assistance provisions of Chapter 373, F.S.

These projects facilitate the implementation of the Legislature's Springs fundings to ensure springs have adequate flow, maintain good water quality, maintain healthy biological communities, and to ensure an adequate water supply for all reasonable and beneficial uses while protecting springs and nature systems.

Plan Linkages: Five-Year Strategic Plan 2017-2022, FY 2017 Budget, FY 2018 Preliminary Budget

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

Alternative(s): Projects could be eliminated or deferred, but would have significant water resource consequences.

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

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY17 - $7,850,000; FY18 - $5,711,229

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY17 - $437,197; FY18 - $440,197

Anticipated Additional Operating Costs/Continuing: None

PROGRAM: 2.0 ACQUISITION, RESTORATION, AND PUBLIC WORKS

ACTIVITY: 2.3 Surfacewater Projects

Project Title: RIVER Local Government Cost Share

Type: Construction, remediation, and/or restoration of surface water bodies

Physical Location: Various locations throughout the District as part of a partnership with local governments

Square Footage/Physical Description: Varies

Expected Completion Date: Ongoing

Historical Background/Need for Project: The RIVER Local Government Cost Share partners with local governments to engage in projects that remediate or restore surface water bodies.

Plan Linkages: Florida Forever Work Plan 2017, Five-Year Strategic Plan 2017-2022, FY 2017 Budget, FY 2018 Preliminary Budget

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

Alternative(s): The local government partners would defer the projects or seek alternative funding sources.

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

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY17 - $4,869,474; FY18 - $3,029,816

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY17 - $220,873; FY18 - $220,873

Anticipated Additional Operating Costs/Continuing: -

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: 158,283 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: Florida Forever Work Plan 2017, Five-Year Strategic Plan 2017-2022, FY 2017 Budget, FY 2018 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.

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

Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY17 - $2,425,563; FY18 - $2,194,404

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY17 - $867,166; FY18 - $868,666

Anticipated Additional Operating Costs/Continuing: -

PROGRAM: 3.0 OPERATION AND MAINTENANCE OF LANDS AND WORKS

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 2017 District Budget, FY 2018 Preliminary Budget

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

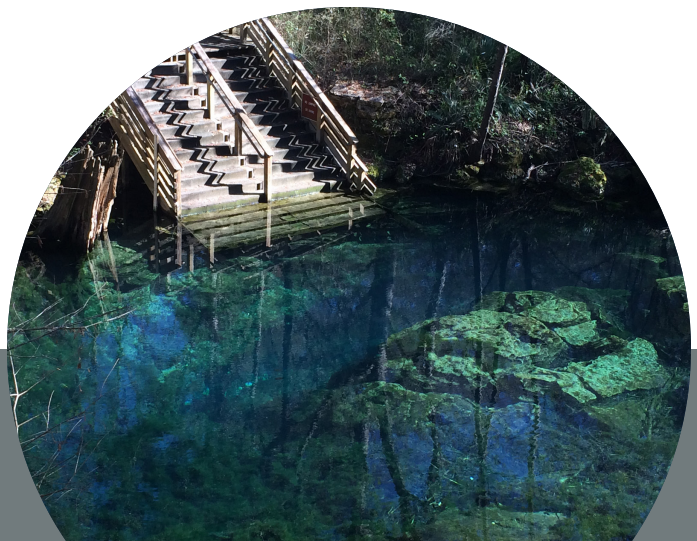
Alternative(s): Facility management improvements could be deferred to future year(s) or foregone, but would result in increased future costs and potentially have adverse effects on District operations

Basic Construction Costs (includes permits, inspections, communications requirements, utilities, outside building, site development, other): FY17 - $275,000; FY18 - none

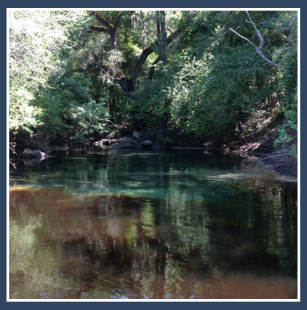
Other Project Costs (includes land, survey, existing facility acquisition, professional services, other): FY17 - $258,500; FY18 - $262,500

Anticipated Additional Operating Costs/Initial (includes salaries, benefits, equipment, furniture, expenses): FY17 - $152,655; FY18 - $152,655

Anticipated Additional Operating Costs/Continuing: -



ALTERNATIVE WATER SUPPLY REPORT



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 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 section 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.

Water Protection and Sustainability Program

During the four years of the Water Protection and Sustainability Program, the District received over $21 million dollars from Water Protection and Sustainability Trust Fund. 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. Consistent with subsection 373.707(8)(c), the District has also used this funding for water resource development projects, and implementing its Minimum Flows and Minimum 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

Water Protection and Sustainability Trust Fund – Alternative Water Supply Projects

Year Funded	Reclaimed Water Program	Amount Funded	Alternative Water Supply Capacity (mgd)
2006	City of Lake City	$3,000,000	1.0
2006	City of Monticello	$1,500,000	0.5
2007	City of Alachua	$1,000,000	3.0
2007	City of Live Oak	$3,000,000	1.5

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 three alternative water supply projects and 13 water conservation projects with a total estimated benefit of 1.1 mgd. In 2015, the Florida Department of Environmental Protection (FDEP) obligated $2 million for water conservation projects within the North Florida Regional Water Supply and Central Florida Water Initiative Planning Areas. The FDEP approved three proposals submitted by the District that will conserve approximately 0.03 mgd of water.

Through agricultural cost-share programs, the District 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.

The District also invests money into water resource development projects. These projects include aquifer recharge and hydrologic restoration projects. The continuing support for springs protection and restoration from Governor Scott, 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. Since 2014, the District, with the FDEP and local partners, has implemented 9 water resource development projects with an estimated benefit of 39.54 mgd.

Details on alternative water supply, water conservation, and water resource development projects funded through these various programs is provided below, including project descriptions, benefits, and funding information.

Alternative Water Supply Projects

Suwannee Valley Ag Extension Center Surface Water Project

The Suwannee Valley Ag Extension Center Surface Water Project is partnership between the District and the University of Florida's Institute of Food and Agricultural Sciences (UF IFAS). This project installed a variable rate linear irrigation system and surface water pump to reduce reliance on groundwater. This project is estimated to offset approximately 0.05 million gallons per day(mgd) of groundwater withdrawals.

Suwannee Country Club Reuse Connection

The Suwannee County Club Reuse Connection project will provide a connection from the Suwannee Country Club to the City of Live Oak's Public Access Reuse System. The County Club currently utilizes onsite wells to provide irrigation for the golf course. This project will allow the Country Club to utilize public access reuse in lieu of withdrawing valuable water from the aquifer for irrigation purposes. This project is estimated to conserve 0.1 mdg.

Oakmont GRU Reclaimed Water Main Extension Project

The Oakmont GRU Reclaimed Water Main Extension project will provide reclaimed water to irrigate 136 residential properties and over three acres of common area. This project is expected to result in an estimated 0.05 mgd of groundwater offset.

Lake City Reclaimed Water System Upgrade (Phase I)

The Lake City Reclaimed Water System Upgrade project will provide upgrades to the City's existing system allowing reclaimed water to be used by a local golf course and farmer. This project has the potential to offset approximately 0.54 mgd of groundwater withdrawals.

Alternative Water Supply Projects

Fiscal Year Funded	Project	Total Project Cost	District Match	Local Match	Capacity (mgd)
2014	Suwannee Valley Ag Extension Center Surface Water	$120,600	$80,400	$40,200	0.05
2015	Suwannee County Club Reuse Connection	$129,344.44	$124,452	$4,893	0.1
2016	Oakmont GRU Reclaimed Water Main Extension	$452, 571	$113,143	$339,428	0.05
2016	Lake City Reclaimed Water System Upgrade (Phase I)	$545,470	$194,304	$351,166	0.54

Water Conservation Projects

City of Alachua Water Conservation Project

The City of Alachua water conservation project will reduce leakage in a water resource caution area, conserving 0.05 mgd of unaccounted water.

City of Waldo Meter Replacement Project

The City of Waldo water conservation project will replace 543 meters. The new meters will be able to keep an accurate account of water usage and potential leakage, reducing 0.01 mgd in lost water.

City of High Springs Water Conservation Project

The City of High Springs water conservation project will reduce leakage in a water resource caution area, conserving 0.02 mgd of unaccounted water.

City of Newberry Water Conservation Project

The City of Newberry water conservation project will reduce leakage in a water resource caution area, conserving 0.04 mgd of unaccounted water.

City of Jasper Fire Hydrant Replacement Project

The City of Jasper water conservation project is to replace 26 leaking fire hydrants in a water resource caution area. This project is expected to conserve approximately 0.04 mgd.

Hamilton County Water System Project

The Hamilton County water conservation project is to install variable frequency drive controllers at the water treatment plant which will reduce the flushing required by 0.04 mgd.

Town of Hampton Water Tank Revitalization Project

The Town of Hampton water conservation project is to repair the 64,000 gallon ground storage tank which supplies clean water to its 179 residents. This project is expected to conserve 0.01 mgd through reduced flushing.

Columbia County October Road Water Main Extension Project

The Columbia County water conservation project is to construct a water main extension which will reduce the flushing required at the Ellisville water treatment plant by 0.03 mgd.

City of High Springs CDBG Water Main Replacement Project

The City of High Springs water conservation project is to replace old leaking water mains in various parts of the City which will conserve 0.10 mgd of potable water.

City of Madison Water Conservation Project

The City of Madison water conservation project will improve efficiency by reducing water loss. This project will replace a 12-inch check valve which will reduce Madison's water loss by 0.03 MGD. This project also includes the installation of two solenoid valves which will reduce Madison's water loss by 0.01 mgd.

Columbia County Water Conservation Project

The Columbia County Water Conservation Project will provide local businesses, such as hotels/motels or office buildings, and multi-family residential units with ultra-high efficiency technology (UHET) indoor plumbing retrofit packages. Retrofitting toilets and faucet aerators with high efficiency fixtures will save water that would otherwise be wasted. This project is estimated to conserve 0.5 mgd. This project is scheduled to begin in 2017.

Levy County University Oaks Water System Improvement Project

The University Oaks Water System Improvement project involves replacing leaking pipes and service connections estimated to reduce water loss by 0.003 mgd.

City of Hampton Water Supply Improvement and Conservation Project

The City of Hampton Water Supply Improvement and Conservation project will increase water conservation, improve water service quality and reliability, and improve fire protection. The project includes water meter replacements, installation of isolation valves, water storage tank repair, improved access to fire hydrants, and if funds are available, water main relocation. Meter improvements will conserve approximately 60 gallons per day.

Starke Fire Hydrant Replacement Project

The Starke Fire Hydrant Replacement project will reduce unaccounted for water loss throughout the City, which is currently estimated at 24%. This project will replace fire hydrants that are non-functional, broken, leaking, inaccessible, and/or difficult to use. It is estimated that replacement of these hydrants will reduce water loss by 0.0056 mgd.

City of Newberry Potable Water and Central Wastewater System Improvement Project

The City of Newberry Potable Water and Central Wastewater System Improvement project will provide new wastewater and potable water improvements to six businesses and three residences. This project is estimated to save 90,000 gallons per year of water, or .0003mgd.

City of Lake City Public and Staff Restroom Retrofit Project

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. The goal of this project is to reduce the water usage of the City's 221 restroom plumbing fixtures by 28%, saving approximately 0.002 million gallons per day mgd or 732,984 gallons per year (gpy).

Columbia County Jail Retrofit Project

The Columbia County Jail Retrofit Project will replace existing plumbing fixtures – toilets, shower heads, sinks, and faucets – at the Columbia County Jail. 20 shower heads will be upgraded from 5 GPM to 1.8 GPM fixtures; 38 toilets will be upgraded from 4 GPF to 1.28 GPF fixtures; 46 faucets/sinks will be upgraded from 2 GPM to 1.5 GPM fixtures; 3 urinals will be upgraded from 4 GPF to 1 GPF; and the 39 toilet/sink combos will have the same water conservation benefits as the individual toilet and sink upgrades. This project will conserve approximately 0.019 mgd or 6,949,600 gpy.

Florida Gateway College Cooling Towers Replacement and Pond Make Up Replacement Project

Florida Gateway College currently operates an aging and inefficient central chilled water and steam plant located near the center of campus. The Florida Gateway College Cooling Towers Replacement and Pond Make Up Replacement Project will install new, replacement cooling towers that can utilize storm water in lieu of potable water. This project will conserve approximately 0.01 mgd or 3,683,760 gpy of water as a result of storm water harvesting.

Water Conservation Projects

Fiscal Year Funded	Project	Total Project Cost	District Match	FDEP Match	Local Match	Benefit (mgd)
2013	City of Alachua	$62,440	$31,220		$31,220	0.05
2013	City of Waldo	$153,671	$76,836		$76,835	0.01
2013	City of High Springs	$57,256	$28,628		$28,628	0.02
2013	City of Newberry	$57,100	$28,550		$28,550	0.04
2013	City of Jasper	$107,200	$97,200		$10,000	0.04
2013	Hamilton County	$49,480	$37,480		$12,000	0.04
2014	Town of Hampton	$30,000	$25,000		$5,000	0.01
2014	Columbia County	$450,808	$201,256		$249,552	0.03
2014	City of High Springs	$124,800	$50,000		$74,800	0.10
2014	City of Madison	$8,119	$7,675		$444	0.04
2014	Colubmia County Water Conservation Project	$350,000.00	$30,000	$250,000	$70,000	0.05
2015	Levy County (University Oaks Water System)	$156,390	$151,390		$5,000	0.003
2016	City of Hampton Water Supply Improvements	$113,530	$105,530		$8,000	0.00006

Water Conservation Projects (Continued)

Fiscal Year Funded	Project	Total Project Cost	District Match	FDEP Match	Local Match	Benefit (mgd)
2016	Starke Fire Hydrant Replacement	$142,080	$119,040		$23,040	0.0056
2016	City of Newberry Potable Water and Central Wastewater System Improvement	$65,000	$38,435		$26,566	0.0003
2016	City of Lake City Public and Staff Restroom Retrofit	$98,850		$98,850		0.002
2016	Columbia County Jail Retrofit	$557,654		$557, 654		.019
2016	Florida Gateway College Cooling Towers Replacement and Pond Make Up Replacement	$1,077,166		$212,000	$865,166	0.01

Agricultural Water Conservation

Fiscal Year 2012-2013 Anticipated District Agricultural Cost-Share Program Results:	
Funds:	$1,200,550 obligated
Estimated Water Savings	5.2 mgd
Irrigation System Retrofits	70
Advanced Irrigation Scheduling Tools	211
Special Project	8

Fiscal Year 2013-2014 Anticipated District Agricultural Cost-Share Program Results:	
Funds:	$837,575 obligated
Estimated Water Savings	3.87 mgd
Irrigation System Retrofits	67
Advanced Irrigation Scheduling Tools	100

Agricultural Water Conservation

Fiscal Year 2014-2015 Anticipated District Agricultural Cost-Share Program Results:	
Funds:	$467,390 obligated
Estimated Water Savings	1.1 mgd
Irrigation System Retrofits	19
Advanced Irrigation Scheduling Tools	43
Special Projects	1

Fiscal Year 2015-2016 Anticipated District/FDEP Agricultural Cost-Share Program Results:	
Funds:	$3,363,256
Estimated Water Savings	2.27 mgd
Irrigation System Retrofits	24
Special Projects	1

Dairy Wastewater Conservation & Nutrient Optimization Project

The Dairy Wastewater Water Conservation & Nutrient Optimization Project will improve the management of dairy wastewater by increasing storage pond sizes to achieve greater nutrient uptake and irrigation efficiencies. By having additional storage in wastewater storage ponds, dairies can more effectively manage effluent irrigation. This project is estimated to reduce nutrient loadings by 62,000 pounds annually and increase irrigation efficiency by saving an estimated 0.3 mgd, benefitting springs within Upper and Lower Santa Fe Basins and Middle and Lower Suwannee.

Suwannee BMAP Center Pivot Retrofits Water Conservation Project

The Suwannee BMAP Center Pivot Retrofits Water Conservation Project will assist agricultural operations in retrofitting approximately 120 center pivot irrigation systems to make them more efficient. Increasing the efficiency of center pivots allows agriculture operations to use less water when irrigating crops. A 5.26 mgd reduction is estimated in the withdrawal from center pivot irrigation use due to cost share retrofits along the Middle and Lower Suwannee River on the groundwater discharge to rivers and springs in the District.

Improved Nutrient Application Practices in Dairy Operations – Phase 2

The Improved Nutrient Application Practices in Dairy Operations project will assist dairy operations in reducing nutrient leaching by an estimated 34,000 pounds annually while saving an estimated 0.32 mgd. Within the District, most dairies use overhead impact sprinklers on center pivots to apply their effluent. The project will enable the dairies to retrofit their irrigation systems from overhead impact sprinklers to drop nozzles and therefore, apply wastewater more uniformly over their crops.

Dairy Wastewater System Improvement

The project will provide cost share funds to dairies throughout the Middle Suwannee and Lower Santa Fe watershed to improve their wastewater systems. Improvements could include additional wastewater storage, advance manure solids separation, and/or advanced treatment technologies. The project will result in approximately 10,000 pounds of nutrient reductions each year in addition to conserving approximately 0.14 mgd. The project will benefit the springs along the Middle Suwanee and Lower Santa Fe river basins.

Sustainable Suwannee Pilot Program – Low Input Agriculture and Land Conservation

The Sustainable Suwannee Pilot Program will incentivize land uses that conserve water and reduce nutrient loading. Agricultural operations within specific springsheds will be invited to submit proposals to transition to less intensive cropping systems, change the type of cropping system or agriculture crop altogether, including changes to silviculture, or change the land use to a fallow or native landscape for a certain amount of time or even a permanent conservation easement. The project is anticipated to reduce nutrients by 375,000 pounds per year and conserve approximately 5.10 mgd of water.

District/FDEP Agricultural Cost-Share Programs

*Florida Department of Agriculture and Consumer Services contributed $250,000 to this project.

Fiscal Year Funded	Project	Total Cost	District Match	FDEP Match	Local Match	Benefit (mgd)
2014	Dairy Wastewater Conservation & Nutrient Optimization*	$1,885,590	$298,004	$920,000	$417,586	0.3
2014	Suwannee BMAP Center Pivot Retrofits Water Conservation	$2,428,975	1,235,000	$885,000	$308,975	5.26
2015	Improved Nutrient Application in Dairies – Phase 2	$2,670,000	$20,000	$2,120,000	$530,000	0.32
2016	Dairy Wastewater System Improvement	$1,800,000		$1,500,000	$300,000	0.14
2016	Sustainable Suwannee Pilot Program- Low Input Ag and Land Conservation	$5,000,000		$5,000,000		5.1

Water Resource Development Projects

Ichetucknee Springshed Water Quality Improvement Project

The Ichetucknee Springshed Water Quality Improvement Project is a partnership between the District, DEP, City of Lake City, and Columbia County. The City's sprayfields are located on the Ichetucknee Trace, and water recharging the aquifer in this area has been shown to reach the springs in a matter of days. This project converted Lake City's largest treated wastewater effluent sprayfield into constructed wetlands to reduce total nitrogen loading by an estimated 85 percent (up to 94% nitrate removal). The project will also provide up to 1.19 mgd of beneficial recharge to the aquifer. This project was completed in 2016.

Middle Suwannee River and Springs Restoration and Aquifer Recharge Project

The Middle Suwannee River and Springs Restoration and Aquifer Recharge Project is a partnership between the District, DEP, and Dixie County to provide hydrologic restoration activities in Dixie and Lafayette counties. The District began restoration efforts at Mallory Swamp several years ago after purchasing 31,000 acres within the swamp. This project will build upon those efforts by implementing 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 mgd. The project will enhance surface water storage and recharge the aquifer to benefit spring flows in the Middle Suwannee River region and to augment domestic and agricultural groundwater supplies in Lafayette and Dixie counties. The engineering, permitting and design phase was competed in June 2015 and construction is scheduled for completion by March 2018.

Oakmont/GRU Recharge Wetland Project

For this project the District is partnering with Gainesville Regional Utilities to construct a recharge wetland in western Alachua County at the Oakmont subdivision, treating both reclaimed water and stormwater. The first phase of the project will provide water quality treatment and roughly .5 to 1 mgd in aquifer recharge, supporting spring flows in the Poe Springs Watershed and benefiting water supply within the Lower Santa Fe River Basin.

Eagle Lake/Upper Suwannee River Springs Enhancement Project

The Eagle Lake / Upper Suwannee River Springs Enhancement Project is a private-public partnership with PotashCorp that will reduce groundwater withdrawals by up to 20 mgd, benefiting spring flows to Blue Sink Spring, Mattair Springs, and Suwannee Springs. The project will also reduce approximately 110,000 lbs/year of total phosphorous and 140,000 lbs/year of total nitrogen (primarily as ammonia) to the Upper Suwannee River. The design, bid documents and specifications were completed at the end of July 2015. Construction was completed at the end of June 2016.

Brooks Sink Aquifer Recharge

The Brooks Sink Aquifer Recharge Project, located in Bradford County, is a public-private partnership with Rayonier Operating Company, LLC, to restore a natural hydrologic connection to Brooks Sink. Brooks Sink is known as one of the largest cover collapse sinkholes in the state of Florida and is directly connected to the IAS, which overlies the UFA. This project was completed in early 2015. Total recharge from March 1, 2015 through October 31, 2016, was 108 million gallons or 0.3 mgd.

Ichetucknee Trace-Cannon Creek Project

The Ichetucknee Trace-Cannon Creek project will provide flood mitigation, water quality improvement, and aquifer recharge. This project will improve spring flows and spring water quality within the Ichetucknee Springs group. Through the replacement of an old drainage well and 13 acres of wetland construction, this project is estimated to provide approximately two to four mgd of aquifer recharge remove approximately 10,000 pounds of nutrients annually.

Cow Pond Drainage Basin Aquifer Recharge Project

The Cow Pond Drainage Basin Aquifer Recharge Project will re-establish natural drainage patterns and use natural recharge features and aquifer recharge wells to enhance aquifer recharge and rehydrate approximately 300 acres of sand ponds and approximately 1,750 acres of wetlands. This project will conserve approximately 1.69 mgd.

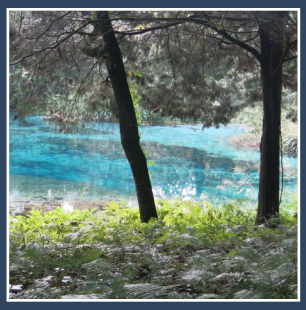
Lower Suwannee Drainage Basin Aquifer Recharge Project

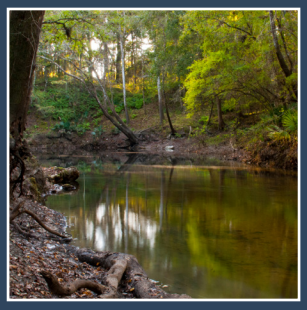
The Lower Suwannee Drainage Basin Aquifer Recharge Project will rehydrate approximately 500 acres of sand ponds and approximately 1,250 acres of wetlands by re-establishing natural flow through natural recharge features and an aquifer recharge well. The project will conserve approximately 3.26 mgd.

Water Resource Development Projects

Fiscal Year Funded	Project	Total Project Cost	District Match	DEP Match	Local Match	Benefit (mgd)
2014	Ichetucknee Springshed Water Quality Improvement Project	$4,600,000	$200,000	$3,900,000	$300,000	1.19
2014	Middle Suwannee River and Springs Restoration & Aquifer Recharge	$1,852,000	$277,000	$1,500,000	$75,000	10
2015	Oakmont/GRU Recharge Wetland	$1,156,740	$150,000		$1,006,740	1
2014	Eagle Lake/Upper Suwannee River Springs Enhancement Project	$3,600,000	$300,000	$3,070,000	$230,000	20
2014	Brook Sink Aquifer Recharge	$35,000	$35,000			0.3
2015	Ichetucknee Trace-Cannon Creek	$3,030,000	$30,000	$2,250,000	$750,000	2
2016	Cow Pond Drainage Basin Aquifer Recharge	$1,600,000	$50,000	$1,500,000	$50,000	1.69
2016	Lower Suwannee Drainage Basin Aquifer Recharge	$2,406,359	$143,000	$2,200,000	$63,359	3.26

FIVE-YEAR WATER RESOURCE DEVELOPMENT WORK PROGRAM





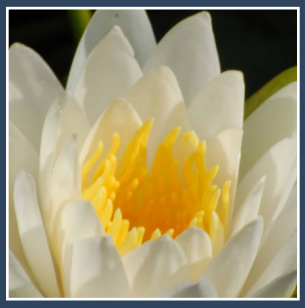
OVERVIEW

Pursuant to section 373.536(6)(a)(4), Florida Statutes (F.S.), the water management districts are required to submit the following:

> "A 5-year water resource development work program to be furnished within 30 days after the adoption of the final budget. The program must describe the district's implementation strategy for the water resource development component of each approved regional water supply plan developed or revised under s. 373.709."

The Suwannee River Water Management District and St. John's River Water Management District Governing Boards approved the North Florida Regional Water Supply Plan January 17, 2017, following the adoption of the 2017 final budget. A five-year water resource development work program will be submitted with the 2018 Consolidated Annual Report pursuant to section 373.036(7)(b)(5), F.S. Information on all projects related to water quality or water quantity as part of a 5-year work program, required by section 373.036(7)(b)(8), F.S., and a grade for each watershed, water body, or water segment in which a project listed under subparagraph 8, required by section 373.036(7)(b)(9), F.S., will also be included in the 2018 Consolidated Annual Report.

FLORIDA FOREVER WORK PLAN



Florida Forever Work Plan

2017 Annual Update

SUWANNEE RIVER
WATER MANAGEMENT DISTRICT

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I. Introduction

The Suwannee River Water Management District (District) is required by section 373.199(7), Florida Statutes (F.S.), to annually update the Florida Forever Five-Year Work Plan. 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 provides funding 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. Actual Florida Forever Expenditures

Fiscal Year	Fee Acquisition Expenditures	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**	35	$97,918	-
2015-2016	$6,720*	-	-	-	$26,398	-
Total	$47,927,560	43,866	$21,228,199	25,292	$568,641	$519,590

*Includes pre-acquisition costs ** Includes land exchanges

Table 2. Projected Florida Forever Expenditures

	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Conservation Land Acquisition	-	-	-	-	-
Water Resource Development and Restoration Projects	-	-	$1,000,000	$475,746	-
Total Projected	-	-	$1,000,000	$475,746	-

II. 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.

Falling Creek Aquifer Recharge Project

Columbia County

In September 2013, the District completed a regional study of potential regionally-beneficial aquifer recharge concepts in a cooperative effort with the St. Johns River Water Management District (SJRWMD). The Falling Creek Aquifer Recharge Project is a concept developed from that study. This project involves pumping up to a maximum daily capacity of 40 million gallons per day (mgd) from the upper Suwannee River to District-owned land in Falling Creek Falls Park. This water will discharge to Falling Creek eventually recharging the Upper Floridan aquifer (UFA) through Falling Creek Sink. During high stages in the upper Suwannee River, water will be diverted to an intake structure and pump station (consisting of intake screens, intake piping, and a pump station) and then pumped to Falling Creek through an approximate 48-inch diameter, 11-mile pipeline. The preliminary design will include surface-water quality testing and analysis. Groundwater modeling analysis conducted during the study indicated this project will benefit aquifer levels and spring flows in the Lower Santa Fe River. The estimated capital cost is $48,000,000.

Santa Fe Basin Flood Mitigation and Aquifer Recharge Projects

West Ridge Water Resource Development Area

Bradford County

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 excellent 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. A portion of the project was previously mined. The District is working closely with the mining business to develop a project that will benefit water resources while allowing the mining business to optimize their mining reclamation plan. The project is currently in the conceptual design phase. The objective of this phase is to evaluate potential project concepts and identify the concept that maximizes water resource development benefits based on flexibility and technical, environmental, and economic feasibility. The project cost is being determined.

Double Run Creek Water Resource Development Area

Bradford County

The Double Run Creek Water Resource Development Area project is located 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 excellent 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. This project is in the conceptual design phase and the project cost is being determined.

Inter-District Water Resource Development Project

Bradford County

This Inter-District Water Resource Development Project is located 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 associatd with this project will have regional cross-boundary beneftis for stressed water resrouces in both the District and SJRWMD due to its proximity to the Keystone Heights ptentiometric high, which is a regional recharge area for the UFA. The project is in the initial phases of feasibility and is dependent upon successful acquisition of property by the District. The project cost is being determined.

Brooks Sink Phase 2

Bradford County

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 1970s, 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 resulted in 108 million gallons, or 0.3 mgd, of recharge from March 1, 2015 through October 31, 2016. Phase 2 proposes the acquisition of 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.

Dispersed Water Storage Initiative

Several decades ago industrial land owners 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 installing ditch blocks and low water crossings on District lands. These structures will allow water to overflow ditch banks and disperse over wetland areas. In order to expand this concept, the District plans to partner with private land owners to gain additional water resource benefits. The District will establish project budgets as individual projects are identified and developed.

Drainage Well Replacement/Rehabilitation

The District's karst landscape is characterized by frequent interaction between groundwater and surface water through sinkholes. In the past, municipalities used these 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 water quality improvements compared to past designs. The District will identify existing and/or abandoned drainage wells within the Northern Highland geographic region for replacement/rehabilitation. Two such projects that have been identified are as follows:

Madison Blue Spring Aquifer Recharge

Madison County
This project proposes to rehabilitate or replace four existing drainage wells to improve aquifer recharge rates. The original wells were installed decades ago primarily for drainage, but had a secondary benefit of recharge. Over time, these wells have become clogged and two wells are believed to be totally nonfunctional. Recharge benefits are estimated up to 3.4 mgd. This project is currently in the conceptual design phase and project cost is being determined.

Lake Sampson Drainage Wells

Bradford County
This project proposes to replace abandoned drainage wells 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 levels. Volumes will be reported in million gallons per day and per year. Positive flows into the well will provide a benefit to springs in the Lower Santa Fe River Water Use Caution Area as well as to related Minimum Flows and Levels which are currently in recovery. Recharge benefits are estimated up to 2 mgd. This project is currently in the conceptual design phase and project cost is being determined.

III. 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.

Hydrologic Restoration

San Pedro Bay, Mallory Swamp, and Waccasassa Flats

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 Floridan aquifer system (FAS) 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 District purchased nearly 30,000 acres of the interior of Mallory Swamp and began initial restoration efforts with assistance from the U.S. Department of Agriculture and the Natural Resources Conservation Service. Restoration activities included the installation of 311 culverts and 57 ditch blocks to restore natural drainage patterns and increase the ability of the property to store water, thereby rehydrating wetlands and inducing aquifer recharge. However, because the District-owned property did not include the perimeter ditching to the east and extensive drainage features to the south and west of the swamp, overall benefits are less than what is potentially feasible. To date, no such restoration activities have occurred in San Pedro Bay or the Waccasassa Flats.

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. These projects are still in the conceptual design phase, however based on similar

efforts, restoration costs per acre are estimated at $1,000, including a conservation easement estimated value of $500 per acre. An estimated minimum practicable project size would be 4,000 acres, with a consequent planning estimate cost of $4 million. Total acreage within the three swamps is in excess of 600,000 acres.

Middle Suwannee River and Springs Restoration Project: Phase II

Lafayette County

The proposed Phase II of the Middle Suwannee River and Springs Restoration and Aquifer Recharge Project is a private-public partnership between a timber company and the District. The Phase II property is east and adjacent to Mallory Swamp and north 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 ditch blocks, 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.

Spring Water Quality and Quantity Restoration

Over the last four years, the District has devoted significant funding for projects generating water quantity and quality improvements, with a large focus on springs protection and restoration activities. These projects increase spring flow, improve erosion and sediment control, reduce nutrient (Total Nitrogen, Total Phosphorous, Suspended Solids) loading, improve 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. Springs restoration project costs average 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 it with local partners to develop wastewater infrastructure

upgrades and septic to sewer conversion projects. 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 toxic contaminant pollution. The goal of stormwater treatment projects is to collect and treat stormwater runoff before it's discharged to surface waters and groundwater. This can be accomplished through the use of 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 stormwaters. 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, and maximizing storage capacity and property usage. Stormwater treatment projects vary depending on type of treatment and if land is needed, however, these project costs average approximately $50,000 per acre of impervious area for treatment.

IV. 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, and Florida Forever programs have preserved over 287,820 acres to protect the region's river systems and public water supply. The following table summarizes fee and less than fee acres owned by the District as of December 2016.

Table 3. Protected Lands by River Basins

Basin	Fee Acres	Less Than Fee Acres
Alapaha	2,922	1,542
Aucilla	15,543	12,031
Coastal River	48,372	52,645
Santa Fe	15,606	8,632
Suwannee	65,937	28,639
Waccasassa	5,327	24,214
Withlacoochee	6,394	18
Total	160,102	127,721

Land Acquisition Planning

The District's land acquisition efforts focus on areas to support potential water resource development projects for aquifer recharge and areas for water storage and management. These areas are located in two broad zones:

- Areas of high recharge adjacent to the Cody Escarpment: These areas provide the highest potential for identifying/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 FAS, as well as maximizing groundwater gradients in District 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, who then make recommendations to the Governing Board Lands Committee for review and approval to send to the propsed acquisition to the full Governing Board for consideration. The following objectives guide the District's evaluation of potential acquisition project 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 restoring springs and surrounding areas to protect and improve surface and groundwater; and
- Increasing recharge to the FAS via water resource development projects restoring natural hydrology in headwater swamps and increasing water retention for recharge enhancement.

Approved Land Acquisition Projects

During 2016, the Governing Board directed staff to use a watershed approach to conducting detailed assessments of potential acquisitions and water resource development projects. Specifically, the Governing Board approved the Executive Director and staff to spend up to $50,000 for detailed assessments of potential acquisitions and water resource development projects within the Aucilla, Coastal Rivers, Lower Suwannee, and Waccasassa River Basins over the 2016 and 2017 fiscal years. This approval 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 Minimum Flows and Levels (MFLs) and the Santa Fe Basin Management Action Plan (BMAP). If properties beneficial for acquisition are identified, staff will make a recommendation to the Lands Committee for review and approval to forward to the Governing Board.

In addition to the approved watersheds, the Governing Board approved four specific land acquisition projets for detailed assessment during the 2016 fiscal year. These approved projects are summarized in the table below. Any given land acquisition project may use Florida Forever and Preservation 2000 resale funds and proceeds from the sale of surplus lands. The District will consider the use of alternative acquisition techniques as a cost-effective means of protection, including less than fee purchase.

Table 4. Acquisition Projects Approved for Detailed Assessment

Seller	Project	Acres	County	Date Approved
Jerry and Virginia Coker	Lumbercamp Springs	37.32	Gilchrist	11/12/2015
Ware Forest, LLC	Ware Forest	160	Jefferson	12/08/2015
Hutchison Family LP	Levy County – Waccasassa Flats	192	Levy	08/09/2016
Waccasassa Fish Club	Levy County – Waccasassa Flats	22.7	Levy	08/09/2016

The following table summarizes the District's land acquisition activity during fiscal year 2016.

Table 5. Acquisitions Completed in FY 2016 Assessment

Seller	Acres	County	Date	Transaction	Funding Source
Mark S. Mooneyhan Trust	251.41	Bradford	12/11/2015	Purchase	FDOT Mitigation Escrow
Gilchrist County	2	Gilchrist	9/29/2016	Exchange	P-2000 Bonds

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 9 lists surplus lands activities during fiscal year 2016.

Table 6. Surplus Lands Activity FY 2016

Surplus Parcels	Acres	County	Disposition Date	Transaction	Proceeds
Steffen Parcel	14	Bradford	11/24/2015	City of Starke – Steffen Parcel Conveyance	$0.00
Shingle Landing and 47 Bridge	4.68	Gilchrist	09/29/2016	Gilchrist County Exchange	$0.00

Land Management

Land management activties ensure District lands continue to provide important water resource functions needed to maintain natural systems and benefit the public. Annually, the District's Land Managemnet Review Team performs a review of management objectives and activities conducted on fee-simple title lands held by the District. The results of the review are published in the Land Management Report which provides details and accomplishments on natural community resource projects designed to maintain or improve natural communities, forest resources, rare species, cultural and historical resources, and aesthetic and visual resources. The Land Management Report also addresses social and economic management goals and activities which are key components of the land management program and include public use, communications and fiscal responsibility.The Land Management Review Team scored the District at 1.53 out of 2 for management activities that occurred during fiscal year 2016, indicating the District is meeting and exceeding its goals for managing the land according to the plan and purpose for which it was acquired.

The following summarizes significant natural community resource projects during FY 2016. A complete listing of activities and accomplishments can be found in the 2016 Land Management Report available on the District's website.

Silviculture Water Yield Research Project

- This project is part of a statewide effort to advance the understanding of the impact of forest management practices on water yield, and whether this water is held in surficial systems or reaches the aquifer. This project will run through 2019.

Natural Resource Management

- The Little River Tract Restoration Project is a joint project with the Florida Fish and Wildlife Conservation Commission (FWC) and National Wild Turkey Federation on 473 acres of upland pine communities. In 2016, 225 acres were treated with herbicides to control hardwood resprouting and 83 acres were prescribed burned.
- The Mallory Swamp Tract Aerial Burn Project is a joint project with FWC and National Wild Turkey Federation to help fund aerial burning operations. In FY 2016, there was aerial burning on over 5,000 acres.
- Project metrics in FY 2016 include prescribed burning on 12,528 acres.
- Sold 1,214 acres of timber and 27 acres were treated with herbicide to facilitate prescribed burning.

Non-native, Invasive Plant Control

- During FY 2016, District staff monitored 53 infestations of invasive plants were monitored.
- 65 infestations were chemically treated.
- Six infestations were reclassified as inactive.
- With funding provided by FWC, contractors chemically treated 59 acres containing multiple infestations on the Lake Rowell tract in Bradford County.

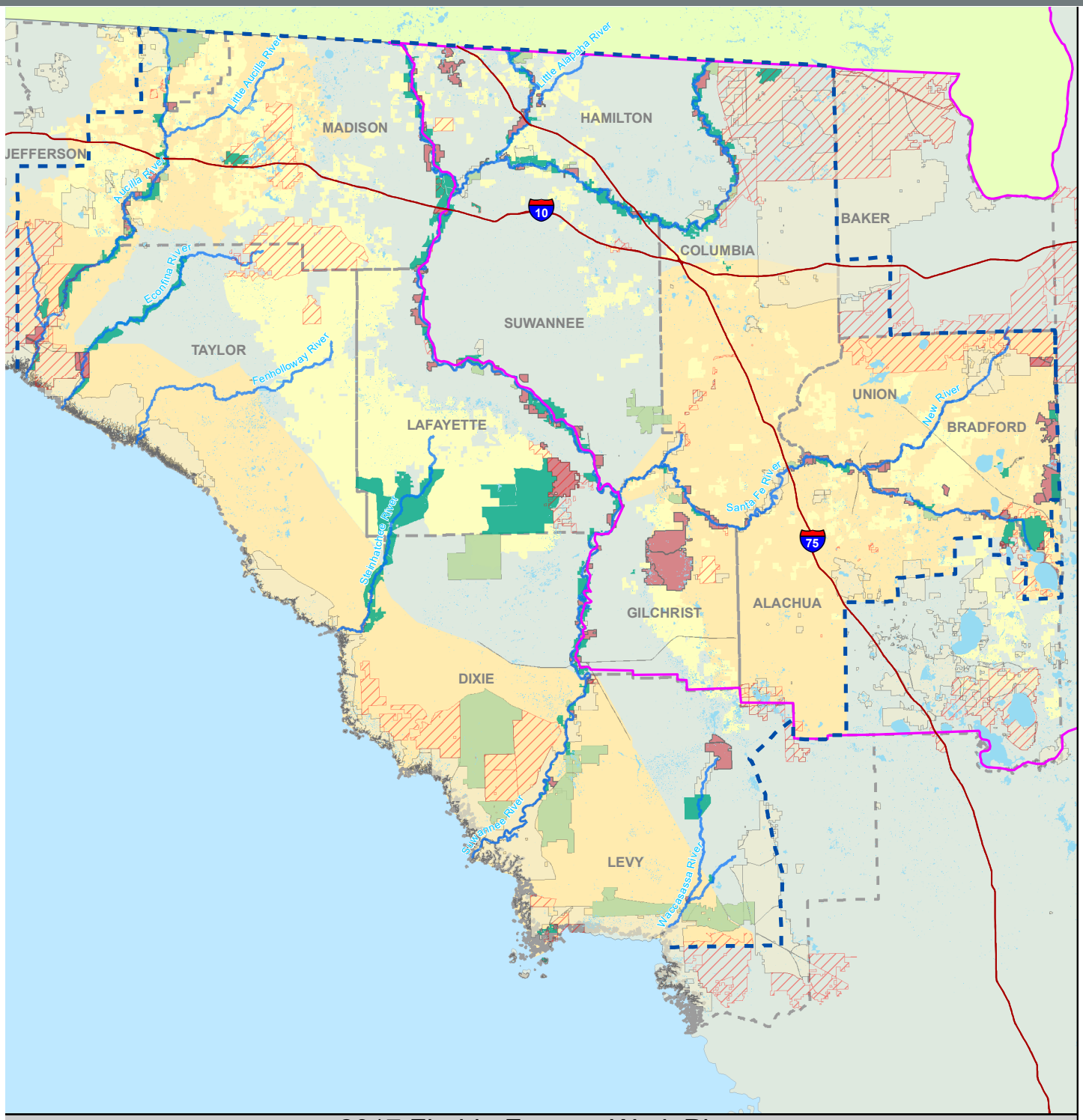
Public Use

- 97% of fee title lands owned by the District are open to the public for recreation. Lands not open to the public include wellfields, sprayfields, and water resource development project sites.
- District partnered with Suwannee River Stutters Chapter of the Nation Wildlife Turkey Federation to sponsor a youth turkey hunt on the Peacock Slough Tract.
- The District cooperates with FWC and U.S. Fish and Wildlife Service to provide public hunting opportunities on almost 105,000 acres.
- During FY 2016, 642 Special Use Authorizations were issued for use of District lands.

Facilities Maintenance Project

- During the FY 2016, 46 miles of roads and 128 miles of property boundaries were maintained.

FLORIDA FOREVER WORK PLAN MAP 2017



2017 Florida Forever Work Plan

- SRWMD Fee Ownership
- SRWMD Conservation Easement
- Public Conservation Lands
- Potential Acquisition Area
- Potential Project Area Added 2016
- Basin Project Areas
- North Florida Regonal Water Supply Planning Area
- Board of Trustees Florida Forever Project
- Hydrography
- County Boundary
- Interstate Highway
- District Boundary
- Rivers

N

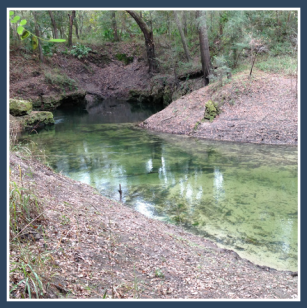
0 7 14

Miles

Note: This map was created by the Suwannee River Water Management District (SRWMD) to be used for planning purposes only. SRWMD shall not be held liable for any injury or damage caused by the use of data distributed as a public records request regardless of their use or application. SRWMD does not guarantee the accuracy, or suitability for any use of these data, and no warranty is expressed or implied. For more information please contact the SRWMD at 386-362-1001.
Map Created on 2/15/2017

MITIGATION DONATION ANNUAL REPORT

SUWANNEE RIVER WATER MANAGEMENT DISTRICT



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EXECUTIVE SUMMARY

In accordance with 373.4137, Florida Statutes, 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.

The FDOT has no new projects for 2017.

A total of 15 wetland mitigation projects have been initiated since 1996, 12 of which have been completed. The District has received a sum total of $6,060,856 from FDOT for wetland mitigation activities.

BACKGROUND INFORMATION

Section 373.4137, Florida Statutes, 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 mitigation to offset wetland impacts from FDOT road projects. 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 develops 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 Governing Boards of the WMD's for approval before March 1st each year. Once the mitigation plan is approved, the WMDs issue permits for the work, apply for USACE permits, and implement mitigation projects as outlined in the mitigation plan.

FDOT wetland impacts in the District have or will occur in the river basins of the Santa Fe, Withlacoochee, Waccasassa, Steinhatchee, Fenholloway, Econfina, and Suwannee Rivers (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 taken together, 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, F.A.C., to calculate the 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 MITIGATION PROJECTS

There are no new mitigation projects.

ONGOING MITIGATION PROJECTS

1) FDOT Project: CR 231 New River Bridge Replacement

FDOT will construct a new bridge over the New River on CR 231 in Union County and the anticipated construction date is December 2, 2019. FDOT has estimated that 1.5 acres of wetlands (FLUCCS 615) will be impacted as a result of the project requiring approximately 1.3 UMAM credits. The project will occur in the Santa Fe River basin and the mitigation will occur in the same basin. The mitigation for the project will occur at the Edwards Bottomland (EBL) mitigation site located in the Santa Fe River Basin which consists of wetland/hydrologic restoration, enhancement, and creation plus the invasive species removal and control implemented at EBL. It is estimated that the total projected mitigation costs are $181,890.00 for the 1.3 mitigation credits.

2) FDOT Project: Construction of Westbound Turn Lane - SR 26 and SE 25th Avenue

Construction of a westbound turn lane on SR 26 at the SE 25th Avenue intersection will impact approximately one acre of wetlands (FLUCCS 630) in Gilchrist County in the Waccasassa River Basin. The construction of the westbound turn lane is a safety project. The date for the submittal of the permit application has been estimated to occur on or about February 21, 2017 and the estimated date construction will begin on the project is estimated to be 2019. Mitigation credits will be purchased at the Gulf Coast Mitigation Bank located at Cedar Key. Total projected mitigation credit costs are calculated to be $121,260.00.

3) FDOT Project: Starke By-Pass Project (SR 223)
Mitigation Project: Starke Bypass Mitigation Area (SBMA)

New roadway corridor which will bypass around the City of Starke in Bradford County. Project will impact 58.06 acres of wetlands with a net functional loss of 46.470 UMAM credits. 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. Alligator Creek Mitigation Bank, LLC, initiated construction activities in December 2015. Construction is about 95% complete.

COMPLETED MITIGATION PROJECTS

AUCILLA RIVER BASIN

1) FDOT Project: US 98 Aucilla Bridge Replacement
Mitigation Project: San Pedro Bay Mitigation Bank

Replacement of US 98 Bridge across Aucilla River 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. District staff met with USACE and FDOT representatives in 2016 to evaluate the success of the mitigation project. It was determined that an additional 0.4 mitigation credits would be required to complete the project. It is estimated that FDOT will purchase these mitigation credits from the San Pedro Bay Mitigation Bank sometime in early 2017.

UPPER SUWANNEE RIVER BASIN

1) FDOT Project: CR 143 Road Widening
Mitigation Project: Woods Ferry Hydrologic Enhancements

Widening of CR 143 in Hamilton County from CR 146 to I-75 impacted approximately 1.23 acres of wetlands. 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. District received $110,970 from FDOT. Evaluation of mitigation success was conducted by Jones, Edmunds and Associates in 2010 and shown to have met mitigation requirements.

WACCASSASSA RIVER BASIN

1) FDOT Project: SR 24 Widening from U.S. 19 to Rosewood
Mitigation Project: Devil's Hammock Hydrological Enhancement and Preservation

Widening of SR 24 in Levy County impacted 9.95 acres of wetlands. The District contracted with consultants to identify, evaluate, and construct mitigation activities within District-owned Devils Hammock in Levy County. Mitigation provided hydrologic enhancement of multiple wetland sites by improving drainage features to restore natural water flow. Mitigation activities were completed in January 2007. District received $180,913 from FDOT. Evaluation of mitigation success was conducted by Jones, Edmunds and Associates in 2010 and shown to have met mitigation requirements.

2) FDOT Project: US 27/SR 500 Widening
Mitigation:
1. Cedar Key Water Quality Restoration Project
2. Cow Creek Road Restoration
3. Wetland Preservation

Widening of US 27/SR 500 from Chiefland to Bronson impacted 23.0 acres of wetlands. Mitigation involved improvements to the Cedar Key storm water 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. District received $1,713,490 from FDOT. Mitigation success will be evaluated by District staff in 2017.

SANTA FE BASIN

1) FDOT Project: US 441 Santa Fe River Bridge Replacement
FDOT Project: SR 121 Santa Fe River Bridge Replacement
Mitigation Project: Alligator Lake Surface Water Improvement and Management (SWIM) Program

Replacement of the bridges impacted 2.3 acres of wetlands. Mitigation restored natural water flow between wetlands adjacent to Alligator Lake and Price Creek (both in Columbia County). Mitigation activities were completed in March 2001. District received $60,000 from FDOT. Mitigation success will be evaluated in 2017.

2) FDOT Project: CR 231 Road Widening
Mitigation Project: Floodplain Restoration at San Felasco Hammock State Preserve

Widening of CR 231 in Union County between SR 100 and the Baker County line impacted 1.96 acres of wetlands. Mitigation restored natural water flow, and removal of exotic plant species 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. Mitigation success will be evaluated in 2017.

3) FDOT Project: CR 229 New River Bridge Replacement
Mitigation: Lake Rowell Tract Restoration/Enhancement

Replacement of CR 229 Bridge over the New River between Union and Bradford counties impacted 2.44 acres of wetlands. Mitigation restored natural water connections between Alligator Creek and Lake Rowell (both in Bradford County). District received $180,214 from FDOT. Mitigation activities were completed in 2006. Mitigation success was evaluated in 2012. Mitigation activities conducted at the CR 229

Bridge and the Lake Rowell project area were evaluated in 2013 and deemed to be a success. Management of invasives is ongoing and District staff will evaluate success in 2017.

STEINHATCHEE RIVER BASIN

1) FDOT Project: SR 51 Road Widening Taylor County
Mitigation Project: Steinhatchee River Basin Hydrological Improvements

Widening of SR 51 impacted 3.5 acres of wetlands in 2002. Mitigation restored natural water connections for wetlands in District owned Steinhatchee Springs Tract. District received $279,174 from FDOT. Mitigation success will be evaluated in 2017.

2) FDOT Project: SR 51 Road Widening Taylor and Dixie Counties
Mitigation Project: San Pedro Bay Mitigation Bank

Widening of SR 51 in Dixie and Taylor Counties from the town of Steinhatchee to the Dixie/Lafayette County line impacted 1.27 acres of wetlands. Mitigation was by purchase of mitigation credits from San Pedro Bay Mitigation Bank. District received $10,200 from FDOT for mitigation. District purchased 0.6 mitigation credits from San Pedro Mitigation Bank in 2006.

WITHLACOOCHEE RIVER BASIN

1) FDOT Project: CR 53 Road Widening
Mitigation: West Farm Storm Water Pond Project

Widening of SR 53 impacted 1.6 acres of wetlands. Mitigation created wetland and lake habitat at the West Farm Storm Water Facility in Madison County. Mitigation activities were completed in March 2001. District received $260,325 from FDOT. District staff are currently working with Madison County staff on compliance with all mitigation requirements.

2) FDOT Project: SR 14 Widening
Mitigation Project: Cabbage Grove Wetland Enhancement

Widening of SR 14 between Interstate 10 and the Madison city limits impacted 0.89 acres of wetlands. Mitigation restored natural water flow in wetlands within District owned Cabbage Grove Tract in Taylor County. District received $75,594 from FDOT. Project was completed in 2006. District conducted operation and maintenance improvements at this site in December 2011. Mitigation success will be evaluated in 2017.

Figure 1.

General location of FDOT construction projects within SRWMD requiring wetland mitigation.

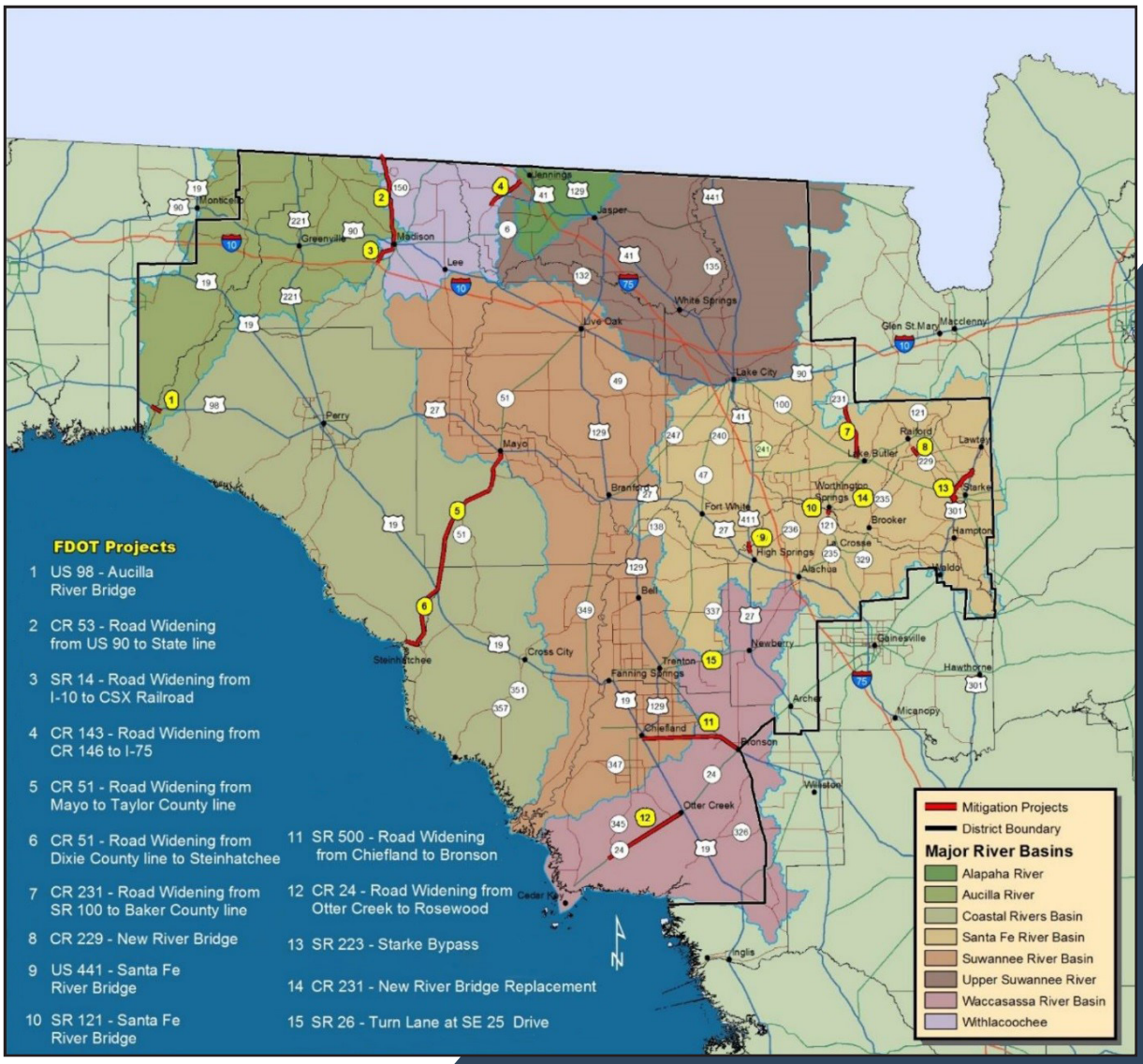

Figure 2.

General location of wetland mitigation sites within SRWMD for FDOT construction projects.

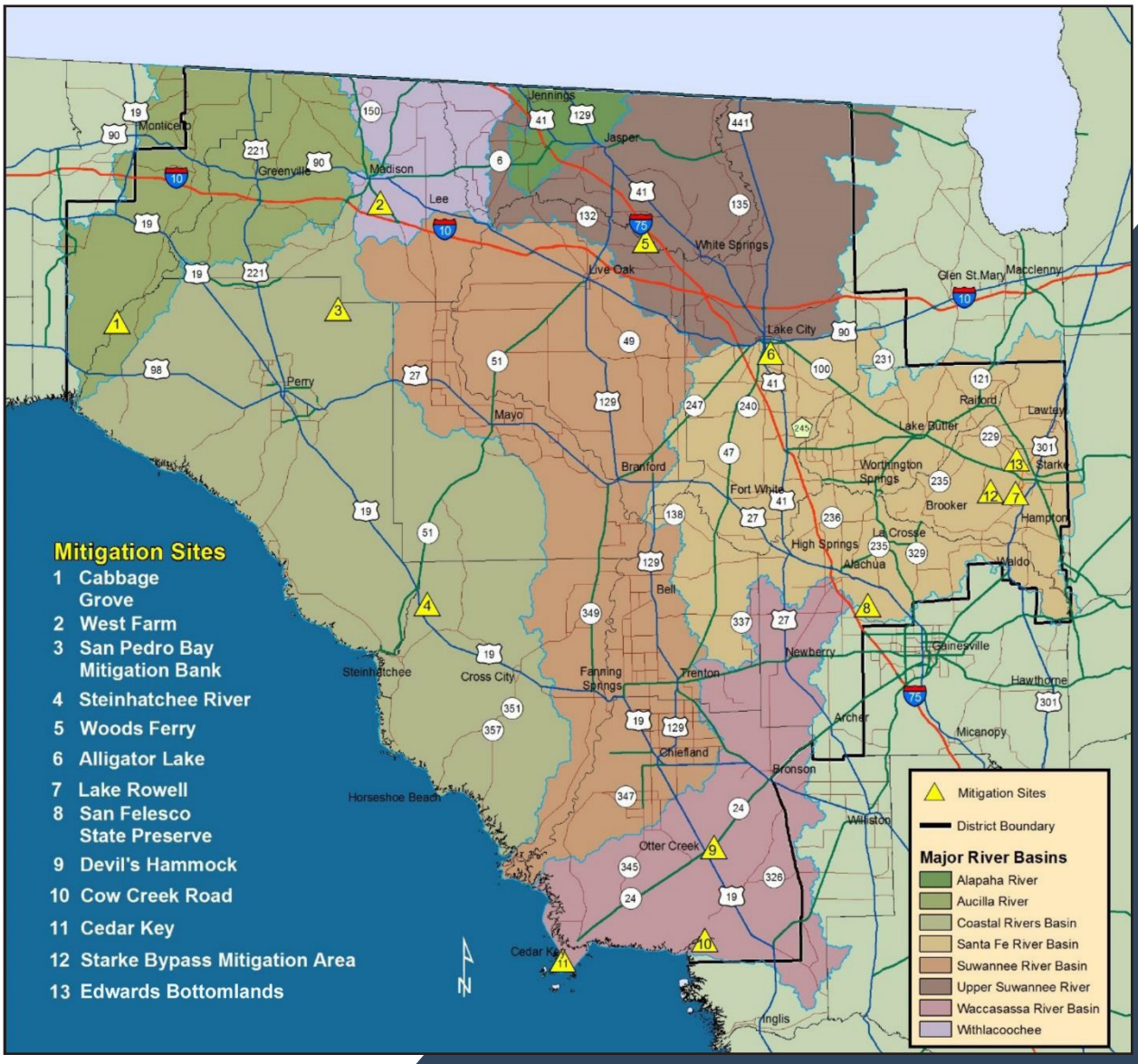

TABLE 1. FDOT CONSTRUCTION PROJECTS WITH WETLAND IMPACTS AND ASSOCIATED MITIGATION PROJECTS.

River Basin	FDOT Project Location	FDOT Work Number	ERP Number	Impact Acres	Wetland Type	Mitigation Project	Revenue from FDOT	Total Funds Expended
Aucilla	US 98 Aucilla River Bridge	2108732	10-0057	5.70	Forested	San Pedro Bay Mitigation Bank	$43,500	$43,500
Santa Fe	1. US 441/Santa Fe River Bridge and SR 121 Santa Fe River Bridge	2110486 2110344	00-0067 99-0069	1.00 1.30	Forested Forested	Alligator Lake Surface Water Improvement and Management Program (SWIM)	$60,000	$60,000
	2. CR.231 Road Widening from S. R. 100 to the Baker County Line	2128801	02-0497	1.96	Forested	Cellon Creek Floodplain Restoration at San Felasco Hammock State Preserve	$166,476	$72,180
	3. CR. 229 New River Bridge	2128761	03-0089	2.44	Forested	Lake Rowell Tract Restoration/ Enhancement	$180,214	$180,214
	4. SR 223 Starke Bypass	2080014,5,6	ERP-007-213985-1	58.47	Forested	Starke Bypass Mitigation Area	2,980,000	2,517,000
	5. CR 231 Bridge Replacement	433957	TBD	1.5	Forested	Edwards Bottomland	$181,890	
Steinhatchee	1. SR 51 Widening from Mayo to Taylor County Line	2100751 2100851	06-0600	3.50	Herbaceous	Restoration of areas impacted by silviculture activities on District property (Steinhatchee Falls)	$279,174	$279,174
	2. SR 51 Widening Steinhatchee to Dixie/Taylor County Line	2108502 2084662	05-0597	1.27	Herbaceous	San Pedro Bay Mitigation Bank credits	$10,200	$10,200
Upper Suwannee	CR 143 Widening from CR 146 to I-75	2122181	05-0081	1.23	Forested, Herbaceous	Woods Ferry Hydrologic Enhancements	$110,970	$53,848
Waccasassa	1. US 27 Widening from Chiefland to Bronson	2117089	96-0039	23.00	Forested	A. Upgrade of storm water management system to improve water quality in Cedar Key B. Cow Creek restoration in Goethe State Forest C. Wetland preservation in Levy County	$1,713,490	$1,713,490
	2. SR 24 Widening from Otter Creek to Rosewood	210384	04-0477	9.95	Forested	Devil's Hammock/47 Runs Enhancement/ Restoration	$180,913	$190,694
	3. SR 26 Westbound Turn Lane	438077	TBD	1.0	Forested	Gulf Coast Mitigation Bank	$121,260	--
Withlacoochee	1. CR 53 Road Widening from US 90 to State Line	2117565	98-0041	1.60	Forested, Herbaceous	West Farm Storm water Project	$260,325	$260,325
	2. SR 14 Road Widening from I-10 to CSX Railroad	2105281	02-0528	0.90	Forested, Herbaceous	Cabbage Grove Wetland Enhancement	$75,594	$46,459

2017

CONSOLIDATED ANNUAL REPORT

SUWANNEE RIVER
Water Management District